

**Special Meeting of the
COMMITTEE ON
ENERGY AND THE ENVIRONMENT
AGENDA**

December 15, 2021 – 5:00 P.M.

On March 3, 2020 Governor Newsom proclaimed a State of Emergency due to COVID-19 and has issued Executive Order N-29-20 and approved AB 361 suspending provisions of the Brown Act allowing meetings via teleconferencing and members of the public to observe and offer comments telephonically or electronically.

- If you wish to speak on an item listed on this agenda or under public comment, it is requested that you submit a speaker card in advance of the meeting at <https://forms.cityofpleasantonca.gov/f/EnergyEnvironmentSpeakerCard1215>

Once the meeting begins, you may participate in the Zoom meeting by using the “raise your hand” function when public comment is opened on the agenda item. You will be unmuted when your name is called and you will be re-muted after the allotted time. To raise your hand, click the “raise your hand” button or *9 on your telephone. To unmute your phone, press *6.

- Join the meeting using this URL <https://cityofpleasanton.zoom.us/j/83036647048>
- Join by phone +1(669)900-6833 or +1(253)215-8782. When prompted enter Webinar ID: 830 3664 7048

CALL TO ORDER

ROLL CALL

AGENDA AMENDMENTS

MINUTES

1. Approve the regular meeting minutes of September 22, 2021.

MEETING OPEN TO THE PUBLIC

2. Public comment from members of the audience regarding items not listed on the agenda.

OTHER MATTERS BEFORE THE COMMITTEE

3. Select Chair and Vice Chair for 2022 for the Committee on energy and the Environment
4. Set 2022 Meeting Schedule for the Committee on Energy and the Environment
5. [Review the DRAFT Climate Action Plan 2.0 and DRAFT Initial Study-Negative Declaration](#)

MATTERS INITIATED BY COMMITTEE MEMBERS: Brief reports on conferences, seminars, and meetings attended by Committee members.

ADJOURNMENT

Next meeting is a Regular Meeting of the Committee on Energy and the Environment on January 26, 2022 at 5:00 p.m.

Accessible Public Meetings

The City of Pleasanton can provide special assistance for persons with disabilities to participate in public meetings. To make a request for a disability-related modification or accommodation (e.g., an assistive listening device), please contact the City Clerk's Office at 123 Main Street, Pleasanton, CA 94566 or (925) 931-5027 at the earliest possible time. If you need sign language assistance, please provide at least two working days' notice prior to the meeting date.

**MINUTES
CITY OF PLEASANTON
SPECIAL MEETING OF THE COMMITTEE ON ENERGY AND THE ENVIRONMENT
August 11, 2021**

CALL TO ORDER

Chair Chang called a teleconference regular meeting of the Committee on Energy and the Environment to order at the hour of 5:00 p.m.

ROLL CALL

Committee Members Present: Brown, Cartwright, Daggy, Kelly, Gan, Vice Chair Liu, and Chair Chang
Absent: none

AGENDA AMENDMENTS

None.

MINUTES

1. Approve the regular meeting minutes of May 26, 2021 as submitted.
Motion by: Daggy Seconded by: Gan
Ayes: Daggy, Liu, Gan, Chang, Cartwright, Kelly, Brown
Noes: none

Motion passed unanimously.

MEETING OPEN TO THE PUBLIC

2. Public Comment from members of the audience regarding items not listed on the agenda:

No public comment.

OTHER MATTERS BEFORE THE COMMITTEE

3. CAP 2.0 forecast correction for adjusted business as usual scenario

Megan Campbell, Associate Planner, gave a verbal informational update that there was a minor correction to the adjusted business as usual forecast. She stated that in the prior report there was a slight over assumption of the emissions reductions and staff wanted to provide the committee with the most up to date inventory for records.

4. Review quantitative analysis and recommend a set of actions for the CAP 2.0 to be considered by the City Council

Megan Campbell, Associate Planner, gave a presentation on this item. Ms. Campbell gave background information to the Committee in which she explained the outreach process and the initial list of over 150 actions that was prepared based on review of the City's initial Climate Action Plan (CAP). The City will need to make a strategic decision about the final package of new actions to be adopted as part of the CAP 2.0, recognizing various tradeoffs to be made between cost and effectiveness in reaching GHG targets. Staff does not recommend including every action on the short list.

Ms. Campbell seeks the Committee's review and recommendation on the suggested 15 primary actions, largely focused on GHG emitting action, that would cost the City \$1.1 Million to implement and 10 secondary actions that focus on resilience and adaption actions be included in the CAP 2.0. Staff's recommendation both reduces emissions and cost, as described below. It is also worth noting, an Implementation and Monitoring Plan will be developed as part of CAP 2.0, which will identify potential

funding sources. In summary, Staff's recommendation strikes a balance between co-benefits, community cost, City cost, community input, and staffing assumptions.

The Committee's recommendation will be provided to the City Council in the fall. The Committee can add, remove, or modify any actions recommended by staff. If actions are removed, staff asks the Committee to be mindful of the CAP 2.0 target pathway. If actions are added, staff asks the Committee to be mindful of cost and resources beyond cost to implement the actions.

Ms. Jocelyn Combs spoke during public comment. Ms. Combs spoke as a Pleasanton resident, former Elected Official and Project Manager. She stated that the information presented on the CAP is technical, dense and critical to the future. Ms. Combs spoke in support of the secondary actions and was thrilled to see goal 1230 of adopting the Housing Element as an action item. Ms. Combs recommends adding goal 1216 as a primary action to institutionalize climate action and suggested adding the word implement to the action to institutionalize. She supports the city hire a single point person to implement the goals of the CAP and keep them functioning.

Mr. Todd Nelson spoke during public comment. Mr. Nelson spoke as a member of the Bicycle, Pedestrian and Trails Committee. Mr. Nelson expressed support of the CAP being proposed and mentioned that in the proposed CAP, the Bicycle, Pedestrian and Trails master plans are both listed as existing and ongoing and a \$13 million line item, which he thinks is optimistic. He noted that historically Bicycle, Pedestrian and Trails task have only received about \$2 million annually from the Capital Improvement budget. Mr. Nelson wants to make sure that actual budget is comprehended in terms of the benefit that is assumed from the CAP actions related to Bicycle, Pedestrian and Trails.

Ms. Becky Dennis spoke during public comment. Ms. Dennis expressed support of a strong emphasis on the CAP. Ms. Dennis suggested staff include the market value of the MTCO_{2e} successfully abated and sequestered. She stated that this would provide ongoing cost/benefit information to the Council should they decide to develop a revenue stream for Pleasanton through participation in the carbon market. Ms. Dennis suggested more frequent reporting on the CAP 2.0 and perhaps a single person should be assigned to do that. Finally, Ms. Dennis stated that we have not met our Housing Element goals and urged the Committee to be an active voice for the Housing Element and bringing people to live closer to the workplace.

Mr. Greg Cline spoke during public comment. Mr. Cline spoke in support of staffing to manage the CAP and expressed concern if the CAP will come into fruition if existing staff can't absorb the implementation. He suggested bringing several initiatives on the secondary list up to the primary list that are low cost, little impact full time employees or that would save the city money.

Chair Chang asked for clarification on the implementation and monitoring of the CAP. Becky Hopkins, Assistant to the City Manager responded to the questions about staffing. She stated that once the Council adopts the CAP, if the Council approves the staff recommendation it will be the City Manager's responsibility to determine how to best resource the plan as a part of the budget process. Chair Chang asked if staff was identified for the first CAP 1.0. Ms. Hopkins stated that the CAP 1.0 was assigned to Environmental Services staff out of the Operations Department. She stated that the funding plan will help to provide the true annual cost to the city including staff and or consultant time.

Committee Member Daggy also expressed concern for the staffing bandwidth issues and the opportunity to apply for grants. Mr. Daggy mentioned the impact of California wildfires, controlled burns, extreme heat events and the drought. He has some concern for hitting targets for the Urban Forest Master Plan and SB1383, stating that the landfill emissions reduction in SB1383 is massive. He stated that changing human behavior and getting to such a massive number is concerning and we will have to move faster.

Committee Member Cartwright agreed that a dedicated Project Manager with the technical skills needs to be included as part of the plan. Mr. Cartwright recommended expediting the zero-emission vehicle infrastructure plan and the comprehensive outreach and education program to get the community in support of the plan as a near term actions.

Megan Campbell, Associate Planner shared the process for next steps, the Committee will make the recommendation for the CAP to the Council. Staff will present the Committee's recommendation to Council in the Fall. Staff will look to Council to provide direction on the final set of actions to put in the plan and then a draft plan will come back to the Committee to review. The draft plan will then go to Council to review before final adoption of the plan. Once the final plan is adopted the City Manager will assign the projects of the plan to staff and or consultants for implementation.

Motion to accept staff's recommendation with the following changes to the CAP2.0 Action list on the action list as amended of the CAP 2.0:

- (1) Add action item (1216) Institutionalize climate considerations across City and community activities and decision-making. Dedicate at least one position (e.g., Sustainability Manager and/or Sustainability Management Analyst(s) focused on sustainability) to implement CAP tasks, manage the Energy Star Portfolio Manager for City facilities and identify opportunities for increased efficiencies and cost savings, maintain relationships with partner agencies and identify grants and funding opportunities as they become available, track legislative changes relating to the climate that affect municipal operations, track City emissions, and promote climate change awareness across all city functions.
- (2) Change to near term implementation action item (1056) Develop and implement a Zero Emissions Vehicle (ZEV) Infrastructure Plan that strategically expands EV and other zero emissions fueling infrastructure throughout the community.
- (3) Change to near term implementation action item (1023) Implement comprehensive public/private climate awareness, education, and outreach.

Motion by: Cartwright Seconded by: Chang

Ayes: Cartwright, Daggy, Kelly, Gan, Liu, Chang

Abstain: Brown Noes: none

Motion passes.

Motion to approve the list as amended to move recommendation forward to Council:

Motion by: Kelly Seconded by: Cartwright

Ayes: Brown, Cartwright, Daggy, Kelly, Gan, Liu, Chang

Noes: none

Motion passes unanimously.

MATTERS INITIATED BY COMMITTEE MEMBERS

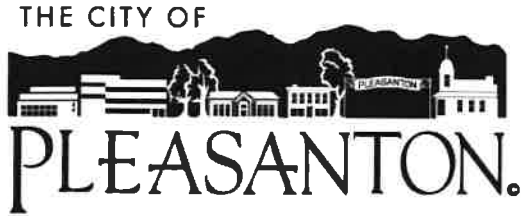
Ms. Hopkins reminded the committee that several seats for the Committee on Energy and the Environment are open for renewal or appointment.

ADJOURNMENT

The meeting was adjourned at 6:35 p.m.

Next regular meeting of the Committee is scheduled for September 22, 2021 at 5pm.

Respectfully Submitted,
ZeeLaura Page



The Committee on Energy and the Environment Meeting

Agenda Report

December 15, 2021

Item 3

SUBJECT: SELECT CHAIR AND VICE CHAIR FOR 2021 FOR THE COMMITTEE ON ENERGY AND THE ENVIRONMENT

SUMMARY

The Energy and Environment Committee appoints a Chair and Vice Chair annually to facilitate meetings of the Committee.

RECOMMENDATION

It is recommended that the Committee select a new Chair and Vice Chair for the 2022 scheduled meetings.

FINANCIAL STATEMENT

None.

BACKGROUND

Per Resolution No. 08-234, the Committee officers are to be selected from among the group membership by vote of a quorum present and designate a Chair and Vice Chair, shall hold its regular meetings every other month during its term. Those selected shall serve in these positions for a year.

DISCUSSION

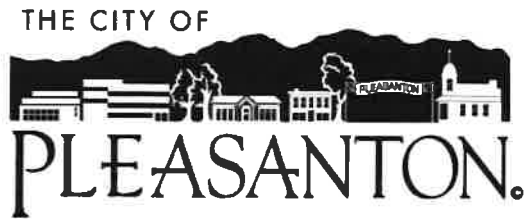
The Committee shall select from its group membership a Chair and Vice Chair to facilitate meetings by a vote of a quorum of the Committee.

Historically, Committee members have rotated the Chair and Vice Chair responsibilities. For example, the Vice Chair has been nominated and voted on for the Chair position and a new Vice Chair was nominated and voted on from the Committee membership.

Submitted by:



Becky Hopkins
Assistant to the City Manager



The Committee on Energy and the Environment Meeting

Agenda Report

December 15, 2021

Item 4

SUBJECT: SET 2022 MEETING SCHEDULE FOR THE COMMITTEE ON ENERGY AND THE ENVIRONMENT

SUMMARY

The Committee's regular meeting schedule includes bi-monthly meetings on the fourth Wednesday. Annually the Committee reviews its meeting schedule and makes any necessary adjustments due to holidays or other potential schedule conflicts.

RECOMMENDATION

Discuss and determine the Committee's 2022 meeting schedule.

FINANCIAL STATEMENT

None.

BACKGROUND

Per Resolution No. 17-912, the Committee shall hold its regular meetings every other month during its term. Annually, the Committee reviews its meeting calendar and makes any adjustments due to holidays or other potential schedule conflicts.

DISCUSSION

The Committee should review the proposed 2022 meeting schedule, many any revisions, and approve.

Regular Meetings

January 26, 2022 at 5:00 p.m.

March 23, 2022 at 5:00 p.m.

May 25, 2022 at 5:00 p.m.

July 27, 2022 at 5:00 p.m.

September 28, 2022 at 5:00 p.m.

November 16, 2022* at 5:00 p.m.

* Note this is third Wednesday of the month due to Thanksgiving holiday.

Submitted by:



Becky Hopkins
Assistant to the City Manager

THE CITY OF



The Committee on Energy and the Environment Agenda Report

December 15, 2021

Item 5

SUBJECT: REVIEW THE DRAFT CLIMATE ACTION PLAN 2.0 AND DRAFT INITIAL STUDY- NEGATIVE DECLARATION

EXECUTIVE SUMMARY

In August 2021, the Committee on Energy and the Environment (Committee) made a recommendation to the City Council about which set of actions to include in the updated Climate Action Plan (CAP 2.0). Since then, the City Council opined on a recommended set of actions. Subsequently, a draft CAP 2.0 and draft Initial Study- Negative Declaration (IS-ND) have been prepared and been in circulation since November 19, 2021. The draft CAP 2.0 reflects the work completed throughout the process and includes greenhouse gas (GHG) emission reduction targets for the City and a series of policies that represent local actions the City will take to achieve the reductions.

RECOMMENDATION

Staff requests the Committee's review the draft CAP 2.0 and draft IS-ND and seeks initial feedback on the draft documents ahead of the future Committee meeting wherein the Committee will make a final recommendation to the City Council.

BACKGROUND

The City's first Climate Action Plan (CAP) had a horizon year of 2020. Since the CAP's adoption in 2012, climate science has evolved, as have state, regional, and local regulations and initiatives. As such, updating the CAP has been a City Council priority and is part of the Council's current workplan. Initial objectives of the CAP update (CAP 2.0) included:

- Reduce Pleasanton's greenhouse gas (GHG) emissions
- Enhance local environmental sustainability and improve resilience and vulnerability to climate change
- Create a plan with evidence-based, actionable, and achievable local policies; the plan should be realistic and implementable
- Create a qualified CAP under the California Environmental Quality Act (CEQA) that complies with current regulations (described further below)
- Shorten, simplify, and improve the aesthetics of the existing CAP

The CAP 2.0 process kicked off in early 2020 but had a delay due to COVID-19 and resumed in mid-2020. Since then, the City of Pleasanton has been working diligently with the Committee on Energy and the Environment to prepare a CAP 2.0 that meets these objectives and set the environmental policy framework for the next 10 years. After about a year and a half, the CAP 2.0 process is nearing completion.

Throughout the process, the City has received input on several aspects of the CAP 2.0 from residents, the business community, implementation partners, City Council, and City Committees and Commissions, including the greenhouse gas (GHG) emission reduction targets and which actions to include in the CAP 2.0.

On August 11, the Committee on Energy and the Environment recommended a set of 16 primary actions and 10 secondary actions be included in the CAP 2.0. On November 2, 2021, the City Council reviewed the policy recommendation and opined on a set of primary and secondary actions to be included. Principal differences between the Committee recommendation and Council direction are as follows:

- Modify Action P4 to *require* (instead of *encourage*) "covered projects" within the Pleasanton Municipal Code to install solar and energy storage systems (i.e., battery storage).
- Move Action P15 from the Secondary Action list to the Primary Action List which expands incentives to install water efficiency retrofits, remove grass lawns, and install native drought tolerant landscaping.
- Omit Action 1216 which was to create a dedicated staffing position to support CAP 2.0 activities, rather than relying on that work being accomplished across multiple departments. The Council preferred that once the CAP 2.0 is adopted, the City Manager review existing staffing and the range of existing/new climate and sustainability tasks and their respective level of effort and timing, and on that basis evaluate how best to meet the staffing needs (which may include requesting the City Council to dedicate funding for a new position).

With this input and direction, a draft CAP 2.0 and draft Initial-Study Negative Declaration have been prepared and in circulation since November 19, 2021 (Attachments 1 and 2 respectively).

During public review comment period, staff has publicized the plan through social media, the Pleasanton Weekly, TV 30, community newsletter, and project email distribution lists. The plan was also shared with implementation partners and interest groups (e.g., StopWaste, Zone 7, PG&E, etc.) that have participated throughout the CAP 2.0 process. Additionally, there were two opportunities to provide comments verbally at a Community Meeting on December 2, 2021, and a Committee on Energy and the Environment hearing on December 15, 2021. The public comment period for the CAP 2.0 will officially end on December 21, 2021. Correspondence received at time of this report publication is attached for your reference (Attachment 3).

Following the public review comment period, staff will respond to comments and implement modifications as necessary. Staff intends to bring a final CAP 2.0 to the Committee on Energy and the Environment for review in late January 2022 and to the City Council for adoption in February 2022.

DISCUSSION

Throughout the year and a half CAP 2.0 development process, the Committee on Energy and the Environment has provided guidance on several factors of the plan. The City has relied on the Committee's direction and input from residents, the business community, implementation partners, and other City Commissions and Commissions, to inform every stage of the CAP 2.0's development. Further, the City Council has opined on several elements of the Plan throughout the process. With this input and direction, a draft CAP 2.0 has been prepared which reflects the work of the previous year and a half.

The CAP 2.0 process thus far has included the following steps:

- **Baseline Assessment**
 - Review of CAP 1.0 progress
 - Assessment of existing plans, policies, and state legislation
 - Analysis of Pleasanton's vulnerabilities to climate change impacts
 - Evaluate existing GHG emissions and forecast future GHG emissions
- **Target Setting and Document Framework**
 - Identify CAP 2.0 emissions reductions targets
 - Articulate a CAP 2.0 vision, guiding principles to guide policy direction, and co-benefits
- **Strategy and Action Development**
 - Develop emissions reductions strategies and actions
 - Qualitatively and quantitatively evaluate the potential actions and strategies
 - Refine and select strategies and actions
- **Draft Plan**
 - Prepare the draft CAP 2.0 and corresponding CEQA materials

At each step of the process, the City has engaged the community through surveys, public hearings, workshops/community meetings, focus groups, social media, the newspaper,

utility bill mailing, TV 30 ads, website development (e.g., videos created by the local high schools) and other methods.

Key engagement themes throughout the process included:

- Support for transitioning new development away from fossil fuels to renewable energy sources. There was particular support for expanding the use of solar panels. However, there was also strong opposition to requiring existing residences to transition away from natural gas with a preference toward an incentive-based approach.
- Concern with future power outages and energy shortages.
- Concern with drought and water scarcity.
- Strong support for electrifying transportation.
- Encouragement to establish a jobs/housing balance with increased housing opportunities near business and transit hubs.
- Endorsement to expand telecommuting, bicycling, and public transit.
- Desire to reduce waste and improve waste diversion.
- Emphasized importance on expanding green spaces and gardens and ensuring proper soil management is used to increase carbon sequestration.
- Concern with potential cost and equity implications of including certain requirements.

Ultimately, the CAP 2.0 includes policies across six sectors: Buildings and Energy (BE), Transportation and Land Use (T&LU), Materials and Consumption (M&C), Natural Systems (NS), Water Resources (WR), and Community Resilience and Wellbeing (CR&W). There are several existing on-going actions the City is already implementing across the six sectors, some of which are GHG mitigating. The CAP 2.0 recommends continuation of these actions through the lifespan of the CAP 2.0 to ensure the City meets the GHG targets (e.g., implementation of the Bicycle and Pedestrian Master Plan and SB 1383). The CAP 2.0 also includes new actions (16 primary actions and 9 secondary actions) as detailed in Figure 1 and 2 below.

Figure 1- Table of primary actions

Sector	Action Summary
BE	P1 Adopt reach codes that require electrification for new construction
BE	P2 Prepare and implement existing building electrification plan (<i>voluntary only</i>) (e.g., grid analysis and community electrification incentives and outreach)
BE	P3 Modify definition of “covered project” in the PMC Green Building section to cover all new commercial buildings and residential homes
BE	P4 Require solar/battery on new developments
T&LU	P5 Develop and implement a zero-emissions vehicle infrastructure plan (e.g., expands EV chargers, electrifies the municipal fleet, etc.)
T&LU	P6 Electrify municipal small engine equipment (e.g., mowers and tractors)
T&LU	P7 Expand community small-engine electrification (e.g., lawn mowers, leaf blowers)
T&LU	P8 Require bicycle parking and amenities (e.g., showers) for new developments

Sector	Action Summary
T&LU	P9 Develop and implement a bicycle rack request program for businesses
T&LU	P10 Increase public transit ridership by partnering with transit agencies (e.g., BART, ACE, and LAVTA) to improve access across the City
T&LU	P11 Promote LEED Neighborhood for new developments
M&C	P12 Reduce consumption from single use plastic
NS	P13 Develop an Urban Forest Master Plan increasing carbon sequestration through trees
NS	P14 Increase carbon sequestration on public and private lands through compost and mulch
WR	P15 Expand incentives to reduce water use including water efficiency retrofits
CR&W	P16 Develop and implement a comprehensive public outreach education program

Figure 2- Table of secondary actions

Sector	Action Summary
BE	S1 Require lowest global warming potential refrigerants available for appliances and HVAC in new construction
BE	S2 Promote energy efficiency improvements through incentives, partnerships, and education/outreach
BE	S3 Energy benchmarking and facility retrofits to improve efficiencies and decrease use
T&LU	S4 Vehicle miles traveled (VMT) reductions for K-12 activities
M&C	S5 City adopt an environmentally preferable purchasing policy
M&C	S6 Embodied Carbon Reduction Plan (i.e., a plan that considers the carbon footprint of raw materials, manufacturing, transportation, use, and disposal of products)
NS	S7 Develop methods to track carbon sequestration in the urban landscape and stay apprised of technological advancements (e.g., mechanical direct air capture)
WR	S8 Green Stormwater Infrastructure Plan
CR&W	S9 Increase wildfire preparation, prevention, and education

The CAP 2.0 document includes four sections as follows:

1. **Introduction:** This section introduces the CAP 2.0, describes CAP 1.0 progress, the shaping of the document, public process, and details the local, regional, and state context (e.g., state regulations like SB 1383).
2. **Climate Vulnerability and GHG Emissions:** This section articulates Pleasanton's vulnerability and current GHG emissions. It covers best available science and outlines the City's GHG emission reduction targets.
3. **Climate Solutions:** This section is the main policy focus of the CAP 2.0. It outlines the strategies and actions the City will take to reduce GHGs locally, comply with state emission reduction targets, and enhance the City's resilience to climate change.
4. **Implementation:** This section provides the CAP 2.0 implementation and monitoring plan. It identifies partners, resources, and a monitoring protocol. It also outlines

staffing, costs, equity consideration, and phasing of CAP 2.0 actions over the next 10 years.

While the information included in the CAP 2.0 is reflective of the public process, the intent of the current public comment period is to continue to implement community input, ensure the document accurately represents the direction to date, confirm the document achieves initial CAP 2.0 objectives, and allow an opportunity to implement further refinements/adjustments to the draft document.

ENVIRONMENTAL ASSESSMENT

Pursuant to California Environmental Quality Act (CEQA), the City prepared a draft Initial Study-Negative Declaration evaluating the potential environmental impacts of the CAP 2.0. The initial study evaluated the CAP 2.0's potential impacts to 20 environmental factors and determined that the project would not have a significant effect on the environment. The full documentation can be reviewed in Attachment 2.

The City has prepared what is considered a qualified GHG Reduction Plan under CEQA. To be considered a qualified CAP, the document must:

- Quantify GHG emissions within a defined area
- Establish a GHG emission level below which planned activities would not be "cumulatively considerable"
- Identify and analyze emissions from planned activities
- Specify measures and performance standards to achieve the specified level of emissions that comply with state legislation
- Establish a mechanism to monitor progress toward achieving the specific emissions level
- Be adopted through a public process following environmental review

The qualified CAP will allow future projects to streamline GHG analyses under CEQA if they comply with the adopted CAP. Future project's compliance with the CAP will be crucial to achieve the City's GHG emission reduction targets and align with state reduction targets.

COMMITTEE REVIEW AND RECOMMENDATION

Staff will respond to comments received and implement adjustments to the draft documents as necessary. Staff will prepare a final CAP 2.0, incorporating revisions that will be reviewed by the Committee on Energy and the Environment in January and considered for adoption by the City Council in February.

No action is needed tonight, however, staff requests the Committee's review of the draft CAP 2.0 and IS-ND. Staff seeks initial feedback on the draft documents, ahead of the future Committee meeting wherein staff will bring the final CAP 2.0 to the Committee for a recommendation to City Council.

Attachments

1. Draft CAP 2.0
2. Draft IS-ND
3. Public comments received to date on the draft documents

Submitted by:



Megan Campbell
Associate Planner

Approved by:



Becky Hopkins
Assistant to the City Manager

THE CITY OF



PLEASANTON®

CLIMATE ACTION PLAN

2.0

DRAFT
November 2021

Acknowledgments

Acknowledgments

This Climate Action Plan (CAP) 2.0 builds on the success of the previous plan to develop a new suite of greenhouse gas emissions reduction targets and actions to mitigate the acceleration of climate change and improve community resilience. The City of Pleasanton (City) expresses great appreciation to the following staff, community members, and organizations for their contributions in developing the CAP 2.0.

City Council

Karla Brown, Mayor

Julie Testa, Vice Mayor

Valerie Arkin, Councilmember

Jack Balch, Councilmember

Kathy Narum, Councilmember

Jerry Thorne, Previous Mayor

Jerry Pentin, Previous Councilmember

City Staff

Nelson Fialho, City Manager

Brian Dolan, Assistant City Manager

Megan Campbell, Associate Planner

Zachary Reda, Management Analyst

Ellen Clark, Community Development Director

Becky Hopkins, Assistant to the City Manager

Committee on Energy and the Environment (EEC)

Andrea Bloom, Regular Member

Catherine Brown, Regular Member

Aryan Jain, Youth Member

Linda Kelly, Regular Member

Greg Klein, Regular Member

Joel Liu, Regular Member

Chiman Lee, Regular Member

Eric Cartwright, Previous Regular Member

Terry Chang, Previous Regular Member

Bruce Daggy, Previous Regular Member

Robert Gan, Previous Youth Member

Professional Services Team

Andrea Martin, Cascadia Consulting Group

P.J. Tillmann, Cascadia Consulting Group

Mike Chang, Cascadia Consulting Group

Addie Bash, Cascadia Consulting Group

Megan Lee, Cascadia Consulting Group

Jillian Buckholz, Cascadia Consulting Group

Kelsey Bennett, Rincon Consultants, Inc.

Ryan Gardner, Rincon Consultants, Inc.

Andrew Hatt, Rincon Consultants, Inc.



The City extends a special recognition to the following implementation partners, community organizations, and businesses:

Implementation Partners

Altamont Corridor Express (ACE)
Bay Area Rapid Transit (BART)
Bay Area Air Quality Management District (BAAQMD)
Dublin San Ramon Services District (DSRSD)
East Bay Community Energy (EBCE)
Livermore Amador Valley Transit Authority (LAVTA)
Metropolitan Transportation Commission (MTC)
Pacific Gas & Electric (PG&E)
Pleasanton Garbage Service (PGS)
San Joaquin Regional Rail Commission
StopWaste
Visit Tri-Valley
Wheels
Zone 7 Water Agency
Zone 7 Water Board

Community

Bay East Association of REALTORS
Chinese American Cooperative Council
Council on American Islamic Relations
Hacienda
GoGreen Initiative
Hindu Swayamsevak Sangh (HSS)
Hines
Muslim Community Center
Pleasanton Chamber of Commerce
Pleasanton Downtown Association
Tri-Valley Citizens' Climate Education
Workday

City Council's Welcome

Pleasanton is an incredible place with a unique character that is reflected in its location, setting, history, and people. Our community is vibrant and rich with small-town character, with a scenic backdrop that gives our city a direct connection to the natural environment. In recent years, like much of California, our community has experienced dangerous heat waves, public safety power shutoffs, and unhealthy air quality from devastating wildfires. We know the climate is changing. We have heard stories from community members about the changes they see in their own lives and the future they want to experience and pass down to generations to come.

To meet these challenges and usher in a sustainable future, Pleasanton will continue to preserve and protect the environment to meet the needs of the current generation without compromising the ability to meet the needs of future generations. The CAP 2.0 is a critical part of realizing this vision. It recognizes the value of our people, our community, our neighborhoods, our thriving economy, and our natural resources: the CAP 2.0 is for, and by, the community. The goals and actions outlined in these pages are responsive to your concerns, priorities, and ambitious vision. Many of you contributed through workshops, online surveys, public hearings, and individual expertise to make the CAP 2.0 possible. Thank you for helping to make sure that the CAP 2.0



reflects Pleasanton and protects what we love, while responding to the changing climate. We are honored to work with our residents, businesses, and organizations to be a leader locally, regionally, and nationally.

Climate change is one of the greatest challenges we face and Pleasanton should be proud for taking initiative to continue our preparation and adaptation. Reducing emissions and responding to the impacts of climate change will not be easy, but we have shown that by working together, we can create

a sustainable, prosperous, and healthy city. The CAP 2.0 is our community roadmap to a climate-friendly future. Implementation will deliver a more inclusive future powered by clean energy, a sustainable and secure water supply, clean transportation options, less waste in our landfills, and a thriving local economy. Although our work has just begun, we have the opportunity to celebrate the many collaborations and innovative ways our community will come together. We hope you'll join us in creating a prosperous, sustainable, and healthy future.

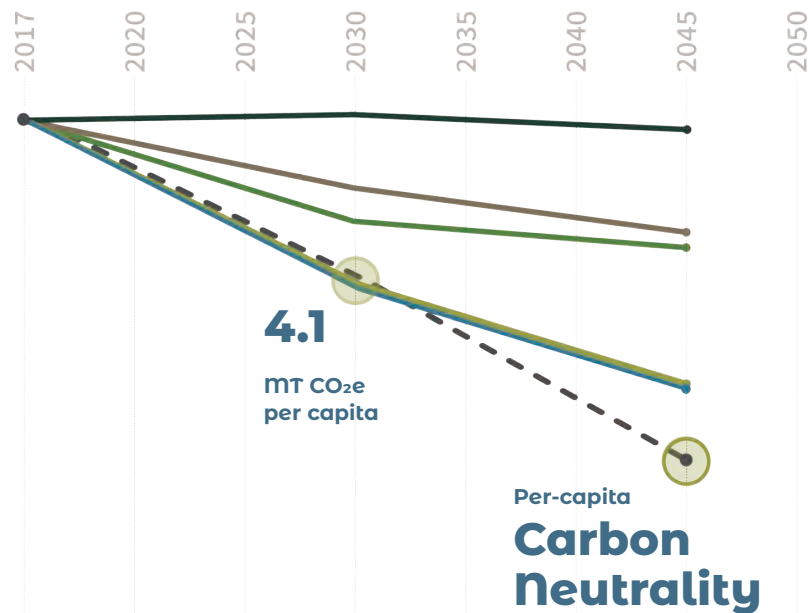
Executive Summary

Vision

This CAP 2.0 looks to not only reduce Pleasanton's greenhouse gas emissions, but also improve quality of life and public health, cultivate community resilience and adaptability, and promote thriving ecosystems and a vibrant economy, now and for future generations. Through an inclusive and equitable process, the CAP 2.0 will position Pleasanton as a regional leader addressing climate change.

Targets

CAP 2.0 sets a target of **per-capita carbon neutrality by 2045** and reduced emissions to **4.1 MT CO₂e per capita by 2030**.





Actions and Strategies

Pleasanton's CAP 2.0 re-envisioned what a climate-smart future looks like in the near- and long-term, and how to get there in an efficient, equitable, and sustainable way. It calls for continuation of existing and ongoing environmental efforts, and details 15 new primary actions to be implemented and 10 secondary actions to be implemented as time and resources allow. The actions are designed to address Pleasanton's most significant GHG emissions sources—transportation (64%), natural gas use (20%), and electricity use (10%)—with ample community benefits beyond emissions reduction. As detailed in Table 1 and Table 2, CAP 2.0 actions will:

- Decarbonize and modernize Pleasanton's buildings and transportation.
- Make it easier, safer, and more enjoyable to travel without a vehicle.
- Increase water and energy security.
- Make the local economy more circular and sustainable.
- Beautify Pleasanton while capitalizing on the carbon storage capacity of trees, plants, and soil.
- Equip current and future generations with the knowledge needed to act on climate change.
- Demonstrate continued City leadership in sustainability.





Table 1. Primary CAP 2.0 actions

Primary Actions	Emissions Reduced (MTCO _{2e}) ¹	Net City Cost	Net Community Cost
Buildings & Energy: Reduce GHG emissions from buildings and associated energy consumption and increase buildings and energy resilience which will result in cost savings, improved public health, and improved infrastructure.			
P1. All-electric reach code for new construction	10,100	(\$49k)	+\$2.8 M
P2. Existing Building Electrification Plan	16,500	(\$140k)	(\$140k)
P3. Modify Municipal Code definition of “covered projects”	1,300	(\$0)	(\$290k)
P4. Solar and storage on new construction	2,300	(\$0)	(\$0)
Transportation & Land Use: Reduce GHG emissions from transportation and land use which will enhance community mobility, improve public health, and result in cost savings.			
P5. Create and implement a ZEV Infrastructure Plan	118,200	(\$220k)	+\$31k
P6. Electrify municipal small engine equipment and reduce emissions of off-road equipment upon replacement		(\$0)	(\$0)
P7. Expand community small-engine electrification	6,300	(\$0)	+\$2.4 M
P8. Bicycle amenities	1,900	(\$0)	(\$2.6 M)
P9. Bicycle rack incentive program	1,800	(\$7.6k)	+\$730k)
P10. Increase transit ridership	5,100	(\$75k)	+\$1.3 M
P11. Promote LEED Neighborhood Development	16,600	(\$900)	+\$850k
Materials & Consumption: Reduce emissions from materials management and consumption which will support regional waste reduction efforts.			
P12. Single use plastic reduction		(\$0)	(\$0)
Natural Systems: Offset GHG emissions by fostering resilient natural landscapes which will improve habitats, ecosystems, and public health.			
P13. Urban Forest Master Plan	366,200 ²	(\$490k)	(\$470k)
P14. Soil management carbon sequestration projects	3,900	(\$35k)	(\$2.9 M)
Water Resources: Reduce GHG emissions from water usage (including conveyance) and prepare community water resources for a changing climate which will result in cost savings, enhance water quality and availability, improve infrastructure, and increase resiliency.			
P15. Water efficiency and retrofits	Not quantified	(\$1.6 M)	+ \$4.7 M
Community Resilience: Prepare for emergencies and integrate climate considerations across City and community decision-making.			
P16. Comprehensive climate awareness, education, and outreach	27,400	(\$120k)	(\$0)

¹ Cumulative reductions to 2030

² Represents carbon sequestration

Table 2. Secondary CAP 2.0 actions

Secondary Actions	Emissions Reduced (MTCO _{2e}) ¹	Net City Cost	Net Community Cost
Buildings & Energy: Reduce GHG emissions from buildings and associated energy consumption and increase buildings and energy resilience which will result in cost savings, improved public health, and improved infrastructure.			
S1. Refrigerant management in new construction	 7,500	(\$43k)	+\$260k
S2. Community energy efficiency upgrades	7,500	(\$960k)	+\$2 M
S3. Energy Benchmarking and City Facility Retrofits	400	+\$3.1 M	(\$0)
Transportation & Land Use: Reduce GHG emissions from transportation and land use which will enhance community mobility, improve public health, and result in cost savings.			
S4. VMT reduction for K-12 activities	12,700	(\$570k)	+\$6.4 M
Materials & Consumption: Reduce GHG emissions from materials management and consumption which will support regional waste reduction efforts.			
S5. Environmentally preferable purchasing policy	 (\$0)	(\$0)	(\$0)
Natural Systems: Offset GHG emissions by fostering resilient natural landscapes which will improve habitats, ecosystems, and public health.			
S6. Embodied carbon reduction plan	 (\$0)	(\$0)	+\$89k
S7. Carbon sequestration research and tracking	Not quantified	(\$0)	(\$0)
Water Resources: Reduce GHG emissions from water usage (including conveyance) and prepare community water resources for a changing climate which will result in cost savings, enhance water quality and availability, improve infrastructure, and increase resiliency.			
S8. Green Stormwater Infrastructure Plan	 (\$0)	(\$0)	(\$0)
Community Resilience: Prepare for emergencies and integrate climate considerations across City and community decision-making.			
S9. Wildfire preparation, prevention, and education	Not quantified	(\$120k)	(\$0)

¹ Cumulative reductions to 2030

Key Definitions

AB	Assembly Bill in the State of California.
ABAU	Adjusted business as usual is a scenario that adjusts the BAU to account for GHG emissions reductions expected from federal, state, and regional policy such as vehicle emissions standards and renewable energy requirements.
AMI	Advanced Metering Infrastructure is a system that enables two-way communication between utilities and customers. It provides utility companies with real-time data about power consumption and allows customers to make informed choices about energy usage.
BAU	Business as usual is a scenario that assumes that current activities do not significantly change relative to current, normal conditions and circumstances.
CAFE	Federal Corporate Average Fuel Economy standards are the required average fuel economy of cars and light trucks produced in the U.S.
CAP 2.0	Pleasanton's Climate Action Plan 2.0 is the City's plan to reach per capita carbon neutrality by 2045, consistent with state requirements.
CARB	California Air Resources Board is California's lead agency for climate change programs and oversees all air pollution control efforts.
CEQA	The California Environmental Quality Act requires state and local government agencies to inform decisionmakers and the public about the potential environmental impacts of proposed projects, and to reduce those environmental impacts to the extent feasible.
City	The City of Pleasanton, CA developed and will implement CAP 2.0, in consultation with community members, stakeholders, and other implementation partners.
EVs	Electric vehicles are vehicles that derive all or part of their power from electricity.
GHG	Greenhouse gas is a gas that traps heat in the air and causes climate change. Examples include carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), and chlorofluorocarbons (CFCs).
GWP	Global warming potential is a measure that allows comparison of global warming impacts among different types of GHGs. Different GHGs can have different impacts on the Earth's warming. For example, compared to CO ₂ , methane has 84 times the GWP of CO ₂ but stays in the atmosphere for a shorter timeframe.

KPI	Key performance indicators are values used to monitor and measure the trends and effectiveness of overall sustainability performance.
LEED ND	Leadership in Energy and Environmental Design for Neighborhood Development is a rating system that recognizes new neighborhood-scale developments that achieve sustainability and energy efficiency. It assesses neighborhood pattern and design, connection to services and amenities, habitat and species conservation, green infrastructure and buildings, and innovation and the design process.
LEV	The most recent Low Emission Vehicles regulations impose stringent emission standards for criteria pollutants and greenhouse gases for new passenger vehicles through the 2025 model year.
MMBTU	Million metric British thermal units is a common unit to measure heat content, particularly of energy sources like natural gas.
MTCO_{2e}	Metric tons of carbon dioxide equivalent is a standard unit of measurement for GHGs that includes consideration of the major GHGs, including carbon dioxide (CO ₂), methane (CH ₄), and nitrous oxide (N ₂ O). It expresses the "global warming potential" of GHGs in a standardized unit, the equivalent amount of carbon dioxide.
NPDES	National Pollution Discharge Elimination System is a permit program that regulates point sources that discharge pollutants into waters across the country.
PMC	Pleasanton Municipal Code refers to ordinances (i.e., laws) that are currently in effect within Pleasanton city limits.
TDM	Transportation demand management is the application of policies, strategies, and incentives to maximize the efficiency of the transportation system through enhanced mobility, reduced congestion, and low-carbon transportation.
VMT	Vehicle miles traveled is a metric used in transportation planning to measure the cumulative miles traveled by all vehicles in a geographic region over a given time period.
EO	Executive Order for the State of California.
SB	Senate Bill in the State of California.
ZEV	Zero emission vehicles are vehicles that emit no carbon pollution during operations. Electric vehicles and hydrogen-fuel cell vehicles are two examples.

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Appendices

- A. GHG Reduction Strategies Quantification and Evidence*
- B. GHG Inventory, Forecast, and Targets Methodology and Calculation*

Section 1. Introduction



Pleasanton rests in the scenic and economically important Tri-Valley area of Alameda County in California, north of San Jose and east of San Francisco. The nearly 80,000 residents of this diverse community enjoy warm summers and mild winters.¹ Pleasanton is a prosperous city full of opportunity and innovation and serves as the home headquarters of many businesses, including Safeway, Workday, and 10x Genomics. The city has an active art scene, with several galleries and theaters that host events throughout the year. Pleasanton values open space, and it has more than 40 community parks, nearly 150 miles of bike paths, bike lanes, and trails, and 700 acres of undeveloped open space for hikers, cyclists, and equestrians to play.² Thanks to these integrated economic, cultural, and community development successes, [Pleasanton](#) has been

ranked one of the wealthiest middle-sized cities in the United States by the Census Bureau, and it was [ranked 4th](#) in USA Today’s list of “America’s 50 best cities to live” in 2014.

The City of Pleasanton has already begun its climate action work, having completed its first greenhouse gas (GHG) emissions inventory in 2007 and its first climate action plan (CAP 1.0) in 2012. Pleasanton surpassed the CAP 1.0 target of reducing emissions 15% below 2005 levels by 2020, ahead of schedule. Since then, extreme heat, water uncertainty, wildfire smoke, and flooding have become more frequent and intense, putting vital systems at risk.

In recognition of escalating climate threats and the latest Intergovernmental Panel on Climate Change (IPCC) report, this climate action plan update (CAP 2.0) reaffirms Pleasanton’s commitment to help slow climate change.³ As Pleasanton continues to grow and thrive, the City needs new strategies to balance economic growth and technological innovation—and maintain the community’s culture—without depleting natural resources and compromising the quality of life of current and future generations. Collectively, the City and community must reduce greenhouse gas emissions while building resilience to climate change within our community to maintain a vibrant, healthy, and sustainable home, now and for decades to come. Local climate action planning is a vital and effective tool for reducing greenhouse gas emissions, and the City is committed to achieving its climate goals through evidence-based, equitable, and accountable leadership.

Pleasanton surpassed the CAP 1.0 target of reducing emissions 15% below 2005 levels by 2020 ahead of schedule.

¹ See the 2020 Decennial US Census.

² See the City of Pleasanton’s Parks & Trails webpage and Trails Master Plan for more information on the City’s park and trail system.

³ IPCC. (2021). Climate Change 2021: The Physical Science Basis. Available at www.ipcc.ch/report/sixth-assessment-report-working-group-i/ (accessed 8/31/2021).

1.1 CAP 2.0 Overview

Why update the Climate Action Plan?

- CAP 1.0 has a horizon year of 2020. Updating the CAP was a City Council priority to continue building on CAP 1.0.
- Climate science has evolved, as have state, regional, and local policies and initiatives. Pleasanton must continue to take an evidence-based approach to climate action that aligns with the latest science and current and anticipated policies.
- CAP 2.0 will create a clear path forward that continues to respond to climate change.

Objectives

- Create a plan with evidence-based, actionable, and achievable local policy direction.
- Reduce Pleasanton’s greenhouse gas emissions.
- Enhance local environmental sustainability and improve resilience and vulnerability to climate change.
- Create a qualified CAP under the California Environmental Quality Act (CEQA) that complies with current regulations.

Document Organization

The CAP 2.0 is organized into the following Sections:

- **Section 1. Introduction and Background:** This section introduces CAP 2.0 and describes CAP 1.0 Progress, the shaping of the CAP 2.0 through analysis and a public process, CAP 2.0 local and regional context (e.g., existing City plans), and CAP 2.0 State context (e.g., existing state legislation).

- **Section 2. Climate Vulnerability and GHG Emissions:** This section articulates Pleasanton’s vulnerability and contribution to climate change. This section also covers best available science and outlines Pleasanton’s greenhouse gas (GHG) emissions reduction targets.
- **Section 3. Pleasanton’s Climate Solutions:** This is the main policy focus of the document. It outlines the strategies and actions Pleasanton will take to reduce GHG emissions locally, comply with state emissions targets, and enhance the City’s resilience to climate change.
- **Section 4. Implementation and Monitoring Plan:** This section provides the CAP 2.0 implementation and monitoring plan. It identifies partners, resources, and a monitoring protocol. It also outlines staffing, costs, equity considerations, and phasing of CAP 2.0 actions.

WHAT IS A “QUALIFIED CAP”?

A "qualified CAP" allows cities to streamline future analyses under the California Environmental Quality Act (CEQA). To be a qualified GHG Reduction Plan (i.e., CAP), the CAP shall:

- Quantify GHG emissions within a defined area.
- Establish a GHG emissions level below which planned activities would not be “cumulatively considerable.”
- Identify and analyze emissions from planned activities.
- Specify measures and performance standards to achieve the specified level of emissions.
- Establish a mechanism to monitor progress toward achieving the specific emissions level and amend if necessary.
- Be adopted through a public process following environmental review.

CAP 2.0 envisions Pleasanton in 2030 as...

Electricity is still 100% renewable and natural gas consumption has declined by over 10%

Homes and buildings are better able to withstand power supply fluctuations because they are more efficient, emit 40% fewer GHG emissions, and generate more renewable energy

Youth continue to drive innovation and ambition in climate action and sustainability, and have a sense of optimism about the environment of the future

People walk and bike more. When they drive, it's most likely in a zero-emissions vehicle

Green space is accessible to all, healthy, and abundant, storing over 70,000 MTCO_{2e} in trees, plants, and soil

Per capita emissions are 70% lower than in 1990 and on track to reach carbon neutrality by 2045

It's second-nature to consider climate change in everything the City and community do, and the community is more resilient to both climate and non-climate risks as a result

Water is used and reused wisely, so there is enough to go around even as the city grows

About 90,000 more tons of waste are recycled, composted, or never generated in the first place

1.2 CAP 1.0 Progress

The City's first Climate Action Plan, CAP 1.0, included a GHG emission reduction target of 15% below its 2005 baseline by 2020. Since adopting the CAP 1.0, the City has developed plans, created committees, enacted policies, and taken other notable action to address climate change. The City and its partners expanded and improved the pedestrian and bicycle network; conserved community and municipal water; and increased recycling, organics diversion, and waste reduction. The City also increased the proportion of clean, renewable resources in the electricity mix and improved green building adoption, energy efficiency, and energy conservation. Several key accomplishments and events have led Pleasanton to where it is today.

Collectively, these actions along with state and regional regulations and policies have reduced Pleasanton's emissions 28% between 2005 and 2017. The City met the CAP 1.0 target ahead of schedule. Along the way to meeting the CAP 1.0 target, the City learned key lessons in both planning and implementing climate actions. Specifically of note, the CAP 1.0 included actions that went far above and beyond the available resources to implement.

CAP 2.0 accounts for these lessons, building upon and improving the work that the City, residents, and businesses have done over the last decade and focusing on a short list of highly implementable actions.



1.3 CAP 2.0 Public Process and Engagement

How We Got Here

Pleasanton's CAP 2.0 took two years to complete. The Committee on Energy and the Environment (EEC) was the primary City Committee providing input and guidance to staff and the City's professional services team. The City relied on EEC direction and community input to inform every stage of the plan's development, from its overarching goals, vision and targets, to sectors of focus, specific strategies and actions, and their implementation. The City Council, commissions, committees, residents, businesses, implementation partners, City staff, and the professional services team worked together to:

- Conduct a **baseline assessment** of existing plans, policies, state legislation, and progress since the 2012 CAP to build on all the City has learned to date.
- Assess Pleasanton's **vulnerabilities to climate impacts**, especially increased heat, extreme weather, wildfire, and water uncertainty.
- Prepare a comprehensive **community engagement plan** to guide public outreach, engagement, and communications. The plan was adjusted to focus on virtual engagement in light of COVID-19.
- Articulate a **vision** and **guiding principles** to guide strategy and action development.
- Explore and forecast **emissions reduction pathways** and set 2030 and 2045 GHG emissions reduction **targets**, based on an updated 2017 GHG emissions inventory.
- Develop and refine **strategies and actions** through focus groups, workshops, and surveys; qualitative analysis of impact, cost, feasibility, level of support, equity, and co-benefits; and quantitative analysis of emissions reductions, costs, cost savings, and staff time to implement CAP 2.0 actions.
- Prepare this **CAP 2.0 document** and corresponding CEQA materials for environmental and public review.

How We Engaged

The City engaged community members and organizations, businesses, other community stakeholders, City committees and commissions, and City staff, throughout the planning process using a range of in-person and digital platforms. Due to the COVID-19 pandemic, the City paused in-person engagement from March-June 2020 and transitioned all engagement to the virtual environment, including the addition of virtual surveys, trivia, and workshops to diversify engagement methods and reach more residents.

By the Numbers¹

685	responses from 2 surveys
11	Committee on Energy and the Environment public hearings
5	public hearings across City Commission and Committees
2	City Council public hearings
2	meetings with the Chamber of Commerce
6	focus groups with representation from approximately 25 different implementation partners and community organizations and businesses
1	community workshop, with more than 25 attendees
22,700	utility customers reached with mailer to raise awareness about the CAP 2.0 planning process
500+	views of youth- and City-created videos on climate action
Dozens	of social media posts, community newsletters, and newspaper and TV ads to engage the community

¹ Future engagement will be added in final draft.

Engagement Themes

During engagement, several themes emerged as priorities for the community. These themes guided each stage of the planning process, ensuring that the City developed policies that align with the community’s priorities.

<p>Reliable Renewable Energy</p> <p>Residents support transitioning away from fossil fuels to renewable energy sources, including electrification and expanding local renewable energy generation, particularly solar panels. Simultaneously, the community is concerned about future blackouts and energy shortages, underscoring the importance of technologies like battery storage to ensure that renewables are both a clean and reliable energy source.</p> <p>What we heard</p> <ul style="list-style-type: none"> ☞ “Vacant or large open land like parking lots and shopping centers are ideal for adding solar.” ☞ “Reliability of the grid; quality and cost (are critical).” 	<p>Water Conservation</p> <p>Community members recognize the threat that severe droughts and water scarcity poses to Pleasanton. They identified safe and clean water as a priority early in the engagement process and reiterated support throughout for water conservation actions, such as expanding recycled water systems.</p> <p>What we heard</p> <ul style="list-style-type: none"> ☞ “We need to ensure that our water supply is safe to drink and bathe in.” ☞ “Please put money into our water supply.” 	<p>Sustainable Transportation</p> <p>Community members and City leaders alike highlighted the need for adopting more policies and programs to reduce GHG emissions from transportation, noting support for electrifying transportation, expanding telecommuting, incentivizing carpooling, making the city more bike- and walk-friendly, making public transportation more convenient, and using sustainable land use policy to reduce VMT.</p> <p>What we heard</p> <ul style="list-style-type: none"> ☞ “More specific targets focused on reducing VMT.” ☞ “Electrification across transportation and buildings highest lever (for reducing emissions).”
<p>Waste Reduction and Diversion</p> <p>Early on, community members elevated reducing community waste as a top priority for CAP 2.0 and reiterated this support throughout the engagement. They noted the importance of both community reuse programs to reduce waste overall and improving waste diversion to divert unavoidable waste from landfills.</p> <p>What we heard</p> <ul style="list-style-type: none"> ☞ “REDUCE waste, then divert what is left.” ☞ “Stop the waste at source; businesses using disposable everything!” ☞ “City events and programs need to focus on food recycling/composting.” 	<p>Green Space and Carbon Storage</p> <p>Community members emphasized the importance of expanding green spaces and ensuring proper soil management, both to support healthy habitat and to increase local carbon sequestration. This feedback resulted in focusing the Natural Systems strategy on local carbon sequestration and ecosystem resilience.</p> <p>What we heard</p> <ul style="list-style-type: none"> ☞ “How could Pleasanton offset emissions with low-cost investments in carbon sequestration projects?” ☞ “Community gardens would be great!” ☞ “More trees in parks & on streets will clean the air and provide more shade from the heat.” 	<p>Accessibility and Cost</p> <p>The community voiced concern over the cost and equity implications of climate action, noting cost as a barrier to climate action and highlighting the need to provide support for low-income residents to ensure that implementing CAP 2.0 does not inadvertently increase existing economic disparities. Additionally, City staff reiterated throughout the planning process that CAP 2.0 should focus on a short list of highly impactful strategies and actions that are cost effective and feasible to implement.</p> <p>What we heard</p> <ul style="list-style-type: none"> ☞ “I am concerned about the rising cost of living in Pleasanton as a result of the plan.” ☞ “Need to consider cost associated (with energy efficiency retrofits); need to incentivize.” ☞ “What are the equity/cost implications of EBCE’s Renewable 100?”

1.4 CAP 2.0 Local and Regional Context

The CAP 2.0 does not exist within a vacuum. To understand the strategies, gaps, and opportunities that exist, the City and professional services team reviewed relevant existing plans, policies, and programs that inform or relate to current and future climate activities in the City. Development of CAP 2.0 also intentionally aligned with and built upon several sustainability-related plans and efforts (see Figure 1 on the next page).

Table 3 (right) links to the various documents reviewed for the City of Pleasanton Baseline Assessment. Figure 1 (next page) highlights the City's key sustainability actions to date.

Beyond Pleasanton's immediate context, regional efforts include but are not limited to:

- **Bay Area Air Quality Management District (BAAQMD) programs** (e.g., Climate Protection Planning Program, Healthy Homes Initiative, and Wildfire Air Quality Response Program)
- **Alameda County programs** (e.g., Green Business Certification, Climate Protection Project, and Cool Counties Climate Stabilization Declaration)
- StopWaste.org programs **that help the community waste less and** use resources more efficiently
- **Plan Bay Area 2040** details how the nine-county Bay Area can make progress toward the region's long-range transportation and land use goals
- **Climate action plans in neighboring jurisdictions** (e.g., Dublin and Livermore recently established GHG reduction targets for carbon neutrality by 2045)

Table 3. Documents reviewed for the City of Pleasanton Baseline Assessment

Cross-cutting
Tri-Valley Local Hazard Mitigation Plan (2018)
StopWaste's Climate Change Adaptation Measures: Building and maintaining soil health to assist in climate change mitigation (2018)
Emergency Operations Plan (2018)
Pleasanton General Plan – Air Quality and Climate Change Element (2005)
Pleasanton General Plan – Economic and Fiscal Element (2005)
Pleasanton General Plan – Housing Element (2005)
Pleasanton General Plan – Community Character Element (2005)
Transportation and Land Use
Downtown Pleasanton Parking Strategy & Implementation Plan (2017)
Downtown Specific Plan (2019)
Pleasanton Pedestrian and Bicycle Master Plan (2010)
Trails Master Plan (2019)
Pleasanton General Plan – Land Use Element (2005)
Buildings and Energy
City greenhouse gas inventories for 2012 and 2017
Pleasanton General Plan – Energy Element (2005)
Materials and Consumption
The Alameda County Integrated Waste Management Plan (amended 2017)
SB 1383 Draft Text
Natural Systems and Water Resources
Zone 7 Water Agency Stream Management Master Plan (2005)
StopWaste's Climate Change Adaptation Measures: Building and maintaining soil health to assist in climate change mitigation (2018)
Urban Water Management Plan – Pleasanton Municipal Code (amended in 2016)
City of Pleasanton Recycled Water Use Guidelines (2015)
Pleasanton General Plan – Water Element (2005)
Pleasanton General Plan – Conservation and Open Space Element (2005)
Pleasanton General Plan – Land Use Element (2005)
Pleasanton 2018 Annual Water Quality Report and Pleasanton's Water Quality webpage

Figure 1. Key sustainability actions to date¹



¹ For more information on City plans, the 2012 CAP 1.0, and EEC, visit the City of Pleasanton website.

1.5 CAP 2.0 State Context

Pleasanton must take an evidence-based approach to climate action planning that aligns with the latest science, current and anticipated policies, and neighboring communities.

Since adoption of the CAP 1.0, several strategies to monitor and address climate change have emerged and California has continued to be a leader in developing climate action goals. Key California legislation and executive orders (EO) that set statewide emissions targets includes:

EO S-3-05 (2005) established statewide targets for reducing GHG emissions to 2000 levels by 2010, 1990 levels by 2020, and 80% below 1990 levels by 2050.

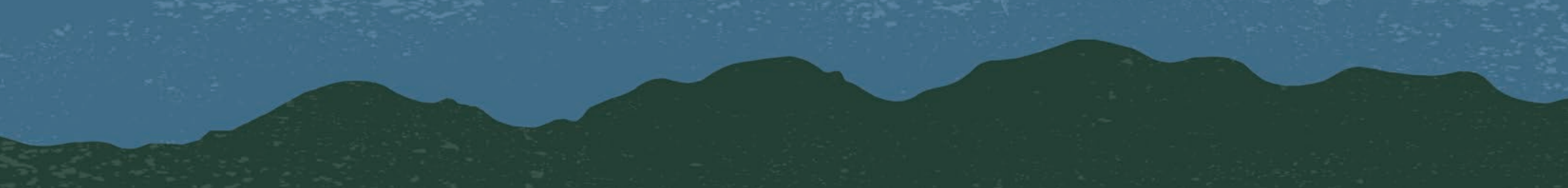
CEQA Guidelines Sections 15183.5 (2010) required, as part of Senate Bill (SB) 97, that public agencies review the environmental impacts of proposed projects and planning documents, including CAPs and specific kinds of development projects, to address GHG emissions and provide guidance about the analysis, mitigation, and effects of GHG emissions. Completion of this environmental review is one of six factors that support a GHG Reduction Plan (i.e., CAP) to be considered qualified.

SB 32 (2016) established an update statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030.

California Climate Change Scoping Plan Update (2017) lays out California's strategy for meeting its GHG emissions reduction goals, including targets and standards for clean energy, clean transportation, energy efficiency, land use and agriculture, industry, and other sectors. The state adopted the Assembly Bill (AB) 32 and SB 32 Scoping Plans in 2014 and 2017, respectively.

EO B-55-18 (2018) created a statewide goal of reaching carbon neutrality by 2045 (in addition to meeting SB 32 targets for 2030).





In addition to GHG emission reduction target setting legislation, the state has passed legislation that will help reduce Pleasanton's emissions including:

AB 1493 (2002) required that the California Air Resources Board (CARB) adopt regulations to achieve the maximum feasible and cost-effective reduction in GHG emissions from California vehicles. These are known as the Pavley Regulations and Fuel Efficiency Standards.

SB 375 (2008) directs CARB to set regional targets for GHG emissions reduction, offers CEQA streamlining incentives for GHG emissions reduction, and establishes a collaborative process to develop a regional Sustainable Communities Strategy that coordinates land use and transportation planning.

California's Advanced Clean Cars Program (2012) establishes regulations and incentives that support the transition to Low Emission Vehicles and Zero Emission Vehicles. This program exceeds federal Corporate Average Fuel Economy (CAFE) fuel efficiency standards and sets some of the most aggressive standards in the country.

SB 1383 (2016) requires that California reduce organic waste to landfill by 75% by 2025 and rescue 20% of surplus edible food in phases beginning in 2022. The bill requires jurisdictions to expand organic waste collection, procure organic waste products such as compost, mulch, and biogas; and conduct education and outreach on organics recycling to residents and businesses.

California Air Resources Board Climate Change Scoping Plan Update (2017) lays out California's strategy for meeting its GHG emissions reduction goals, including targets and standards for clean energy, clean transportation, energy efficiency, land use and agriculture, industry, and other sectors.

AB 1346 (2021-2022) would require the California State Air Resources board to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, such as leaf blowers.

SB 100 (2018) created the state's renewable portfolio standards, requiring 100% renewable energy with zero-carbon energy sources by 2045.

California Code of Regulations Title 24 (2019) was updated with new California Green Building Standards (part 11) and Building Energy Efficiency Standards (part 6). These energy efficiency and other sustainable building and construction standards apply to all newly constructed and renovated California buildings.

SAFE (Safer Affordable Fuel-Efficient) Vehicles Rule (2019) is a federal policy that revoked California's authority to set its own GHG emissions standards and ZEV mandates. The Final SAFE Rule relaxed federal GHG emissions and Corporate Average Fuel Economy (CAFE) standards to increase in stringency at only about 1.5% per year from model 2020 levels over model years 2021-2026.

EO N-79-20 (2020) requires sales of all new passenger vehicles to be zero-emission by 2035.

AB 1346 (2021) phases out gas-powered small engines, including those found in lawn mowers and leaf blowers.

While state and regional efforts will help Pleasanton reduce GHG emissions, they alone will be insufficient to meet the state's 2030 and 2045 targets. This CAP 2.0 provides a roadmap of proactive City actions and coordination with regional partners to reduce GHG emissions, so that the City can do its part to mitigate climate change and adapt to climate impacts.

Section 2. Climate Vulnerability and GHG Emissions

2.1 Pleasanton's Climate Vulnerability

Pleasanton, like many communities, faces vulnerabilities to climate change. To better understand the extent to which climate change will affect the community, the City completed a Pleasanton-specific climate vulnerability assessment.¹ This assessment evaluated anticipated climate threats to the community—including impacts to social, environmental, and infrastructure systems—and the City's level of readiness to respond to them. The assessment revealed that the community is already experiencing and will continue to experience impacts from climate change. These impacts will build upon one another, with one impact intensifying another, and threaten the safety, health, and wellbeing of residents, particularly vulnerable populations such as outdoor workers, the very young, and the elderly. Some of the specific threats that Pleasanton faces are shown in Table 4 on the following page.

¹ To view the full Climate Vulnerability Assessment, visit the City of Pleasanton [CAP 2.0 webpage](#) (accessed August 16, 2021).



Table 4. Vital systems vulnerability to climate change impacts

This table shows the extent to which Pleasanton's greatest climate change impacts (increased heat, extreme weather, wildfire, water uncertainty) are likely to affect the City's most vital public and natural systems.



Increased heat

Summers are expected to warm in Alameda County, with the number of extreme heat days and heat waves at least doubling by mid-century. Rising temperatures will exacerbate drought, wildfire, and water uncertainty

Rising temperatures impact nearly every vital system in Pleasanton. For example, a severe summer heat wave threatens public health from heat-related illness. Higher demand for air conditioning could strain the energy supply.



Extreme weather

Climate change will cause rain events to be less frequent but more intense.² In the Bay Area, these heavy rain events are likely to increase flooding, landslides, and mudslides.

Flooding, landslides, and mudslides can put people in harm's way and increase risk of injury or death. Extreme weather can also cause property damage.



Wildfire

Climate change is causing more frequent, intense wildfires in the Bay Area, straining what the fire-prone landscape can handle. Rising temperatures, drought, and expanding wildland development increases wildfire risk for parts of the inland Bay Area.

Wildfires are very likely to make air quality unhealthy: those with asthma and other health complications are at higher risk.



Water uncertainty

Pleasanton is particularly vulnerable to future water shortages. Warmer temperatures, an 80% decline in snowpack by 2100, and changing seasonal precipitation patterns will worsen summer water shortages and lead to more frequent, severe droughts.³

Pleasanton recently declared a Local Drought Emergency. These water shortage challenges will become more severe and frequent in the coming years, with impacts to everyday water use, natural landscapes, habitats, and even hydropower energy sources.

PUBLIC INFRASTRUCTURE	Most Relevant Impacts				Risk Level (1-5)
Land Use					1
Energy Infrastructure					2
Energy Supply & Demand					3
Buildings					4
Dams					1
Transportation Systems					4
WATER MANAGEMENT	Most Relevant Impacts				Risk Level (1-5)
Wastewater Infrastructure					1
Water Supply & Availability					5
Stormwater Infrastructure					3
NATURAL SYSTEMS & BIODIVERSITY	Most Relevant Impacts				Risk Level (1-5)
Terrestrial Habitats					3
Aquatic Habitats					4
Habitats & Biodiversity					3
Agriculture					2
PUBLIC HEALTH	Most Relevant Impacts				Risk Level (1-5)
Mental Health					1
Heat-related Illnesses					4
Respiratory Illnesses					3
Acute Injuries & Displacement					4
Health Access & Emergency Services					2

¹ An extreme heat day is defined as a maximum air temperature of at least 95°F, a heat wave is defined as three to nine days with maximum air temperature of at least 95°F, and an extreme heat wave is defined as ten or more days with maximum air temperature of at least 95°F. Warm months are defined as June through October. Source: Vahmani, P., Jones, A.D., and Patricola, C.M. (2019). Interacting implications of climate change, population dynamics, and urban heat mitigation for future exposure to heat extremes. Environ. Res. Lett. 14(0840851). DOI: doi.org/10.1088/1748-9326/ab28b0

² Cannon, S.H. and J.E. Gartner. (2005). Ch. 15 Wildfire-related debris flow from a hazards perspective. In: Debris-flow Hazards and Related Phenomena [eds. M. Jakob and O. Hungr]. Springer Praxis Books. Springer, Berlin, Heidelberg.

³ Ackerly, David, Andrew Jones, Mark Stacey, Bruce Riordan. (University of California, Berkeley). (2018). San Francisco Bay Area Summary Report. California's Fourth Climate Change Assessment. Publication number: CCCA4-SUM-2018-005.

Building a Resilient Community for Future Generations

The CAP 2.0 focuses on not only reducing emissions but also building a resilient community. The COVID-19 pandemic revealed the importance of understanding climate vulnerability through the lens of public health, emergency responses, quality of life, and those who are disproportionately impacted. The investments the City makes today will allow Pleasanton to shape what the community will look like, not just for current residents and visitors, but for children, grandchildren, and all future generations.

- **Some community members are more vulnerable to climate change impacts**, including children, older populations, people with chronic health conditions, low-income households, and communities of color.
- **Addressing climate vulnerability can build resilience to a broad range of crises and hazards, including natural disasters, water shortages, and public health crises**—all of which are expected to increase as a result of climate change.
- **Some of the most cost-effective strategies for increasing resilience and preparing for pandemics involve investing in essential public health infrastructure**, including water and sanitation systems, increasing community awareness and education, and increasing emergency response systems. Shoring up the local economy, especially small, local businesses, is another important opportunity to cost effectively prepare for public health and climate emergencies.
- By coordinating planning efforts, **multiple economic challenges generated by crises from climate change and other impacts can be addressed simultaneously.**



Did you know? Individual action is just as important as City action to ensure community resilience. Read on to learn what you can do!

What you can do today

Act locally

- Join and support local non-profits such as the [GoGreen Initiative](#) and/or [Tri-Valley Citizens Climate Education](#) to support local climate and sustainability action.
- Calculate your [household carbon footprint](#) and build an action plan for reducing your household's carbon pollution (e.g., how you get to work, what you buy and throw away, what you eat). The calculator will also offer funding and cost-saving resources!
- Increase your civic engagement to ensure your concerns, priorities, and values are heard and reflected, such as participating in the Pleasanton Committee on Energy and the Environment.
- Stay informed about recent climate science. For example, read parts of the most recent [IPCC report](#).

Travel more sustainably

- Reduce your travel by minimizing flights and cutting down on driving.
- Enjoy alternative transportation modes, including walking, biking, and public transit—replacing just one car trip per week can really add up!
- If you purchase a car, go electric!

Embrace zero waste

- Reduce your meat and dairy consumption—replacing just one portion of meat per week can really add up!—and eat more low-carbon foods. Seasonal fruits and vegetables, grains, and unprocessed foods have a lower carbon footprint.
- Shop locally and avoid unnecessary food waste by planning meals, right-sizing your grocery and restaurant purchases, and bring reusable containers when you shop or eat out.
- Avoid single-use plastic food wraps, utensils, or bags and instead use reusable storage containers, jars, beeswax, and shower caps.
- When purchasing clothing, electronics or household goods, look for items that are high quality, repairable, and long lasting.
- If you live in a condo or apartment building without access to organics collection (food and yard waste), talk to your property manager.

Be Water-Wise, Energy-Smart, and Nature-Friendly



- Switch off and unplug appliances when not in use (computers, phone chargers, TVs, etc.).
- Install water- and energy-efficient appliances, such as Energy Star toilets, showerheads, and washing machines.
- Plant native trees and vegetation in your backyard or garden.
- Practice xeriscaping, a process that reduces or eliminates the need for additional water in landscaping and gardening.
- Organize a community group to help restore a local stream or park.
- Avoid pesticides, herbicides, and insecticide use and instead practice [Integrated Pest Management](#).

2.2 Pleasanton's Greenhouse Gas Emissions

Every mile we travel, device we plug in, and ounce of food and waste we produce adds to Pleasanton's carbon footprint. As Pleasanton continues to grow and develop, more buildings, more vehicles, and more demand for goods and services come at a cost that we will eventually repay in impacts from climate change. Limiting the amount of climate pollution and other heat-trapping GHGs in the atmosphere is the most important action the City and community can take to slow climate change.

The City has completed several GHG emissions inventories with the most recent in 2017. These inventories help the City set community-wide targets, measure progress over time, and inform which actions will have the greatest GHG emissions reduction benefits.

The City measured the following sources of carbon pollution in the 2017 GHG emissions inventory:



BUILDINGS & ENERGY

Buildings and energy, including residential, commercial, industrial, and municipal electricity and natural gas use.



TRANSPORTATION & LAND USE

Transportation and land use, including fuels for community and municipal vehicle travel (e.g., passenger vehicle, commercial vehicles, off-road vehicles).



WASTE AND WASTEWATER

Waste and wastewater, including community solid waste generation and decomposition, and wastewater generation and treatment.

Like many cities, Pleasanton's major emissions sources are on-road transportation, especially from commercial and passenger vehicles, and building energy, especially natural gas consumption. In 2017, most of Pleasanton's GHG emissions came from three sources (Figure 2):

- **Transportation** (on-road and off-road transportation)
- **Building natural gas use** (residential and non-residential buildings)
- **Building electricity use** (residential and non-residential buildings)

As measured in the inventories, between 2005 and 2017, Pleasanton community GHG emissions have declined 28%, exceeding the GHG emissions reduction target established in the CAP 1.0. Even as Pleasanton has continued to experience a growing population and economy, the community achieved a per capita emissions reduction of 37%.

Figure 3. Communitywide emissions changes from 1990 to 2017, by sector

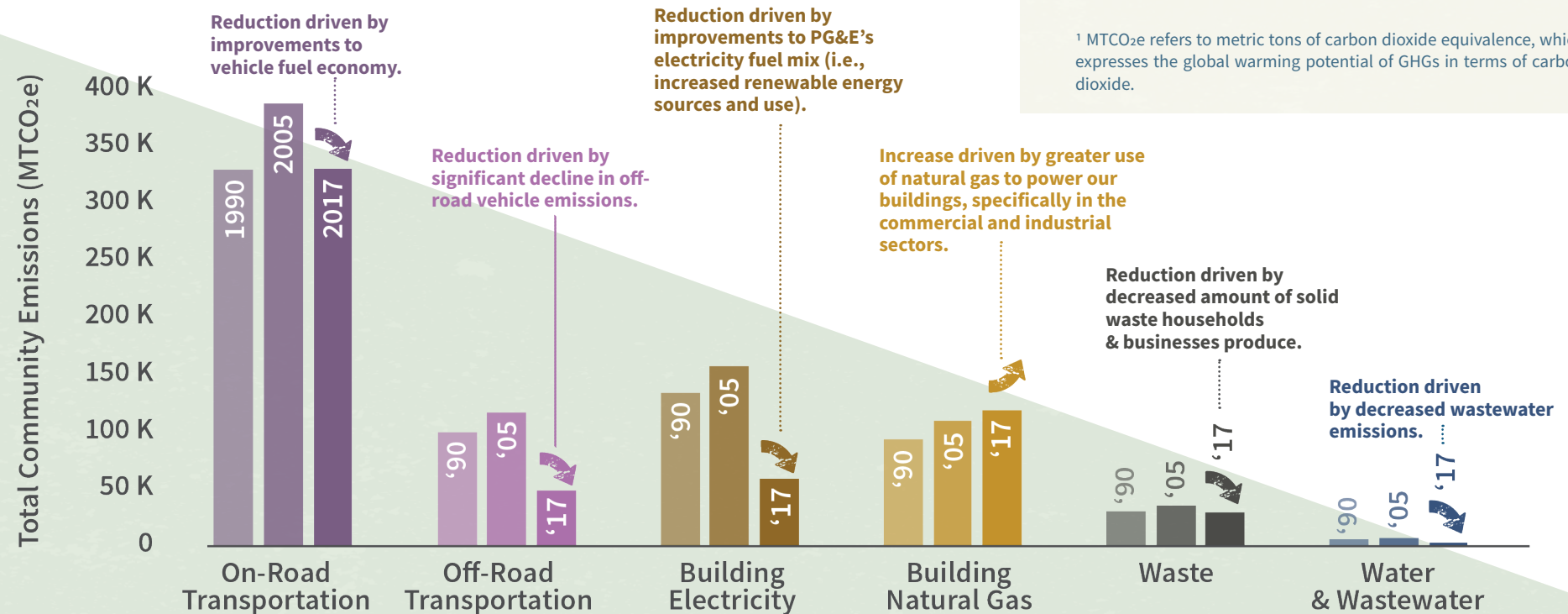
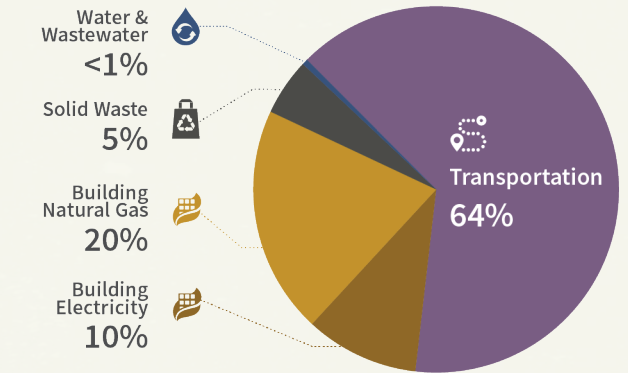


Figure 2. Pleasanton community GHG emissions by sector (2017 Total: 588,553 MTCO_{2e}¹)



¹ MTCO_{2e} refers to metric tons of carbon dioxide equivalence, which expresses the global warming potential of GHGs in terms of carbon dioxide.

Projected Emissions

Building off the 2017 GHG emissions inventory, emissions were forecasted into the future, in five-year intervals beginning in 2020 and ending in 2050 (see Appendix B and Figure 4 on page 28 for more information).

- A **Business as Usual (BAU) forecast** estimates how emissions would change over time without the influence of external or internal policies or programs. Population and economic growth are the key drivers of the BAU projection, specifically the growth projected in the City’s 2005-2025 General Plan and Association of Bay Government’s future demographic forecasts.
- An **Adjusted BAU (ABAU) forecast** considers the influence of policies external to Pleasanton—namely SB 100, Title 24 building efficiency standards, and vehicle emission standards—on projected communitywide emissions. These existing and anticipated policies will decrease Pleasanton’s local emissions even if the City takes no climate action. Calculating the difference between the ABAU and the reduction targets set by the City (see Section 2.3) determines the gap to be closed through CAP 2.0 implementation.

In addition to state and federal regulations that affect local emissions, the City is already taking several actions that are anticipated to continue through the life of this plan. These actions are considered existing and ongoing. Some of these actions are GHG mitigating actions and contribute to additional GHG emissions reductions. Existing ongoing actions that were quantified for emission reduction potential are listed in Table 5 to the right.

Table 5. GHG emission reduction estimates for local existing ongoing actions

Existing Ongoing Actions	Cumulative 2030 Emissions Reduced (MTCO _{2e})
E1. Maintain zero-emissions energy as the default EBCE choice for municipal operations	2,200
E2. Maintain zero-emissions energy as the default EBCE choice for the community	255,700
E3. Bicycle & Pedestrian Master Plan and Trails Master Plan	6,400
E4. Regional transit support	5,300
E5. Complete Streets Implementation	1,000
E6. Housing Element	18,800
E7. SB 1383 implementation	135,100



2.3 GHG Emissions Reduction Targets

Recognizing that state and federal policies will reduce emissions, the City aims to deepen GHG emissions reductions through local targets, strategies, and actions.

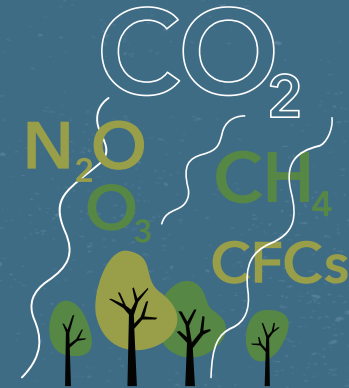
The CAP 2.0 includes a linear emissions reduction target pathway that complies with the latest state-level policies and supports a qualified CAP. This pathway includes GHG emission reduction targets to reach **per capita carbon neutrality by 2045 and reduce emissions to 4.1 MTCO₂e per capita by 2030**. The targets set in the CAP 2.0 align Pleasanton with the long-term path set by the state (i.e., SB 32, EO B-55-18, EO S-3-05), with a more aggressive interim 2030 target. The City chose a pathway that exceeds state GHG emissions reduction requirements in 2030 to underscore the importance of early and consistent action. Actions that are taken today set the foundation for achieving carbon neutrality, help ensure a smooth transition for system-changing actions, and enable emissions reductions to occur sooner, making them more impactful.

By 2030

Pleasanton's per-capita GHG emissions will be **~65% below 2005 levels** and **~70% below 1990 levels** (4.1 MTCO₂e per capita)

By 2045

Pleasanton will achieve **carbon neutrality** (0 net MTCO₂e per capita)

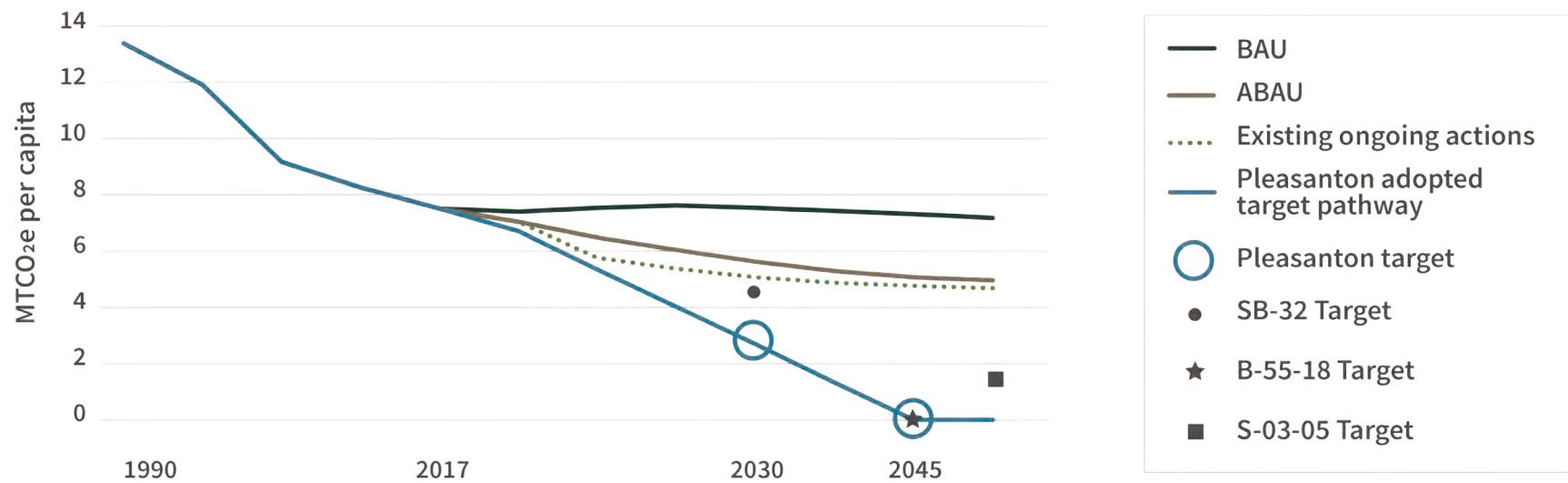


2.4 CAP 2.0 Policy Focus

As shown in Figure 4 below, existing state legislation (i.e., the ABAU forecast scenario) will help drive reductions in emissions. Further driving reductions are local existing and ongoing actions. However, that is not enough to reach the CAP 2.0 2030 target. Further local action is needed to close the gap between the projected emissions and the CAP 2.0 target pathway. This gap is the policy focus of the CAP 2.0. The CAP 2.0 outlines new strategies and actions the City will implement over the next 10 years that will achieve the interim 2030 CAP 2.0 target and set the City up for success to meet the City’s long-term 2045 target for per capita carbon neutrality (see Section 3: Pleasanton’s Climate Solutions).



Figure 4. CAP 2.0 GHG emissions forecast, goals, and targets (MTCO₂e per capita)



Section 3. Pleasanton's Climate Solutions

3.1 Introduction and Orientation

Climate Solutions Introduction

Pleasanton's climate solutions since 2012 have led to meaningful benefits for residents and businesses. The policy focus for the CAP 2.0 builds off the solutions since 2012 and focuses on the gap between the forecasted emissions and the CAP 2.0 targets. CAP 2.0's climate solutions outline new strategies and actions combined with existing ongoing actions that slow the process of climate change by reducing GHG emissions from multiple sectors and storing carbon in natural systems. CAP 2.0 climate solutions also build resilience to extreme heat and weather, flooding, wildfire, fluctuations in the power supply, and water shortages. In addition to reducing emissions, the CAP 2.0's climate solutions have many social, economic, and environmental co-benefits for the community (see Orientation to actions for details).

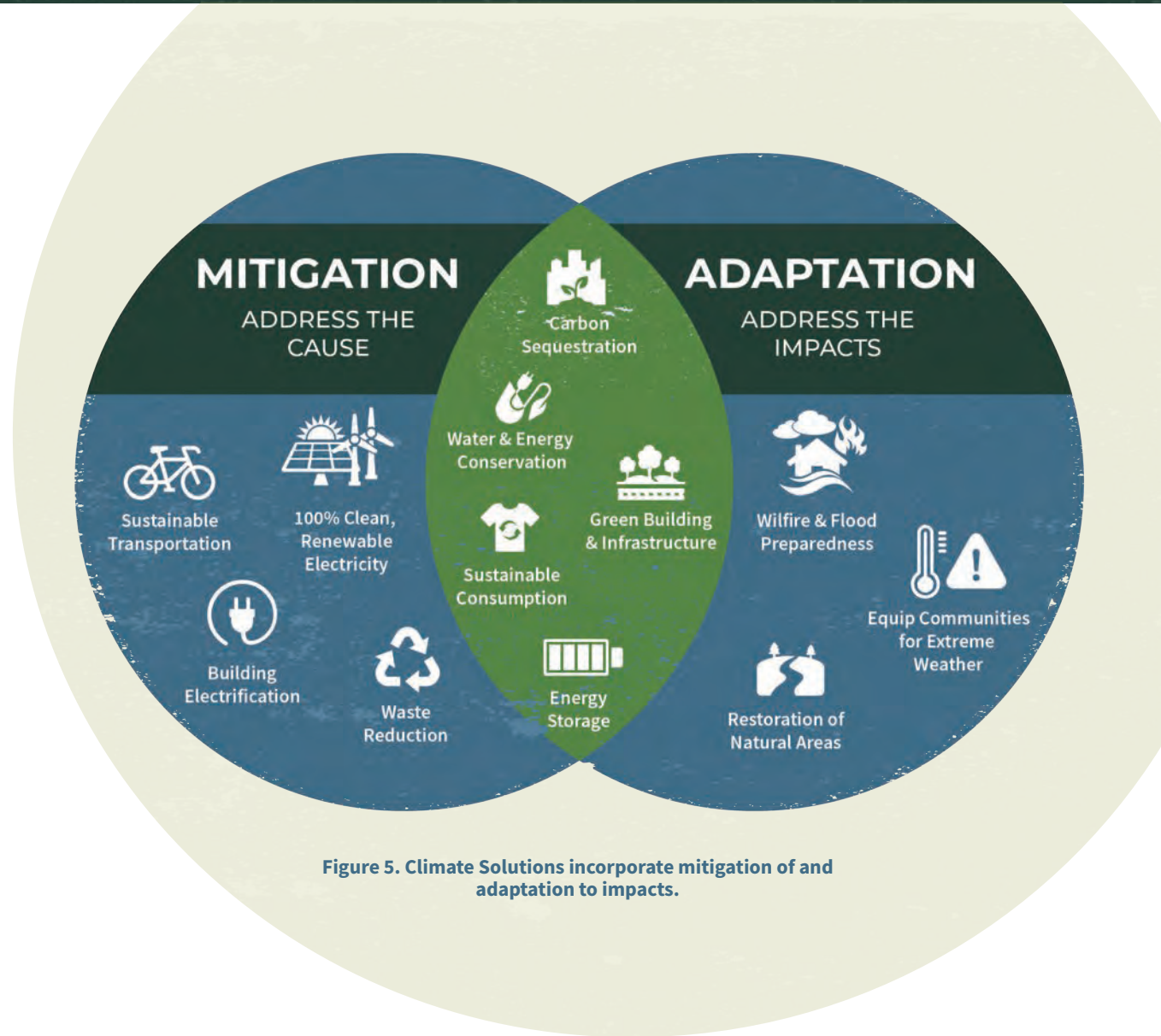
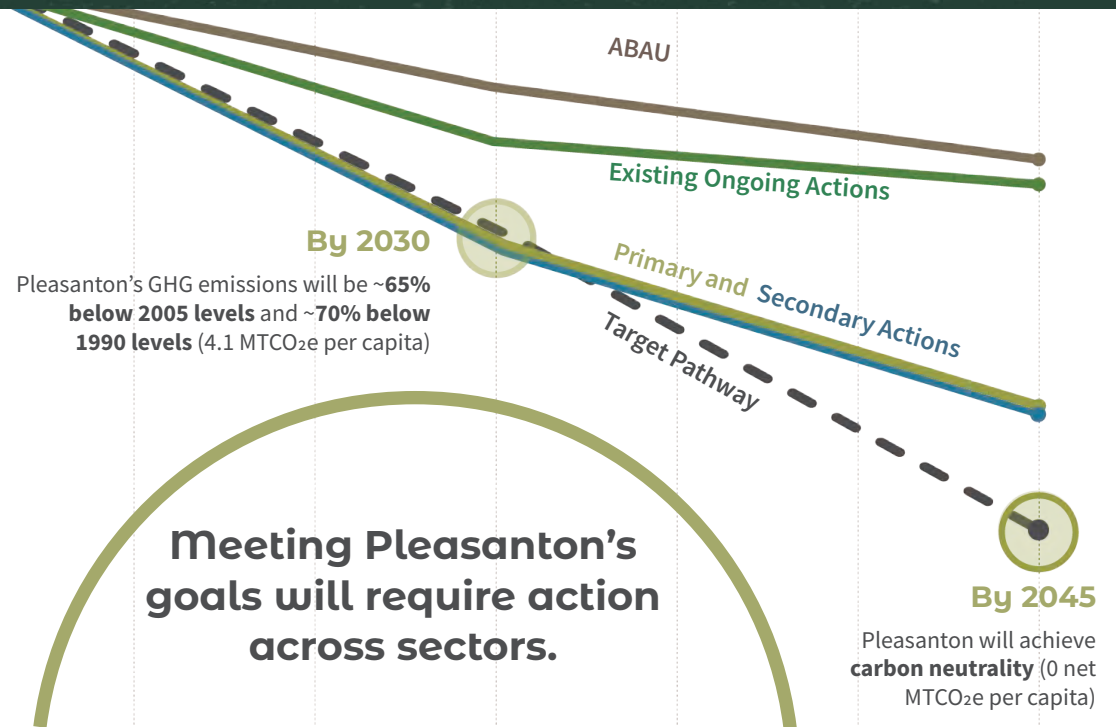


Figure 5. Climate Solutions incorporate mitigation of and adaptation to impacts.

The strategies and actions included in the CAP 2.0 aim to meet the needs and reflect the values and concerns of the Pleasanton community. The primary pathway to reduce transportation emissions is to take advantage of zero-emissions electricity to **electrify vehicles and buildings**. The City will also **build out and connect its bicycle, pedestrian, and transit network** to further reduce emissions from remaining gas-powered vehicles, provide viable travel alternatives for those without vehicles, and support healthy lifestyles. Natural gas emissions is also a key component on the primary pathway to reduce emissions. In July 2021, the Pleasanton City Council made the decision to opt into EBCE's 100% renewable energy portfolio which will help to make significant progress in this area. Since electrified buildings still use energy, electrification will be complemented by **expanding green building and energy conservation and efficiency efforts**, which also build resilience to extreme heat and fluctuations in the power supply. Together, the transportation and buildings/energy approaches will reduce ~40% of Pleasanton's emissions. The remaining reductions will come largely from **implementing existing state law on food waste reduction and recovery** and **storing carbon on the landscape** through an Urban Forest Master Plan.

To further address the impacts of climate change and support a healthy environment for Pleasanton residents to live, work, and play, the City will continue a number of ongoing efforts. They will continue to **implement water conservation, water quality, stormwater, and pollutant reduction programs** to preserve and protect the water supply. The City will also **support urban agriculture**, and **provide cooling centers** during extreme heat. Finally, the City will **support and in some cases expand community outreach and education programs**.



BUILDINGS & ENERGY	TRANSPORTATION & LAND USE	MATERIALS & CONSUMPTION	NATURAL SYSTEMS	WATER & WASTEWATER	COMMUNITY RESILIENCE
Electrify vehicles and buildings, promote green building, and expand energy conservation and efficiency efforts	Build out and connect bicycle, pedestrian, and transit networks	Implement existing state laws on food waste reduction and recovery	Support urban agriculture and store carbon on the landscape	Implement water conservation, water quality, stormwater, and pollution reduction programs	Provide cooling centers and continue to expand community outreach and education programs

Orientation to Climate Solutions Sectors, Strategies and Actions

Orientation to Sectors and Strategies

Each sector (Buildings & Energy, Transportation & Land Use, Materials & Consumption, Natural Systems, Water Resources, and Community Resilience & Wellbeing) begins with a **two-page overview** of how the sector contributes to Pleasanton's carbon pollution and climate solutions.

- 1. Subheader:** The plan for the sector, in a nutshell
- 2. Introduction:** How the sector contributes to Pleasanton's climate pollution and what the City has done since 2012 to address it
- 3. Goal(s):** The outcome that Pleasanton intends to achieve and how progress will be tracked
- 4. Reductions:** The emissions reductions needed from the sector to achieve the 2030 target
- 5. Strategies:** Pleasanton's plan to accomplish goals in the sector, and the cumulative emissions reductions and other benefits expected from the sector through 2030
- 6. Actions:** The specific activities the City will implement; includes the cumulative costs or cost savings over a 10-year timeframe and cumulative emissions reductions expected through 2030. The 🏠 symbol indicates an action that indirectly supports emissions reduction

Buildings & Energy
Decarbonize buildings, expand the use of renewable energy sources, and use energy more wisely.

Buildings & Energy Goal(s)
Reduce GHG emissions from buildings and associated energy consumption and increase buildings and energy resilience which will result in cost savings, improved public health, and improved infrastructure.

Key Performance Indicators (vs. 2017)
Success will be monitored in the Buildings and Energy sector by tracking progress against the following key performance indicators:

- Reduce building emissions 31%, to ~123,000 MTCO₂e
- Reduce natural gas consumption 7%, to ~20,900,000 therms
- Maintain energy consumption despite population growth
- Reduce the carbon intensity of energy 100%, to 0 MTCO₂e/kWh
- Increase solar and battery permits
- Decrease municipal energy use

Buildings & Energy in Pleasanton
Building emissions come primarily from powering, heating, and cooling buildings, in particular increasing natural gas use.

- Pleasanton's second-largest source of emissions
- 30% of community emissions in 2017
- 20% of these emissions were from natural gas in 2017, and natural gas use increased 30% from 2005 to 2017

Performance since 2012

- Converted 5,400 sodium vapor streetlights to light emitting diodes (LEDs).
- Installed solar panels at four municipal buildings.

By 2030, 31% of emissions reductions will come from this sector.

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Strategy BE-1. Advance the decarbonization of buildings 285,900 MTCO₂e reduced
Pleasanton is now participating in EBCE's Renewable 100 program, ensuring all of Pleasanton is powered by 100% renewable energy and that low-income residents have access to discounted programs to keep energy affordable. Shifting electricity from natural gas to electric fuels in all new and existing buildings will address the biggest remaining source of building emissions—natural gas—and build a foundation for fully transitioning to carbon-free renewable energy. Making the transition to all-electric will support green job creation and improved indoor air quality, as natural gas equipment is replaced and new buildings are built electric. Paired with increased energy efficiency and small-scale renewable energy and storage, buildings will also become more resilient to fluctuations in energy supply.

E1. Maintain zero-emissions energy as the default EBCE choice for municipal operations	2,100
E2. Maintain zero-emissions energy as the default EBCE choice for the community	280,000
P1. All-electric reach code for new construction	12,000
P2. Existing Building Electrification Plan	17,000
S1. Refrigerant management in new construction	0

Strategy BE-2. Improve energy consumption and efficiency 9,200 MTCO₂e reduced
As the City electrifies buildings to ensure that they are powered with clean, renewable energy, Pleasanton can further reduce energy emissions right away by making homes and buildings more energy efficient. This strategy builds on the City's progress to date in financing, outreach, and partnerships in support of energy efficiency and conservation. Energy efficiency also has the added benefit of reducing energy bills for residents and businesses. These cost savings are particularly important for lower income residents and renters, who tend to face a disproportionately higher energy burden because they are more likely to live in older, less energy-efficient homes and apartment complexes.

Supporting Actions		Cumulative Emissions Reduced through 2030 (MTCO ₂ e)
F3. Modify Municipal Code definition of "covered projects"		1,300
S2. Community energy efficiency upgrades		8,300
S3. Energy benchmarking and City facility retrofits		350

Strategy BE-3. Expand use of renewable energy 300 MTCO₂e reduced
As the decarbonization strategy works to remove fossil fuel use from our buildings and the energy efficiency strategy works to reduce overall energy consumption, expanding the use of renewable energy will increase Pleasanton's general climate and energy resilience. The City will increase local renewable energy generation and storage to reduce reliance on the larger power grid and make the community less susceptible to potential energy shortages from climate impacts like heat waves. Expanding renewables and storage will increase community resilience during Power Safety Shut-off events and allow homes to maintain service during those times. The installation and maintenance of new solar technology will also support local green jobs. Equitable access to renewable energy technologies, such as residential solar panels, is important to successful implementation. The City can expand access through financial incentives and rebate programs that support residents in purchasing or leasing these technologies.

Supporting Actions		Cumulative Emissions Reduced through 2030 (MTCO ₂ e)
P4. Solar and storage on new construction		300

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Orientation to Actions

Following the two-page overview, the existing ongoing, primary, and secondary actions supporting each strategy are described in detail.

Existing ongoing actions either directly or indirectly support the emissions reductions goals of the CAP 2.0. The City is already implementing these actions and will continue to do so to meet its targets. GHG emissions and co-benefits were evaluated for these, but costs were not, as they are already contemplated in other plans and policies. These actions are denoted with an "E."

Primary actions are new actions in the CAP 2.0 that are primarily GHG mitigating actions. These actions are needed to meet emissions reduction targets. They will be implemented according to the implementation plan. These actions are denoted with a "P."

Secondary actions are new actions in the CAP 2.0 that are primarily resilience building actions. These actions will only be implemented as resources (e.g., staff time, grants, and other funding sources) and/or partnership opportunities become available. These actions are denoted with a "S."

Strategy BE-1. Advance the decarbonization of buildings

Existing Ongoing Actions

E1. Maintain zero-emissions energy as the default EBCE choice for municipal operations

Emissions reduction	2,200	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

Description of action

E2. Maintain zero-emissions energy as the default EBCE choice for the community

Emissions reduction	255,700	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

Description of action

Primary Actions

P1. All-electric reach code for new construction

Emissions reduction	10,100	City Cost	\$49k
Co-benefits	☀️ 🌳 🗑️	Community Cost	\$2.8 M saved

Description of action

P2. Existing Building Electrification Plan

Emissions reduction	16,500	City Cost	\$140k
Co-benefits	🗑️	Community Cost	\$140k

Description of action

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CO-BENEFITS

	Increases resilience	Supports the ability of vital systems and the community to withstand or bounce back from climate change impacts and risks.
	Improves public health	Provides direct or indirect public health benefits, such as improved air and water quality or healthier lifestyles.
	Improves habitats and ecosystems	Positively affects natural systems, such as cleaner water or improved habitat.
	Advances racial and social justice	Fairly distributes social, environmental, and economic benefits and costs across the community in consideration of historically marginalized and underserved groups.
	Supports job creation	Likely to generate new jobs in Pleasanton.
	Improves mobility and transportation safety	Improves public transit reliability and equitable access, or helps residents and shipments move around more easily and safely.

3.2 Action Prioritization Process

The following process was used to develop the CAP 2.0 actions:

- 1 Develop initial set of actions**

An initial set of actions was prepared based on the CAP 1.0, current best practices and best available science, EEC workshop, peer cities, six focus groups, and community input. Importantly, all actions had to meet the three guiding principles of being **evidence-based, accountable, and actionable**.
- 2 Conduct qualitative analysis of actions**

To effectively rank the list of actions, actions were evaluated based on effectiveness, cost, feasibility, level of support, equity, and realization of co-benefits. The qualitative analysis highlighted the most promising CAP 2.0 actions. The actions were reviewed through **public hearings with several Committees and Commissions, meetings with the Chamber of Commerce, and a public workshop**. Based on the qualitative analysis and feedback received, approximately **50 actions** were recommended to move forward to a quantitative analysis, along with a suite of existing ongoing actions the City plans to continue.
- 3 Conduct quantitative cost-benefit analysis of existing ongoing and short list of actions**

For most actions, the potential **emissions reductions, costs (or cost savings)** to the City and community, and City staff time over the near-term (2022-2024), mid-term (2025-2028), and long-term (2029-2031). The cost-benefit analysis considered both start-up and ongoing costs and relied on published scientific literature, case studies, and expert opinion, including City staff input and consultation with peer cities, to conduct the analyses. Some actions were not modeled because they were not readily quantifiable, may have resulted in inconsequential GHG emissions reductions, or may have indirect benefits that do not result in emissions reductions. Results from the cost-benefit analysis are detailed in Sections 3.2-3.8. See Appendix A for the full analysis and results.
- 4 Finalize existing ongoing, primary, and secondary actions**

The EEC, community, and City Council reviewed the results of the quantitative analysis. Based on the results, a set of 15 new primary actions and 10 new secondary actions are included in the CAP 2.0. Secondary actions will be implemented as time and resources allow. Additionally, a set of existing ongoing actions will be continued through the life of the CAP 2.0 and are included for reference.



Guiding Principles

Actions in the CAP 2.0 must be:

- Evidence-based**

Actions rely on the best available scientific and local knowledge.
- Actionable**

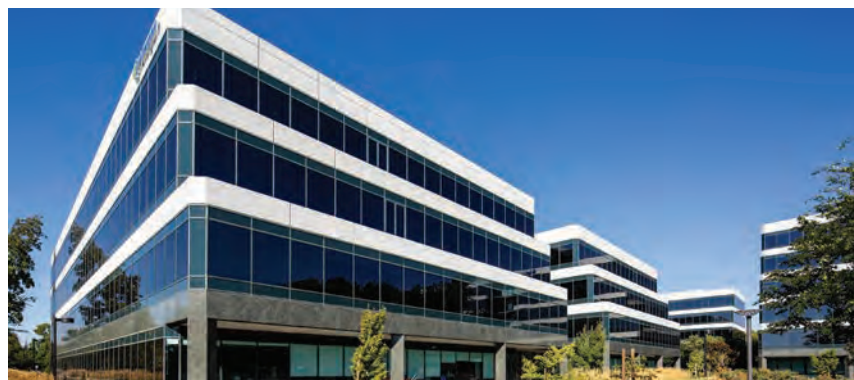
Actions are as ambitious as possible while being realistic about factors affecting implementation.
- Accountable**

Actions can be transparently evaluated, measured, and reported.



Buildings & Energy

Decarbonize buildings, expand the use of renewable energy sources, and use energy more wisely.



Buildings & Energy in Pleasanton

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- Reduce the carbon intensity of energy 100%, to 0 MTCO₂e/kWh
- Increase solar and battery permits
- Decrease municipal energy use

By 2030, 31% of emissions reductions will come from this sector.



Strategy BE-1. Advance the decarbonization of buildings		284,500 MTCO₂e reduced
<p>Pleasanton is now participating in EBCE’s Renewable 100 program, ensuring all of Pleasanton is powered by 100% renewable energy and that low-income residents have access to discounted programs to keep energy affordable. Shifting electricity from natural gas to electric fuels in all new and existing buildings will address the biggest remaining source of building emissions—natural gas—and build a foundation for fully transitioning to carbon-free renewable energy. Making the transition to all-electric will support green job creation and improved indoor air quality, as natural gas equipment is replaced and new buildings are built electric. Paired with increased energy efficiency and small-scale renewable energy and storage, buildings will also become more resilient to fluctuations in energy supply.</p>		
Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO₂e)	
E1. Maintain zero-emissions energy as the default EBCE choice for municipal operations	2,200	
E2. Maintain zero-emissions energy as the default EBCE choice for the community	255,700	
P1. All-electric reach code for new construction	10,100	
P2. Existing Building Electrification Plan	16,500	
S1. Refrigerant management in new construction		

Strategy BE-2. Improve energy consumption and efficiency		9,200 MTCO₂e reduced
<p>As the City electrifies buildings to ensure that they are powered with clean, renewable energy, Pleasanton can further reduce energy emissions right away by making homes and buildings more energy efficient. This strategy builds on the City’s progress to date in financing, outreach, and partnerships in support of energy efficiency and conservation. Energy efficiency also has the added benefit of reducing energy bills for residents and businesses. These cost savings are particularly important for lower income residents and renters, who tend to face a disproportionately higher energy burden because they are more likely to live in older, less energy-efficient homes and apartment complexes.</p>		
Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO₂e)	
P3. Modify Municipal Code definition of “covered projects”	1,300	
S2. Community energy efficiency upgrades	7,500	
S3. Energy benchmarking and City facility retrofits	400	

Strategy BE-3. Expand use of renewable energy		2,300 MTCO₂e reduced
<p>As the decarbonization strategy works to remove fossil fuel use from our buildings and the energy efficiency strategy works to reduce overall energy consumption, expanding the use of locally generated renewable energy will increase Pleasanton’s general climate and energy resilience. The City will increase local renewable energy generation and storage to reduce reliance on the larger power grid and make the community less susceptible to potential energy shortages from climate impacts like heat waves. Expanding renewables and storage will increase community resilience during Power Safety Shut-off events and allow homes to maintain service during those times. The installation and maintenance of new solar technology will also support local green jobs. Equitable access to renewable energy technologies, such as residential solar panels, is important to successful implementation. The City can expand access through financial incentives and rebate programs that support residents in purchasing or leasing these technologies.</p>		
Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO₂e)	
P4. Solar and storage on new construction	2,300	

Strategy BE-1. Advance the decarbonization of buildings

Existing Ongoing Actions

E1. Maintain zero-emissions energy as the default EBCE choice for municipal operations

Emissions reduction	2,200	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City commits to maintain the highest renewable energy choice as the default for all municipal facilities, including opportunities to secure Power Purchase Agreements with other EBCE jurisdictions.

E2. Maintain zero-emissions energy as the default EBCE choice for the community

Emissions reduction	255,700	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City commits to maintain the highest renewable energy choice as the default for the community.

Primary Actions

P1. All-electric reach code for new construction

Emissions reduction	10,100	City Cost	\$49k
Co-benefits	  	Community Cost	\$2.8 M saved

The City will adopt an all-electric building reach code for new construction that limits the development of new gas infrastructure

where economically feasible. The City will ensure solutions are equitably tailored to different building, ownership, and use types, which will require a cost-effectiveness evaluation and further outreach. Exceptions to the code will be considered.

P2. Existing Building Electrification Plan

Emissions reduction	16,500	City Cost	\$140k
Co-benefits		Community Cost	\$140k

The City will develop and implement an Existing Building Electrification Plan to advance electrification of buildings. This plan will be phased in over time to allow property owners time to adjust and plan for the transition. With this effort, the following should also be considered:

Grid Analysis/Improvements

- Work with EBCE, PG&E, and regional partners to ensure a robust regional electrical grid that minimizes the risk of power outages, increases storage, and reduces demand for diesel or gas generators. Partnerships should consider opportunities for local renewable generation and storage, consistent with Strategy BE-3.
- Conduct an existing building electrification analysis to identify areas of opportunities, building types, and prerequisites needed to make electrification cost-effective in the community.

Municipal and Public Buildings

- Phase implementation of electrification into existing municipal buildings, consistent with Action S3.
- Partner with the school district to phase implementation of electrification into school buildings.

Community Buildings

- Review and enhance permitting process to simplify the process (e.g., permit streamlining) as feasible to encourage adoption of

electrification and energy storage back-up practices throughout the community.

- Leverage partnerships to provide financial incentives for existing residential and commercial building electrification (e.g., EBCE’s Resilient Home program), consistent with Action S2.

Outreach and Education

- Build a residential and business toolkit (e.g., permit guide) to identify the steps needed to electrify buildings (e.g., panel upgrades) and promote rebates and incentives (e.g., hot water heater replacements and induction cooking through EBCE and Bay Area Renewable Energy Network [BayREN]) to encourage and simplify the electrification process of existing buildings.
- Work with local businesses and change agents to influence behavior in community.
- Work with local organizations (e.g., Bay East Association of Realtors) to promote energy programs to business and homeowners.

Metrics and Evaluation

- Build in evaluation metrics to determine progress towards meeting electrification goals.
- Stay apprised of existing building electrification regulations, studies, and regional efforts.

Secondary Actions

S1. Refrigerant management in new construction

Emissions reduction		City Cost	\$43k
Co-benefits		Community Cost	\$260k saved

The City will require that all new construction use the lowest global warming potential (GWP) refrigerants available for appliances and heating, ventilation, and air conditioning (HVAC) systems.

Strategy BE-2. Improve energy consumption and efficiency

Primary Actions

P3. Modify Municipal Code definition of “covered projects”

Emissions reduction	1,300	City Cost	\$0
Co-benefits		Community Cost	\$290k

The City will modify the Pleasanton Municipal Code (PMC) Green Building chapter to expand the definition of “covered projects” to cover all new commercial buildings and all new residential homes. Under the current PMC, a “covered project” means (1) construction of any city sponsored project; (2) construction of any commercial project that includes 20,000 gross square feet or more of conditioned space; (3) renovation of any commercial project or city sponsored project that adds 20,000 gross square feet or more of additional conditioned space, but not a renovation project that consists solely of interior improvements to an existing building; (4) construction of any single-family residential project that is 2,000 square feet or more in size; (5) construction of any multi-family residential project; (6) construction of

any mixed use project; (7) additions to residential projects where the addition is 2,000 square feet or greater; or (8) additions of any size to residential projects where the residential project was less than 2,000 square feet when built and it has been less than five years from the date the certificate of occupancy was issued. Covered projects do not include historic buildings or privately owned commercial or mixed use buildings within the boundaries of the downtown specific plan.


Secondary Actions

S2. Community energy efficiency upgrades

Emissions reduction	7,500	City Cost	\$960k
Co-benefits		Community Cost	\$2 M saved

The City will promote use of energy efficiency improvements (e.g., window upgrades, LED lighting) communitywide through incentives, partnerships, and/or education and outreach, consistent with P16.

S3. Energy benchmarking and City facility retrofits

Emissions reduction	400	City Cost	\$3.1 M saved
Co-benefits		Community Cost	\$0

The City will use the U.S. Environmental Protection Agency’s Energy Star Portfolio Manager tool (or other similar tools) to measure and track energy and water usage across City facilities. The City will assess the performance of individual facilities over time, identify opportunities for efficiency upgrades and cost savings across City facilities, and conduct energy retrofits of existing City facilities and equipment. To build local resilience to energy shortages, the City will work with regional partners (e.g., EBCE) to install solar and storage systems on municipal facilities (e.g., parks, library) where they will be the most effective.

Strategy BE-3. Expand use of renewable energy

Primary Actions

P4. Solar and storage on new construction

Emissions reduction	2,300	City Cost	\$0
Co-benefits		Community Cost	\$0

Within the PMC Green Building chapter, the City will require “covered projects” to include solar installation that meets the power needs of the new development if feasible. Where solar is being installed, the covered projects will also be required to install energy storage systems.



Transportation & Land Use

Advance vehicle decarbonization, alternative transportation, and sustainable land use.



Transportation & Land Use in Pleasanton

Transportation emissions come primarily from driving cars and light trucks, in particular on-road single occupancy vehicles.

- Pleasanton's largest source of emissions
- 64% of community emissions in 2017

Performance since 2012

Since 2012, Pleasanton has taken the following steps to reduce GHG emissions from the Transportation & Land Use sector.

- Doubled the amount of Class I bicycle paths and increased the Class II bicycle lanes from 27 to 40, including completion of the Iron Horse Trail through Hacienda Business Park and Johnson Drive Canal underpass to connect to Dublin.
- Supported the implementation of the LAVTA Rapid bus that increased transit ridership and reduced travel time to and from BART Station.
- Modified the PMC to require new residential developments within 1/2 mile of transit to offer discounted transit passes as part of HOA amenities.

Transportation & Land Use Goal(s)

Reduce GHG emissions from transportation and land use which will enhance community mobility, improve public health, and result in cost savings.

Key Performance Indicators (vs. 2017)

Success will be monitored in the Transportation and Land Use sector by tracking progress against the following key performance indicators:

- Reduce per-capita VMT 6%, to ~4,600 VMT per capita
- Reduce the average carbon intensity of passenger vehicles 44%, to 0.05 kg CO₂e/mile
- Increase electric vehicle charger permits
- Increase electric vehicles in municipal fleet
- Increase miles of bicycle lanes built
- Increase public transit ridership

By 2030, 18% of emissions reductions will come from this sector.



Strategy TLU-1. Advance vehicle decarbonization	124,500 MTCO₂e reduced
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The City of Pleasanton will expand existing ZEV fueling infrastructure throughout the community and transition the municipal fleet to EVs. Even with shifts toward active and public transportation, many community members in Pleasanton will still own or lease cars due to proximity and convenience. Acknowledging that car use will continue to persist (and perhaps dominate), this strategy is pivotal to reducing Pleasanton’s emissions. By engaging the local community, including school districts and regional organizations, the City of Pleasanton will educate key audiences and identify funding partnerships to support the switch to ZEVs (e.g., electric or hydrogen-fuel celled vehicles). This switch will not only reduce local GHG emissions, but also improve local air quality—especially near major roadways.

Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO ₂ e)
P5. Create and implement a ZEV Infrastructure Plan	118,200
P6. Electrify municipal small engine equipment and reduce emissions of off-road equipment upon replacement	6,300
P7. Expand community small-engine electrification	6,300

Strategy TLU-2. Advance active, shared, and public transportation	34,200 MTCO₂e reduced
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Through continued work to support the Valley Link project and implement the City’s Trail Master Plan, Bicycle & Pedestrian Master Plan, and Complete Streets program, the City is actively integrating accessible infrastructure that accommodates multiple modes of transportation. The City will continue to expand bicycle infrastructure, encourage transit ridership, and invest in school programs that reduce VMT for curricular and co-curricular activities. The City’s investments in active, shared, and public transportation must expand into all areas of the city, and ensure those without personal vehicles have reliable access to alternative transportation options. Convenience, affordability, and ease of use are imperative to the success of alternative transportation programs, as options that are inconvenient and difficult to navigate will likely not be used.

Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO ₂ e)
E3. Bicycle & Pedestrian Master Plan and Trails Master Plan	6,400
E4. Regional transit support	5,300
E5. Complete Streets Implementation	1,000
P8. Bicycle amenities	1,900
P9. Bicycle rack incentive progr	1,800
P10. Increase transit ridership	5,100
S4. VMT reduction for K-12 activities	12,700

Strategy TLU-3. Advance sustainable land use	35,400 MTCO₂e reduced
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Since Pleasanton’s population and job base is expected to increase, General Plan Housing Element implementation and LEED ND will be essential to support not only responsible community development, but reduce VMT and provide access to active and/or shared transportation. This strategy will prioritize housing near transit and job centers and encourage sustainable land development for new projects that get built. Current hurdles to active and public transit include convenience and accessibility linked to land use patterns in Pleasanton. Some of these issues can be solved for future development through conscious efforts to develop with sustainable principles from plan concept to implementation.

Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO ₂ e)
E6. Housing Element	18,800
P11. Promote LEED Neighborhood Development	16,600



Strategy TLU-1. Advance vehicle decarbonization

Primary Actions

P5. Create and implement a ZEV Infrastructure Plan

Emissions reduction	118,200	City Cost	\$220k
Co-benefits		Community Cost	\$31k saved

The City of Pleasanton will develop and implement a ZEV Infrastructure Plan that strategically expands EV and other zero emissions fueling infrastructure throughout the community, electrifies portions of the municipal fleet, and bolsters community outreach and funding. As a part of this effort, the following should also be considered:

Infrastructure Analysis

- Review existing alternative fuels infrastructure to identify gaps (e.g., location and quantity of EV charging).
- Work with regional partners to create a job training program to expand trade knowledge around electric and zero emissions fueling alternative vehicles.
- Support regional organizations (e.g., EBCE and LAVTA) and other regional efforts to transition medium and heavy-duty trucks to electric.

Municipal Fleet

- Collaborate with EBCE to establish and implement a plan that guides municipal fleet transition to all-electric in the coming decade.

Community Infrastructure

- Expand publicly available EV infrastructure which may include installing EV chargers on municipal properties (e.g., parks, library, senior center). This may also include collaborating with schools to expand EV infrastructure on school properties.
- Collaborate with existing gas stations to encourage installation of EV and alternative carbon free fueling stations.
- Provide preferential parking for ZEVs in public parking lots.
- Modify the PMC section requiring new housing units (e.g., apartments, condominiums, mixed use units, and single-family residences) include EV charging capabilities (e.g., in a SFR this may include a 220V outlet in the garage or for an apartment complex it may require several tenant charging stations).

Education, Outreach, and Funding

- Conduct an education and outreach campaign in the community and in high schools about electric vehicles, consistent with P16.
- Partner with regional organizations (e.g., EBCE) to promote incentives and rebates for ZEVs including EVs and electric bicycles. This may include identifying grant funds to help replace private vehicles with ZEVs, with a focus on supporting ZEV purchases for low-income demographics.
- Provide alternative financial models for city-owned EV charging, including sliding scales and Electronic Benefits Transfer (EBT) card features.

P6. Electrify municipal small engine equipment and reduce emissions of off-road equipment upon replacement

Emissions reduction		City Cost	\$0
Co-benefits	 	Community Cost	\$0

The City has already made significant progress to reduce emissions from off-road transportation. To further reduce those emissions, the City will identify municipal off-road equipment (e.g., mowers, chippers, tractors) that fall below current emissions standards and switch to lower-emissions alternatives upon replacement. City staff are encouraged to consider prioritizing high-emissions equipment for replacement. Further, the City will work with regional partners and local organization (e.g., the Tri Valley Air Quality Community Alliance) to monitor advancements around battery technology in small-engine options and transition City operations to electric landscaping equipment when feasible.

P7. Expand community small-engine electrification

Emissions reduction	6,300	City Cost	\$0
Co-benefits	    	Community Cost	\$2.4 M saved

To build on the City’s success significantly reducing off-road transportation emissions, the City will partner with local organizations to provide incentives to the community to purchase all-electric small-engine equipment (e.g., lawn mowers, leaf blowers) and will continue to investigate opportunities to incorporate all-electric small equipment in large-scale commercial projects. This action may include a gas-powered leaf blower ban, consistent with new statewide legislation ([AB 1346](#)).

Strategy TLU-2. Advance active, shared, and public transportation

Existing Ongoing Actions

E3. Bicycle & Pedestrian Master Plan and Trails Master Plan

Emissions reduction	6,400	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to implement the Bicycle & Pedestrian Master Plan and Trails Master Plan, with an emphasis on closing bicycle, pedestrian, and trail network gaps. Under the Trails Master Plan, trail miles will nearly double from 80 to 159 miles.

During implementation, the City will:

- Continue to implement existing programs as part of this process (e.g., the Commendable Commute program, which collaborates with employers to provide incentives as part of transportation demand management (TDM) programs to encourage alternative modes of travel and reduce single-occupant vehicle use).
- Encourage development project amenities (when amenities are required) to include contribution of funds or land to further the trails network as outlined in the Trails Master Plan and bicycle and pedestrian networks as in the Bicycle & Pedestrian Master Plan.
- Support the expansion of the complete streets network as outlined in the Bicycle & Pedestrian Master Plan with a focus on designated and protected bike lanes to businesses, parks, and schools.
- Prioritize city contributions to building and expanding networks and improving public access to open space and waterways.
- Report progress indicators such as miles of new bike lanes in CAP 2.0 monitoring.

E4. Regional transit support

Emissions reduction	5,300	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue working with regional partners to support the Valley Link project. This new rail line will connect the Bay Area to northern San Joaquin County with seven new stops between the Dublin/Pleasanton BART station and the North Lathrop ACE station. Valley Link will increase connectivity to jobs, housing, and people within the Tri Valley and beyond, and serve as a model of sustainability in its design, construction, and operation.

E5. Complete Streets Implementation

Emissions reduction	1,000	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue implementing the City’s Complete Streets program to ensure transportation improvement projects include multimodal elements and maintain safe and convenient street travel.

Primary Actions

P8. Bicycle amenities

Emissions reduction	1,900	City Cost	\$0
Co-benefits		Community Cost	\$2.6 M

The City will update the PMC to require showers, lockers, changing areas, bike parking, and protected bicycle storage for new commercial developments of a certain size; and commercial, mixed-use, and multi-family projects to install bicycle parking (consistent with the Bicycle & Pedestrian Master Plan recommended programs 6.4.2 (2) and 6.6.2 (1)).

P9. Bicycle rack incentive program

Emissions reduction	1,800	City Cost	\$7.6k
Co-benefits		Community Cost	\$730k saved

The City will develop and implement a citywide bicycle rack request program that receives requests from businesses and residents to install bicycle racks free of charge on public property next to business properties (consistent with the Bicycle & Pedestrian Master Plan recommended policy 4-2). The City will maintain an inventory of installed bicycle racks.

P10. Increase transit ridership

Emissions reduction	5,100	City Cost	\$75k
Co-benefits		Community Cost	\$1.3 M saved

The City will partner with transit agencies (e.g., BART, ACE, and LAVTA) to improve access across the City. Improving access across the City should consider the following:

- Provide convenient connections to destinations throughout the City (e.g., BART to Main Street and ACE to Hacienda).
- Provide connections between transit facilities and the bicycle and trail network.
- Ensure sufficient transit connections to higher-density areas that currently have low or limited access to transit.
- Enhance secure bicycle parking at transit stations and major bus stops.

Secondary Actions

S4. VMT reduction for K-12 activities

Emissions reduction	13,000	City Cost	\$570k
Co-benefits		Community Cost	\$6.4 M saved

The City of Pleasanton will explore opportunities to reduce VMT related to K-12 curricular and extra-curricular activities. As part of this effort, the following should be considered:

- Partner with school districts and clubs to encourage active transportation (i.e., walking and bicycling) and carpooling to schools and after-school activities (e.g., sports).
- Partner with school districts to create a bicycle safety course that can be integrated into the curriculum (e.g., physical education class or otherwise).
- Partner with the California Air District on the anti-idle campaign and working with schools to reduce idling.
- Adjust traffic signals to prioritize those walking and cycling around schools.
- Explore and encourage potential school bus ridership options.
- Incentivize and encourage electric bicycle usage.

Strategy TLU-3. Advance sustainable land use

Existing Ongoing Actions


E6. Housing Element

Emissions reduction	19,000	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to support General Plan Housing Element implementation including aiming to achieve a balance between jobs and housing, working with regional partners to prevent displacement and increase affordable housing, and encouraging transit-oriented development near BART stations, along transportation corridors, and in business parks/near employment hubs.

Primary Actions

P11. Promote LEED Neighborhood Development

Emissions reduction	17,000	City Cost	\$900
Co-benefits		Community Cost	\$850k saved

The City of Pleasanton will promote and encourage the use of LEED ND as new developments are proposed and redevelopment occurs in the city. It may be added to the CAP checklist for new development.



Materials & Consumption

Reduce waste and promote sustainable consumption.



Materials & Consumption in Pleasanton

Materials and consumption emissions come primarily from solid waste collection and processing. Consumption-based emissions were not measured.

- 5% of community emissions in 2017

Performance since 2012

Since 2012, Pleasanton has taken the following steps to reduce GHG emissions from the Materials & Consumption sector.

- Expanded residential yard and food waste collection program to multi-family residences.
- Expanded commercial curbside recycling to include organics.

Materials & Consumption Goal(s)

Reduce GHG emissions from materials management and consumption which will support regional waste reduction efforts.

Key Performance Indicators (vs. 2017)

Success will be monitored in the Materials and Consumption sector by tracking progress against the following key performance indicators:


- Reduce waste in landfills by 8%, to ~93,800 tons annually

By 2030, 13% of emissions reductions will come from this sector






Strategy MC-1. Increase waste diversion and optimize collection and disposal systems	135,100 MTCO₂e reduced
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Waste collection and processing release a significant amount of methane gas, a greenhouse gas with a global warming potential 84 times greater than carbon dioxide. Diverting waste from the landfill and optimizing collection and disposal not only reduces processing emissions, it increases the supply of recycled and composted content available for a variety of uses and helps improve local air and soil quality.

Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO ₂ e)
E7. SB 1383 implementation	135,100
E8. Outreach and education	Not quantified
P12. Single use plastic reduction	

Strategy MC-2. Enhance sustainable production and reduce consumption	Supports emissions reduction
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Recognizing the significant GHG emissions from consumption must ultimately be reduced through consumer behavior change, efforts to reduce barriers to and incentivize sustainable consumption are essential to meaningful reductions in consumption-based emissions. Sustainable consumption can increase waste diversion, which supports local air and soil quality improvements. It also supports the local economy and can strengthen social ties and financial resilience as communities rely more on local businesses.

Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO ₂ e)
E9. Local purchasing	Not quantified
E10. Textile recovery	
S5. Environmentally preferable purchasing policy	
S6. Embodied carbon reduction plan	

Strategy MC-1. Increase waste diversion and optimize collection and disposal systems

Existing Ongoing Actions

E7. SB 1383 implementation

Emissions reduction	135,100	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to implement SB 1383, which includes establishing a robust food recovery program, developing an implementation plan to reduce methane emissions by decreasing organics in the landfill, and increasing education and outreach around compliance.



E8. Outreach and education

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will build upon existing outreach and education efforts around reducing waste generation and increasing waste diversion to bolster understanding of ways to reduce the amount of waste that ends up in landfills.

Primary Actions

P12. Single-use plastic reduction

Emissions reduction		City Cost	\$0
Co-benefits		Community Cost	\$0

The City will continue to explore viable paths to reduce single-use plastic, working with key regional partners such as StopWaste. Actions aimed at reducing single-use plastics are popular in the community and benefit both human and ecosystem health. The City can support businesses in the transition to sustainable products to address potential business concerns. As part of this effort, the following should be considered:

- Update the PMC to require large and special events producers to provide and use reusables, provide recycling and composting infrastructure, and divert waste from landfill after the event.
- Work with regional partners to promote participation in waste reduction and reusable programs (e.g., ReThink Disposables), for businesses to incorporate more reusable food ware.
- Implement a citywide ordinance that reduces single-use plastics, and enhances the use of reusable products, particularly food and drink ware.

Strategy MC-2. Enhance sustainable production and reduce consumption

Existing Ongoing Actions

E9. Local purchasing

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue its ongoing efforts to promote local purchasing for businesses and residents to support local vendors, services, and stores and to reduce GHG emissions from commerce-related transportation, food production, and distribution.




E10. Textile recovery

Emissions reduction		City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will implement textile recovery drop-off service as outlined in the City's Franchise Agreement with PGS. This service will support waste diversion goals and provide convenient means for residents and businesses to donate used textiles.


Secondary Actions

S5. Environmentally preferable purchasing policy

Emissions reduction		City Cost	\$0
Co-benefits	 	Community Cost	\$0

Using existing resources provided by Alameda County, the City will adopt an Environmentally Preferable Purchasing Policy that includes alternatives for the most carbon-intensive materials the City purchases, such as building materials (e.g., concrete, metals). This policy will complement local purchasing (Action E9) to further support local businesses.

S6. Embodied carbon reduction plan

Emissions reduction		City Cost	\$0
Co-benefits	  	Community Cost	\$89k saved

The City will participate and support a regional Embodied Carbon Reduction Plan that uses a variety of approaches to reduce the total lifecycle carbon footprint of materials (i.e., that considers the carbon footprint of raw materials, manufacturing, transportation, use, and disposal of products).

The regional Embodied Carbon Reduction Plan should consider:

- Whole building lifecycle analysis for new construction and incentives for achieving reductions
- Participation in regional efforts to build local supply chains and economic opportunities
- Partnerships to promote low-carbon products
- Encouraging carbon-smart and recycled building materials
- A low-carbon concrete requirement
- Education campaigns and resources



Natural Systems

Store more carbon on resilient natural landscapes.



Natural Systems in Pleasanton

Natural systems store significant amounts of carbon in leaves, trees, and soil. There is no estimate currently available of the carbon storage capacity of Pleasanton's natural systems.

- 700 acres of undeveloped open space

Performance since 2012

Since 2012, Pleasanton has taken the following steps to reduce GHG emissions via the Natural Systems sector.

- Distributed rebates for sustainable land management
- Supported sustainability retrofits of irrigation and landscaping systems
- Replaced or installed xeriscaping

Natural Systems Goal(s)

Offset GHG emissions by fostering resilient natural landscapes which will improve habitats, ecosystems, and public health.

Key Performance Indicators (vs. 2017)

Success will be monitored in the Natural Systems sector by tracking progress against the following key performance indicators:

- Increase carbon sequestration ~70,000 net MTCO_{2e} in 2030
- Increase tree canopy
- Increase trees planted

By 2030, 35% of emissions reductions will come from this sector.



Strategy NS-1. Increase and optimize carbon sequestration, improve ecosystem resilience**370,100 MTCO₂e reduced**

The GHG emissions reductions needed to achieve per capita carbon neutrality by 2045 are significant. Even with significant emissions reductions, carbon sequestration (i.e., storing carbon in soil, trees, and vegetation) is a critical piece of meeting the City's targets. Carbon sequestration can offset emissions that may persist and be challenging to remove (e.g., natural gas from industries that do not currently have alternative fuel options). The City maintains a significant amount of open and green spaces, including parks, medians, the golf course, and hillsides so this strategy represents a significant opportunity for Pleasanton to offset emissions. Successful sequestration and ongoing sustainable land management will also restore and improve ecosystem resilience, alleviating the pressure and stress on Pleasanton's natural systems from global climate change and localized extreme heat, water shortages, pesticide use, and land development.

Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO₂e)
E11. Pesticide posting program	Not quantified
E12. Municipal landscape management practice	Not quantified
E13. Sustainable land management education	Not quantified
P13. Urban Forest Master Plan	366,200
P14. Soil management carbon sequestration projects	3,900
S7. Carbon sequestration research and tracking	Not quantified

Strategy NS-1. Increase and optimize carbon sequestration and improve ecosystem resilience

Existing Ongoing Actions

E11. Pesticide posting program

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to implement the Pesticide Posting Program and follow their Integrated Pest Management Program, using notices and signage to inform the public of ongoing pest management operations.

E12. Municipal landscape management practice

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to manage the amount, source, placement, and timing of plant nutrients and soil amendments in City parks, green spaces, and natural areas through actions such as applying recycled wood mulch from tree trimmings into planters, medians, and tree wells and leaving green waste on-site to the extent feasible.

E13. Sustainable land management education

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will build upon existing land management education such as continuing the City's Environmental Services Water Conservation efforts. For example, encouraging lawn conversion and improving landscape design will reduce water use, support native habitats, and preserve the aesthetic benefits of well-designed outdoor spaces.

Primary Actions

P13. Urban Forest Master Plan

Emissions reduction	366,200	City Cost	\$490k
Co-benefits	↑↑↑ 🌳	Community Cost	\$470k

The City will develop and implement an Urban Forest Master Plan that includes best practices for tree health and maintenance and reevaluates community tree regulations. The plan should aim to protect and increase tree canopy, and to ensure trees are replanted with a "right-sized tree" sufficient minimum soil volume. The significant carbon storage potential of the plan makes it essential to reaching CAP 2.0 targets. As part of this effort, the following should be considered:

- Consider a community planting program that incentivizes the community to increase the quantity of trees planted throughout the City on private property.
- Create a community guide with information on the benefits of canopy cover, appropriate species (e.g., climate-adapted, drought-tolerant, and carbon sequestering species), and proper planting practices.
- Modify the municipal code as needed to require climate adapted plantings for projects of a certain size, facilitate tree planting throughout the City, and discourage tree removal.
- Partner with the school districts to increase tree canopy on school campuses.
- Partner with local organizations (e.g., Go Green Initiative) to encourage increased tree canopy throughout the City.

P14. Soil management carbon sequestration projects

Emissions reduction	3,900	City Cost	\$35k
Co-benefits		Community Cost	\$2.9 M

The City will increase its carbon sequestration potential throughout the City to offset emissions, increase drought- and flood-resistance of soil, and further SB 1383 compliance. As part of this effort, the following should be considered:

Public Lands


- Implement carbon sequestration projects on City property where feasible (e.g., soil at City parks, golf courses, and open spaces).
- Reduce the use of synthetic nitrogen fertilizer with soil amendments such as manure or other organic by-products (e.g., compost and mulch) on new landscape installations.
- Partner with Zone 7 Water Agency, East Bay Regional Park District, and other public agencies to expand sequestration potential on public lands within the City’s boundaries.

Private Lands

- Subsidize the cost of compost to encourage use of compost throughout the City on private property.
- Encourage the use of compost exceeding Water-Efficient Landscape Ordinance (WELO) standards in new landscape projects and undeveloped lands.
- Increase awareness of the benefits of land carbon sequestration through education campaigns, consistent with P16.

Secondary Actions

S7. Carbon sequestration research and tracking

Emissions reduction	Not quantified	City Cost	\$0
Co-benefits		Community Cost	\$0

The City of Pleasanton will work with regional partners (e.g., StopWaste) and neighboring jurisdictions to develop methods to track carbon sequestration in the urban landscape. The City will stay apprised of leading research and technological advancements available that mechanically and naturally capture and/or remove carbon (e.g., direct air capture and carbon sequestration).



Water Resources

Improve stormwater resilience, water supply, and conservation.



Water Resources in Pleasanton

Water-related emissions come primarily from providing drinking water and treating wastewater. Water uncertainty and increased flooding are among Pleasanton's major climate vulnerabilities.

- Pleasanton's smallest source of inventoried emissions
- Less than 1% of community emissions in 2017

Performance since 2012

Since 2012, Pleasanton has taken the following steps to reduce GHG emissions from the Water Resources sector.

- Installed over 20,000 new AMI smart water meters and retrofitted 500 existing meters.
- Installed "smart" irrigation systems throughout 80 acres of City-owned land.

Water Resources Goal(s)

Reduce GHG emissions from water usage (including conveyance) and prepare community water resources for a changing climate which will result in cost savings, enhance water quality and availability, improve infrastructure, and increase resiliency.

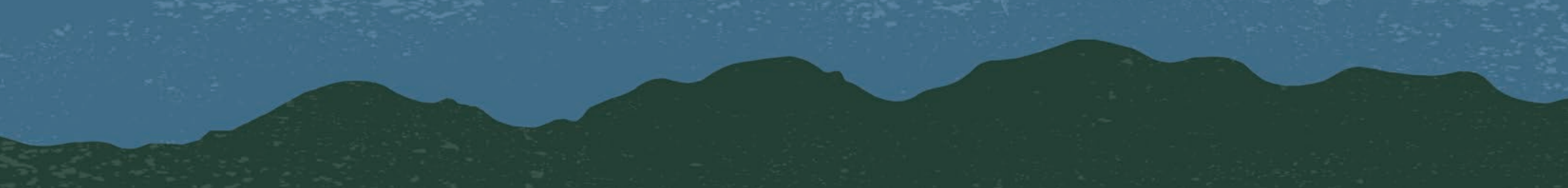
Key Performance Indicators (vs. 2017)

Success will be monitored in the Natural Systems sector by tracking progress against the following key performance indicators:


- Maintain per-capita water consumption electricity usage to 23 kWh per service person.
- Decrease water used by community
- Decrease municipal water used
- Increase use of City programs

By 2030, this sector will improve the efficiency of water systems and build resilience to water insecurity.





Strategy WR-1. Improve water supply & increase conservation	Supports emissions reduction
<p>Water is the foundation of life, and Pleasanton has already experienced mandated water cuts due to drought conditions. The City will continue to prioritize a sustainable, healthy water supply and storage, building on the success of existing programs such as the Controller Assistant Program and Water Conservation Program. Continued success in water efficiency and conservation also ensures enough water for natural systems, increasing both ecosystem and community resilience.</p>	
Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO ₂ e)
E14. Controller assistant program	Not quantified
E15. Smart water meter installation	Not quantified
E16. Water conservation program	Not quantified
P15. Water efficiency and retrofits	Not quantified

Strategy WR-2. Improve stormwater resilience	Supports emissions reduction
<p>To maximize water reuse and efficiency, the City will increase stormwater infrastructure resilience to prepare for changes to flow and quality. By capturing stormwater, the City can both help to reduce flooding impacts of heavy rainfall periods and improve local water supplies. These benefits support community health, reduce water bills, may increase water availability for ecosystems, and may bring more green jobs to Pleasanton.</p>	
Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO ₂ e)
E17. On-site stormwater management	Not quantified
S8. Green Stormwater Infrastructure Plan	

Strategy WR-1. Improve water supply & increase conservation

Existing Ongoing Actions

E14. Controller assistant program

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to provide the controller assistance program to Pleasanton residents. Through this program, City staff visit residents' homes and help them adjust their water controller to ensure they are watering their landscapes an appropriate amount and at optimal times of the day.

E15. Smart water meter installation

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

To protect against current and future water waste that could put both ecosystems and public health at risk, the City will continue to monitor and provide outreach to the community regarding their water leaks based on their smart water meter data.


E16. Water conservation program

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to promote its Water Conservation Program which provides water use related rebates, workshops, and outreach to the community.

Primary Actions

P15. Water efficiency and retrofits

Emissions reduction	Not quantified	City Cost	\$1.6 M
Co-benefits		Community Cost	\$4.7 M saved

The City will expand incentives to reduce water use. Incentives may include, but are not limited to:

- Partner regionally with Zone 7 Water Agency to expand incentives and direct install programs to retrofit inefficient water fixtures in existing properties.
- Enhance existing incentives and rebates for native and drought-tolerant residential and commercial landscaping.
- Remove grass turfs and lawns.

Strategy WR-2. Improve stormwater resilience

Existing Ongoing Actions

E17. On-site stormwater management

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to require new developments of a certain size to have on-site stormwater management and minimal hardscape as regulated by the Alameda Countywide National Pollutant Discharge Elimination System (NPDES).

Secondary Actions

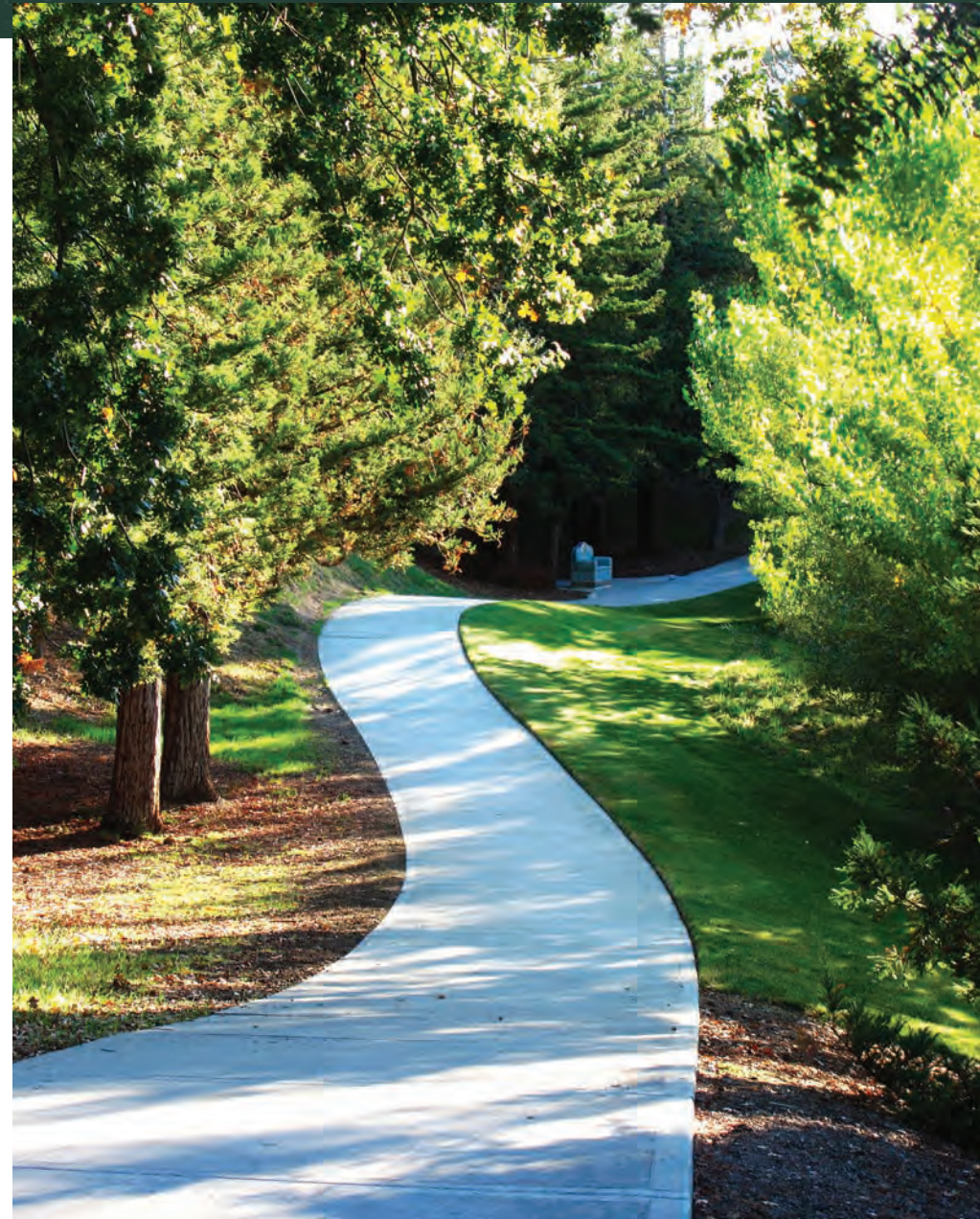
S8. Green Stormwater Infrastructure Plan

Emissions reduction		City Cost	\$0
Co-benefits		Community Cost	\$0

To further support on-site stormwater management (Action E17) and sustainable infrastructure (Actions P3 and P11), the City will participate and support regional Green Stormwater Infrastructure Planning efforts that build off and support the City's NPDES permit to ensure a sustainable approach for managing stormwater runoff.

The plan may include the following:

- Replace traditional grey infrastructure with bioretention areas, green roofs, permeable pavement, and rainwater catchment.
- Explore retrofit opportunities and integration of green infrastructure into existing and new City facilities.
- Incorporate green infrastructure and stormwater management into infrastructure projects.
- Ensure future infrastructure and retrofits are adequately sized to be able to handle future flows and storms exacerbated by climate change.





Community Resilience & Wellbeing

Strengthen community resilience and reduce vulnerability to climate change.



Community Resilience in Pleasanton

Pleasanton is expected to face more extreme weather such as flooding and heat waves, increased water uncertainty, and increased risk from wildfire, especially smoke. These vulnerabilities will stress public infrastructure, water provision, natural systems, and public health. ¹

Performance since 2012

Since 2012, Pleasanton has taken the following actions to strengthen community resilience.

- 14 businesses participating in the Alameda County Green Business Program.
- Hosted dozens of free community events, sustainability lectures, and workshops.
- Participated in Sustainability Circles, a comprehensive 6-month peer-learning program that embeds sustainable practices in organizations.

¹ For more information, please see the Pleasanton Climate Vulnerability Assessment, available on the CAP 2.0 webpage (accessed August 16, 2021).

Community Resilience Goal(s)

Prepare for climate and non-climate emergencies and integrate climate considerations across City and community decision-making.

Key Performance Indicators (vs. 2017)

- Population has access to a cooling center

By 2030, 2% of emissions reductions will come from this sector.



Strategy CRW-1. Improve community resilience & reduce vulnerability to climate change**27,400 MTCO₂e reduced**

Climate change is global, but it is felt at the local level. In Pleasanton, we have experienced poor air quality due to wildfires, mandatory water usage cuts due to droughts, and increased temperatures. Access to programming that supports, educates, and improves the quality of life for the most vulnerable communities is essential to improve resilience and prepare communities for climate impacts. Existing programs encourage active lifestyles and green space, which enhance public health. To continue to support healthy communities, the City of Pleasanton will maintain current community resilience programs and dedicate resources to comprehensive climate awareness, education, and outreach, both of which are critical to understanding how to prepare for climate change and the consequences of inaction.

Supporting Actions	Cumulative Emissions Reduced through 2030 (MTCO₂e)
E18. School climate action planning	Not quantified
E19. Access to green spaces	Not quantified
E20. Community cooling centers	Not quantified
E21. Community gardens	Not quantified
P16. Comprehensive climate awareness, education, and outreach	27,400
S9. Wildfire preparation, prevention, and education	Not quantified

Strategy CRW-1. Improve community resilience and reduce vulnerability to climate change

Existing Ongoing Actions

E18. School climate action planning

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to partner with schools (e.g., provide funding and staff capacity) and support the activities of the climate action groups at schools, including connecting them to resources from GoGreen Initiative, StopWaste, and California Youth Energy Services.

E19. Access to green spaces

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to partner with local organizations to increase awareness of and access to green spaces and outdoor recreation for all residents.

E20. Community cooling centers

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

To address one of Pleasanton’s major climate vulnerabilities—extreme heat—the City will continue to maintain adequate and accessible cooling centers and work with Alameda County to ensure sufficient notification systems are in place to notify residents of extreme heat events and

available transportation routes to cooling centers. Potential locations include schools, city buildings, other public buildings, and multi-purpose rooms. These buildings should be considered high priority to address electrification, solar, and battery storage back-up in Action P2.

E21. Community gardens

Emissions reduction	Not quantified	City Cost	N/A
Co-benefits	Not assessed	Community Cost	N/A

The City will continue to partner with nonprofits, school districts, low-income communities, and underrepresented communities to expand urban agriculture opportunities (e.g., Bernal Community Farm) in community gardens, schools, parks, and on rooftops. The City will prioritize and promote programs that teach residents how to garden.

Primary Actions

P16. Comprehensive climate awareness, education, and outreach

Emissions reduction	24,000	City Cost	\$120k
Co-benefits		Community Cost	\$0

The City will implement comprehensive public and private climate awareness, education, and outreach. In doing so, the City will consider all potential climate campaigns associated with CAP 2.0 implementation and phase campaigns over time accounting for staffing, resources, and balancing other community messaging to ensure feasibility. Outreach materials should be translated to Spanish, Chinese, and other commonly spoken languages in the community as identified by the Public Information Officer.

The City’s expanded efforts may include:

- Develop and implement an empowerment program that helps residents, businesses, neighborhood leaders, and visitors reduce their personal carbon footprint and improve climate literacy. The program should consider including a carbon footprint calculator that generates a list of actions to reduce emissions at the household level and creating competitions to encourage adoption of programs.
- Develop a Library and Recreation Department program dedicated to conservation and stewardship projects for varying age groups, expanding upon existing programs (e.g., Ridge Runner, Arbor Day, and future bee and butterfly gardens programs).
- Create “sustainability awards” presented by the City Council during Earth Week to recognize community efforts and increase climate awareness. The community could also play a role in nominating “green” efforts throughout the City for business operations, development projects, and individual efforts throughout the City.
- Consider preparation of a checklist comparing LEED with CALGreen to simplify the process for development applications.

Secondary Actions

S9. Wildfire preparation, prevention, and education

Emissions reduction	Not quantified	City Cost	\$0
Co-benefits	↑↑+🌳	Community Cost	\$0

The City will increase wildfire resilience through a range of prevention and preparation initiatives. Together, these initiatives will address one of Pleasanton’s greatest sources of climate vulnerability—wildfire and wildfire smoke—to increase resilience, support ecosystem health, and reduce exposure to wildfire smoke.

As part of these efforts, the City will:

- Leverage existing outreach and education campaigns and work with local organizations, (e.g., California Department of Forestry and Fire Protection [CalFire], Firewise, and Tri-Valley Air Quality Community Alliance) to increase awareness of residential homeowner actions to reduce and mitigate wildfire risk (e.g., create defensible space, reduce fuel loads, clean out leaves in rain gutters).
- Expand and improve targeted community messaging on how to respond to heat risks and poor air quality due to smoke.
- Work with regional partners to modify development regulations and codes and implement retrofit programs to increase resilience to wildfires.
- Work with CalFire and other partners to identify and implement controlled burns and other means to reduce combustible biomass and improve early wildfire detection for the City.
- Explore grant opportunities to assist with wildfire preparation, prevention, and education across the community.
- Provide clean air shelters in the event of poor air quality due to wildfires.

Section 4. Implementation

The Bigger Picture

Successful implementation requires not just a plan and resources, but an awareness and attention to how the city is and will continue to change, the City's unique role, and the vision and values that guide all decision making. As the City implements CAP 2.0, it will keep in mind:



Pleasanton's growing population:

Pleasanton has changed over the years, adding nearly 10,000 new residents since 2012 and becoming increasingly diverse. These changing demographics are mirrored across much of the Bay Area and may make Pleasanton an increasingly attractive city for businesses and new residents as the overall population of the Bay Area continues to grow.



The City's unique role in climate action:

The City has significant decision-making control over land use, development, and management of natural resources and wastewater. Through regional partnerships, and aligning with neighboring cities, the City also influences transportation, energy provision, water resources planning, and waste management. The City will continue to use these roles to build upon past progress and implement the meaningful, long-term climate programs and policies that are needed to prepare Pleasanton for an uncertain future.



Pleasanton's vision and values:

CAP 2.0 is designed to actualize the City and community's vision—reduced GHG emissions, improved quality of life and public health, and a resilient community with thriving ecosystems and economy—in a way that is evidence-based, inclusive, equitable, and accountable to generate high quality of life for current and future generations.

4.1 Overview

Since the 2012 CAP, the City of Pleasanton has made progress in reducing emissions, developing innovative sustainability initiatives, and building community support for climate action. CAP 2.0 was developed to build on key climate action successes and provide a pathway to reach state decarbonization targets by 2045—and exceed state targets for 2030. Importantly, the City prioritized a short list of highly impactful actions to improve implementation potential over the next 10 years.

To take the CAP 2.0 from vision to action will require City leadership and commitment, collaboration with the community and implementation partners, a realistic plan for funding and implementation, and strong monitoring and evaluation of progress. The following pages identify how the City will work toward CAP 2.0 goals:

- The **implementation plan** outlines the cost, staff allocation, timeframe, responsible City department, and other considerations for implementation.
- **City leadership and accountability** identifies the role of City Council and City staff to lead implementation and report on progress.
- Key **partnerships** emphasize the importance of collaboration.
- **Equity** describes key areas of focus to support equitable implementation, specific actions that impact the most vulnerable communities, and the importance of keeping people at the center of the City's climate mitigation and adaptation work.



- **Funding and financing** highlights the many resources available to support CAP 2.0 actions, specifically those that are the most expensive.
- To ensure that climate action and adaptation strategies meet the needs of the community and use resources efficiently, **evaluation, monitoring and reporting** lays out a series of key performance indicators (KPIs) and a reporting structure so that City staff can report progress to Council, gather feedback from and update the community, and measure successes.

Following CAP 2.0 adoption, a consolidated list of actions and the implementation plan will be available in CAPDash, a cloud-based reporting dashboard.



4.2 Implementation Plan

Implementation of CAP 2.0 will focus on reducing the City’s largest sources of GHG emissions—transportation, natural gas use, and electricity use—and storing carbon in trees, plants, and soil in order to achieve per capita carbon neutrality by 2045.

The two tables below summarize the primary and secondary actions the City of Pleasanton will implement by 2030. Primary actions are prioritized actions that focus on GHG emissions reduction in the near- (2022-2024), mid- (2025-2028), and long-term (2029-2031) with identified responsible parties for implementation. Secondary actions are generally focused on adaptation and will be implemented when possible. A third table in the Equity section (Section 4.5) summarizes other implementation considerations, such as feasibility, community support, and equity (Table 9). Existing actions are omitted from Section 4 as their implementation is already contemplated in other existing plans and policies.

Key for Understanding Implementation Actions













Priority	
Type of action	P = Primary S = Secondary
Logistics	
Phase	I = 2022-2024 II = 2025-2028 III = 2029-2031
Average Staff time (over action timeframe)	= Less than 0.5 FTE = Between 0.5 and 1 FTE = More than 1 FTE

Table 6. Implementation plan for existing ongoing and primary actions

Action	City (Costs) or +Savings	Community (Costs) or *Savings	Phase	Staff Time	Responsible Department			
Buildings & Energy								
P1. All-electric reach code for new construction	(\$49k)	+\$2.8 M	I	1	Community Development			
P2. Existing Building Electrification Plan	(\$140k)	(\$140k)	II	1	Community Development			
P3. Modify Municipal Code definition of “covered projects”	(\$0)	(\$290k)	I	1	Community Development			
P4. Solar and storage on new construction	(\$0)	(\$0)	I	1	Community Development			
Transportation & Land Use								
P5. Create and implement a ZEV Infrastructure Plan	(\$220k)	+\$31k	II	2	Community Development, Operations Services, City Manager’s Office			
P6. Electrify municipal small engine equipment and reduce emissions of off-road equipment upon replacement	(\$0)	(\$0)	II	1	Operations Services			
P7. Expand community small-engine electrification	(\$0)	+\$2.4 M	I	1	Community Development & City Manager’s Office			
P8. Bicycle amenities	(\$0)	(\$2.6 M)	I	1	Community Development			
P9. Bicycle rack incentive program	(\$7.6k)	+\$730k	II	1	Community Development & Economic Development			
P10. Increase transit ridership	(\$75k)	+\$1.3 M	III	2	Community Development			
P11. Promote LEED Neighborhood Development	(\$900)	+\$850k	I	1	Community Development			
Materials & Consumption								
P12. Single use plastic reduction	(\$0)	(\$0)	II	1	City Manager's Office			
Natural Systems								
P13. Urban Forest Master Plan	(\$490k)	(\$470k)	I	1	Operations Services and Engineering			
P14. Soil management carbon sequestration projects	(\$35k)	(\$2.9 M)	I	1	Operations Services			
Water Resources								
P15. Water efficiency and retrofits	(\$1.6 M)	+\$4.7 M	II	1	Operations Services			
Community Resilience & Wellbeing								
P16. Comprehensive climate awareness, education, outreach	(\$120k)	(\$0)	I	1	All departments			
KEY	P = Primary action	S = Secondary action	I = 2022-24	II = 2025-28	III = 2029-31	1 = Less than 0.5 FTE	2 = 0.5 to 1.0 FTE	3 = More than 1 FTE

Table 7. Implementation plan for secondary actions

These actions will be implemented as staff time and resources allow.

Action	City (Costs) or +Savings	Community (Costs) or *Savings	Phase	Staff Time	Responsible Department			
Buildings & Energy								
S1. Refrigerant management in new construction	(\$43k)	+\$260k	III		Community Development			
S2. Community energy efficiency upgrades	(\$960k)	+\$2 M	II		City Manager's Office			
S3. Energy benchmarking and City facility retrofits	+\$3.1 M	(\$0)	I		City Manager's Office			
Transportation & Land Use								
S4. VMT reduction for K-12 activities	(\$570k)	+\$6.4 M	I		Community Development and City Manager's Office			
Materials & Consumption								
S5. Environmentally preferable purchasing policy	(\$0)	(\$0)	I		City Manager's Office			
S6. Embodied carbon reduction plan	(\$0)	+\$89k	III		Community Development			
Natural Systems								
S7. Carbon sequestration research and tracking	(\$0)	(\$0)	II		City Manager's Office			
Water Resources								
S8. Green Stormwater Infrastructure Plan	(\$0)	(\$0)	III		Operations Services			
Community Resilience & Wellbeing								
S9. Wildfire preparation, prevention, and education	(\$0)	(\$0)	I		Fire			
KEY	P = Primary action	S = Secondary action	I = 2022-24	II = 2025-28	III = 2029-31	 = Less than 0.5 FTE	 = 0.5 to 1.0 FTE	 = More than 1 FTE

4.3 City Leadership and Accountability

For Pleasanton to take meaningful action on climate change, **it is important that city government leads implementation in partnership with the community and stakeholders** and that City Council continue to demonstrate leadership on climate change. **City Council** will have oversight responsibility for CAP 2.0. They will receive annual updates on the CAP 2.0 progress and make policy decisions, and budgetary appropriations that will facilitate implementation.

Staff with dedicated time and resources to climate action are required to ensure the CAP 2.0's success and to more fully mainstream climate change in existing City operations, policy development, and community partnerships. The **City Manager** will have an important role to play in allocating and balancing staff time devoted to CAP 2.0 implementation, including consideration of new roles such as a central coordinator for CAP 2.0 implementation and new responsibilities within existing roles such as implementation leads for each sector. While much of the CAP 2.0 will be implemented by extending existing ongoing actions into the future, an additional 3 FTE per year, on average, will be needed to implement the primary actions.

City staff will use an interactive tracking and reporting dashboard (CAPDash) to manage CAP 2.0 progress, oversee implementation, provide annual updates to City Council, and communicate progress to the public (see *Section 4.6 Monitoring* for details).



4.4 Partnerships

As the City of Pleasanton is part of the larger Bay Area, and one of many municipalities working to meet climate neutrality targets, the City has an opportunity to work collaboratively and collectively through local and regional networks to meet the goals outlined in CAP 2.0. The City will continue to work with key partners in the community, across the Bay Area, and at the state level, as it cannot achieve its goals alone.

Leveraging partnerships will be key to the City's success in seeking funding opportunities, dividing workload, and improving the quality of life for individuals living in the region. Partnerships enable City staff to identify projects that align with both CAP 2.0 and community investment goals, and work to maximize cost-effectiveness, impact, and co-benefits like improved public health and job creation. Existing and new relationships with community groups are essential to effectively implement strategies, be equitable, and spread awareness. Many CAP 2.0 actions focus on or include significant community education and outreach, some of which is expected to maintain or increase support for climate action.

Key Stakeholders and Partnerships

Key stakeholders and partnerships, and their roles and responsibilities, include but are not limited to:



Neighboring jurisdictions

Connections with neighboring cities (**Dublin, Livermore, and San Ramon**) are essential to align policies and programs to bring regional cohesion to climate efforts and leverage **Alameda County** directives that support collective climate goals.

Regional transit partners

The City will provide localized context and knowledge to regional transit partners (e.g., **Alameda County Transportation Commission, BART, Tri-Valley Air Quality Community Alliance, Bike East Bay, Altamont Corridor Express, LAVTA, MTC, San Joaquin Regional Rail Commission, Wheels, ACE, and BAAQMD**) to accomplish both local and regional transit goals, reduce emissions, support alternative transportation, and improve air quality.

Utility and service providers

Continued relationships with utilities and energy-, water-, and waste-focused organizations (**EBCE, PG&E, CPUC, BayREN, DSRSD, Zone 7 Water Agency, and Zone 7 Water Board, StopWaste and PGS**) are crucial to stay abreast of cutting edge technologies and leverage funding opportunities.

Community groups

The City will listen to and engage with the diverse Pleasanton community (**Chinese American Cooperative Council, Council on American Islamic Relations, HSS, Muslim Community Center, Tri-Valley Citizens Climate Education**), which is essential to keeping equity at the center of CAP 2.0 implementation and ensure people are prioritized as climate goals are pursued.

Businesses and climate advocates

The City will build connections among local businesses (**Visit Tri-Valley, Bay Area Relators, Hacienda Business Park, Hines, Pleasanton Chamber of Commerce, Pleasanton Downtown Association, and Workday**) and community climate leaders (**East Bay Regional Parks, GoGreen Initiative, and Tri-Valley Citizens Climate Education**) to design interconnectivity between industry and the circular economy.

While the City emphasized actions within their sphere of control in developing CAP 2.0, some of the most impactful and costly actions rely on partnerships for implementation. These include the Existing Building Electrification Plan (P2) and ZEV Infrastructure Plan (P5). Partnerships will also be crucial to advancing secondary actions because they offer the additional capacity, mechanisms for identifying funding sources, and opportunities for collaborative funding and implementation the City will need to be able to implement them. Partnerships will also be crucial to advancing secondary actions because they offer the additional capacity, mechanisms for identifying funding sources, and opportunities for collaborative funding and implementation the City will need to be able to implement them.

4.5 Equity

To truly consider equity during CAP 2.0 implementation, the City will need to go beyond merely distributing resources equally. Equitable participation in implementation and access to the benefits of climate action require meeting community needs in the context of existing vulnerabilities and inequalities, and **integrating equity in policy, outreach, and infrastructure development**. The most effective climate action initiatives protect and conserve the environment, build resilience, avoid unintended consequences, improve public health, and support livable communities with healthy local economies.

While equity must be considered in implementation of all actions, **certain actions will require particular attention to ensure implementation is equitable** (see Table 8). The City will focus on:

- **Fair distribution of benefits over time:** The City will consider not only where actions are implemented, but when, to ensure that vulnerable and historically marginalized communities are not the last to receive the benefits of climate action.

- **Financial burden:** The City will provide, either directly or through partners, financial rebates, incentives, and other measures to ensure that the household-level costs of CAP 2.0 implementation do not increase existing income burdens. This is especially relevant for actions that affect renters (e.g., landlord building electrification or energy efficiency) and actions with broadly distributed costs (e.g., EBCE Renewable 100).
- **Community engagement:** City staff will work to involve diverse community voices from the start of any new initiative and will track progress towards advancing equity (see Monitoring, Evaluation, and Reporting). They will also rely on and contribute to partnerships with the community groups and service providers who know Pleasanton’s diverse communities best, and will consider when additional effort is needed to truly engage a community (e.g., significant changes like EV adoption and household-based energy and water efficiency).

Table 8. CAP 2.0 focus areas for equitable implementation and applicable actions

	Fair distribution of benefits over time	Anti-displacement	Financial burden	Community engagement
P2. Existing Building Electrification Plan			•	•
P5. Create and implement a Zero Emissions Vehicle (ZEV) Infrastructure Plan			•	•
P10. Increase transit ridership	•			
S2. Community energy efficiency upgrades		•	•	•
P15. Water efficiency and retrofits		•	•	•
S9. Wildfire preparation, prevention, and education	•			•

Table 9. Equity & other implementation considerations

Action	Considerations
P1. All-electric reach code for new construction	<ul style="list-style-type: none"> ➤ Public engagement indicated that some businesses and residents oppose the introduction of a new building requirement and express concern about rising building costs. Education and outreach will be crucial for implementation success. ➤ Consider the nuance of how these regulations are written and where exceptions should be included (e.g., biotechnology industry). ➤ An all-electric reach code is highly feasible, and many Bay Area cities are introducing these code requirements.
P2. Existing Building Electrification Plan	<ul style="list-style-type: none"> ➤ Equitable implementation will represent property owners and tenants with lower incomes in all implementation phases, have protections in place to avoid increased costs and other negative impacts, and support local installers.
P4. Solar and storage on new construction	<ul style="list-style-type: none"> ➤ Not all properties and projects lend themselves to solar and battery storage due to shading and building orientation. Careful consideration of when to implement this action should be considered so as not to unduly impact projects where solar/storage benefits will not be realized.
S1. Refrigerant management in new construction	<ul style="list-style-type: none"> ➤ The Biden administration recently announced it will reduce the use of HFCs used in air conditioning and refrigeration by 85% in the next 15 years and is investing \$8 million over the next five years to find alternatives. ➤ Support to the business community should be considered to address challenges or costs of switching to a new refrigerant.
S2. Community energy efficiency upgrades	<ul style="list-style-type: none"> ➤ Focused outreach and resources on low-income households will support the cost savings benefit of this action. ➤ Resources may include financial support such as a revolving loan fund for home performance audits and system upgrades.
P5. Create and implement a ZEV Infrastructure Plan	<ul style="list-style-type: none"> ➤ Rising community interest in ZEVs, combined with recent and anticipated changes in national and state policy, make widespread ZEV expansion highly feasible. The key hurdles will be funding and ensuring ZEV is financially affordable and accessible for all Pleasanton residents. ➤ Concerted attention to reducing financial and infrastructure barriers to ZEV ownership for those with low incomes is essential to ensure implementation is equitable.
P7. Expand community small-engine electrification	<ul style="list-style-type: none"> ➤ Community electrification of small-engine equipment will require special attention to landscape companies and people that come to Pleasanton to work but may also work in other jurisdictions with varying regulations. Consider partnering with neighboring jurisdictions for successful implementation.
P8. Bicycle amenities	<ul style="list-style-type: none"> ➤ There may be some opposition from developers due to the new code requirement. Outreach to the development community should be highlighted. Early in the entitlement process, work with applicants to find the best solution for on-site facilities.
P10. Increase transit ridership	<ul style="list-style-type: none"> ➤ The biggest hurdle will be to make public transit convenient and available enough to be a preferred mode of transportation across communities compared to single-occupancy vehicles.
S4. VMT reduction for K-12 activities	<ul style="list-style-type: none"> ➤ The biggest hurdle will be to make public transit convenient and available enough to be a preferred mode of transportation compared to single-occupancy vehicles. This action will require concerted action with the school district and community organizations that sponsor youth activities.

Action	Considerations
S5. Environmentally preferable purchasing policy	<ul style="list-style-type: none"> Alameda County is currently preparing a policy; consider partnering with the County and/or neighboring jurisdictions that may already have these policies in place.
S6. Embodied carbon reduction plan	<ul style="list-style-type: none"> This regional plan will benefit ecosystem health and support a local, circular economy, including the potential for new, green jobs. The plan is generally well-supported by the community, but the possibility of new requirements and citywide changes to construction approaches could concern some businesses and would benefit from additional engagement with those entities.
P13. Urban Forest Master Plan	<ul style="list-style-type: none"> The benefits to public health, ecosystem health, and local air quality will build support for this plan by the community and among businesses. The possibility of more regulations may encounter some opposition and require additional engagement.
P14. Soil management and carbon sequestration projects	<ul style="list-style-type: none"> While businesses and community members generally support the carbon storage, ecosystem health, and aesthetic benefits of these projects, their scale and location, as well as the relatively higher cost to the community, may face some pushback. Engagement with these community members is recommended.
S7. Carbon sequestration research and tracking	<ul style="list-style-type: none"> Many carbon sequestration research and tracking methods are still under development.
S8. Green Stormwater Infrastructure Plan	<ul style="list-style-type: none"> Throughout its development and implementation, the plan should prioritize stormwater projects—paired with the anti-displacement efforts in the Housing Element (Action E6)—in underserved communities to prevent green gentrification and inequitable distribution of water resiliency. Zone 7 is currently developing a Green Stormwater Infrastructure Plan; there may be opportunities to partner or support their planning efforts.
P16. Comprehensive climate awareness, education, and outreach	<ul style="list-style-type: none"> Ensure outreach is accessible across communities, such as by providing services and materials in multiple languages.
S9. Wildfire preparation, prevention, and education	<ul style="list-style-type: none"> Wildfires and their associated impacts hit vulnerable populations especially hard; these populations should be a focus for this action.



4.6 Funding and Financing

The City of Pleasanton has several opportunities to finance CAP 2.0 strategies and actions. As climate impacts intensify and occur more frequently, **resources are becoming more readily available** from the federal government, State of California, local agencies, and utilities. The City will seek grants, matching funds, in-kind contributions, and other resources from state, federal, and philanthropic sources to help pay for actions, make wise use of the City's General Fund, and limit the cost of implementation to the City and Pleasanton community. Potential funding sources may include:

- Support for electrification of buildings and transportation through **grants and rebate opportunities** through EBCE and BayREN
- Municipal, commercial, and residential solar and energy storage rebates through BAAQMD, CPUC, and/or EBCE
- Air quality improvement **grants and rebates** from BAAQMD
- **Joint applications** with other local and regional agencies for competitive statewide and federal funding programs, especially those that support alternative transportation goals

- Existing funding sources as **matching funds** for regional, state, or federal funding such as the federal Infrastructure Investment & Jobs Act (2021)
- **General funds** from the City of Pleasanton for staff time to seek and apply for funding, fully cover project costs, or as a match to outside funding sources
- The establishment of a City **impact fee** to cover costs associated with emissions reductions for projects related to specific CAP 2.0 actions

CAP 2.0 will not be implemented all at once—it will take **time, investment, and ongoing work** within the community. The City has committed to fund and implement existing ongoing and primary actions, and will fund and implement secondary actions if resources become available.



4.7 Monitoring, evaluation, and reporting

A core requirement of a qualified GHG reduction plan under CEQA is to monitor implementation of adopted GHG emissions reduction strategies. Successful implementation requires a methodology, tools, and metrics to measure progress and track performance over time. The City will rely on **CAPDash**—a cloud-based tool—to continually monitor CAP progress. The City will conduct **regular GHG emissions inventories** (e.g., every 3 years), track and measure progress toward meeting CAP 2.0 targets and goals, and support transparent data and progress reporting with the community and stakeholders. City staff will use CAPDash as well as reports from implementation leads to develop an **annual City Council update** on CAP 2.0 implementation that includes progress against specific strategies and actions, as well as overall progress on reducing community climate vulnerability and GHG emissions.

While monitoring, evaluation, and reporting of emissions reductions are essential to stay on track to meet CAP 2.0 goals, they can be time-consuming and detract from other critical monitoring such as assessing community perspectives and feedback on implementation. Both

are needed to adaptively manage CAP 2.0 and ensure it meets both emissions reduction and community investment goals. Therefore, the City will establish through the work of the Committee on Energy and the Environment, an opportunity for **public feedback and recommendations** and share with City Council in the **annual update**.

Given the accelerating pace of climate change, the City will evaluate and **update the CAP 2.0 in 2030** to ensure that CAP 2.0 strategies and actions reflect the latest knowledge and best practices around climate change, Pleasanton's progress on implementation, and the changing landscape of local, state, and federal funding and environmental policies. It is expected that methodologies for measuring some KPIs may also evolve and improve over time. The City currently plans to track and report on the following KPIs, which emphasize strategies with significant GHG emissions reduction potential (see Table 10).

Table 10. 2030 Targets for Key Performance Indicators (KPIs)

Strategies	KPI	Unit	2017 Baseline	2030 Target	% Change
Buildings & Energy					
BE-1. Advance the decarbonization of buildings	Building GHG emissions	MTCO ₂ e	178 K	123 K	-31%
	Natural gas consumption	therms	22.4 M	20.9 M	-7%
BE-2. Community energy efficiency upgrades	Energy consumption	MMBTU	4.13 M	4.03 M	-3%
BE-3. Expand use of renewable energy	Electricity emissions factor	MTCO ₂ e/kWh	0.000096	0	-100%
Transportation & Land Use					
TLU-1. Advance vehicle decarbonization	Average passenger vehicle carbon intensity	kgCO ₂ e/mile	0.09	0.05	-44%
TLU-2. Advance active, shared, and public transportation	Vehicle miles traveled (VMT)	vehicle miles	694 M	686 M	-1%
	VMT per capita	vehicle miles	4.9 K	4.6 K	-6%
	Bike lanes & trails	miles of new infrastructure	Unknown	50	Unknown
TLU-3. Advance sustainable land use	Same as TLU-2				
Materials & Consumption					
MC-1. Increase waste diversion and optimize collection and disposal systems	Landfilled waste	short tons	102 K	93.8 K	-8%
MC-2. Enhance sustainable production and reduce consumption	N/A				
Natural Systems					
NS-1. Increase and optimize carbon sequestration and improve ecosystem resilience	Carbon sequestration	net MTCO ₂ e	Not currently tracked	74 K	N/A
Water Resources					
WR-1. Improve water supply and conservation	N/A				
WR-2. Improve stormwater resilience	N/A				
Community Resilience & Wellbeing					
CRW-1. Improve community resilience and reduce vulnerability to climate change	Access to cooling center	% of population	100%	100%	Constant

An aerial photograph of a city valley, likely San Jose, California, showing a mix of urban development, green spaces, and a large body of water in the distance. The sky is a clear, bright blue. The image is overlaid with a semi-transparent blue gradient that darkens towards the top, where the text is located.

APPENDIX A

GHG Reduction Strategies
Quantification and Evidence

An aerial photograph of a city and golf course, overlaid with a semi-transparent blue and green gradient. The city features a mix of residential and commercial buildings, with a prominent golf course in the foreground. The background shows rolling hills under a clear sky.

APPENDIX B

GHG Inventory, Forecast, and Targets
Methodology and Calculations



Pleasanton Climate Action Plan 2.0

Draft Initial Study – Negative Declaration

prepared for

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Appendices

Appendix A	Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants
Appendix B	Description of Greenhouse Gases of California Concern

Initial Study

Proposed Plan Title

Pleasanton Climate Action Plan (CAP) 2.0

Lead Agency/Plan Sponsor and Contact

Lead Agency/Plan Sponsor

City of Pleasanton
Community Development Department
P.O. Box 520
Pleasanton, California 94566

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Plan Location and Physical Setting

The CAP 2.0 applies to all areas and plans/projects within the City of Pleasanton limits. Figure 1 shows the regional location, and Figure 2 shows the plan location. The plan location includes all of Pleasanton's incorporated lands.

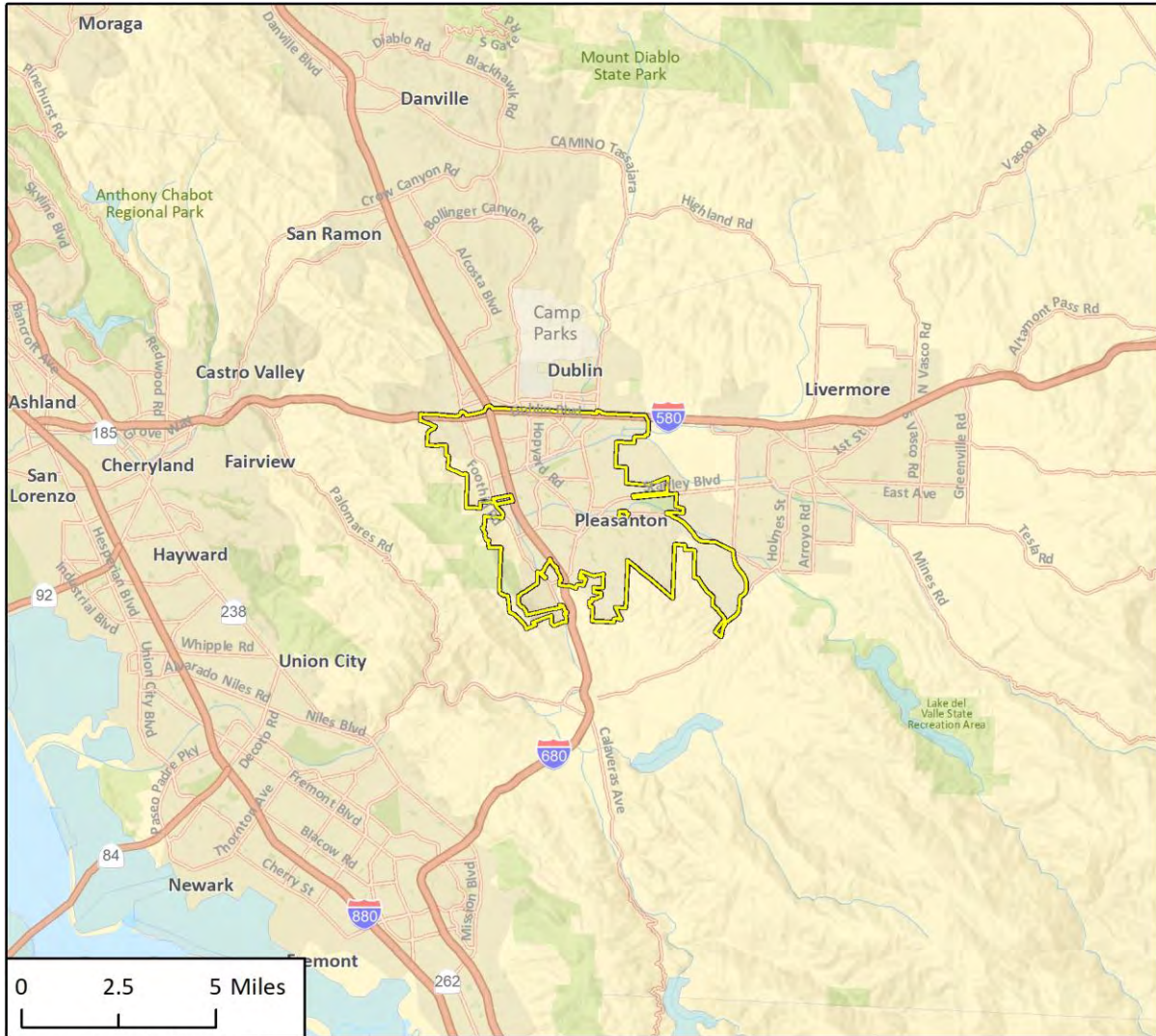
Regional Location and Setting

The City of Pleasanton is approximately 24 square miles within Alameda County in the San Francisco Bay Area. Pleasanton lies within the Tri-Valley area, which also includes the Cities of Dublin, Livermore, San Ramon, and the Town of Danville, and unincorporated portions of Alameda and Contra Costa Counties. The City is bordered by the east-west Interstate 580 (I-580) thoroughfare and the City of Dublin to the north, the City of Livermore and portions of unincorporated Alameda County to the east, and other portions of unincorporated Alameda County to the south and west, including the Pleasanton Ridge Regional Park.

Vehicular access to Pleasanton is primarily provided by I-580 and I-680. Pleasanton is also served by public transit facilities, including the Bay Area Rapid Transit (BART) Dublin/Pleasanton–Daly City Line, Altamont Commuter Express (ACE) Rail, and Livermore Amador Valley Transit Authority Wheels bus routes.¹ There are two BART stations in Pleasanton along I-580, the West Dublin/Pleasanton BART Station at the Stoneridge Shopping Center, and the East Dublin/Pleasanton BART Station off Owens Drive.

¹ Pleasanton, City of. 2021. Public Transit. Available: <<https://www.cityofpleasantonca.gov/visitor/gettingaround/transit/default.asp>>. Accessed September 15, 2021.

Figure 1 Regional Location



Basemap provided by Esri and its licensors © 2021.

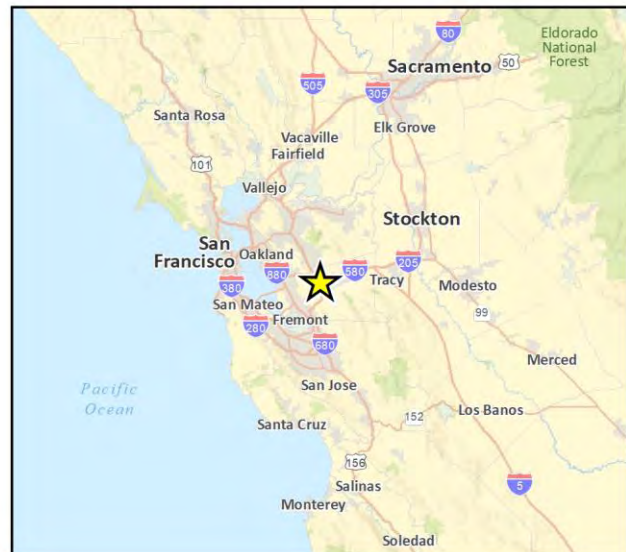
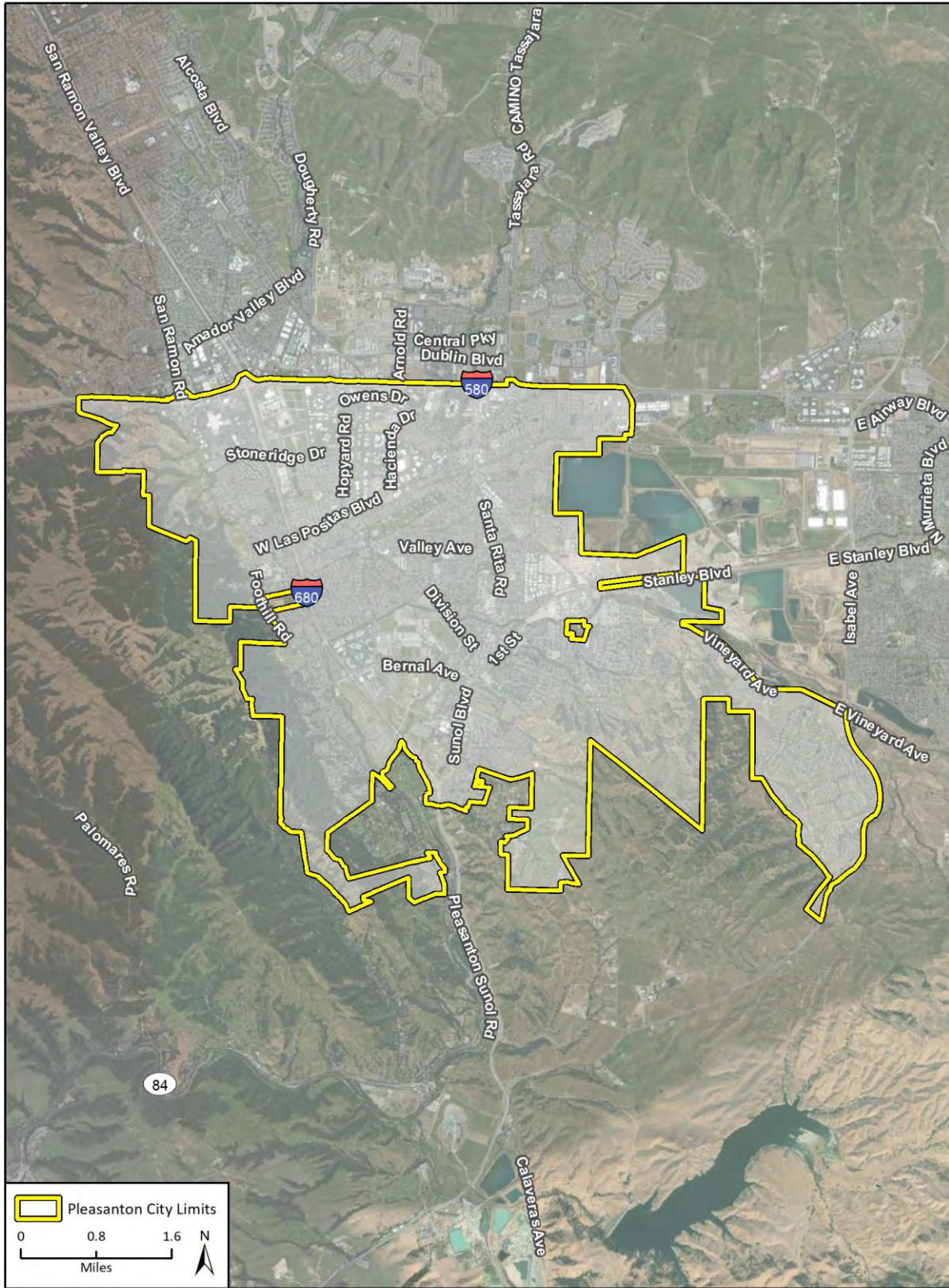


Figure 2 Plan Location



There is also one ACE Rail Station in the City that connects Pleasanton to Stockton and San Jose, located in downtown Pleasanton at 4950 Pleasanton Avenue. Pleasanton is also served by the following Wheels bus routes:

- Route 3 connecting Stoneridge Shopping Center to East Dublin/Pleasanton BART Station via Hacienda Drive and Stone Ridge Drive.
- Route 8 connecting the East Dublin/Pleasanton BART Station and south Pleasanton along Hopyard Road and Valley Avenue.
- Route 14 connecting the City from the East Dublin/Pleasanton BART Station to Livermore via Jack London Boulevard and Stoneridge Drive.
- Route 53 connecting the West Dublin/Pleasanton BART Station to the Alameda County Fairgrounds and ACE station via I-680 and Bernal Avenue.
- Route 54 connecting East Dublin/Pleasanton BART Station to Alameda County Fairgrounds and ACE Station via I-680, Hopyard Road, Valley Avenue, Los Positas Boulevard, and Bernal Avenue.
- Route 70X connecting East Dublin/Pleasanton BART Station, San Ramon, Walnut Creek, and Pleasant Hill.
- Route 580X connecting East Dublin/Pleasanton BART Station and Livermore Transit Center via I-58- and North Livermore Avenue.
- Route 10R connecting East Dublin/Pleasanton BART Station and Livermore Transit Center via Santa Rita Road and Stanley Boulevard.

Local Setting

Pleasanton is the eighth most populous city in Alameda County, with a population of 79,871 according to the 2020 U.S. Census.² Residential uses comprise the largest portion of existing land uses within the City. In addition, the City contains retail, office, and industrial uses along major transportation corridors, as well as in the downtown area. Neighborhood and community parks are interspersed throughout the City, with passive open space uses in the eastern, southern, and western fringes of the City.³ The City supports a diverse range of industries, including agriculture, recreation, tourism, and a variety of retail, office, and commerce.

Pleasanton is located within an alluvial valley. The City is located approximately 340 feet above mean sea level, and its topography is generally flat with elevations increasing towards the Pleasanton ridgelines to the west.⁴ The City is characterized by a Mediterranean climate with dry summers and wet winters. The warmest months of the year in Pleasanton are July and August, and the coldest months of the year are December and January. The annual average daily maximum temperature is 89.0 degrees Fahrenheit (°F), while the annual average daily minimum temperature is 38.8°F. Average monthly rainfall measured in the local area since 1977 varies from 0 inch in July to 2.81 inches in February.⁵

² U.S. Census Bureau. Quick Facts: Pleasanton City, California. Available: <<https://www.census.gov/quickfacts/pleasantoncitycalifornia>>. Accessed October 6, 2021.

³ Pleasanton, City of. 2008. Proposed General Plan Draft Environmental Impact Report. Available: <<http://dev.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?blobid=23819>>. Accessed September 15, 2021.

⁴ Pleasanton, City of. 2008. Proposed General Plan Draft Environmental Impact Report. Available: <<http://dev.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?blobid=23819>>. Accessed September 15, 2021.

⁵ Iowa State University. 2021. Iowa Environmental Mesonet: Livermore Station. Available: <https://mesonet.agron.iastate.edu/sites/monthlysum.php?station=LVK&network=CA_ASOS>. Accessed September 15, 2021.

Existing Sustainability Setting

Pleasanton Sustainability and Greenhouse Gas Emissions Reduction Efforts

The City has actively implemented a variety of environmental programs since 2009 contributing to greenhouse gas (GHG) emissions reductions. The following is a listing of the City's primary sustainable and climate protection programs:

- Committee on Energy and the Environment established (2008)
- 2005-2025 General Plan adopted (2009)
- 2020 Climate Action Plan adopted (2012)
- Complete Streets Policy enacted (2012)
- Polystyrene Ban Ordinance adopted (2013)
- Water Efficient Landscape Ordinance adopted (2015)
- Tri-Valley Local Hazard Mitigation Plan prepared (2018)
- Jeffrey G. Hansen Water Recycling Plant upgraded (2018)
- Bicycle and Pedestrian Master Plan adopted (2018)
- Tri-Valley – San Joaquin Valley Regional Rail Authority established, and Valley Link project launched (2018)
- Emergency Operations Plan adopted (2018)
- Trails Master Plan adopted (2019)
- Community Choice Aggregation authorized, highest renewable choice established as default for community and municipal facilities (2019)
- 2020 Urban Water Management Plan completed (2021)
- 2015-2023 Housing Element of General Plan updated (currently underway)
- SB 1383 Action Plan Adopted by City Council in July 2021 and education, outreach, and implementation efforts are currently underway

Regional Sustainability and GHG Emissions Reduction Efforts

In coordination with Alameda County, the State of California, and the federal government, the City of Pleasanton has committed to implementing regional and State policies related to GHG emissions reduction. As follows is a summary of the regional GHG emissions reduction efforts, which Pleasanton CAP 2.0 is intended to be consistent with or exceed.

Plan Bay Area: Strategy for a Sustainable Region

The Metropolitan Transportation Commission (MTC) adopted the Plan Bay Area 2017 update, which identified how the Bay Area would meet its GHG emission reduction targets. Plan Bay Area is also considered the Association of Bay Area Governments (ABAG)/MTC Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In accordance with SB 743, the Plan Bay Area included elements designed to encourage the type of land-use development to meet three primary objectives. First, Roadway Level of Service (LOS) could not be considered an environmental impact under the California Environmental Quality Act (CEQA). Second, it introduced changes to Vehicle Miles Traveled (VMT) per capita as a determinant of environmental impact. Third, the use of VMT as

an environmental impact in CEQA is considered a mechanism for achieving State and regional GHG emissions reduction goals.

Bay Area Air Quality Management District CEQA Guidelines

The Bay Area Air Quality Management District (BAAQMD) encourages local governments to adopt a GHG Reduction Strategy that is consistent with AB 32 goals. The GHG Reduction Strategy may streamline environmental review of community development projects. According to the BAAQMD, if a project is consistent with a GHG Reduction Strategy, then it can be presumed that the project will not have significant GHG impacts. This approach is consistent with State CEQA Guidelines, Section 15183.5:

Lead agencies may analyze and mitigate the significant impacts of GHG emissions at a programmatic level, such as...a plan to reduce GHG emissions. Later project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental documents may rely on an [Environmental Impact Report] containing a programmatic analysis of GHG emissions.

Alameda County Countywide Transportation Plan

In 2020, The Alameda County Transportation Commission adopted the Countywide Transportation Plan (CTP) to provide the County with a long-range plan for establishing the vision and priorities for transportation over a 30-year planning horizon. The CTP seeks to enhance and expand public transit, bicycle facilities, and pedestrian access within the County in order to improve mobility and access for all segments of the population and promote public health, environmental sustainability, and climate resiliency. The plan identifies 93 projects across the county including greenways and trails, transit capacity improvements, sea level rise adaptation, and multimodal corridors. Priority projects identified for Pleasanton include the West Las Positas Bike Corridor Improvements, I-680 Sunol Interchange Modernization, and Dublin/Pleasanton Active Access Improvements to BART.⁶

Alameda County Climate Protection Project and Cities for Climate Protection Campaign

In 2009, the Alameda County Climate Protection Project and Cities for Climate Protection Campaign organized a coordinated effort by all 14 cities in Alameda County, including Pleasanton, to reduce the emissions that cause global warming as well as improve air quality, reduce waste, cut energy use, and save money. Participants work together across jurisdictions focusing on key action areas, such as energy efficiency, transportation, and waste reduction, and on specific projects best addressed by a regional effort, such as collaborative grant applications and electric vehicle related infrastructure.

East Bay Community Energy Community Choice Aggregation Program

East Bay Community Energy (EBCE) is a public agency based in Oakland and governed by a Board of local elected officials from each of the participating jurisdictions. In 2018, EBCE began supplying East Bay communities with renewable energy-sourced electricity. Renewable energy is energy that comes from resources that are naturally replenished, create no carbon emissions, and include small hydroelectric, solar, wind, biomass, biowaste, and geothermal sources. At EBCE, renewable energy is specifically provided by solar and wind sources. Purchasing electricity from EBCE is a way to

⁶ Alameda County Transportation Commission (ACTC). 2020. Countywide Transportation Plan. Available: <https://www.alamedactc.org/wp-content/uploads/2021/02/2020_CTP_Final.pdf>. Accessed September 15, 2021.

reduce GHG emissions and meet community climate action goals. Pleasanton joined EBCE in 2019 and began receiving power from EBCE in April 2021.

State Sustainability and GHG Emissions Reduction Efforts

As follows is a summary of the State GHG emissions reduction efforts, which Pleasanton CAP 2.0 is intended to be consistent with or exceed.

California Executive Order S-3-05

In 2005, the California governor issued Executive Order (EO) S-3-05, which identifies Statewide GHG emissions reduction targets to achieve long-term climate stabilization as follows:

- Reduce GHG emissions to 1990 levels by 2020
- Reduce GHG emissions to 80 percent below 1990 levels by 2050

In response to EO S-3-05, California Environmental Protection Agency (CalEPA) created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the “2006 CAT Report”). The *2006 CAT Report* identified a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the State agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, among others.

California Assembly Bill 32, California Global Warming Pollution Solutions Act

In 2006, the California legislature signed Assembly Bill (AB) 32 – the Global Warming Solutions Act – into law, requiring a reduction in Statewide GHG emissions to 1990 levels by 2020 and California Air Resources Board (CARB) preparation of a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 required CARB to adopt regulations to require reporting and verification of Statewide GHG emissions. Based on this guidance, CARB approved a 1990 Statewide GHG level and 2020 limit of 427 metric tons (MT) of carbon dioxide equivalent (CO₂e).

California Senate Bill 375, Sustainable Communities and Climate Protection Act

In 2008, Senate Bill (SB) 375 enhanced the State’s ability to reach AB 32 targets by CARB to develop regional GHG emissions reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the State’s 18 major Metropolitan Planning Organizations (MPO) to prepare a sustainable community’s strategy (SCS) that contains a growth strategy to meet such regional GHG emissions reduction targets for inclusion in the respective regional transportation plan (RTP).

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. ABAG was assigned targets of a ten percent reduction in per capita GHG emissions from passenger vehicles by 2020 and a nineteen percent reduction in per capita GHG emissions from passenger vehicles by 2035.

California Climate Change Scoping Plan

In 2008, CARB approved the original California Climate Change Scoping Plan, which included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted and implemented since approval of the Scoping Plan.

California Climate Change Scoping Plan Update (2013)

In 2013, CARB approved the first update to the California Climate Change Scoping Plan. The 2013 Scoping Plan Update defined CARB climate change priorities for the next five years and set the groundwork to reach post-2020 Statewide GHG emissions reduction goals. The 2013 Scoping Plan Update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use.

California Executive Order B-30-15

In 2015, the California governor issued Executive Order B-30-15, which established a Statewide mid-term GHG reduction target of 40 percent below 1990 levels by 2030.

California Senate Bill 32, California Global Warming Pollution Solutions Act Update

In 2016, the California legislature signed Senate Bill 32 (SB 32) into law, extending AB 32 by requiring further reduction in Statewide GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies and policies, such as SB 350 and SB 1383 (see below).

California Climate Change Scoping Plan Update (2017)

In 2017, CARB approved the second update to the California Climate Change Scoping Plan. The 2017 Scoping Plan put an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan Update does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with Statewide per-capita goals of six MT of CO₂e by 2030 and two MT of CO₂e by 2050. As stated in the 2017 Scoping Plan Update, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects, because they include all GHG emissions sectors in the State.⁷

⁷ California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. Available: <https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf>. Accessed September 15, 2021.

California Executive Order B-55-18

In 2018, the California governor issued Executive Order B-55-18, which established a new Statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing Statewide GHG reduction targets established by SB 32.

For more information on the Senate and Assembly Bills, Executive Orders, and Scoping Plans discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

Assembly Bill 1493, Pavley Bill Vehicle Efficiency Standards

In 2002, the California State Legislature enacted Assembly Bill 1493 (aka “the Pavley Bill”), which directs the CARB to adopt standards that will achieve “the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles,” taking into account environmental, social, technological, and economic factors. In September 2009, CARB adopted amendments to the “Pavley” regulations to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The Pavley Bill is considered to be the national model for vehicle emissions standards. In January of 2012, CARB approved a new emissions control program for vehicle model years 2017 through 2025. The program combines the control of smog, soot, and GHGs and the requirement for greater numbers of zero emission vehicles into a single package of standards called Advanced Clean Cars.

California Energy Efficiency Strategic Plan of 2008

In September 2008, the California Public Utilities Commission (CPUC) adopted California’s first Long Term Energy Efficiency Strategic Plan, presenting a single roadmap to achieve maximum energy savings across all major groups and sectors in California. The Strategic Plan was subsequently updated in January 2011 to include a lighting chapter. The Strategic Plan sets goals of all new residential construction and all new commercial construction in California to be zero net energy (ZNE) by 2020 and 2030, respectively. In 2018, the California Energy Commission voted to adopt a policy requiring all new homes in California to incorporate rooftop solar. This change went into effect in January 2020 with the adoption of the 2019 California Code of Regulations (CCR) Title 24 Code and is a step towards the State achieving its goal of all residential new construction being ZNE by 2020. Additionally, the Strategic Plan sets goals of 50 percent of existing commercial building to be retrofit to ZNE by 2030 and all new State buildings and major renovations to be ZNE by 2025.

California Code of Regulations Title 24 (California Building Code)

Updated every three years through a rigorous stakeholder process, Title 24 of the CCR requires California homes and businesses to meet strong energy efficiency measures, thereby lowering their energy use. Title 24 contains numerous subparts, including Part 1 (Administrative Code), Part 2 (Building Code), Part 3 (Electrical Code), Part 4 (Mechanical Code), Part 5 (Plumbing Code), Part 6 (Energy Code), Part 8 (Historical Building Code), Part 9 (Fire Code), Part 10 (Existing Building Code), Part 11 (Green Building Standards Code), Part 12 (Referenced Standards Code). The California Building Code is applicable to all development in California. (Health and Safety Code §§ 17950 and 18938(b).)

The regulations receive input from members of industry, as well as the public, with the goal of “[r]educing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy.” (Pub. Res. Code § 25402.) These regulations are carefully scrutinized and analyzed for technological and

economic feasibility (Pub. Res. Code § 25402(d)) and cost effectiveness (Pub. Res. Code § 25402(b)(2) and (b)(3)).

PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS

CCR Title 24 Part 6 is the Building Energy Efficiency Standards. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California’s energy demand. The Building Energy Efficiency Standards is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. New construction and major renovations must demonstrate compliance with the current Building Energy Efficiency Standards through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards, and residential homes will be 7 percent more energy efficient. When accounting for the electricity generated by the solar photovoltaic system, residences would use 53 percent less energy compared to homes built to the 2016 standards. The 2019 Building Energy Efficiency Standards, adopted on May 9, 2018, became effective on January 1, 2020. The 2019 Standards move toward cutting energy use in new homes by more than 50 percent and require installation of solar photovoltaic systems for single-family homes and multi-family buildings of three stories and less. The 2019 Standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements. Under the 2019 Standards, nonresidential buildings will be 30 percent more energy-efficient compared to the 2016 Standards, and single-family homes will be seven percent more energy-efficient. When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards.

PART 11 – CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards Code, referred to as CALGreen, was added to CCR Title 24 as Part 11 first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). The 2016 CALGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- 20 percent reduction in indoor water use relative to specified baseline levels;
- 50 percent construction/demolition waste diverted from landfills;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards;
- Dedicated circuitry to facilitate installation of EV charging stations in newly constructed attached garages for single-family and duplex dwellings; and
- Installation of EV charging stations at least three percent of the parking spaces for all new multi-family developments with 17 or more units.

Similar to the compliance reporting procedure for demonstrating Building Energy Efficiency Standards compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms for new low-rise residential and non-residential buildings. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

Senate Bill 97, CEQA Guidelines for Addressing GHG Emissions

The California Environmental Quality Act (CEQA) requires public agencies to review the environmental impacts of proposed projects, including General Plans, Specific Plans, and specific kinds of development projects. In February 2010, the California Office of Administrative Law approved the recommended amendments to the State CEQA Guidelines for addressing GHG emissions. The amendments were developed to provide guidance to public agencies regarding the analysis, mitigation, and effects of GHG emissions in draft CEQA documents.

Assembly Bill 117, Community Choice Aggregation

Assembly Bill 117 establishes the creation of Community Choice Aggregation (CCA) that fosters clean and renewable energy markets. CCA allows cities and counties to aggregate the buying power of individual jurisdictions. The California CCA markets were created as an answer to the brownouts and energy shortages of the early 2000's. AB 117 was passed in 2002 as an answer to California's increased energy independency by incorporating more alternative and renewable energy sources into its energy portfolio. With AB 117, municipalities can provide alternative energy choices to their local carrier (e.g., the Pacific Gas and Electric Company, PG&E). Marin Clean Energy was the first CCA in the State of California to go online with a 50 percent to 100 percent clean energy portfolio in 2010. In 2018, EBCE began supplying East Bay communities, including Pleasanton, with renewable energy-sourced electricity. CCAs are governed by the California Public Utilities Commission (CPUC). SB 790 further ensures fair and transparent competition by creating a code of conduct and guiding principles for entrants into the CCA field.

Senate Bill 1275, Charge Ahead Initiative

In 2014, Senate Bill 1275 established a State goal of one million zero-emissions and near-zero-emissions vehicles in service by 2020 and directed CARB to develop a long-term funding plan to meet this goal. SB 1275 also established the Charge Ahead California Initiative requiring planning and reporting on vehicle incentive programs and increasing access to and benefits from zero-emissions vehicles for disadvantaged, low- and moderate-income communities and consumers.

Senate Bill 350, Clean Energy and Pollution Reduction Act of 2015

In 2015, SB 350 established new clean energy, clean air, and GHG reduction goals for 2030 and beyond. SB 350 codified Governor Brown's aggressive clean energy goals and established the State 2030 GHG reduction target of 40 percent below 1990 levels. To achieve this goal, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 (legislation originally enacted in 2002) to 50 percent by 2030. Renewable resources include wind, solar, geothermal, wave, and small hydroelectric power. In addition, SB 350 requires the State to double State-wide energy efficiency savings in electricity and natural gas end uses by 2030 from a base year of 2015.

Assembly Bill 197, State Air Resources Board GHGs Regulations

In 2016, AB 197, a bill linked to SB 32, increased legislature oversight over CARB and directs CARB to both prioritize disadvantaged communities in its climate change regulations and evaluate the cost-effectiveness of measures it considers. AB 197 requires CARB to protect the State's most impacted and disadvantaged communities [and] consider the social costs of the emissions of GHGs when developing climate change programs. The bill also adds two new legislatively appointed non-voting members to CARB, increasing the Legislature's role in CARB's decisions.

Senate Bill 100, The 100 Percent Clean Energy Act of 2018

In September 2018, Governor Brown signed SB 100, requiring that the State's load serving entities (including energy utilities and community choice energy programs) must procure energy generated 100 percent from Renewables Portfolio Standard for eligible renewable resources by 2045.

General Plan Designation and Zoning

CAP 2.0 would be implemented throughout the City and would occur in all Pleasanton General Plan designations and zoning designations. The plan would not alter any existing land use or zoning designations.

Description of the Plan (CAP 2.0)

CAP 2.0 incorporates the many climate protection programs noted above that the City of Pleasanton has in place and will continue to reduce GHG emissions. The CAP 2.0 provides an update to Pleasanton's first Climate Action Plan adopted in 2012; upon its adoption the CAP 2.0 will reflect Pleasanton ongoing and active engagement for the plan's 25-year planning horizon in addressing climate change, sustainability, and reductions in GHG emissions.

The City has developed CAP 2.0 in order to achieve several objectives, including reducing GHG emissions, improving quality of life and public health, cultivating community resilience and adaptability, and promoting thriving ecosystems and a thriving economy. The CAP 2.0 establishes a new target and goal for reducing GHG emissions by 2030 and 2045, respectively, and is intended to provide a framework through its actions for a safer future and enhanced quality of life for the community, new economic opportunities through green jobs, enhanced social equity and citizen engagement on the issue of climate change, and reduced obstacles for building affordable housing. The CAP 2.0 provides a foundation for future sustainable development efforts in the City of Pleasanton. It is anticipated that environmental documents for future development projects will identify and incorporate applicable GHG reduction strategies and actions from the CAP 2.0.

The CAP 2.0 addresses communitywide GHG emissions and includes a goal of reducing communitywide per capita GHG emissions output to carbon neutrality in 2045. It also includes a discrete target for Pleasanton reaching maximum emissions of 4.11 MT of CO₂e per capita (or 341,188 MT of CO₂e in total emissions) by 2030. This corresponds to a 70 percent reduction in per-capita GHG emissions below 1990 levels by 2030 (or a 65 percent reduction below 2005 levels), exceeding the California Senate Bill 32 target for 2030 to reduce total GHG emissions 40 percent below 1990 levels. The CAP 2.0 assessed herein is based upon community-level inventories developed in 2005 and 2017, contains a list of strategies and respective supporting actions to achieve Pleasanton's sustainability goals and focuses on actions through 2030 for purposes of meeting the Pleasanton 2030 GHG emissions target.

The 2005 GHG emissions inventory provides an important foundation for the CAP 2.0, providing the basis for an emissions back-cast to 1990 to serve as the reference year from which the City's target to reduce per capita emissions 70 percent below 1990 levels by 2030 has been developed. Approximately 12.16 MT of CO₂e per person (813,131 MT of CO₂e total) were emitted in Pleasanton in 2005. The 2017 inventory also provided the basis for the GHG emissions forecast, against which progress toward Pleasanton's 2030 target can be measured. Approximately 7.67 MT of CO₂e per person (588,553 MT of CO₂e total) were emitted in Pleasanton in 2017. GHG emissions in the 2005 and 2017 inventories were emitted from the residential and commercial energy, transportation, water, wastewater, and waste sectors. The residential and commercial energy sector represents emissions that result from electricity and natural gas used in both private and public sector buildings and facilities. The transportation sector includes emissions from on-road passenger and commercial vehicles within the City, as well as off-road vehicles and equipment. The transportation sector was the largest contributor to Pleasanton's GHG emissions in both 2005 and 2017, followed by energy and waste. Table 1 provides the Pleasanton community GHG emissions in 2017 by sector as well as each sector's percentage of communitywide emissions.

Table 1 2017 Pleasanton GHG Emissions Inventory Summary

Sector	Activity Data	Emission Factors	Units	MT of CO ₂ e
Residential Electricity (kWh)	182,355,696	0.00009635	MT CO ₂ e/kWh	17,571
Nonresidential Electricity (kWh)	320,791,579	0.00009635	MT CO ₂ e/kWh	30,910
Direct Access Electricity (kWh) ⁴	52,782,630	0.0002027	MT CO ₂ e/kWh	10,700
Residential Gas (therms)	11,796,750	0.00531	MT CO ₂ e/therms	62,647
Nonresidential Gas (therms)	10,579,242	0.00531	MT/CO ₂ e/therms	56,181
Passenger On-Road Transportation (VMT)	601,291,074	0.000338	MT CO ₂ e/mile	202,947
Commercial On-Road Transportation (VMT)	92,034,058	0.001366	MT CO ₂ e/mile	126,668
Off-Road Transportation (VMT)	N/A	0.0806 ²	Effective Change in Service Population	48,634
Waste (tons) ⁵	102,684	0.2860	MT CO ₂ e/Ton	29,358
Wastewater (kWh)	N/A ¹	N/A ³	MT CO ₂ e/kWh	1,190
Water (kWh)	18,146,306	0.00009635	MT CO ₂ e/kWh	1,748
Total Emissions				588,553

MWh: megawatt hours; kWh: kilowatt hours; MT: metric tons; CO₂e: carbon dioxide equivalent; VMT: vehicle miles traveled; Totals may not sum due to rounding.

¹ Off-road emissions calculated as a proportion of total emissions in Alameda County based on changes in population without activity data.

² Effective change in service population was defined as on the sum of new population and jobs in Pleasanton divided by the total sum of new jobs and population in Alameda County for each inventory year.

³ Wastewater is a combination of stationery and process emissions.

⁴ Direct access service is retail electric service where customers purchase electricity from a competitive provider called an Electric Service Provider instead of from a regulated electric utility. An Electric Service Provider is a non-utility entity that offers electric service to customers within the service territory of an electric utility.

⁵ Includes a small quantity (367 tons) of Alternative Daily Cover Waste for which a different emission factor was used (.246 MTCO₂e/ton). This emissions factor was calculated using data from the CARB California Landfill Emissions Tool Version 1.3.

As shown in Table 1, the largest sectors of GHG emissions are related to transportation (specifically on-road passenger and commercial vehicles) and building energy use (specifically residential and commercial electricity and natural gas use). As part of the CAP 2.0, Pleasanton is committed to a per capita emissions reduction goal of carbon neutrality in 2045 and a target of 70 percent below 1990 levels (or 4.11 MT of CO₂e per capita) by 2030. This 2030 GHG emissions goal is selected to be consistent with SB 32 State emissions targets and ABAG regional passenger vehicle emissions targets, to be consistent with CEQA for a qualified GHG emissions reduction strategy, and to be achievable by City-supported strategies and actions identified in CAP 2.0. CAP 2.0 includes a business-as-usual (BAU) forecast and an adjusted BAU (ABAU) forecast of GHG emissions, based on the 2017 inventory, that enables Pleasanton to estimate the amount of emissions reductions needed to meet its per capita reduction targets.

The CAP 2.0 includes actions to achieving, or making progress towards achieving, Pleasanton's 2030 target and 2045 goal. Key among these, the CAP 2.0 includes strategies and actions to electrify new and existing residential, commercial, and municipal buildings and increase the amount of renewable energy and storage for new buildings. It recommends increasing electric vehicle (EV) charging stations to encourage greater EV adoption in the community, and development patterns that emphasize complete streets that allow people to go about their business on foot, by bicycle, or via public transportation. It also offers ways to reduce water use and divert organic and inorganic waste that would otherwise go to landfills. In addition, CAP 2.0 includes strategies and actions to increase urban greenspace and trees for carbon sequestration and to provide community education and outreach regarding CAP 2.0 and local sustainability efforts.

Table 2 includes a complete list of the CAP 2.0 strategies and descriptions of respective supporting actions as well as anticipated annual GHG reductions in 2030 and 2045. Strategies and supporting actions within the CAP 2.0 are organized in the categories of ongoing, primary, and secondary. Ongoing measures are actions already contemplated in other City plans, policies, or programs. This CAP 2.0 programmatic CEQA assessment document analyzes the impacts of implementation of the new primary and secondary actions - primary (labeled with a P) since those actions would be implemented and secondary (labeled with a S) since those actions could also be implemented as time and resources allow; however secondary actions are not relied upon to reduce GHG emissions over time.

Table 2 Pleasanton CAP 2.0 Strategies and Actions

Action ID #	Strategies and Respective Supporting Actions	Anticipated GHG Emissions Reduction (MT of CO ₂ e) ¹
Buildings and Energy		
Strategy BE-1: Advance the decarbonization of buildings		
P1	All-electric reach code for new construction: Adopt all-electric reach code that limits the development of new gas infrastructure by requiring electrification for new construction (exceptions will be considered).	2030: 2,628 2045: 22,959
P2	Existing building electrification plan: Prepare and implement an existing building electrification plan including grid analysis, municipal building electrification, encouraging community electrification through incentives and permit streamlining, conducting outreach and education, and staying apprised of regulations, studies, and regional efforts.	2030: 4,357 2045: 6,034
S1	Refrigerant management in new construction: Require new construction use lowest global warming potential refrigerants for appliances and HVAC systems.	Secondary ¹
Strategy BE-2: Improve energy consumption and efficiency		
P3	Modify Municipal Code definition of “covered projects”: Modify definition of “covered project” in the Pleasanton Municipal Code (PMC) Green Building section to cover all new commercial buildings and residential homes.	2030: 279 2045: 65
S2	Community energy efficiency upgrades: Promote community energy efficiency upgrades through incentives, partnerships, and/or education and outreach. This action can include establishing and implementing a revolving loan fund for home performance audits and system upgrades.	Secondary
S3	Energy benchmarking and City facility retrofits: Conduct energy benchmarking to measure and track energy and water usage across City facilities. Identify opportunities for efficiency upgrades and cost savings across City facilities, and conduct energy retrofits of existing City facilities and equipment. This may include identifying municipal facilities where solar/storage systems will be the most effective and installing solar/storage systems throughout municipal locations.	Secondary
Strategy BE-3: Expand use of renewable energy		
P4	Solar and storage on new construction: Require solar/battery storage systems on new developments where feasible.	2030: 726 2045: 0
Transportation and Land Use		
Strategy TLU-1: Advance vehicle decarbonization		
P5	Create and implement a Zero-Emissions Vehicle (ZEV) Infrastructure Plan: Develop and implement a ZEV Infrastructure Plan including a fuel infrastructure analysis, expand public electric vehicle (EV) infrastructure, incentivize EV, electric bicycle, and ZEV use, require new multi-family housing to install EV charging, transition the municipal fleet to all-electric, conduct education and outreach, and support regional efforts.	2030: 25,352 2045: 71,168

Action ID #	Strategies and Respective Supporting Actions	Anticipated GHG Emissions Reduction (MT of CO ₂ e) ¹
P6	Electrify municipal small engine equipment and reduce emissions of off-road equipment upon replacement: Evaluate the current fleet of Municipal off-road equipment (e.g., mowers, chippers, tractors, etc.) and identify equipment that falls below current emissions standards. Replace and update off-road equipment with lower emissions alternatives upon replacement.	2030: 0 2045: 0
P7	Expand community small-engine electrification: Partner with local organizations to provide incentives to the community to purchase all-electric small-engine equipment (e.g., lawn mowers, leaf blowers).	2030: 1,446 2045: 1,871
Strategy TLU-2: Advance active, shared, and public transportation		
P8	Bicycle amenities: Update the Municipal Code to require bicycle amenities (e.g., parking and showers) for new commercial developments and require bicycle parking for new multi-family and mixed-use projects.	2030: 380 2045: 205
P9	Bicycle rack incentive program: Develop and implement a program for the community to request bicycle racks free of charge on public property adjacent to businesses.	2030: 584 2045: 308
P10	Increase transit ridership: Increase public transit ridership by partnering with transit agencies (e.g., BART, ACE, and LAVTA) to improve access across the City to/from public transit, the bicycle/trails network, and destinations throughout the City.	2030: 1,330 2045: 1,907
S4	VMT reduction for K-12 activities: Explore opportunities to decrease VMTs related to K-12 curricular and extracurricular events including partnering with the school district to encourage active transportation and create a bicycle safety course, adjusting traffic signals to prioritize pedestrians and bicycles around schools, and encouraging school bus ridership.	Secondary
Strategy TLU-3: Advance sustainable land use		
P11	Promote LEED Neighborhood Development: Promote and encourage the use of LEED for Neighborhood Development (LEED ND) as new developments are proposed and areas in the City are redeveloped.	2030: 1,800 2045: 968
Materials and Consumption		
Strategy MC-1: Increase waste diversion and optimize collection and disposal systems		
P12	Single use plastic reduction: Reduce consumption from single use plastic which may include: requiring special events to provide reusables, recycling, an composting, promoting and implementing regional sustainable waste programs, expanding local reusable infrastructure, and implementing an ordinance that focuses on replacing single-use plastics with reusable products.	2030: 0 2045: 0
Strategy MC-2: Enhance sustainable production and reduce consumption		
S5	Environmentally preferable purchasing policy: Adopt City environmentally preferable purchasing policy. Include alternatives for the most carbon-intensive materials that the City purchases, such as building materials (e.g., concrete, metals, etc.).	Secondary

Action ID #	Strategies and Respective Supporting Actions	Anticipated GHG Emissions Reduction (MT of CO ₂ e) ¹
S6	Embodied carbon reduction plan: Participate and support a regional Embodied Carbon Reduction Plan (i.e., considering the footprint of the material including resources needed to produce the materials) to reduce the carbon content of materials that include a variety of approaches for example whole building lifecycle analysis for new construction.	Secondary
Natural Systems		
Strategy NS-1: Increase and optimize carbon sequestration and improve ecosystem resilience		
P13	Urban Forest Master Plan: Develop and implement an Urban Forest Master Plan increasing carbon sequestration through trees. The plan should aim to protect and increase tree canopy, include a planting program, require climate adapted plantings for certain projects, and create a community planting guide.	2030: 73,253 2045: 195,340
P14	Soil management carbon sequestration projects: Increase carbon sequestration on public lands by implementing carbon sequestration projects on City property (e.g., soil at parks) and reducing use of synthetic nitrogen fertilizer. Increase carbon sequestration on private lands by increasing the awareness of and subsidizing the cost of compost and encouraging the use of compost beyond water efficient landscape ordinance (WELO) standards.	2030: 621 2045: 621
S7	Carbon sequestration research and tracking: Stay apprised of methods to track carbon sequestration and technological advancements available that mechanically and naturally captures carbon and/or remove carbon.	Secondary
Water Resources		
Strategy WR-1: Improve water supply and increase conservation		
P15	Water efficiency and retrofits: Decrease community water use by expanding incentives for retrofitting inefficient water fixtures and further incentivize native and drought tolerant landscape retrofits.	Negligible (not quantified)
Strategy WR-2: Improve stormwater resilience		
S8	Green Stormwater Infrastructure Plan: Participate and support regional Green Stormwater Infrastructure Planning efforts that builds off and supports the City's National Pollutant Discharge Elimination System (NPDES) permit to ensure a sustainable approach for managing stormwater runoff (e.g., incorporating green roofs, rainwater catchment, etc.).	Secondary
Community Resilience and Wellbeing		
Strategy CRW-1: Improve community resilience and reduce vulnerability to climate change		
P16	Comprehensive climate awareness, education, and outreach: Implement comprehensive public/private climate awareness, education, and outreach which may include creating a method for the community to calculate their personal carbon footprint, a new Library and Recreation program dedicated to environmental conservation and stewardship for different age groups, and "sustainability awards" recognizing community efforts presented annually.	2030: 5,490 2045: 2,966

Action ID #	Strategies and Respective Supporting Actions	Anticipated GHG Emissions Reduction (MT of CO ₂ e) ¹
S9	Wildfire preparation, prevention, and education: Reduce community vulnerability and increase wildfire resilience by increasing awareness and expanding outreach, modifying development regulations, identify and implement controlled burns and other means to reduce combustible biomass and improve early wildfire detection, and provide clean air shelters.	Secondary

Note: MT of CO₂e = metric tons of carbon dioxide equivalent

¹ Secondary actions are those that may be implemented at a later date, but are not guaranteed. Secondary actions are not accounted for in the anticipated GHG emissions reductions. Values represent reductions in that year compared to the BAU scenario (i.e., not several-year-spanning compounded reductions).

Source: Compiled by Rincon based on information contained in the Pleasanton Draft CAP 2.0.

The strategies and actions included in CAP 2.0 (shown above in Table 2), combined with Statewide legislation and City initiatives, will enable Pleasanton to meet its GHG emissions reduction target pathway, a linear pathway to achieving a 70 percent reduction in per capita GHG emissions from 1990 levels by 2030, which exceeds the State’s goal of 40 percent below 1990 levels by 2030.

Table 3 shows the contribution of the Statewide and City initiatives in conjunction with CAP 2.0 strategies and actions to reduce Pleasanton’s projected total GHG emissions in 2030.

Table 3 Pleasanton 2030 GHG Emissions Reductions from 2030 BAU levels

State Initiative	Sector	GHG Emissions Reduction (MT of CO ₂ e)
Advanced Clean Cars Program	On-road Transportation	103,931
Renewable Portfolio Standard	All Electricity	29,208
Title 24	Residential Energy	1,338
A. Total State Initiative Emissions Reductions		134,477
B. Total City Initiative Emissions Reductions		55,017
C. Total CAP 2.0 Emissions Reductions		120,752
D. Total Expected Emissions Reductions (A+B+C)		310,246
E. Pleasanton Emissions Reduction Requirement per SB 32 (State Goal)		231,947
F. Meets/exceeds State Goal? (D > E)		Yes

MT of CO₂e = metric tons of carbon dioxide equivalent

Table 4 shows the 2030 GHG emissions and targets for Pleasanton, including the expected emissions once the strategies and actions listed in Table 2 are implemented.

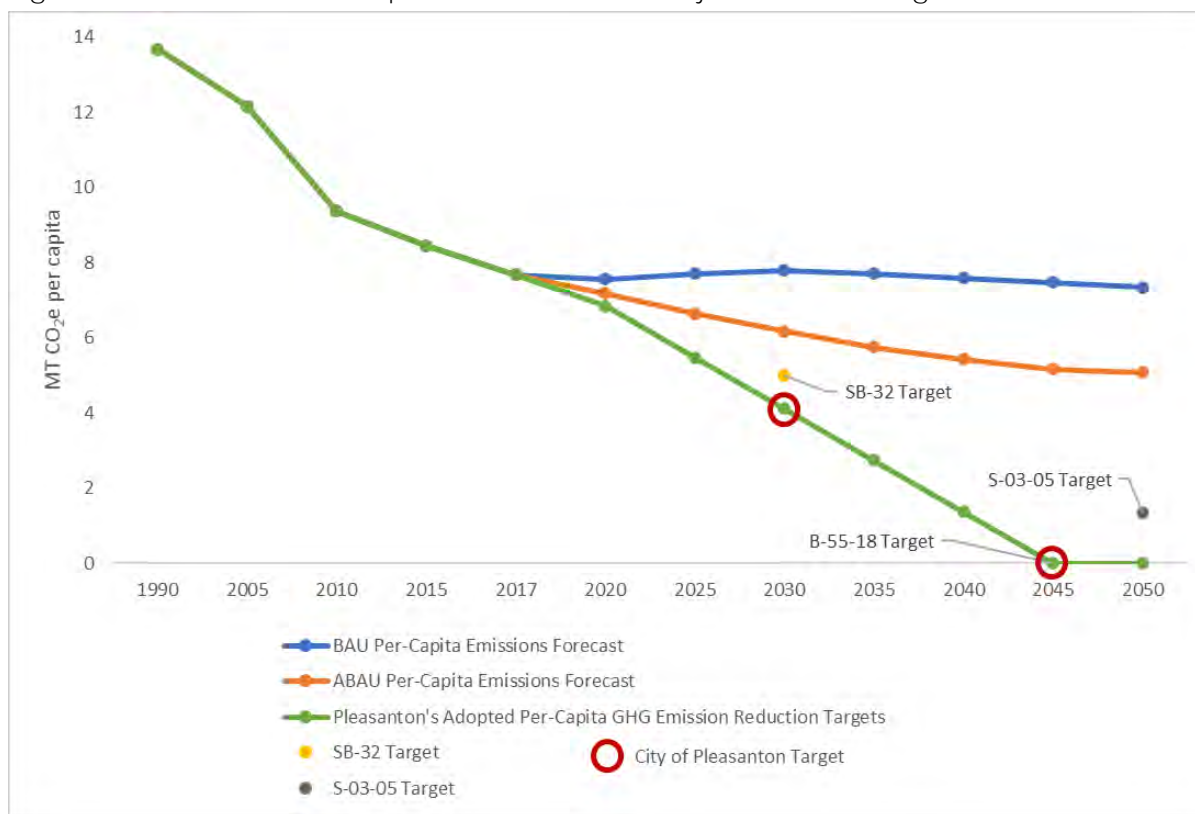
Table 4 Pleasanton GHG Emissions Projections by Target Year

Description	Emissions (MT of CO ₂ e/person)	Emissions (MT of CO ₂ e total)
1990 Emissions	13.67	691,161
2030 BAU Emissions	7.79	646,644
2030 ABAU Emissions (including ongoing local actions)	5.51	457,150
SB 32 2030 Target Emissions (40% below 1990)	5.0	414,697
2030 Expected Emissions with Implementation of CAP 2.0 Primary Actions	4.05	336,398

MT of CO₂e = metric tons of carbon dioxide equivalent

Figure 3 depicts 2030 and 2045 GHG emissions and targets for Pleasanton, including the expected emissions once the strategies and actions listed in Table 2 are implemented. Figure 3 illustrates, for per capita emissions, the forecasted BAU emissions (in blue). Figure 3 also shows the forecasted ABAU emissions (in orange), after State-level and City-level initiatives are accounted for. Finally, Figure 3 depicts the emissions target/goal pathway trajectory and the emissions reductions needed after all State-and City-level actions and Pleasanton CAP 2.0 primary actions are applied (in green).

Figure 3 Pleasanton Per Capita GHG Emissions Projections and Targets



Implementation of CAP 2.0 strategies and actions listed in Table 2 could result in physical changes to the environment that could potentially have an impact on the environment. While individual projects resulting from these actions have not been identified for the purposes of this document,

the types of actions that could result from realization of CAP 2.0 strategies are taken into account in considering potential environmental impacts that could occur through implementation of CAP 2.0. For example, projects or actions requiring ministerial approval, such as installation of EV charging stations and supporting infrastructure, as well as new bicycle or pedestrian facilities, would introduce physical changes related to the temporary presence and operation of construction vehicles and equipment during installation of required facilities and the long-term presence of new facilities such as bike and pedestrian facilities, solar arrays, and EV charging stations, which could alter pedestrian and vehicular traffic patterns. Future plans or projects requiring discretionary approval would be subject to environmental review under CEQA, and individual impact analyses will identify required plan- or project-specific mitigation measures where applicable.

Cumulative Projects Scenario

For purposes of CEQA cumulative impacts analysis of CAP 2.0, the cumulative projects scenario is buildout of the 2025 Pleasanton General Plan plus Pleasanton population projections through 2045. The Pleasanton 2025 General Plan Land Use Element assumes a total of 29,600 housing units and 35,000,000 gross square feet of non-residential development by the general plan horizon year in 2025.⁸ In addition, the CAP 2.0 projects a population of 83,014 persons by 2030 and 97,859 persons by 2045.⁹ These are slightly higher than ABAG's 2018 population projections for 2030 but are utilized to provide a conservative analysis.¹⁰

Required Approvals

City of Pleasanton

Required approvals include:

- Adoption of the CAP 2.0 Initial Study-Negative Declaration; and
- Approval of CAP 2.0.

Although individual plans or projects may be implemented later under the umbrella of CAP 2.0, each individual plan or project would be subject to separate environmental review under CEQA.

Other Public Agencies

The City of Pleasanton has sole approval authority regarding CAP 2.0. There are no other public agencies whose approval is required.

⁸ Pleasanton, City of. 2009. General Plan Land Use Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23896>>. Accessed September 15, 2021.

⁹ Pleasanton, City of. 2021. Draft Climate Action Plan Update: Table 17.

¹⁰ Association of Bay Area Governments (ABAG). 2018. Plan Bay Area Projections. Available: <<http://projections.planbayarea.org/>>. Accessed September 15, 2021.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Megan Campbell

Lead Agency Representative Signature

11/15/2021

Date

Megan Campbell

Lead Agency Representative Printed Name

Associate Planner

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project have a substantial adverse effect on a scenic vista?*
- b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?*

The Pleasanton General Plan and General Plan Environmental Impact Report (EIR) identify scenic resources within and nearby Pleasanton as the undeveloped hillsides and ridges surrounding the City to the north, east, west, and south, Mount Diablo to the north, major arroyos and creeks (e.g., Arroyo de la Laguna, Arroyo del Valle, Arroyo Mocho, Alamo Canal, Chabot Canal, and Tassajara Creek), and Shadow Cliffs Lake and the Chain of Lakes (former gravel quarries) at the eastern edge of the City. The agricultural and open space uses to the south of the City also contribute to the visual character of the community. Scenic vistas are primarily available from publicly accessible roadways and scenic routes including I-680, I-580, and SR-84.^{11,12} I-680 is a designated State scenic highway that runs north-south through Pleasanton and offers views of the wooded hillsides and surrounding

¹¹ Pleasanton, City of. 2009. 2005-2025 Pleasanton General Plan. Available: <<https://www.cityofpleasantonca.gov/gov/depts/cd/planning/general.asp>>. Accessed October 15, 2021.

¹² Pleasanton, City of. 2008. Pleasanton General Plan Draft Environmental Impact Report. Available: <<http://dev.cityofpleasantonca.gov/civicax/filebank/blobload.aspx?blobid=23819>>. Accessed October 15, 2021.

valleys. I-580, which runs east-west and is located in the northern portion of Pleasanton, is eligible for designation as a State scenic highway.^{13,14}

As a policy document, the CAP 2.0 would not result in impacts related to scenic vistas and scenic highways. However, implementation of some CAP 2.0 strategies may promote infrastructure development and other physical changes through policies and programs. CAP 2.0 Action S3 and P4 promote installation of small-scale solar PV systems and associated battery energy storage systems at existing municipal facilities and in new developments. CAP 2.0 Action P5 encourages the installation of EV charging stations and supporting infrastructure. Additionally, CAP 2.0 Actions P13 and S8 facilitate the expansion of the urban forest and green stormwater management infrastructure within the City. CAP 2.0 projects would generally be limited to the existing developed areas of the City and would be small-scale in nature. Expansion of the urban forest could have a positive effect on scenic vistas, adding new tree cover and enhancing existing natural landscapes.

The CAP 2.0 would promote infrastructure development and redevelopment that is complimentary to existing development and land uses. Though the implementation of the CAP 2.0 may result in future development, CAP 2.0-related projects and actions, including those identified above, would be required to adhere to City development zoning and regulations, including Pleasanton Municipal Code (PMC) Chapter 18.20, Design Review, which establishes the City's Design Review process, and the Pleasanton Standards and Guidelines, which establish criteria for the aesthetic qualities of new and retrofitted development in the City including design, architecture, lighting, landscaping, and signage.^{15,16} Compliance with the PMC and Pleasanton Standards and Guidelines would ensure that potential future infrastructure development and redevelopment related to the CAP 2.0 would be carefully integrated with the existing character of the Pleasanton community, minimizing potential aesthetic impacts. In addition, CAP 2.0 projects and actions would be reviewed for consistency with the Pleasanton General Plan policies related to scenic resources prior to approval. As such, the CAP 2.0 would not result in adverse impacts related to scenic vistas or State scenic highways within the City. Therefore, the CAP 2.0 would result in ***less-than-significant impacts*** related to scenic vistas and scenic highways.

- c. *Would the project in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Pleasanton is an urbanized area with the following applicable visual character/quality policies in the Pleasanton General Plan Land Use, Community Character, Conservation and Open Space, and Subregional Planning Elements:

¹³ Pleasanton, City of. 2008. Pleasanton General Plan Draft Environmental Impact Report. Available: <<http://dev.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?blobid=23819>>. Accessed October 15, 2021.

¹⁴ California Department of Transportation (Caltrans). 2021. California State Scenic Highway System Map. Available: <<https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>>. Accessed October 15, 2021.

¹⁵ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 18.20. Available: <http://qcode.us/codes/pleasanton/?view=desktop&topic=18-18_20-18_20_010>. Accessed October 15, 2021.

¹⁶ Pleasanton, City of. 2021. Pleasanton Standards and Guidelines. Available: <<https://www.cityofpleasantonca.gov/gov/depts/cd/planning/standards.asp>>. Accessed October 15, 2021.

Land Use Element

- **Policy 8:** Preserve and enhance the character of existing residential neighborhoods.
- **Policy 12:** Preserve the character of the Downtown while improving its retail and residential viability and preserving the traditions of its small-town character.
- **Policy 19:** Preserve designated open space areas for the protection of public health and safety, the provision of recreational opportunities, agriculture and grazing, the production of natural resources, the preservation of wildlands, water management and recreation, and the physical separation of Pleasanton from neighboring communities.
- **Policy 20:** In the ridgeland, preserve the remaining agricultural open space.
- **Policy 21:** Preserve scenic hillside and ridge views of the Pleasanton ridgeland and Southeast Hills.¹⁷

Community Character Element

- **Policy 2:** Improve the visual appearance of the Downtown.
- **Policy 3:** Maintain the scale and character of the historic Downtown and surrounding residential areas.
- **Policy 6:** Enhance the visual appearance and natural condition of the arroyos.
- **Policy 7:** Improve the visual quality of entryways to Pleasanton.
- **Policy 9:** Enhance landscaping along city streets and the freeways.
- **Policy 17:** Maintain, enhance, and protect the quality, character, and distinctiveness of residential neighborhoods.
- **Policy 20:** Preserve scenic hillside and ridge views, and other natural features in the hills.¹⁸

Conservation and Open Space Element

- **Policy 6:** Protect all large continuous areas of open space, as designated on the General Plan Map, from intrusion by urban development.
- **Policy 7:** Preserve and expand open-space opportunities, including open-space access to the public.
- **Policy 8:** Preserve as permanent open space all areas of outstanding scenic qualities or areas which provide extraordinary views of natural and human-made objects.
- **Policy 12:** Preserve heritage trees throughout the Planning Area.¹⁹

Subregional Planning Element

- **Policy 13:** Enhance community identity through the protection of community separators, scenic hillsides, and ridgelines.²⁰

¹⁷ Pleasanton, City of. 2009. Pleasanton General Plan Land Use Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23896>>. Accessed September 15, 2021.

¹⁸ Pleasanton, City of. 2009. Pleasanton General Plan Community Character Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23915>>. Accessed September 15, 2021.

¹⁹ Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed September 15, 2021.

²⁰ Pleasanton, City of. 2009. Pleasanton General Plan Subregional Planning Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23917>>. Accessed September 15, 2021.

The CAP 2.0 would not involve land use or zoning changes but would instead promote sustainable infrastructure development and redevelopment through policies and programs. Implementation of some CAP 2.0 Actions related to transportation, renewable energy, and GHG sequestration may result in physical changes that could impact scenic resources. Specifically, CAP 2.0 Actions S3 and P4 promote installation of small-scale solar PV systems and associated battery energy storage systems at existing municipal facilities and in new developments. CAP 2.0 Action P5 encourages the installation of EV charging stations and supporting infrastructure. Additionally, CAP 2.0 Actions P13 and S8 facilitate the expansion of the urban forest and green stormwater management infrastructure within Pleasanton.

Implementation of small-scale solar panels and battery storage, introduction of EV charging infrastructure, planting additional trees, and developing new green stormwater management infrastructure such as bioswales and retention basins may slightly change the scenic character of the Pleasanton community. However, future CAP 2.0-related projects would be located and designed to be complimentary to existing land uses and would be required to adhere to the City development zoning and regulations described under *Responses 1a. and b.*, above, that seek to preserve the character of Pleasanton and minimize environmental impacts. In addition, CAP 2.0 projects and actions would be reviewed for consistency with the Pleasanton General Plan policies highlighted above and other applicable regulatory land use actions prior to approval. Therefore, the CAP 2.0 would not conflict with applicable zoning and other regulations governing scenic quality and would result in a ***less than significant impact***.

d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The CAP 2.0 would not involve land use or zoning changes. Rather the CAP 2.0 would promote sustainable infrastructure development and redevelopment that is complimentary to existing land uses in the City. As a policy document, the CAP 2.0 would not directly result in impacts related to light and glare. However, implementation of CAP 2.0 Actions S3 and P4 encourage or require the installation of solar panels and battery storage systems at new developments and select existing municipal facilities. Solar panels have the potential to result in new sources of glare within Pleasanton if not thoughtfully designed and located. The design and location of proposed solar infrastructure would be complimentary to existing development in Pleasanton, such as the addition of small-scale rooftop solar panels, in order to reduce potential glare impacts within Pleasanton. Furthermore, CAP 2.0 projects and actions would be reviewed for consistency with the CCR Title 24 lighting standards (CCR Title 24 Part 6) and PMC Section 18.20, Design Review, which includes a review of exterior lighting.^{21,22} In addition, CAP 2.0 projects or actions would be reviewed for consistency with the Pleasanton General Plan and other applicable regulatory land use actions prior to approval. Compliance with these regulations would minimize environmental impacts related to light and glare by limiting the use of highly reflective materials and requiring the shielding of exterior lighting. Thus, the CAP 2.0 would result in a ***less-than-significant impact*** related to light and glare.

²¹ California Energy Commission (CEC). 2019. 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. Available: <https://www.energy.ca.gov/sites/default/files/2021-06/CEC-400-2018-020-CMF_0.pdf>. Accessed October 15, 2021.

²² Pleasanton, City of. Pleasanton Municipal Code Chapter 18.20. Available: <http://qcode.us/codes/pleasanton/?view=desktop&topic=18-18_20-18_20_010>. Accessed October 15, 2021.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Cumulative impacts related to scenic resources, visual character, and increased light and glare would generally be site-specific, and cumulative projects are not anticipated to contribute to cumulative aesthetic impacts with adherence to Pleasanton General Plan policies and the Municipal Code. Because of the developed nature of Pleasanton, future infrastructure projects under the CAP 2.0, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, would not adversely impact the visual character of the Pleasanton community. In addition, future development in the City would be required to comply with the City's Design Review process and be reviewed against applicable Pleasanton General Plan policies and City's design standards for design quality and compatibility with adjacent land uses. Therefore, implementation of the CAP 2.0 would result in a ***less-than-significant cumulative impact*** related to aesthetics.

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*
- e.1. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

Pleasanton is characterized primarily by urban and suburban development. However, Pleasanton contains several vineyards in the southeast portion of the City along Vineyard Avenue and is adjacent to areas of grazing land at the western and southern boundaries. The California Farmland Mapping and Monitoring Program classifies the majority of Pleasanton as urban and built-up land not suitable for farming, with the vineyards identified as a mix of prime farmland and unique

farmland.²³ There are no Williamson Act contracts within the City. Areas of unincorporated Alameda County surrounding the City, particularly to the west and south of the City, are largely grazing land and passive open space, some of which include Williamson Act contracts.²⁴

The CAP 2.0 strategies and actions focus on electrification of buildings, improving active transportation, zero emission vehicle and public transit infrastructure, water conservation, and increasing urban greenspace and trees. CAP 2.0 actions would not involve projects or policies that would result in impacts related to conversion or loss of farmland. Therefore, the CAP 2.0 would result in a **no impact** related to degradation of agricultural resources or conversion of agricultural land to non-agriculture uses, nor would there be a conflict with existing zoning or Pleasanton General Plan land use designations.

c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

e.2. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?*

Pleasanton contains several parks as well as natural areas in the southern portion of the City that contain mixed grassland and woodland communities and oak woodland on the ridges at the western edge of the City.²⁵ However, Pleasanton does not contain areas designated for forest land or Timberland Production. PMC Chapter 17.16, Tree Preservation, establishes policies, regulations, and standards to ensure tree protection within the City.²⁶ In addition, the Pleasanton General Plan contains a number of goals, policies, and actions such as Policy 2, preserve heritage trees, that illustrate the City's commitment to managing and preserving Pleasanton's urban forest. The CAP 2.0 aligns with the Pleasanton General Plan by including strategies and actions such as CAP Action P13, which seeks to facilitate the implementation of an urban forest master plan to increase tree canopy throughout the City.

As such, the CAP 2.0 would increase planting of trees within the City and be consistent with the City's Tree Preservation Regulations. Furthermore, the CAP 2.0 seeks to increase trees within the City for the purposes of carbon sequestration. The CAP 2.0 does not include actions that would result in the loss of forest land or the conversion of forest land to non-forest use, nor would it conflict with or cause the rezoning of forest, timber land, or Timberland Production areas. Therefore, the CAP 2.0 would result in a **no impact** related to degradation of forestry resources or conversion of forest land to non-forest uses, nor would there be a conflict with existing zoning or Pleasanton General Plan land use designations.

²³ California Department of Conservation. 2021. California Important Farmland Finder Map. Available: <<https://maps.conservation.ca.gov/dlrp/ciff/>>. Accessed October 7, 2021.

²⁴ Pleasanton, City of. 2008. Pleasanton General Plan Draft Environmental Impact Report. Available: <<http://dev.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?blobid=23819>>. Accessed October 7, 2021.

²⁵ Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021.

²⁶ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 17.16. Available: <https://qcode.us/codes/pleasanton/view.php?topic=17-17_16&frames=on>. Accessed October 7, 2021.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. As the City's population grows and development intensifies in the future, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, CAP 2.0 Strategy NS-1 and Action P13 would ensure that the urban forest is maintained and that additional trees are planted throughout the City. As discussed above, CAP 2.0 would not include any strategies or actions that would significantly impact agricultural or forest resources. In addition, the CAP 2.0 would not involve land use or zoning changes that could result in cumulative impacts related to conversion or loss of farmland or forest land. Therefore, implementation of CAP 2.0 would result in ***no cumulative impact*** related to agricultural and forestry resources.

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

The federal Clean Air Act (CAA) governs air quality in the United States and is administered by the U.S. EPA at the federal level. Air quality in California is also governed by regulations under the California CAA, which is administered by CARB at the State level. At the regional and local levels, local air districts typically administer the federal and California CAA. As part of implementing the federal and California CAA, the U.S. EPA and CARB have established ambient air quality standards for major pollutants at thresholds intended to protect public health. Pleasanton is located within the San Francisco Bay Area Air Basin (the Air Basin), which includes the nine Bay Area counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma. The Air Basin is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). As the local air quality management agency, BAAQMD is required to monitor air pollutant levels to ensure that State and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the Air Basin is classified as being in “attainment” or “nonattainment.” Under State law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-attainment. BAAQMD is in non-attainment for the State and federal ozone standards, the State and federal PM_{2.5} (particulate matter up to 2.5 microns in size) standards, and the State PM₁₀ (particulate matter up to 10 microns in size) standards and is required to prepare a plan for improvement.²⁷ The sources, health effects, and typical controls associated with criteria pollutants are described in Appendix A.

²⁷ Bay Area Air Quality Management District (BAAQMD). 2017. Air Quality Standards and Attainment Status. Available: <<http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status>>. Accessed October 7, 2021.

The Bay Area 2017 Clean Air Plan provides a plan to improve Bay Area air quality and protect public health as well as the climate. The legal impetus for the Clean Air Plan is to update the most recent ozone plan, the 2010 Clean Air Plan, to comply with State air quality planning requirements as codified in the California Health and Safety Code. Although steady progress has been made toward reducing ozone levels in the Bay Area, the region continues to be designated as non-attainment for both the one-hour and eight-hour State ozone standards as noted previously. In addition, emissions of ozone precursors in the Bay Area contribute to air quality problems in neighboring air basins. Under these circumstances, State law requires the Clean Air Plan to include all feasible measures to reduce emissions of ozone precursors and reduce transport of ozone precursors to neighboring air basins.²⁸

The Federal Clean Air Act Amendments (CAAA) mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. The SIP includes pollution control measures to demonstrate how the standards will be met through those measures. The SIP is established by incorporating measures established during the preparation of Air Quality Management Plans (AQMP) and adopted rules and regulations by each local Air Pollution Control District (APCD) and AQMD, which are submitted for approval to CARB and the U.S. EPA.²⁹ The goal of an AQMP is to reduce pollutant concentrations below the NAAQS through the implementation of air pollutant emissions controls.

The CAP 2.0 would not involve land use or zoning changes but would rather promote sustainable infrastructure development and redevelopment. CAP 2.0 strategies and policies focus on decarbonization of buildings and sustainable development, increasing local renewable energy infrastructure, improving active transportation, zero emission vehicle and public transit infrastructure, and increasing urban trees. Implementation of CAP 2.0 actions, such as those aimed at reducing VMT, electrifying vehicles, and reducing natural gas use through building electrification, would have co-benefits to air quality within the Air Basin, would help BAAQMD meet applicable air quality plan goals, and would generally reduce sensitive receptor exposure to pollutant concentrations. Although the purpose and intended effect of the CAP 2.0 is to reduce GHG emissions generated in Pleasanton to help reduce the effects of climate change, many of its actions would also reduce criteria pollutant (i.e., air quality) emissions. CAP 2.0 Strategies BE-1 and BE-2 involve increased energy efficiency and building electrification as part of residential, non-residential, and municipal land uses, and Strategy BE-3 and Action S3 seek to increase the generation of local renewable energy. In addition, CAP 2.0 Strategy TLU-2 seeks to reduce VMT in the City by improving active transportation and public transit facilities, while Strategy TLU-1 would encourage the adoption of ZEVs and low-emissions off-road vehicles and equipment by enhancing EV infrastructure, replacing the municipal fleet of off-road equipment with low- or zero-emissions equipment, and providing incentives for community members to purchase zero-emissions, all electric equipment such as lawnmowers and leaf blowers. These energy- and transportation-related strategies would reduce air quality emissions as well as GHG emissions. Therefore, the CAP 2.0 is consistent with the 2017 Clean Air Plan and would have **no impact** related to a conflict with or obstruction of the applicable air quality plan.

²⁸BAAQMD. 2017. Final Clean Air Plan: Spare the Air Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area. Final 2017 Clean Air Plan. Available: <http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en>. Accessed October 7, 2021.

²⁹CARB. 2017. 2016 State Strategy for the State Implementation Plan. Available: <<https://ww3.arb.ca.gov/planning/sip/2016sip/2016sip.htm>>. Accessed October 7, 2021.

- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

The CAP 2.0 would not involve land use or zoning changes but would instead promote sustainable infrastructure development and redevelopment. As a policy document, the CAP 2.0 would not result in impacts related to criteria pollutants. However, implementation of the following CAP 2.0 actions may promote construction activities that would temporarily generate criteria pollutants during the construction phase.

CAP 2.0 Action P2 promotes electrification of existing buildings, Action P5 would expand EV charging stations and supporting infrastructure throughout Pleasanton, and Actions S2 and S3 encourage energy efficiency upgrades and retrofits to existing buildings and municipal facilities. CAP 2.0 Action P15 would incentivize water efficiency retrofits to existing buildings and landscaped areas, and Action S8 seeks to increase green stormwater infrastructure within the City, including low-impact development (LID) strategies such as bioswales, rain catchment basins, and green roofs. Additionally, CAP 2.0 Action P13 would involve the planting of new trees throughout the City, and Action S9 may include controlled burns in wildland areas to prevent wildfire, which could temporarily generate criteria pollutants such as PM₁₀ and PM_{2.5}. Construction-related air quality impacts are generally associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction vehicles and soil hauling trucks, in addition to reactive organic gases (ROG) that would be released during the drying phase upon application of architectural coatings. However, implementation of CAP 2.0 actions would not include large-scale construction within Pleasanton and would involve temporary and short-term criteria pollutant emissions. As such, CAP 2.0 would result in low-level criteria pollutant emissions and negligible impacts to air quality. CAP 2.0 projects or actions would also be reviewed for consistency with BAAQMD air quality regulations and other applicable local, State, and federal regulations once project details and locations are known. Thus, the construction required for implementation of the CAP 2.0 would result in a less-than-significant impact related to net increase of criteria pollutants.

With respect to operational emissions, many of the CAP 2.0 actions would have the secondary benefit of reducing criteria pollutant emissions, such as strategies aiming to increase building energy efficiency, promote EVs, reduce on-road gasoline fuel use, and reduce VMT. Implementation of CAP 2.0 would be beneficial by helping Pleasanton meet applicable air quality plan goals. In addition, future CAP 2.0 projects would be required to comply with local, regional, and State air quality regulations. Therefore, the CAP 2.0 would result in a ***less-than-significant impact*** related to criteria pollutant emissions.

- c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Implementation of the CAP 2.0 strategies and actions as described under *Response 3b.*, above, promote infrastructure development and redevelopment that may result in temporary construction activities. Construction-related air quality impacts are generally associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction vehicles and soil hauling trucks, in addition to ROG that would be released during the drying phase upon application of architectural coatings. However, implementation of CAP 2.0 strategies and actions would not include large-scale construction, and construction-related emissions would be temporary. As such, implementation of the CAP 2.0 would result in low-level toxic air contaminant emissions associated with construction.

While the CAP 2.0 could result in construction-related impacts related to toxic air contaminants and exposure to sensitive receptors, CAP 2.0 projects or actions would be reviewed for consistency with BAAQMD air quality regulations and other applicable local, State, and federal regulations once project details and locations are known to ensure compliance. Thus, construction associated with implementation of the CAP 2.0 would not result in substantial emissions of toxic air contaminants and exposure to sensitive receptors. No operational toxic air contaminant emissions are anticipated with implementation of the CAP 2.0 strategies and actions. Therefore, the CAP 2.0 would have a **less-than-significant impact** related to exposure of sensitive receptors to toxic air contaminants.

d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The CARB 2005 *Air Quality Land Use Handbook: A Community Health Perspective* identifies land uses associated with odor complaints which include: sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, auto body shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations.³⁰ None of the CAP 2.0 strategies and actions involve new or expanded land uses that would generate odors, such as those listed above. Therefore, the CAP 2.0 would not facilitate development that could create adverse odors, and there would be **no impact** related to odors exposure.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. The CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, could exceed applicable BAAQMD thresholds or be inconsistent with the 2017 Clean Air Plan. However, implementation of the CAP 2.0 would have a less-than-significant contribution related to potential cumulative air quality impacts within the air basin and on sensitive receptors within Pleasanton, given that the CAP 2.0 would result in community-wide reduction of GHG emissions, energy use, single-occupancy vehicle travel, and waste generation. As such, implementation of the CAP 2.0 would not result in adverse impacts related to contribution of criteria pollutants to the air basin and exposure of sensitive receptors to toxic air contaminants. Therefore, implementation of the CAP 2.0 would result in a **less-than-significant cumulative impact** related to air quality.

³⁰ California Air Resources Control Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. Available: <<https://ww3.arb.ca.gov/ch/handbook.pdf>>. Accessed October 8, 2021.

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*

Pleasanton is a primarily urbanized community with neighborhood parks, community parks, and recreational and open spaces incorporated throughout the City. PMC Chapter 17.16 and the Pleasanton General Plan Conservation and Open Space Element as well as Water Element incorporate goals and policies to protect biological resources, such as plants, trees, wildlife habitats, wetlands and rivers, and rare and endangered species in the City.^{31, 32, 33} The western edge of Pleasanton, in the undeveloped hillsides of Pleasanton Ridge, contains critical habitat for Alameda whipsnake (*Masticophis lateralis euryxanthus*).³⁴

The CAP 2.0 would not involve land use or zoning changes and would instead promote sustainable infrastructure development and redevelopment. The CAP 2.0 strategies and actions would not conflict with the PMC or objectives and policies of the Pleasanton General Plan related to wildlife but would rather be consistent with and promote those policies. CAP 2.0 strategies and actions would generally apply to the urbanized areas of the City, with little application to parks, open spaces area, or the undeveloped portions of the City where sensitive habitat and related species may be present. In addition, CAP 2.0 Strategy NS-1 and Action P-13 facilitate the implementation of an urban forest master plan that would increase tree canopy and landscaping throughout Pleasanton that could serve as additional habitat for special status species and migratory and nesting birds. As such, the CAP 2.0 would not have a substantial adverse effect on candidate, threatened, or endangered wildlife species either directly through individual take or indirectly through species habitat modification.

As a policy document, the CAP 2.0 would not directly result in impacts related to wildlife species of special status. However, implementation of some CAP 2.0 actions may promote infrastructure development within the urbanized portions of the City and could result in impacts to species through construction activities. CAP 2.0 Action P2 promotes electrification of existing buildings, Action P5 would expand EV charging stations and supporting infrastructure throughout the City, and Actions S2 and S3 encourage energy efficiency upgrades and retrofits to existing buildings and municipal facilities. CAP 2.0 Action P15 would incentivize water efficiency retrofits to existing buildings and landscaped areas, and Action S8 seeks to increase green stormwater infrastructure within the City, including low-impact development (LID) strategies such as bioswales, rain catchment basins, and green roofs. Additionally, Action S9 promotes controlled burns in wildland areas to prevent wildfire, which could potentially impact biological resources. These actions have the potential to disturb nesting habitat for birds and raptors protected under Sections 3503, 3503.5, and 3513 of the California Fish and Game Code (CFGC) and under the Migratory Bird Treaty Act (MBTA). However, construction activities for future CAP 2.0 projects would be required to comply with the provisions of the MBTA and CFGC Sections 3503, 3503.5, and 3513 in order to avoid impacts to protected birds and would be reviewed for consistency with City, State, and federal

³¹ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 17.16. Available: <https://qcode.us/codes/pleasanton/view.php?topic=17-17_16&frames=on>. Accessed October 7, 2021.

³² Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021

³³ Pleasanton, City of. 2009. Pleasanton General Plan Water Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23911>>. Accessed October 8, 2021

³⁴ U.S. Fish and Wildlife Service (USFWS). 2021. Critical Habitat for Threatened and Endangered Species Map. Available: <<https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>>. Accessed October 8, 2021.

policies related to protected species. As such, the CAP 2.0 would not have a substantial adverse effect on special-status wildlife species. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to special-status wildlife species.

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- c. *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The CAP 2.0 would not involve land use or zoning changes but would instead promote sustainable infrastructure development and redevelopment within urbanized areas of the City. According to the Pleasanton General Plan Open Space and Conservation Element as well as Water Element, there are a number of arroyos in the City that provide riparian corridors. These include Arroyo del Valle, Arroyo Mocho, and Arroyo de la Laguna, as well as several smaller riparian corridors. Other special habitat resources in Pleasanton include wetlands, lakes, rivers, and streams. The Pleasanton General Plan Conservation and Open Space Element contains Goal 2 and Goal 5 to conserve existing open space and sensitive habitats and the native species that rely on them. In addition, the Pleasanton General Plan Water Element contains Goal 2 to preserve the health of water courses, riparian corridors, and wetlands.^{35, 36}

The CAP 2.0 strategies and actions would generally apply to the urbanized areas of the City, with little application to parks, open spaces area, or other locations where riparian and wetland habitat is located. CAP 2.0 Strategy NS-1 and Action P13 facilitate the implementation of an urban forest master plan to increase trees throughout Pleasanton, which aligns with Pleasanton General Plan goals related to habitat and greenspace conservation. Likewise, CAP 2.0 Action S8 seeks to increase green stormwater infrastructure throughout Pleasanton, including low-impact development (LID) strategies such as bioswales, rain catchment basins, and green roofs, that would improve stormwater management and water quality within the City. In addition, future CAP 2.0-related projects would be required to adhere to City development regulations and Pleasanton General Plan policies, including the City of Pleasanton Tree Preservation Ordinance, to retain urban forestry and minimize environmental impacts. In addition, the location and details of future CAP 2.0 projects would be reviewed for consistency with applicable local, regional, and State regulations related to sensitive habitat prior to approval. As such, the CAP 2.0 would not have a substantial adverse effect on riparian habitat or sensitive natural community, such as wetlands. Therefore, the CAP 2.0 would have a **less-than-significant impact** related to sensitive natural plant communities.

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The CAP 2.0 would not involve land use or zoning changes but would instead promote sustainable infrastructure development and redevelopment within urbanized portions of the City. As a policy document, the CAP 2.0 would not result in direct impacts related to interference with species

³⁵ Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021

³⁶ Pleasanton, City of. 2009. Pleasanton General Plan Water Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23911>>. Accessed October 8, 2021

movement or use of wildlife nursery sites. However, implementation of CAP 2.0 Action S9 that promotes controlled burns in wildland areas to reduce wildfire risk, could potentially result in temporary disturbance to habitat areas. Future CAP 2.0 projects would be required to adhere to City development regulations and Pleasanton General Plan policies, including the City of Pleasanton Tree Preservation Ordinance, and would be reviewed for consistency with applicable local, regional, and State regulations to retain urban forestry and open space and minimize environmental impacts. Furthermore, the CAP 2.0 actions would generally apply to the urbanized areas of Pleasanton with little application to parks, open spaces area, or other locations where wildlife corridors or native wildlife nursery sites may be present. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to interference with species movement or wildlife nursery use.

4e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Pleasanton is a primarily urbanized community with neighborhood parks, community parks, and recreational spaces throughout the City. PMC Chapter 17.16 and the Pleasanton General Plan Conservation and Open Space Element as well as Water Element incorporate goals and policies to protect biological resources, such as plants, trees, wildlife habitats, wetlands and rivers, and rare and endangered species in the City.^{37, 38, 39}

The CAP 2.0 would not involve land use or zoning changes but would promote sustainable infrastructure development and redevelopment within the urbanized portion of the City. The purpose and intended effect of the CAP 2.0 is to reduce GHG emissions generated in the City to help reduce the effects of climate change. Implementation of proposed CAP 2.0 actions would be beneficial by helping Pleasanton meet applicable local policies and ordinances for protecting biological resources, including the City of Pleasanton Tree Preservation Ordinance. Specifically, CAP 2.0 Action P13 provides for the planting of additional urban trees. As such, the CAP 2.0 would not conflict with or obstruct implementation of the applicable policies for preserving biological resources and would not affect the City's ability to attain goals and policies that protect biological resources. Therefore, the CAP 2.0 would result in **no impact** related to consistency with local biological resources protection policies.

4f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

No portion of Pleasanton is currently subject to a Habitat Conservation Plan or Natural Community Conservation Plan.⁴⁰ PMC Chapter 17.16 and the Pleasanton General Plan Conservation and Open Space Element as well as Water Element incorporate goals and policies to protect natural resources,

³⁷ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 17.16. Available: <https://qcode.us/codes/pleasanton/view.php?topic=17-17_16&frames=on>. Accessed October 7, 2021.

³⁸ Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021

³⁹ Pleasanton, City of. 2009. Pleasanton General Plan Water Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23911>>. Accessed October 8, 2021

⁴⁰ California Department of Fish and Wildlife (CDFW). 2019. Natural Community Conservation Plan Summaries. Available: <<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>>. Accessed October 13, 2021.

such as plant and wildlife habitats in the City.^{41, 42, 43} The CAP 2.0 would not facilitate specific development projects, nor would it add or enable new development that would conflict with the PMC or Pleasanton General Plan. Rather, the CAP 2.0 prioritizes the preservation of greenspace and trees and improvements to buildings and the transportation system in order to reduce GHG emissions and related impacts to the environment. Therefore, the CAP 2.0 would have **no impact** related to consistency with an adopted habitat or natural community conservation plan.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Implementation of CAP 2.0 projects, in combination with other cumulative projects anticipated under General Plan buildout, could result in impacts to biological resources during infrastructure and building construction. However, as described in *Responses 4a.* through *4f.*, above, infrastructure development or redevelopment resulting from implementation of the CAP 2.0 would be required to comply with applicable Pleasanton General Plan policies and State and federal regulatory requirements regarding avoidance of special wildlife species and habitat. In addition, the CAP 2.0 would not result in new building construction and contains actions that prioritize the preservation of trees and improvements to stormwater management and water quality. Therefore, implementation of the CAP 2.0 would result in a **less-than-significant cumulative impact** related to biological resources.

⁴¹ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 17.16. Available: <https://qcode.us/codes/pleasanton/view.php?topic=17-17_16&frames=on>. Accessed October 7, 2021.

⁴² Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021

⁴³ Pleasanton, City of. 2009. Pleasanton General Plan Water Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23911>>. Accessed October 8, 2021

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The Pleasanton General Plan Conservation and Open Space Element identifies 86 historic-aged properties and five historic neighborhoods potentially eligible for listing as historic resources.⁴⁴ The CAP 2.0 would not involve land use or zoning changes but would promote infrastructure development and redevelopment that would be complimentary to existing development. CAP 2.0 projects would be required to comply with Pleasanton General Plan Conservation and Open Space goals, policies, and programs related to the preservation of historic resources, including Programs 5.1 and 5.2. These programs require the identification and protection of sites and structures within the City of architectural, historical, archaeological, and cultural significance and the inclusion of cultural resources studies, construction monitoring, and/or mitigation as appropriate for future development projects. This includes sites, structures, and areas that are associated with a historic event, activity, or persons that contribute to the historic character of districts, neighborhoods, landmarks, historic structures, and artifacts. CAP 2.0 projects and actions would be reviewed for compliance with applicable local, regional, and State regulations regarding cultural resources and the Pleasanton General Plan Conservation and Open Space Element to avoid adverse impacts related to historic resources. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to historical resources.

b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The Pleasanton General Plan Conservation and Open Space Element acknowledges that scattered known archeological sites are primarily concentrated along arroyos and marsh areas and that there are likely to be additional areas of buried archaeological resources that have not been previously

⁴⁴ Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021

identified.⁴⁵ Hence, there is a possibility for archaeological sites not previously recorded to be present in areas where CAP 2.0 projects could occur. In particular, CAP 2.0 Actions P2, S2, S3, P5, P13, and S8 would result in small-scale construction that may expose previously undiscovered archaeological resources during ground disturbing activities. The CAP 2.0 projects would be located and designed strategically to reduce ground disturbance to the maximum extent possible. In addition, CAP 2.0 projects and actions would be reviewed for consistency with applicable local, regional, and State archeological regulations prior to final siting and construction and would be required to implement BMPs in accordance with the Pleasanton General Plan Conservation and Open Space Element Goal 4 and its associated policies and programs, including the Pleasanton Standard Specifications and Details.^{46,47} These policies include a standard requirement during all ground disturbing activities that if potential archaeological resources are unearthed, construction must be halted, the City must be contacted, and a qualified professional must be hired to investigate and make recommendations. As such, archeological resources would be protected prior to and/or upon discovery and, thus, impacts would be reduced to a minimal level. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to archaeological resources.

c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

There is a possibility of encountering unknown buried human remains throughout the City where CAP 2.0 project could occur. In particular, CAP 2.0 Actions P2, S2, S3, P5, P13, P15, and S8 would result in small-scale construction that may expose unknown human burial sites ground disturbing activities. CAP 2.0 projects and actions would be reviewed for compliance with applicable local, regional, and State regulations regarding cultural resources and human remains to avoid impacts related to unknown human interments. In addition, CAP 2.0 projects would be required to comply with State coroner requirements related to burial findings, including assessment and mitigation incorporation once project details and locations are known. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to human remains.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Implementation of the CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, would include infrastructure that could have an impact on cultural resources during construction. Impacts to historic and archaeological resources are generally site-specific. Additionally, there is a possibility of encountering buried archaeological deposits and human remains throughout the City. Accordingly, potential impacts associated with cumulative developments would be addressed on a case-by-case basis. In addition, future projects in the City, including those associated with implementation of the CAP 2.0, would be required to comply with the Pleasanton General Plan Conservation and Open Space Element policies and programs that require the identification and protection of sites and structures of architectural, historical, archaeological, and cultural significance

⁴⁵ Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021.

⁴⁶ Ibid.

⁴⁷ Pleasanton, City of. 2016. Pleasanton Standard Specifications and Details. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=28996>>. Accessed October 13, 2021.

in order to avoid impacts related to cultural resources. Therefore, implementation of the CAP 2.0 would result in a ***less-than-significant cumulative impact*** related to cultural resources.

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

California is one of the lowest per-capita energy users in the United States, ranked 46th in the nation, due to its energy efficiency programs and mild climate.⁴⁸ California consumed 279,402 gigawatt-hours (GWh) of electricity in 2019 and 2,074,302 million cubic feet of natural gas in 2020.^{49,50} The single largest end-use sector for energy consumption in California is transportation (39.1 percent), followed by industry (23.5 percent), commercial (19.2 percent), and residential (18.3 percent).⁵¹ Adopted in 2018, SB 100 accelerates the State’s Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

The City of Pleasanton has demonstrated its commitment to energy efficiency and renewable energy through many efforts, as described in the *Existing Sustainability Setting* section above. The City has adopted the California Green Building Standards Code, pursuant to PMC Chapter 20.26, that requires efficiency measures to reduce energy use, and provide energy reduction benefits.⁵² The City has also completed a communitywide GHG emissions inventory for 2017, which is summarized in Table 1. Transportation (specifically on-road passenger and commercial vehicles) and building energy use (specifically residential and commercial electricity and natural gas use) were responsible

⁴⁸ United States Energy Information Administration (USEIA). 2021. “California - Profile Overview.” Last modified: February 18, 2021. Available: <<https://www.eia.gov/state/?sid=CA>>. Accessed October 13, 2021.

⁴⁹ California Energy Commission (CEC). 2019. Electricity Consumption by County. Available: <<http://www.ecdms.energy.ca.gov/elecbycounty.aspx>>. Accessed October 13, 2021.

⁵⁰ USEIA. 2021. Natural Gas: Natural Gas Consumption by End Use. September 30, 2021. Available: <https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm>. Accessed October 13, 2021.

⁵¹ USEIA. 2021. “California - Profile Overview.” Last modified: February 18, 2021. Available: <<https://www.eia.gov/state/?sid=CA>>. Accessed October 13, 2021.

⁵² Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 20.26. Available: <http://qcode.us/codes/pleasanton/view.php?topic=20-20_26&frames=on>. Accessed October 13, 2021.

for the most GHG emissions within the Pleasanton community in 2017. Passenger and commercial vehicles in Pleasanton accounted for 610,525,132 vehicle miles traveled (VMT) in 2017. Residential, non-residential, and direct access electricity use in Pleasanton totaled 555,929,905 kWh in 2017. Residential and non-residential natural gas use in Pleasanton totaled 22,375,992 therms in 2017.

The CAP 2.0 is a policy document containing climate action strategies to reduce communitywide GHG emissions. The CAP 2.0 would encourage energy efficiency in existing residential, commercial, and municipal building stock through new policies and educational campaigns as well as new requirements for proposed new buildings through Strategies BE-1, BE-2, and TLU-3. The CAP 2.0 would also incentivize increased renewable energy production within the City through Actions S3 and P4. Additionally, the CAP 2.0 attempts to reduce transportation-related energy consumption by increasing active transportation and public transit use and reducing VMT through Strategy TLU-2. CAP 2.0 Strategies BE-1 and BE-2 and Action P11 seek to decrease natural gas consumption in new and existing buildings by requiring electrification, incentivizing energy-efficient retrofits, and encouraging LEED-certified development, while Strategy BE-3 and Action S3 encourage the production and storage of local renewable energy. CAP 2.0 Strategies TLU-1 and TLU-2 would provide improvements to the active transportation, public transit and EV programming and infrastructure of the City to reduce energy consumption and GHG emissions from the transportation sector. Additionally, CAP 2.0 Strategies MC-1 and MC-2 relate to reducing waste production and sustainable consumption.

Implementation of CAP 2.0 strategies and actions would require small-scale construction. However, energy use for the construction of such projects would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of CCR Title 13 Sections 2449 and 2485, which would minimize unnecessary fuel consumption. Construction equipment would be subject to the United States Environmental Protection Agency (U.S. EPA) Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements such as 2019 California's Green Building Standards Code (CALGreen), which is the CCR Title 24, Part 11, future infrastructure projects would comply with construction waste management practices to divert a minimum of 65 percent of construction and demolition debris. These practices would result in efficient use of energy necessary to construct CAP 2.0-related projects. Upon completion of construction for any CAP 2.0-related infrastructure development and redevelopment, non-renewable energy use would be reduced by increasing renewable energy production and storage and reducing VMT within the City.

The purpose and intended effect of the CAP 2.0 is to reduce GHG emissions generated within the Pleasanton community to minimize the effects of climate change, including those emissions generated by energy demand and supply. The CAP 2.0 would not result in the use of non-renewable resources in a wasteful or inefficient manner; rather, it would assist in reducing use of non-renewable energy resources and increasing the production of local renewable energy. Therefore, the CAP 2.0 would result in *no impact* related to the wasteful, inefficient, or unnecessary consumption of energy.

b. Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Relevant plans and policies that aim to increase energy efficiency and the production of renewable energy include SB 100, the 2019 California Green Building Standards Code (CALGreen or Title 24 Part

11), and the 2019 California Building Energy Efficiency Standards (Title 24 Part 6). SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program and requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. CALGreen (Title 24 Part 11) institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. In addition, the California Building Energy Efficiency Standards (Title 24 Part 6) establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. CCR Title 24 (Parts 6 and 11) is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. New construction and major renovations must demonstrate their compliance with the current Building Energy Efficiency Standards through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC.

Pleasanton is part of the EBCE community choice aggregate, which provides electricity primarily from clean, renewable sources. Pleasanton would continue to reduce its use of nonrenewable energy resources as the electricity generated by renewable resources provided by EBCE continues to increase to comply with State requirements through SB 100, which requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. The CAP 2.0 includes strategies and actions to reduce electricity use and increase production of renewable energy, as discussed further below, and would therefore align with the overall intent of SB 100.

In addition, the City of Pleasanton has adopted CALGreen (Title 24 Part 11) and the California Building Energy Efficiency Standards (Title 24 Part 6) pursuant to PMC Chapter 20.26.⁵³ Therefore, construction and operation associated with infrastructure projects stemming from the CAP 2.0 would be designed to comply with the energy source standards of the CALGreen and the California Building Energy Efficiency Standards. Future CAP 2.0 projects would be required to demonstrate compliance with the CALGreen and the California Building Energy Efficiency Standards by implementing sustainability and energy efficiency measures such as high-efficiency lighting and HVAC systems, low-flow water fixtures, dual-paned windows, and water efficient landscaping and irrigation systems. Compliance with these regulations would minimize potential conflicts with adopted energy conservation plans

As discussed under *Response 6a.*, above, Strategies BE-1 and BE-2 and Action P11 seek to decrease natural gas and energy consumption in new and existing buildings by requiring electrification, incentivizing energy-efficient retrofits, and encouraging LEED-certified development, while Strategy BE-3 and Action S3 encourage the production and storage of local renewable energy. These actions are consistent with the goals and policies established by SB 100, CALGreen, and the California Building Energy Efficiency Standards. Thus, the CAP 2.0 would not conflict with adopted renewable energy or energy conservation plans and there would be **no impact**.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Implementation of the CAP 2.0 would result in reducing use of non-renewable energy resources across the community, in particular with retrofitted buildings and new infrastructure. Implementation of the CAP 2.0 would also increase the

⁵³ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 20.26. Available: <http://qcode.us/codes/pleasanton/view.php?topic=20-20_26&frames=on>. Accessed October 13, 2021.

production of renewable energy within the City by incentivizing the inclusion of small-scale solar projects in new development and on existing municipal facilities. Additionally, the CAP 2.0 includes strategies to increase the use of active transportation and public transit and reduce VMT within the City, which would reduce transportation fuel use. As the City's population grows and development intensifies in the future, actions contained within the CAP 2.0 would ensure that planned new development not related to the CAP 2.0 is constructed to strict energy efficiency standards and that VMT is reduced. As the CAP 2.0 would result in decreased non-renewable energy use within the City and would align with existing plans and policies related to renewable energy and energy efficiency, implementation of the CAP 2.0 would result in ***no cumulative impact*** related to energy.

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
d. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?
2. Strong seismic ground shaking?
3. Seismic-related ground failure, including liquefaction?
4. Landslides?

Pleasanton is located in a seismic hazard zone and there are eight active faults within the vicinity of the City that could cause seismic-related impacts. The Calaveras Fault is the closest fault and is located immediately adjacent to the City in the Pleasanton Ridge area. According to the Pleasanton General Plan Public Safety Element, there is minimal risk of fault rupture within the City; however, earthquakes from the nearby faults have the potential to generate severe to violent ground shaking within the City.⁵⁴ Approximately, 12,000 acres within Pleasanton are susceptible to liquefaction and the majority of the City has no to low potential for landslides except for in the foothills area adjacent to Pleasanton Ridge and in the southern portion of the City adjacent to the Southeast Hills.⁵⁵ In 2018, the Tri-Valley Cities (Pleasanton, Livermore, and Dublin), adopted a Local Hazard Mitigation Plan (LHMP) to assess hazards and reduce risks prior to a disaster event and fully cover the necessity to address seismic and geological hazards.⁵⁶ According to the LHMP, Pleasanton is at high risk of earthquake impacts and medium risk of geologic hazards such as landslide.⁵⁷

Although Pleasanton is at risk of earthquake-induced ground shaking and associated hazards, the CAP 2.0 is a policy document containing climate strategies and supporting actions to reduce GHG emissions and is consistent with the Pleasanton General Plan, LHMP, and other regional and State seismic regulations. The CAP 2.0 does not propose habitable development or policies that could result in exposure of people to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides. Therefore, the CAP 2.0 would result in **no impact** related to seismic- and landslide-related hazards.

b. Would the project result in substantial soil erosion or the loss of topsoil?

The CAP 2.0 would not involve land use or zoning changes but would promote sustainable infrastructure development and redevelopment. As a policy document, the CAP 2.0 would not directly require ground-disturbing activities. However, implementation of several CAP 2.0 actions may result in small-scale construction activities that could cause soil erosion or the loss of topsoil during construction. CAP 2.0 Action P2 promotes electrification of existing buildings, Actions S2 and S3 encourage energy efficiency upgrades and retrofits to existing buildings and municipal facilities, and Action P5 would expand EV charging stations and supporting infrastructure throughout Pleasanton. CAP 2.0 Action P15 would incentivize water efficiency retrofits to existing buildings and landscaped areas, and Action S8 seeks to increase green stormwater infrastructure within the City,

⁵⁴ Pleasanton, City of. 2009. Pleasanton General Plan Public Safety Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23899>>. Accessed October 13, 2021.

⁵⁵ Ibid

⁵⁶ Pleasanton, Livermore, and Dublin, Cities of. 2018. Tri-Valley Local Hazard Mitigation Plan. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=35090>>. Accessed October 13, 2021.

⁵⁷ Ibid.

including low-impact development (LID) strategies such as bioswales, rain catchment basins, and green roofs. Additionally, CAP 2.0 Action P13 would involve the planting of new trees throughout the City.

CAP 2.0 projects and actions would be reviewed for consistency with Pleasanton General Plan and PMC and other local and State erosion and grading regulations prior to final siting and construction. The potential for CAP 2.0 project construction activities involving soil disturbance to result in increased erosion and sediment transport by stormwater to surface waters would be minimized, because future projects would be required to comply with the Pleasanton Standard Specifications and Details, which include erosion and sediment control standards, and/or a the National Pollutant Discharge Elimination System (NPDES) Construction General Permit provided by the Regional Water Quality Control Board.⁵⁸ These regulations require best management practices (BMPs) such as the covering of graded slopes and stockpiled materials, storm drain protection, and use of fiber rolls and silt fences to reduce erosion and topsoil loss from stormwater runoff. Compliance with the Pleasanton Standard Specifications and Details and/or Construction General Permit would ensure that BMPs are implemented during construction and minimize substantial soil erosion or the loss of topsoil. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to soil erosion and loss of topsoil.

- c. *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*
- d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

According to the Pleasanton General Plan Public Safety Element, Pleasanton contains approximately 12,000 acres of land concentrated in the northernmost portion of the City, the center of the City, and along the I-680 corridor at risk of liquefaction. Most of Pleasanton is characterized by low to no potential for landslides, other than in the areas adjacent to Pleasanton Ridge and Southeast Hills. Expansive soils are known to be present in the northern and northwestern portions of Pleasanton, and moderate potential for expansive soils exists throughout the rest of the City. Lateral spreading, subsidence, and other soil-related risks are generally low throughout the City.⁵⁹ The Pleasanton General Plan Public Safety Element, PMC, and California Building Code (CBC) contain regulations for structural design and soil hazards in order to mitigate potential impacts related to unstable soils.

The CAP 2.0 is a policy document containing programs that are consistent with the Pleasanton General Plan. Some of the proposed policies in the CAP 2.0 would support small-scale construction projects, such as EV charging stations. However, CAP 2.0 projects and actions would be reviewed for consistency with local and State geotechnical regulations prior to final siting and construction. New structures would be required to comply with PMC Chapter 20.06, Existing Building Code, which adopts the latest CBC, including measures to address unstable soil conditions.⁶⁰ Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to risks associated with location on unstable geologic unit or soil or on expansive soils.

⁵⁸ Pleasanton, City of. 2016. Pleasanton Standard Specifications and Details. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=28996>>. Accessed October 13, 2021.

⁵⁹ Pleasanton, City of. 2009. Pleasanton General Plan Public Safety Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23899>>. Accessed October 13, 2021.

⁶⁰ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 20.06. Available: <<https://qcode.us/codes/pleasanton/>>. Accessed October 14, 2021.

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The CAP 2.0 would not involve the development of habitable structures and, thus, no use of septic tanks or alternative wastewater disposal systems. Therefore, **no impact** would occur related to soil capability support of alternative wastewater disposal systems.

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The CAP 2.0 would not involve land use or zoning changes that would encourage new development but would instead promote infrastructure development and redevelopment. As a policy document, the CAP 2.0 would not directly result in impacts related to paleontological resources or unique geologic features. CAP 2.0 policies that would involve construction activities, such as the policies related to building energy-efficiency and renewable energy retrofits and EV charging infrastructure, would involve work within existing, previously graded and disturbed areas where the likelihood of encountering intact and previously undiscovered paleontological resources would be minimal. Nonetheless, there is a possibility that these small-scale construction projects may expose paleontological resources during ground disturbing activities. To reduce such risks, CAP 2.0 projects and actions would be reviewed for consistency with geotechnical and paleontological regulations prior to final siting and construction. CAP 2.0 projects would be required to implement BMPs in accordance with the Pleasanton General Plan, including Conservation and Open Space Program 5.3 that requires implementation of best practices when previously undiscovered historic and prehistoric resources are unearthed during project construction, and the Pleasanton Standard Specifications and Details.^{61,62} In addition, the CAP 2.0 projects would be located and designed strategically to reduce ground disturbance to the maximum extent possible. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to paleontological resources and unique geologic features.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. CAP 2.0 projects, in combination with other cumulative projects anticipated under General Plan buildout, could expose additional people and property to the low to moderate seismic and geologic hazards that are present in the region. The magnitude of geologic hazards for individual projects, including those associated with implementation of the CAP 2.0, would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Specific geologic hazards associated with individual project sites would be limited to those sites without affecting other areas. Similarly, potential impacts to paleontological resources associated with each individual site would be limited to that site without affecting other areas, and impacts related to these resources would be minimized on a case-by-case basis. Compliance with existing regulations, including CBC requirements, City-issued permit requirements, the Pleasanton General Plan, the Pleasanton Standard Specifications and Details, and/or Construction General Permit requirements, would

⁶¹ Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 14, 2021.

⁶² Pleasanton, City of. 2016. Pleasanton Standard Specifications and Details. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=28996>>. Accessed October 13, 2021.

minimize potential cumulative seismic and geologic impacts. Seismic and geologic hazards would be addressed on a case-by-case basis and would not result in cumulative impacts. Therefore, implementation of the CAP 2.0 would result in a ***less-than-significant cumulative impact*** related to geology and soils.

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

The greenhouse effect is a natural occurrence that helps regulate the temperature of the Earth. The majority of radiation from the sun hits Earth’s surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions. This process is essential to support life on Earth, because it warms the planet by approximately 60°F. Emissions from human activities since the beginning of the industrial revolution (approximately 270 years ago) have been adding to the natural greenhouse effect by resulting in increased gases in the atmosphere that trap heat and contribute to an average increase in Earth’s temperature. Global warming is the observed increase in the average temperature of the Earth’s surface, and climate change is the resultant change in wind patterns, precipitation, and storms over an extended period.

GHGs produced by human activities include CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorinated compound, and sulfur hexafluoride (see Appendix B for more details related to these GHG gases).⁶³ Combustion of fossil fuels (gasoline, natural gas, and coal), deforestation, and decomposition of waste release carbon into the atmosphere that had been locked underground and stored in oil, gas, and other hydrocarbon deposits or in the biomass of surface vegetation. Since 1750, estimated concentrations of CO₂, CH₄, and N₂O in the atmosphere have increased by over 36 percent, 148 percent, and 18 percent respectively, primarily due to human activity. Emissions of GHGs affect the atmosphere directly by changing its chemical composition.

Changes to the land surface also indirectly affect the atmosphere by changing the way in which Earth absorbs gases from the atmosphere. Potential impacts in California due to climate change include sea level rise, more extreme-heat days and high-ozone days, larger and more frequent

⁶³ The CAP 2.0 only considers emissions of CO₂, CH₄, and N₂O, because these are the GHGs most relevant to local government policymaking. These gases comprise a large majority of GHG emissions at the community level. The remaining gases are emitted primarily in private sector manufacturing and electricity transmission and are the subject of regulation at the State level. Therefore, these gases were omitted from the CAP 2.0.

forest fires, and more frequent and severe drought years.⁶⁴ Although GHG emissions do not typically cause direct health impacts at a local level, GHG emissions can result in indirect health impacts by contributing to climate change, which can have public health implications. The primary public health impacts of climate change include the following:

- Increased incidences of hospitalization and deaths due to increased incidences of extreme heat events;
- Increased incidences of health impacts related to ground-level ozone pollution due to increased average temperatures that facilitate ozone formation;
- Increased incidences of respiratory illnesses from wildfire smoke due to increased incidences of wildfires;
- Increased vector-borne diseases due to the growing extent of warm climates; and
- Increased stress and mental trauma due to extreme events and disasters, economic disruptions, and residential displacement.⁶⁵

Pleasanton has completed a communitywide GHG emissions inventory for 2017, which is summarized in Table 1. The transportation sector was the largest contributor to Pleasanton's GHG emissions, followed by the energy sector. Figure 3 and Table 4 summarize the communitywide GHG emissions forecast under three scenarios: 1) business-as-usual projections, 2) business-as-usual projections with State measures, and 3) the City of Pleasanton target reduction path along with State measures. As shown therein, under the business-as-usual scenario, communitywide GHG emissions are forecasted to increase to approximately 646,644 MT of CO₂e (7.79 MT of CO₂e per capita) by the year 2030, based on anticipated economic and population growth. However, with implementation of State laws and programs, communitywide GHG emissions would decline to approximately 456,717 MT of CO₂e (5.5 MT of CO₂e per capita) by 2030. Furthermore, implementation of the CAP 2.0 alongside State laws and programs would reduce communitywide GHG emissions to approximately 336,398 MT of CO₂e (4.05 MT of CO₂e per capita) by 2030.

The strategies included in the CAP 2.0 combined with State-wide legislation and initiatives and Countywide transportation programs will enable the City of Pleasanton to meet its per capita emissions reduction target of 70 percent below 1990 levels (a 51 percent reduction in communitywide emissions) by 2030, exceeding the California Senate Bill 32 target for 2030 to reduce total GHG emissions 40 percent below 1990 levels. The City needs to achieve a GHG emissions reduction from 2030 BAU levels of 231,947 MT of CO₂e to meet the SB 32 target. The total estimated GHG reductions from 2030 BAU levels that would be achieved by the CAP 2.0 along with State-wide legislation and initiatives total 310,246 MT of CO₂e by 2030 and would exceed the SB 32 requirements. Because SB 32 is considered an interim target toward meeting the 2045 State goal of carbon neutrality, implementation of the CAP 2.0 would also be considered substantial progress toward meeting the State's long-term 2045 goal. Avoiding interference with and making substantial progress toward these long-term State targets are important, because these targets have been set at levels that achieve California's fair share of international emissions reduction targets that will stabilize global climate change effects and help avoid the associated adverse environmental consequences.

⁶⁴ CARB and California Environmental Protection Agency (CalEPA). 2009. Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature. Available: <<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.386.4605&rep=rep1&type=pdf>>. Accessed October 14, 2021.

⁶⁵ California Natural Resources Energy. 2018. California's Fourth Climate Change Assessment Statewide Summary Report. Available: <<http://www.climateassessment.ca.gov/state/>>. Accessed October 18, 2021.

The CAP 2.0 includes a list of 25 actions intended to reduce communitywide GHG emissions. Implementation of the CAP 2.0 would result in the reduction of communitywide operational GHG emissions, while only generating temporary GHG emissions during construction of infrastructure such as EV charging stations and building energy and water efficiency upgrades. Additionally, the CAP 2.0 would serve as a pathway to reduce GHG emissions and introduce other beneficial environmental and sustainability effects. These benefits include reduction in building energy consumption, vehicle miles traveled (and thus air pollution), and solid waste generation. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to generation of GHG emissions.

b. Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The CARB 2017 Climate Change Scoping Plan outlines a pathway to achieving the 2030 reduction targets set under SB 32, which are considered interim targets toward meeting the long-term 2045 carbon neutrality goal established by EO B-55-18. The CAP 2.0 is a policy-level document that sets strategies to reduce GHG emissions within the City in an effort to also comply with State regulations. As discussed under *Response 8a.* above, the CAP 2.0 includes strategies to reduce Pleasanton GHG emissions from forecasted business-as-usual levels to approximately 336,398 MT of CO₂e (4.051 MT of CO₂e per capita) by 2030. The purpose of the CAP 2.0 is to meet Pleasanton's proportionate fair share of the Statewide GHG emissions reduction target set by SB 32 and work toward the State's longer-term target of carbon neutrality identified in California Executive Order B-55-18.

The CAP 2.0 would not conflict with any applicable GHG reduction plans, including the CARB 2017 Climate Change Scoping Plan. The CAP 2.0 identifies how Pleasanton would achieve consistency with the Statewide GHG emissions limit. The CAP 2.0 would serve as a pathway to reduce GHG emissions and introduce other beneficial environmental and sustainability effects. These benefits include reduction in building energy consumption, vehicle miles traveled (and thus air pollution), and solid waste generation. Therefore, the CAP 2.0 would result in a **no impact** related to consistency with applicable GHG emissions reduction plans, policies, and regulations.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Analyses of GHG emissions and climate change are cumulative in nature, as they affect the accumulation of GHG emissions in the atmosphere. Cumulative projects anticipated under Pleasanton General Plan buildout that exceed the thresholds discussed above would have a significant impact related to GHG emissions and climate change, both individually and cumulatively. The CAP 2.0 creates a GHG emissions reduction strategy (consistent with Section 15183.5 of the CEQA Guidelines) for Pleasanton. The CAP 2.0 also includes a series of actions that are intended to reduce per capita GHG emissions by approximately 70 percent below 1990 levels (a 51 percent reduction in communitywide emissions) by 2030, which provides substantial progress toward Pleasanton meeting State goals. As such, the CAP 2.0 would result in the reduction of GHG emissions rather than generating GHG emissions. Some GHG emissions would occur during construction of CAP 2.0-specific infrastructure projects; however, these emissions would be temporary and minor in nature. Therefore, implementation of the CAP 2.0 would result in a **less-than-significant cumulative impact** related to GHG emissions.

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The CAP 2.0 is a policy document containing strategies and actions to reduce GHG emissions. The CAP 2.0 does not involve identified site-specific development and, for the most part, it would not facilitate new development that would involve the routine use of hazardous materials. Implementation of some of the CAP 2.0 actions, such as energy and water efficiency retrofits and installation of EV charging stations, would require construction activities. Construction would involve the temporary use of hazardous materials such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. However, these types of materials are not considered acutely hazardous, and storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control, U.S. EPA, and Occupational Safety & Health Administration. In addition, standard construction BMPs for the use and handling of such materials would avoid or reduce the potential for such conditions to occur. Any use of potentially hazardous materials during construction of projects would comply with all local, State, and federal regulations regarding the handling of potentially hazardous materials, including Title 49 of the Code of Federal Regulations and Title 22, Division 4.5 of the CCR. Risk of spills would cease after construction is completed. Therefore, construction activities related to CAP 2.0 actions would not be anticipated to create upset and accident conditions involving the release of hazardous materials, and operation of the majority of CAP 2.0 actions would not involve the routine transport, use, or disposal of hazardous materials during operation.

However, CAP 2.0 Actions S3 and P4 emphasizes increasing local renewable energy production and battery energy storage facilities within the City by encouraging municipal facilities and new developments to include small-scale solar and/or battery storage systems in their design. Hazardous materials used in battery energy storage systems would generally consist of the lithium-ion batteries. Lithium-ion technology is a common battery storage medium and is considered one of the safest and most efficient methods of energy storage on the market. During normal operation, lithium-ion batteries do not represent a risk to off-site receptors, and safety standards applicable to energy storage facilities and safety certification tests established by independent bodies, such as Underwriters Laboratories, National Fire Protection Association, and International Electrotechnical Commission would prevent any reasonable possibility of a substantial adverse effect on the environment related to the lithium-ion batteries. However, in the unlikely event of a fire, there is a risk of the accidental release of hazardous materials associated with battery energy storage systems. Any future proposed battery energy storage facilities would, therefore, be carefully reviewed for appropriate locations, safety measures, and consistency with the Pleasanton General Plan, PMC, and applicable local, State, and federal regulations. Therefore, the CAP 2.0 would result in a ***less-than-significant impact*** related to creating a significant hazard through the routine transport, use, or disposal of hazardous materials and reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The CAP 2.0 is a policy document containing strategies to reduce GHG emissions. The CAP 2.0 does not include site-specific proposals and development, nor would it emit or handle hazardous materials. Implementing some CAP 2.0 actions may require future development or improvements, such as EV charging stations and building improvements related to energy efficiency. However, CAP 2.0 projects and actions would be reviewed to ensure the appropriate location of projects in relation to existing development in the City and would be reviewed for consistency with the Pleasanton General Plan, PMC, and applicable local, State, and federal regulations. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to handling of hazardous materials in proximity to schools.

- d. *Would the project be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The CAP 2.0 is a policy document containing strategies and supporting actions to reduce GHG emissions. The proposed CAP 2.0 does not include site-specific proposals and development, but CAP 2.0 actions could result in projects that could be located on listed hazardous materials sites. However, CAP 2.0 projects and actions would be reviewed for consistency with the Pleasanton General Plan, PMC, and would be required to comply with applicable local, State, and federal regulations related to hazardous materials sites. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to location on a listed hazardous materials site.

- e. *For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The City of Pleasanton does not contain any airports. The nearest airports to Pleasanton are the Livermore Municipal Airport and the Oakland International Airport, both located greater than two miles from the City boundary. Furthermore, the CAP 2.0 is a policy document that would not increase airport activity or result in additional habitable development or commercial development that could increase potential exposure of residents and employees to aircraft-related hazards. Therefore, the CAP 2.0 would result in **no impact** related to risks associated with location proximate to a public airport.

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The CAP 2.0 is a policy document intended to reduce GHG emissions. The CAP 2.0 does not involve site-specific development, nor would it facilitate new development that would interfere with adopted emergency plans. Implementation of some CAP 2.0 actions, such as Action S8 which would provide for the addition of new green stormwater infrastructure, may involve construction within the local right-of-way. Construction activities have the potential to require lane closures and may impact traffic and vehicle speeds on the affected roadways; however, these impacts would be temporary and access to roadways would be maintained throughout project construction. Furthermore, future projects involving work in the public right-of-way would be required to coordinate with the City to ensure appropriate construction staging and adequate vehicular and

pedestrian access on adjacent roadways, pursuant to PMC Chapter 13.04, Encroachments.⁶⁶ In addition, CAP 2.0 Action S9 would reduce combustible biomass and improve early wildfire detection in order to reduce community vulnerability to wildfires, the highest risk hazard type for the City identified in the LHMP.⁶⁷ Therefore, the CAP 2.0 would result in **no impact** related to impairment or interference with implementation of an emergency response or evacuation plan.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

According to the LHMP and Pleasanton General Plan Public Safety Element, wildfire poses a high risk to portions of Pleasanton at the urban-wildland fringe. These areas are concentrated in the west of the City adjacent to Pleasanton Ridge and to the south of the City. The central, urbanized portions of the City are not subject to wildfire risk.^{68,69} CAP 2.0 Action S9 would reduce community vulnerability to wildfires via controlled burns, reduced combustible biomass, and early wildfire detection. In addition, the CAP 2.0 does not propose specific development or new residential or commercial land uses that could be subject to wildland fire. Therefore, the CAP 2.0 would result in **no impact** related to risks associated with exposure to wildland fires.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Hazards and hazardous materials impacts are typically site-specific in nature. CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, are not anticipated to contribute to cumulative hazards and hazardous materials impacts with adherence to applicable Pleasanton General Plan policies and applicable State and federal regulatory requirements. Therefore, implementation of the CAP 2.0 would result in a **less-than-significant cumulative impact** related to hazards and hazardous materials.

⁶⁶ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 13.04. Available: <<https://qcode.us/codes/pleasanton/>>. Accessed October 18, 2021.

⁶⁷ Pleasanton, Livermore, and Dublin, Cities of. 2018. Tri-Valley Local Hazard Mitigation Plan. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=35090>>. Accessed October 13, 2021.

⁶⁸ Ibid.

⁶⁹ Pleasanton, City of. 2008. Pleasanton General Plan Public Safety Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23899>>. Accessed October 13, 2021.

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

The CAP 2.0 is a policy document containing actions intended to reduce GHG emissions within Pleasanton. CAP 2.0 Strategies BE-1, BE-2, and BE-3 promote building electrification in new and existing buildings and installation of solar PV systems and battery storage facilities to provide greener renewable electricity within the City. CAP 2.0 Action P5 supports the installation of new EV charging stations and supporting infrastructure. CAP 2.0 Action P13 provides for the planting of additional urban trees throughout the community. Additionally, CAP 2.0 Action P15 incentivizes water efficiency retrofits to existing buildings and landscaped areas, and Action S8 seeks to increase green stormwater infrastructure within the City, including LID strategies such as bioswales, rain catchment basins, and green roofs. These actions may result in small scale construction activities in the future that could result in temporary water quality impacts due to soil erosion and ground disturbance, as further discussed under *Response 10c* in Section 7, *Geology and Soils*.

However, CAP 2.0 projects and actions would be reviewed for consistency with local and State regulations, including the NPDES permitting program that requires implementation of Stormwater Pollution Prevention Plans (SWPPPs) and the Pleasanton Standard Specifications and Details, that include erosion and sediment control standards.⁷⁰ These regulations require BMPs to reduce water quality impacts from construction activities. Compliance with the Pleasanton Standard Specifications and Details and/or NPDES permitting program would ensure that BMPs are implemented during construction to minimize potential impacts to surface and groundwater quality. As such, the CAP 2.0's related infrastructure and retrofit projects would not result in new or different wastewater discharge that would violate water quality standards, waste discharge requirements, or otherwise degrade surface or groundwater quality. Therefore, the CAP 2.0 would result in **less-than-significant impacts** related to surface or groundwater water quality in Pleasanton.

b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The CAP 2.0 is a policy document containing strategies intended to reduce GHG emissions and increase sustainability. CAP 2.0 Action P15 seeks to decrease community water use through water efficiency retrofits and sustainable landscaping. Reduced water use within the City would aid in maintaining groundwater supplies. In addition, CAP 2.0 Action S8 is intended to improve sustainable stormwater management by increasing the use of LID strategies including bioswales, green roofs, and other green stormwater infrastructure. Increased green stormwater infrastructure would improve groundwater infiltration and recharge within the City. Furthermore, implementation of other CAP 2.0 strategies, such as improved EV charging infrastructure and building energy efficiency retrofits, would not substantially degrade groundwater quality or recharge or result in increased groundwater demand. Therefore, the CAP 2.0 would result in **no impact** related to impedance of sustainable groundwater management.

⁷⁰ Pleasanton, City of. 2016. Pleasanton Standard Specifications and Details. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=28996>>. Accessed October 13, 2021.

- c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- Result in substantial erosion or siltation on- or off-site?
 - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
 - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
 - Impede or redirect flood flows?

Implementation of several CAP 2.0 strategies and actions may promote infrastructure development and small-scale construction activities within Pleasanton. CAP 2.0 Strategies BE-1, BE-2, and BE-3 promote building electrification in new and existing buildings and installation of solar PV systems and battery storage facilities to provide greener renewable electricity within the City. CAP 2.0 Action P5 supports the installation of new EV charging stations and supporting infrastructure. CAP 2.0 Action P13 provides for the planting of additional urban trees throughout the community. Additionally, CAP 2.0 Action P15 incentivizes water efficiency retrofits to existing buildings and landscaped areas, and Action S8 seeks to increase green stormwater infrastructure within Pleasanton.

Implementation of these CAP 2.0 actions would primarily occur within previously developed areas and would not result in substantial alterations to Pleasanton's existing drainage pattern and amount of impervious surface. Construction of CAP 2.0 projects could result in erosion as discussed in Section 7, *Geology and Soils*. However, impacts to drainage and water quality during construction would be minimized through the implementation of BMPs as required by the Pleasanton Standard Specifications and Details and NPDES Construction General Permit program. In addition, CAP 2.0 projects would be in accordance with the Pleasanton General Plan, which includes goals and policies for the protection and preservation of creeks, streams, and groundwater within Pleasanton.⁷¹ Furthermore, CAP 2.0 Actions S8 and P13 would increase permeable surfaces and landscaping within Pleasanton, which would improve drainage and water quality. Therefore, the CAP 2.0 would result in a **no impact** related to the alteration of existing drainage patterns.

- d. *Would the project result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Pleasanton is not located within designated seiche or tsunami zones. Portions of the City are within the 100- and 500-year flood zones defined by Federal Emergency Management Agency (FEMA), and the City also contains areas within the inundation zone of the Del Valle Dam located to the southeast of the City.⁷² Therefore, areas of the City are at risk of flooding. As described under *Response 10c.*, CAP 2.0 projects would not impede or redirect flood flows, and as discussed under *Response 9 a. and b.* in Section 9, *Hazards and Hazardous Materials*, CAP 2.0 projects would generally not involve the regular use or storage of hazardous materials with the exception of battery energy storage facilities that include the storage of lithium-ion batteries. Future CAP 2.0 projects, such as battery energy storage facilities, would be reviewed for compliance with the applicable local

⁷¹ Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021.

⁷² Pleasanton, City of. 2009. Pleasanton General Plan Public Safety Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23899>>. Accessed October 13, 2021.

and State regulations related to flooding and hazardous materials use and storage, including PMC Chapter 9.16, Hazardous Materials Storage, and CBC standards for construction within flood-prone areas.⁷³ Furthermore, any projects associated with implementation of the CAP 2.0 located in flood-prone areas must comply with PMC Chapter 17.08, Flood Damage Prevention, which provides requirements to mitigate potential flood risks.⁷⁴ Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to flooding and inundation resulting in release of pollutants.

e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The CAP 2.0 strategies and actions would not include activities that would result in the direct extraction of groundwater. Rather, the CAP 2.0 encourages reduced water consumption and expanded green stormwater infrastructure within Pleasanton, which would aid in groundwater recharge and reduced surface water runoff and related water quality issues. The CAP 2.0 would not interfere with or obstruct implementation of water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, the CAP 2.0 would result in **no impact** related to consistency with a water quality control plan or sustainable groundwater management plan.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, are not anticipated to contribute to cumulative hydrology and water quality impacts with adherence to applicable Pleasanton General Plan policies and applicable local, State, and federal regulatory requirements. Implementation of the CAP 2.0 would not contribute to an increase in growth and development in Pleasanton but could result in small-scale infrastructure development and building retrofit projects, including new EV charging infrastructure and energy and water efficiency upgrades. As such, implementation of the CAP 2.0 and other cumulative projects could have incremental impacts related to hydrology and water quality, such as erosion and sedimentation due to construction activities. However, the CAP 2.0's contribution to such impacts would be minor and temporary, and the CAP 2.0 would have the long-term effect of reducing water use and improving sustainable stormwater management. Therefore, implementation of the CAP 2.0 would result in a **less-than-significant cumulative impact** related to hydrology and water quality.

⁷³ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 9.16. Available: <<https://qcode.us/codes/pleasanton/>>. Accessed October 14, 2021.

⁷⁴ Pleasanton, City of. 2021. Pleasanton Municipal Code Chapter 17.08. Available: <http://qcode.us/codes/pleasanton/?view=desktop&topic=17-17_08-17_08_070>. Accessed October 14, 2021.

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project physically divide an established community?

The CAP 2.0 is a policy document containing strategies that are consistent with the Pleasanton General Plan and does not include actions or specific development projects that would divide an established community. CAP 2.0 Strategy TLU-2 facilitates the provisioning of new bike parking infrastructure and amenities, improved public transit connectivity, and enhanced safety and active transportation in areas surrounding schools. Such actions would help to increase connectivity within the Pleasanton community. Therefore, the CAP 2.0 would result in **no impact** related to division of an established community.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The CAP 2.0 is a policy document containing strategies that are consistent with the Pleasanton General Plan and that are designed to reduce adverse environmental impacts associated with climate change. Nonetheless, implementing the CAP 2.0 would require some modification of existing policies, including developing and implementing new programs, and projects, or modifying existing ones. For example, CAP 2.0 Actions P-1, P-2, P3, and S1 include adoptions of new building ordinances or updates to the existing municipal code to require building electrification for new and existing developments and the regulation of appliances and HVAC systems for new development. CAP 2.0 Action P5 may involve updates to the municipal code to require EV charging infrastructure in new developments. Likewise, CAP 2.0 Action P8 would require updates to the PMC to require bicycle infrastructure parking and amenities for new residential, commercial, and mixed-use development. In addition, CAP 2.0 Actions P12, P13, and S8 would involve the adoption of new plans and policies related to the reduction of single-use plastics, urban forest management, and green stormwater infrastructure. In order to implement these measures, the PMC, Pleasanton General Plan, and other applicable City documents may need to be amended to reflect new or modified requirements. However, where modifications of existing policies are needed, such as updates to policies related to energy, solid waste, EV infrastructure, and active transportation, the CAP 2.0 strategies and actions would result in greater avoidance or reduction of environmental effects.

Therefore, the CAP 2.0 would result in **no impact** related to consistency with current land use plans or policies.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. The CAP 2.0 is a policy document containing strategies that are consistent with the Pleasanton General Plan. Nonetheless, implementing the CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, would require some modification of existing land use policies, including developing and implementing new programs, and projects, or modifying existing ones. The proposed policy changes are consistent with the intent of the goals and policies established within the Pleasanton General Plan and Zoning Regulations and would not cumulatively contribute to population growth or the loss of housing. Cumulative projects, including the CAP 2.0, would be required to adhere to City development regulations and Pleasanton General Plan policies to retain land use character and minimize environmental impacts. Future CAP 2.0 projects and actions would be reviewed for consistency with the Pleasanton General Plan and other applicable regulatory land use actions prior to approval. Therefore, implementation of the CAP 2.0 would result in a **less-than-significant cumulative impact** related to land use.

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The Pleasanton General Plan and Pleasanton General Plan EIR identify the Livermore-Amador Valley Quarry area in the easternmost portion of the City as an aggregate resource area of regional significance for sand and gravel. These areas are designated for Sand and Gravel Harvesting use in the Pleasanton General Plan Land Use Element.⁷⁵ The majority of the City is classified as having no significant mineral deposits, while the developed portion of the City west of I-680 is classified as an area containing mineral deposits the significance of which cannot be evaluated based on available data.^{76,77} The Pleasanton General Plan Conservation and Open Space Element includes Policy 4 that reserves all areas designated for Sand and Gravel Harvesting exclusively for mineral resource extraction until the resources have been depleted, and the CAP 2.0 would not conflict with this policy or otherwise impact operations in the Livermore-Amador Valley Quarry area. Furthermore, the CAP 2.0 would not facilitate additional urban growth or infrastructure development projects within the City that could result in the loss of availability of known mineral resources. Therefore, the CAP 2.0 would result in **no impact** related to mineral resource.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Identified mineral resources within the City are limited to sand and gravel quarries located in the east of the City. These areas are designated by the Pleasanton General Plan exclusively for mineral resources extraction, and the CAP 2.0 would not

⁷⁵ Pleasanton, City of. 2012. Pleasanton General Plan Land Use Map. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23897>>. Accessed October 14, 2021.

⁷⁶ Pleasanton, City of. 2009. Pleasanton General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021.

⁷⁷ Pleasanton, City of. 2008. Pleasanton General Plan Environmental Impact Report. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021.

conflict with or alter these land uses. CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, are not anticipated to contribute to cumulative impacts to mineral resources with adherence to the Pleasanton General Plan policies related to conservation of such resources. Therefore, implementation of the CAP 2.0 would result in ***no cumulative impact*** related to mineral resources.

13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear works, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance, while noise from a point source typically attenuates at about 6 dBA per doubling of distance. Noise levels may also be reduced by the introduction of intervening structures. For example, a single row of buildings between the receptor

and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm that breaks the line-of-sight reduces noise levels by 5 to 10 dBA.

The Pleasanton General Plan Noise Element identifies roadway traffic as the major sources of noise within the City as roadway traffic. In addition, railroad operations, such as the ACE and BART trains, the sand and gravel quarry operations, and aircraft overhead also contribute to the noise environment of the City. The Pleasanton Noise Element aims to ensure appropriate noise levels considered compatible for community noise environments.⁷⁸ The City’s normally acceptable exterior noise exposure standards for various land uses are shown in Table 5. Consistent with State noise insulation standards (CCR Title 24 Part 11), the Pleasanton General Plan Noise Element states that the maximum acceptable interior noise level for residential uses is 45 L_{dn}. In addition, PMC Chapter 9.04, Noise Regulations, establishes noise regulations for residential, commercial, industrial, and public property uses, as well as for construction activity noise.⁷⁹

Table 5 Pleasanton General Plan Noise Element Normally Acceptable Noise Levels

Land Use	Exterior Noise Exposure (L _{dn} , dBA)
Single Family Residential ¹	60
Multi-family Residential, Hotels, and Motels ¹	65
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches	60
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	65
Office Buildings, Business, Commercial, and Professional	70
Auditoriums, Concert Halls, Amphitheaters	n/a ²

dBA = A-weighted decibels; L_{dn} = day/night average sound level; n/a = not applicable

¹ In noise environments resulting primarily from railroad trains, exterior noise levels up to 70 dBA L_{dn} are normally acceptable recognizing that day-night average noise levels are controlled by intermittent, loud events.

² Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.

Source: Pleasanton General Plan Noise Element

Construction noise is regulated by PMC Section 9.04.100, which provides an exemption to the noise regulations for construction occurring between the hours of 8:00 am and 8:00 pm daily, except Sunday and holidays, when the exemption applies between 10:00 am and 6:00 pm. Construction noise is permitted during the above specified house provided that one of the following conditions is met:

- No individual piece of equipment shall produce a noise level exceeding 83 dB at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet from the equipment as possible; or
- The noise level at any point outside of the property plane of the project shall not exceed 86 dB.

The CAP 2.0 is a policy document containing programs that are consistent with the Pleasanton General Plan. Some of the CAP 2.0 actions would support small scale construction projects that could result in temporary noise. These include CAP 2.0 Actions P2, S2, and S3 that promote building electrification of existing buildings and installation of solar PV systems and battery storage systems at municipal facilities, Action P5 that supports the installation of new EV charging infrastructure,

⁷⁸ Pleasanton, City of. 2009. General Plan Noise Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23914>>. Accessed October 15, 2021.

⁷⁹ Pleasanton, City of. 2021. Municipal Code Chapter 9.04. Available: <<https://qcode.us/codes/pleasanton/>>. Accessed October 15, 2021.

Action P13 that would increase tree planting in the City, Action P15 that would encourage water efficiency upgrades to existing buildings, and Action S8 that would add new green stormwater management facilities to the community. However, CAP 2.0 projects and actions would be reviewed for consistency with the Pleasanton General Plan and PMC, and construction activities would be required to comply with the provisions of the PMC Chapter 9.04, including the permitted construction hours and maximum noise limits. Therefore, the CAP 2.0 would not result in significant construction noise related impacts.⁸⁰

The CAP 2.0 does not include future projects that would result in substantial operational noise. Rather, the CAP 2.0 encompasses a suite of GHG-reduction opportunities that affect the transportation sector and its associated noise. For example, CAP 2.0 Strategies TLU-1 and TLU-2 encourage adoption of EVs and electric small engine and off-road equipment, which are quieter than gas-powered alternatives, and facilitate improvements to bicycle and public transit circulation to increase active transportation and transit ridership and decrease VMT. These strategies would reduce VMT and traffic-related noise in Pleasanton. Therefore, the CAP 2.0 would not generate excessive operational noise levels and would result in a ***less-than-significant impact*** related to noise exposure.

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise.⁸¹ Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or Root Mean Square (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings.⁸² Vibration significance ranges from approximately 50 vibration decibels (VdB), which is the typical background vibration-velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings. The general human response to different levels of groundborne vibration velocity levels is described in Table 6.⁸³

⁸⁰ Pleasanton, City of. 2021. Municipal Code Chapter 9.04. Available: <<https://qcode.us/codes/pleasanton/>>. Accessed October 15, 2021.

⁸¹ California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-13-069.25.3). Available: <<https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf>>. Accessed October 15, 2021.

⁸² Federal Highway Administration (FHWA). 2006. FHWA Highway Construction Noise Handbook. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). Available: <https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook00.cfm>. Accessed October 15, 2021.

⁸³ Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>. Accessed October 15, 2021.

Table 6 Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day

VdB = vibration decibels
Source: Federal Transit Administration (FTA), 2018

The CAP 2.0 is a policy document containing programs that are consistent with the Pleasanton General Plan. Some of the CAP 2.0 actions would support small-scale construction projects, such as EV charging station construction and building energy and water efficiency retrofits that may result in a temporary, minor increase in groundborne vibration. However, CAP 2.0 projects and actions would be reviewed for consistency with the Pleasanton General Plan and PMC, and construction activities would be required to comply with applicable local, State, and federal regulations to ensure that temporary construction impacts related to groundborne vibration would not occur. Furthermore, CAP 2.0 projects would not include operational sources of groundborne vibration. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to groundborne vibration.

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

Pleasanton does not contain any airports. The nearest airports to Pleasanton are the Livermore Municipal Airport and the Oakland International Airport. The City is not within the airport land use plan for either airport, and both airports are located greater than two miles from the City boundary.^{84,85} Furthermore, the CAP 2.0 is a policy document that would not increase airport activity or result in additional habitable development or commercial development that could increase potential exposure of residents and employees to aircraft-related noise. Therefore, the CAP 2.0 would result in **no impact** related to aviation-related noise exposure.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. The CAP 2.0 is a policy document containing programs that are consistent with the Pleasanton General Plan, including the Noise Element. Nonetheless, the CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, would support construction projects, such as EV charging station construction that may result in a temporary increase in groundborne vibration or noise levels. However, cumulative projects, including CAP 2.0 projects, would be subject to review by the City for compliance with the Pleasanton General Plan and PMC and would be required to comply with applicable State and federal regulations governing construction noise and vibration. Additionally, the CAP 2.0 encompasses a suite of GHG-reduction opportunities that would decrease traffic and

⁸⁴ Alameda County. 2012. Livermore Executive Airport Land Use Compatibility Plan. Available: <https://www.acgov.org/cda/planning/generalplans/documents/LVK_ALUCP_082012_FULL.pdf>. Accessed October 15, 2021.

⁸⁵ Alameda County. 2010. Oakland International Airport Land Use Compatibility Plan. Available: <https://www.acgov.org/cda/planning/generalplans/documents/OAK_ALUCP_122010_FULL.pdf>. Accessed October 15, 2021.

traffic-related noise. As such, implementation of the CAP 2.0 would not generate permanent, excessive groundborne vibration or noise levels. Therefore, the CAP 2.0 would result in a ***less-than-significant cumulative impact*** related to noise.

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*
- b. *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The CAP 2.0 does not include strategies, policies, or programs that would result in new housing or jobs or that would displace existing residents or housing. In addition, the CAP 2.0 does not propose new infrastructure, such a roadways or utilities, that could indirectly lead to new population growth or development. Therefore, the CAP 2.0 would not directly increase the population, indirectly induce additional unplanned population growth, or displace people or housing. Therefore, the CAP 2.0 would result in **no impact** related to population and housing.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, are not anticipated to displace people or housing nor induce substantial unplanned population growth within Pleasanton. Specifically, the CAP 2.0 would not contribute to person or housing displacement in Pleasanton nor result in population growth beyond that already assumed and planned for in the Pleasanton General Plan and in accordance with Pleasanton 2045 population projections. Therefore, the CAP 2.0 would result in **no cumulative impact** related to population and housing.

15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

- Fire protection?
- Police protection?
- Schools?
- Parks?
- Other public facilities?

The CAP 2.0 is a policy document containing programs that are consistent with the Pleasanton General Plan. Implementation of the CAP 2.0 and its proposed strategies and actions would not result in increases in population or new employment opportunities that could induce population growth, as further discussed in Section 14, *Population and Housing*. As such, the CAP 2.0 would not require the construction of new or physically altered governmental facilities to serve additional population, the construction of which could cause significant environmental impacts. CAP 2.0 Strategy CRW-1 and Actions S8 and S9 would help to increase community resiliency and reduce vulnerability to the impacts of climate change and mitigate hazards such as flooding and wildfire

within Pleasanton, thereby reducing the burden on local public services related to such natural disasters. Furthermore, future CAP 2.0 projects and actions would be reviewed for consistency with the Pleasanton General Plan and other applicable local and State regulations related to public services. Therefore, the CAP 2.0 would result in **no impact** related to public services in terms of need for the construction of new or altered governmental facilities.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Implementation of CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, would not result in increases in population or induce additional population growth beyond that assumed under the Pleasanton General Plan and in accordance with Pleasanton 2045 population projections. Therefore, implementation of the CAP 2.0 would not result in substantial cumulative need to expand public services facilities. Therefore, the CAP 2.0 would result in a **no significant cumulative impact** related to public services.

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Pleasanton is a primarily urbanized community with parks and recreational spaces incorporated throughout the City, including four large recreational open space areas, as shown in Figure 7-4 of the Pleasanton General Plan Conservation and Open Space Element.⁸⁶ The Pleasanton General Conservation and Open Space Element incorporates goals and policies to protect open space/recreational resources in the City. The CAP 2.0 is a policy document containing programs that are consistent with Pleasanton’s General Plan, including the recreation and open space policies established in the Pleasanton Conservation and Open Space Element. CAP 2.0 Action P13 seeks to increase greenspace and trees within Pleasanton, while Action S9 would reduce wildland fire risks that could result in damage to the City’s recreational open space amenities. Additionally, as described in Section 14, *Population and Housing*, the CAP 2.0 would not result in substantial population growth or direct land use changes. As such, implementation of the CAP 2.0 would not result in a substantial physical deterioration of parks or other recreational facilities or result in the need to expand recreational facilities. Therefore, the CAP 2.0 would result in **no impact** related to the need for construction of new or altered recreational facilities.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Implementation of CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, would not result in increases in population or induce additional population growth beyond that

⁸⁶ Pleasanton, City of. 2009. General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobload.aspx?BlobID=23910>>. Accessed October 7, 2021.

assumed under the Pleasanton General Plan and in accordance with 2045 population projections. Therefore, implementation of the CAP 2.0 would not result in increased demand for parks or substantial cumulative physical deterioration of parks or other recreational facilities or result in the cumulative need to expand recreational facilities. In addition, the CAP 2.0 includes strategies to increase the number of trees/greenspace within the community and reduce wildland fire risk, which aligns with the Pleasanton General Plan goals. Therefore, implementation of the CAP 2.0 would result in ***no cumulative impact*** related to recreation.

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The Pleasanton General Plan Circulation Element includes the following goals:

- **Goal 1:** Develop a safe, convenient, and uncongested circulation system.
- **Goal 2:** Develop and manage a local and regional street and highway system which accommodates future growth while maintaining acceptable levels of service.
- **Goal 3:** Protect residential neighborhood quality-of-life and community character from cut-through traffic, speeding, and nonresidential parking.
- **Goal 4:** Provide a multi-modal transportation system which creates alternatives to the single-occupancy automobile.⁸⁷

Additionally, the City adopted the Pleasanton Bicycle and Pedestrian Master Plan in 2018 to make active transportation a safe and pleasant option within Pleasanton by providing a dedicated bicycle and pedestrian network. The Pleasanton Bicycle and Pedestrian Master Plan also implements the Pleasanton General Plan goals, policies, and programs related to complete streets by building on the blueprint for a system of bikeways established in the Pleasanton General Plan.⁸⁸

⁸⁷ Pleasanton, City of. 2009. General Plan Circulation Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23898>>. Accessed October 18, 2021.

⁸⁸ Pleasanton, City of. 2018. Bicycle and Pedestrian Master Plan. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=32630>>. Accessed October 18, 2021.

The CAP 2.0 is a policy document containing strategies and policies that are consistent with the Pleasanton General Plan Circulation Element and Pleasanton Bicycle and Pedestrian Master Plan. CAP 2.0 Action P8 facilitates the adoption of a new ordinance that would require new commercial development to include amenities for bicyclists such as secured bicycle parking and employee locker rooms with showers, as well as dedicated bicycle parking for new multi-family residential development, and Action P9 would create a policy that allows community members to request the installation of new bicycle parking racks in public property. Additionally, CAP 2.0 Action P10 seeks to improve public transit connections to destinations within and nearby the City to make public transit a more attractive mobility option, and Action S4 would establish programs, such as bike safety courses, to increase the use of active transportation and school buses by students. These CAP 2.0 actions would advance active transportation and public transit within Pleasanton and decrease VMT and associated air pollutants and GHG emissions.

These CAP 2.0 actions would be consistent with the Pleasanton General Plan Circulation Element and Bicycle and Pleasanton Pedestrian Master Plan goals related to improving multi-modal facilities, reducing VMT and single-occupancy vehicles, encouraging active transportation, and reducing vehicle congestion within Pleasanton. Furthermore, the CAP 2.0 would seek to reduce VMT within the City, consistent with CEQA Guidelines section 15064.3, subdivision (b). Therefore, the CAP 2.0 would result in **no impact** related to consistency with plans addressing the transportation circulation system and CEQA Guidelines section 15064.3, subdivision (b).

- c. *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*
- d. *Would the project result in inadequate emergency access?*

The CAP 2.0 is a policy document containing strategies that are consistent with the Pleasanton General Plan and would not facilitate development beyond that allowed under the Pleasanton General Plan. Implementation of some CAP 2.0 actions, such as Action S8 which would provide for the addition of new green stormwater infrastructure, may involve construction within the local right-of-way. Construction activities have the potential to require lane closures and may impact traffic and vehicle speeds on the affected roadways; however, these impacts would be temporary and access to roadways would generally be maintained throughout project construction. Furthermore, future projects involving work in the public right-of-way would be required to coordinate with the City to ensure appropriate construction staging and adequate vehicular and pedestrian access on adjacent roadways pursuant to PMC Chapter 13.04, Encroachments.⁸⁹ Compliance with the PMC would ensure that significant impacts to the circulation system design, including safety impacts and emergency access, would not occur. As such, construction of CAP 2.0 projects would not create transportation design hazards or result in inadequate emergency access. Furthermore, the CAP 2.0 would facilitate increased active transportation and public transit use and decreased VMT within Pleasanton, which in turn would reduce potential transportation hazards and congestion conditions that can hinder emergency response. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to transportation hazards and emergency access.

⁸⁹ Pleasanton, City of. 2021. Municipal Code Chapter 13.04. Available: <<https://qcode.us/codes/pleasanton/>>. Accessed October 18, 2021.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Implementation of CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, could result in increases in VMT or changes affecting traffic design safety and emergency access. However, the CAP 2.0 is a policy document containing programs that are consistent with the Pleasanton General Plan and does not propose new development that would require the provisioning of new roadways. The CAP 2.0 strategies and actions promote alternative modes of transportation and reduction of VMT throughout Pleasanton, consistent with goals contained in the Pleasanton General Plan Circulation Element and Pleasanton Bicycle and Pedestrian Master Plan.^{90,91} Therefore, the CAP 2.0 would result in a ***less-than-significant cumulative impact*** related to transportation.

⁹⁰ Pleasanton, City of. 2009. General Plan Circulation Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23898>>. Accessed October 15, 2021.

⁹¹ Pleasanton, City of. 2018. Bicycle and Pedestrian Master Plan. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=32630>>. Accessed October 15, 2021.

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>e. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significant of the resource to a California Native American tribe?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1 (k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significant of the resource to a California Native American tribe?*

On October 20, 2021, the 12 following Native American Heritage Commission (NAHC)-identified local Native American tribal groups were formally notified that the City initiated environmental review of the CAP 2.0 and were invited to provide consultation:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Costanoan Rumsen Carmel Tribe
- North Valley Yokuts Tribe
- Guidiville Indian Rancheria
- Tamien Nation
- Indian Canyon Mutsun Band of Costanoan
- The Confederate Villages of Lisjan
- The Ohlone Indian Tribe
- Tule River Indian Tribe
- Wilton Rancheria
- Wuksache Indian Tribe/Eshom Valley Band

Under AB 52, Native American tribes have 30 days to respond and request further project information and formal consultation. As of the date of publication of this Draft IS-ND, no responses have been received, and no formal consultation has been requested. However, any AB 52 responses received from the aforementioned tribes within 30 days of October 20, 2021 will be addressed prior to finalization of this IS-ND.

The CAP 2.0 would not involve land use or zoning changes that would increase development within the City but would instead promote sustainable infrastructure development within the urbanized area of the City. As a policy document, the CAP 2.0 would also not directly entail ground disturbing activities. Implementation of the CAP 2.0 actions related to existing building energy, EV charging infrastructure, green stormwater management facilities, and tree planting may include minor construction activities.

Electrification retrofits associated with CAP 2.0 Actions P2, S2, and S3 may change the physical environment through the need for upgraded service and electrical panels, branch circuit upgrades, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. The physical changes these upgrades would entail are dependent on the year of building construction and location of electrical and service panels and plumbing connection of condensate drains, which sometimes may include modifications to the interior and/or exterior of buildings for wiring and panel replacement and minor excavation for connection of drainage to sewer systems.

Installation of EV chargers associated with CAP 2.0 Action P5 would primarily impact previously disturbed areas within existing parking lots and developments. However, the physical changes these installations and enhancements would entail are dependent on the location of construction for the EV charging connections, which in some cases may include minor temporary excavation.

In addition, CAP 2.0 Actions P13 and S8 would increase the planting of urban trees and construction of green stormwater infrastructure within the community. These actions could result in ground disturbance related to the construction of new stormwater infrastructure and planting new trees. However, the physical changes these installations and enhancements would entail are generally minor and would be dependent on the location of construction.

Implementation of these CAP 2.0 actions could impact unknown tribal cultural resources during construction that involves below-grade activities in previously undisturbed soils. However, the CAP

2.0 projects would be located and designed strategically to reduce ground disturbance to the maximum extent possible. In addition, CAP 2.0 projects and actions would be reviewed for consistency with applicable local, regional, and State tribal cultural and archaeological regulations prior to final siting and construction and would be required to implement BMPs in accordance with the Pleasanton General Plan Conservation and Open Space Element Goal 4 and its associated policies and programs, including the Pleasanton Standard Specifications and Details.^{92,93} These policies include a standard requirement during all ground disturbing activities that if potential tribal cultural resources are unearthed, construction must be halted, the City must be contacted, and a qualified professional must be hired to investigate and make recommendations. As such, tribal cultural resources would be protected prior to and/or upon discovery and, thus, impacts would be reduced to a minimal level. Therefore, the CAP 2.0 would result in a ***less-than-significant impact*** related to tribal cultural resources.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. CAP 2.0 projects, in combination with other cumulative projects anticipated under Pleasanton General Plan buildout, could increase the potential for adverse effects to unknown tribal cultural resources in Pleasanton. However, impacts to tribal cultural resources are site-specific; accordingly, as required under applicable laws and regulations, potential impacts associated with cumulative developments would be addressed on a case-by-case basis as cumulative project details and locations become known. CAP 2.0 projects and other cumulative projects would be required to comply with the Pleasanton General Plan and Pleasanton Standard Specifications and Details requirements for the halting of construction and proper treatment of any resources discovered during ground disturbance. Therefore, the CAP 2.0 would result in a ***less-than-significant cumulative impact*** related to tribal cultural resources.

⁹² Pleasanton, City of. 2009. General Plan Conservation and Open Space Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23910>>. Accessed October 7, 2021.

⁹³ Pleasanton, City of. 2016. Standard Specifications and Details. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=28996>>. Accessed October 13, 2021.

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

The CAP 2.0 is a policy document aimed at reducing solid waste production and energy and water consumption, amongst other issues, and the related GHG emissions throughout Pleasanton and does not include site-specific infrastructure designs or project proposals. Implementing the CAP 2.0 would not result in an increase in population and housing nor would it facilitate growth beyond that anticipated by the Pleasanton General Plan. As such, implementing the CAP 2.0 would not create new demand related to water, wastewater, stormwater drainage, electric power, natural gas power,

or telecommunications utilities. However, projects resulting from implementation of the CAP 2.0 could include redevelopment and/or restructuring of electricity and natural gas power facilities and infrastructure, as well as new local renewable energy generation and storage and green stormwater infrastructure projects. Potential impacts related to these strategies are discussed further below.

Water Supply Facilities/Infrastructure

The City of Pleasanton is the retail water supplier for development within the City. Pleasanton obtains its municipal water supply from a mix of local groundwater wells and Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7). According to the Pleasanton Urban Water Management Plan (UWMP), the City currently purchases approximately 80 percent of its water from Zone 7 and the remaining 20 percent is produced from the City's groundwater wells. Zone 7 uses a combination of water supplies to meet water demand which include imported surface water from the State Water Project, imported surface water transferred from the Byron Bethany Irrigation District, local surface water runoff captured in Del Valle Reservoir, and local groundwater. The City's distribution system consists of 327 miles of pipelines and 22,369 water service connections. There are 14 pump stations, 22 water storage reservoirs, one hydropneumatics tank, and approximately 51,500 linear feet of recycled water pipeline.⁹⁴

The City addresses issues of water supply in the Pleasanton UWMP, which is a long-range planning document used to assess current and projected water usage, water supply planning, and conservation and recycling efforts. According to the UWMP, the City has analyzed three different hydrological conditions to determine the reliability of water supplies: average/normal water year, single dry water year, and multiple, dry water year periods. The UWMP indicates that water supplies under the three hydrological conditions will be sufficient to meet demand through 2045. In addition, the UWMP includes a Water Shortage Contingency Plan.⁹⁵

CAP 2.0 Action P15 seeks to decrease community water use by promoting water efficiency retrofits, sustainable landscaping, and efficient landscaping irrigation. In addition, CAP 2.0 Actions S8 and P13 would increase green stormwater management infrastructure and the planting of urban trees, which would increase permeable surfaces throughout the City, improving water infiltration and groundwater recharge. Furthermore, the CAP 2.0 would not result in new land uses, such as increased residential or commercial development, that would contribute to an increase in water use compared to existing conditions or that would require relocation or construction of new water infrastructure. Therefore, the CAP 2.0 would have **no impact** related to the need for construction or expansion of water supply facilities and infrastructure.

Wastewater Treatment Facilities/Infrastructure

The City of Pleasanton collects wastewater within Pleasanton City limits as well as wastewater from the Castlewood Area of Alameda County. The sanitary sewer system currently serves an area of approximately 24 square miles and consists of 250 miles of gravity sewers, approximately 25,192 feet of force main, and ten pump stations.⁹⁶ Sewage treatment for the collected wastewater is

⁹⁴ Pleasanton, City of. 2021. 2020 Urban Water Management Plan. Available: <https://wuedata.water.ca.gov/public/uwmp_attachments/1451328873/R%20-%20680%20-%20City%20of%20Pleasanton%20-%20Final%202020%20UWMP.pdf>. Accessed October 18, 2021.

⁹⁵ Pleasanton, City of. 2021. 2020 Urban Water Management Plan. Available: <https://wuedata.water.ca.gov/public/uwmp_attachments/1451328873/R%20-%20680%20-%20City%20of%20Pleasanton%20-%20Final%202020%20UWMP.pdf>. Accessed October 18, 2021.

⁹⁶ Pleasanton, City of. 2019. Sewer System Management Plan. Available: <<http://admin.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=34321>>. Accessed October 18, 2021.

provided by the Dublin-San Ramon Services District (DSRSD) treatment plant located in Pleasanton. The DSRSD treatment plant currently treats approximately 10.3 million gallons per day (mgd) and treats approximately 10.7 mgd during wet weather conditions. The treatment plant has an average dry weather flow treatment capacity of approximately 17.0 mgd.⁹⁷

The CAP 2.0 would not result in new land uses that would generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment requirements. Rather, CAP 2.0 Strategy WR-1 would expand incentives for water fixture retrofits, such as low-flow faucets and toilets, that could help reduce the production and treatment of wastewater within the City. Furthermore, the CAP 2.0 would not require relocation or construction of new wastewater treatment infrastructure. Therefore, **no impact** related to need for construction or expansion of wastewater treatment facilities and infrastructure would occur.

Stormwater Drainage Facilities/Infrastructure

The City of Pleasanton maintains a system of storm drains, gutters, ditches, and arroyos to convey stormwater generated during rain events. As discussed in Section 10, *Hydrology and Water Quality*, implementation of CAP 2.0 Actions related to building electrification and energy and water efficiency upgrades, renewable energy production and storage, transportation, green stormwater infrastructure, and urban trees may promote infrastructure development that would involve small-scale construction. Construction of projects implemented in accordance with the CAP 2.0 could result in erosion and potential changes to drainage patterns. However, as described in Section 7, *Geology and Soils*, and Section 10, *Hydrology and Water Quality*, CAP 2.0 projects would be required to comply with local, State, and federal requirements during construction that would control stormwater runoff, erosion, and potential impacts to the stormwater drainage system. Furthermore, CAP 2.0 Actions S8 and P13 encourage new green stormwater management infrastructure such as bioswales and green roofs and the planting of additional urban trees within the community, that would help to reduce impermeable groundcover and stormwater flows to the City's drainage facilities. Therefore, **no impact** related to need for construction or expansion of stormwater drainage facilities and infrastructure would occur.

Electric Power Facilities/Infrastructure

Electric power service in the City is provided by EBCE using transmission infrastructure operated and maintained by Pacific Gas & Electric (PG&E). CAP 2.0 Strategies BE-1, BE-2, and TLU-3 promote building electrification of new and existing buildings, energy efficiency retrofits of existing buildings, and energy efficient LEED buildings for future development. CAP 2.0 Actions S3 and P4 support installation of small-scale solar PV systems and battery storage facilities at new developments and existing municipal facilities to provide greener renewable electricity within the City. In addition, CAP 2.0 Action P5 encourages new EV infrastructure throughout the City. These CAP 2.0 strategies and actions may slightly alter electricity demand within Pleasanton. However, the CAP 2.0 would serve as a pathway to reduce GHG emissions, including emissions related to energy consumption, and other beneficial environmental and sustainability effects. These benefits include a reduction in energy consumption. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to construction, expansion, or relocation of electric power facilities and infrastructure.

⁹⁷ Dublin-San Ramon Services District. 2021. District at a Glance Fact Sheet. Available: <<https://www.dsrds.com/home/showpublisheddocument?id=811>>. Accessed October 18, 2021.

Natural Gas Power Facilities/Infrastructure

PG&E provides natural gas services to the City. The CAP 2.0 would not involve new land uses that require new or additional natural gas service that could require the construction of new or expanded natural gas facilities. CAP 2.0 Actions P1 and P2 would encourage building electrification in new and existing buildings to reduce natural gas consumption within the City. Implementation of these actions could involve minor alterations to existing natural gas infrastructure as natural gas use is reduced. However, the CAP 2.0 would serve as a pathway to reduce GHG emissions, including emissions related to energy consumption, and other beneficial environmental and sustainability effects. These benefits include a reduction in natural gas consumption. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to construction, expansion, or relocation of natural gas facilities and infrastructure.

Telecommunications Facilities/Infrastructure

The City is served by existing telecommunications companies such as AT&T and Comcast. The CAP 2.0 would not alter existing telecommunications facilities and infrastructure and would not involve new land uses or development that would require new telecommunications infrastructure. Therefore, the CAP 2.0 result in **no impact** related to need for construction or expansion of telecommunication facilities and infrastructure.

- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*
- c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The CAP 2.0 is a policy-level document that does not include site-specific infrastructure designs or project proposals, nor does it grant entitlements for development that would have the potential to increase demand for water supply or wastewater treatment. Rather the CAP 2.0 contains strategies and actions to reduce water use and wastewater production, such as Strategies WR-1 and TLU-3, that encourage water efficiency retrofits to existing buildings and landscaping and LEED development for new buildings, that would reduce water demand and wastewater production. Thus, the CAP 2.0 would result in **no impact** related to water supply and wastewater treatment.

- d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?*

Pleasanton Garbage Service, Inc. provides solid waste services for residential and commercial uses within the City. Solid waste and recyclable materials collected in the City are sorted at the Pleasanton Transfer Station. Municipal solid waste generated in Pleasanton is primarily disposed of at the Vasco Road Sanitary Landfill in Livermore. The Vasco Road Sanitary Landfill has a maximum

permitted throughput of 2,518 tons of solid waste per day and has a remaining capacity of 7,379,000 cubic yards.⁹⁸

The CAP 2.0 focuses on sustainable infrastructure development and does not include land use or other policy changes that would result in increased residential, commercial, or other development that would increase solid waste generation within the City. CAP 2.0 Strategies MC-1 and MC-2 seek to reduce the amount of waste produced within the City by reducing consumption and implementing sustainable waste programs. These CAP 2.0 strategies align with federal, State, and local regulations aimed at reducing solid waste disposal and increase organic waste diversion, such as Senate Bill 1383. Additionally, because the CAP 2.0 is a policy document that would not facilitate growth beyond that anticipated by the Pleasanton General Plan, it would not generate solid waste in excess of State or local standards. Therefore, the CAP 2.0 would result in **no impact** related to solid waste.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. Other cumulative projects anticipated under Pleasanton General Plan buildout within the City could result in increases in population and additional use of or need for utilities and service systems. However, implementation of the CAP 2.0 and related infrastructure projects would not contribute to increases in population or induce additional population growth that would require additional use of existing City utilities or service systems. Rather, implementation of the CAP 2.0 would result in reduced energy and water consumption and solid waste and wastewater production. Therefore, implementation of the CAP 2.0 would result in a **less-than-significant cumulative impact** related to utilities and service systems.

⁹⁸ California Department of Resources Recovery and Recycling (CalRecycle). 2021. SWIS Facility/Site Activity Details: Vasco Road Sanitary Landfill. Available: < <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/9?siteID=8>>. Accessed October 18, 2021.

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

- d. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

According to the California Department of Forestry and Fire Protection (CalFIRE), the majority of the Pleasanton is not located in designated California Fire Hazard Severity Zones; however, the City contains and is adjacent to areas classified as moderate, high, and very high fire hazard severity zones at the wildland fringes located at the southern and western borders of the City.⁹⁹ According to the LHMP and the Pleasanton General Plan Public Safety Element, wildfire poses a high risk to portions of Pleasanton at the urban-wildland fringe. The central, urbanized portions of the City are not subject to wildfire risk.^{100,101}

Though there are areas within and surrounding Pleasanton that are at risk of wildfires, the CAP 2.0 is a policy-level document that does not propose new residential, commercial, or institutional development that could be at risk from wildfire, nor does it grant entitlements for development that would have the potential to directly cause wildfire. In addition, the CAP 2.0 includes Action S9 that aims to reduce the risk of wildfire in the community through awareness and educational campaigns, improving early wildfire detection, and implementing controlled burns to reduce combustible biomass. Thus, the CAP 2.0 would result in **no impact** related to wildfire.

Cumulative Impacts

The cumulative projects scenario is overall General Plan buildout for Pleasanton in 2025 plus Pleasanton population projections through 2045. The CAP 2.0 does not include new habitable development that could be at risk from wildfire, nor does it grant entitlements for development that would have the potential to cause wildfire. Rather, the CAP 2.0 includes Action S9 to reduce the risk of wildfire in the City. Therefore, the CAP 2.0 would result in **no cumulative impact** related to wildfire.

⁹⁹ California Department of Forestry and Fire Protection (CalFIRE). 2021. Fire Hazard Severity Zone Viewer. Available: <<https://egis.fire.ca.gov/FHSZ/>>. Accessed October 18, 2021.

¹⁰⁰ Pleasanton, Livermore, and Dublin, Cities of. 2018. Tri-Valley Local Hazard Mitigation Plan. Available: <<http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=35090>>. Accessed October 13, 2021.

¹⁰¹ Pleasanton, City of. 2008. General Plan Public Safety Element. Available: <<https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23899>>. Accessed October 13, 2021.

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The intent of the CAP 2.0 is to reduce GHG emissions from Pleasanton community operations through implementation of strategies and actions related to energy use, water consumption, transportation, solid waste, carbon sequestration, and community education and outreach. The CAP 2.0 strategies and actions are consistent with the Pleasanton General Plan and encourage residents, businesses, and the municipal facilities to reduce energy and water use, fuel use, VMT, and solid waste generation and the associated GHG emissions. The CAP 2.0 would not facilitate development that would eliminate or threaten wildlife habitats or eliminate important examples of the major periods of California history or prehistory. Therefore, as discussed in more detail in Section 4,

Biological Resources, Section 5, *Cultural Resources*, and Section 18, *Tribal Cultural Resources*, the CAP 2.0 would result in a **less-than-significant impact** related to biological and cultural resources.

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Implementation of the CAP 2.0 would result in a cumulatively beneficial reduction of GHG and air pollutant emissions across the City. In addition, as discussed throughout the respective cumulative impacts discussions within this document, the CAP 2.0 would not result in significant cumulative impacts. Rather, implementation of the CAP 2.0 would be consistent with Pleasanton General Plan policies aimed at reducing emissions of GHGs and air pollutants, reducing VMT, reducing energy and water supply demands on utilities, and decreasing solid waste generation. Therefore, the CAP 2.0 would result in an overall **less-than-significant cumulative impact** related to all CEQA topics addressed within this document.

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, GHG emissions and climate change, hazards and hazardous materials, noise, and transportation impacts. As detailed in the preceding sections, the CAP 2.0 would not result, either directly or indirectly, in substantial adverse effects related to air quality, GHG emissions, hazards, and noise. As discussed in more detail in Section 3, *Air Quality*, Section 13, *Noise*, and Section 17, *Transportation*, the CAP 2.0 could cause temporary construction impacts related to transportation, air quality, and noise that could, in turn, affect human beings but would not result in substantial adverse effects. However, as discussed throughout this document, the CAP 2.0 would serve as a pathway to reduce operational GHG emissions and would result in other positive environmental and sustainability effects. These benefits include reduction in building energy and water consumption, VMT, and solid waste generation and improved air quality. Therefore, the CAP 2.0 would result in a **less-than-significant impact** related to potential for adverse effects on human beings.

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List of Preparers

Rincon prepared this CAP 2.0 Initial Study-Negative Declaration under contract to the City of Pleasanton. Persons involved in data gathering, environmental impact analysis, quality review, graphics preparation, and document formatting include the following.

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Appendix A

Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants

Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants

Pollutant	Sources	Health Effects	Typical Controls
Ozone (O ₃)	Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil); solvents; petroleum processing and storage.	Breathing difficulties, lung tissue damage, vegetation damage, damage to rubber and some plastics.	Reduce motor vehicle reactive organic gas (ROG) and nitrogen oxide (NO _x) emissions through emission standards, reformulated fuels, inspections programs, and reduced vehicle use. Limit ROG emissions from commercial operations, gasoline refueling facilities, and consumer products. Limit ROG and NO _x emissions from industrial sources such as power plants and manufacturing facilities.
Carbon monoxide (CO)	Any source that burns fuel such as automobiles, trucks, heavy construction and farming equipment, residential heating.	Chest pain in heart patients, headaches, reduced mental alertness.	Control motor vehicle and industrial emissions. Use oxygenated gasoline during winter months. Conserve energy.
Nitrogen dioxide (NO ₂)	See Carbon Monoxide.	Lung irritation and damage. Reacts in the atmosphere to form ozone and acid rain.	Control motor vehicle and industrial combustion emissions. Conserve energy.
Sulfur dioxide (SO ₂)	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Reduce use of high sulfur fuels (e.g., use low sulfur reformulated diesel or natural gas). Conserve energy.
Respirable particulate matter (PM ₁₀)	Road dust, windblown dust, agriculture and construction, fireplaces. Also formed from other pollutants (NO _x , SO _x , organics).	Increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling.	Control dust sources, industrial particulate emissions, woodburning stoves and fireplaces. Reduce secondary pollutants which react to form PM ₁₀ . Conserve energy.
Fine particulate matter (PM _{2.5})	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also formed from reaction of other pollutants (NO _x , SO _x , organics, and NH ₃).	Increases respiratory disease, lung damage, cancer, and premature death, reduced visibility, surface soiling. Particles can aggravate heart diseases such as congestive heart failure and coronary artery disease.	Reduce combustion emissions from motor vehicles, equipment, industries, and agricultural and residential burning. Precursor controls, like those for ozone, reduce fine particle formation in the atmosphere.
Lead	Metal smelters, resource recovery, leaded gasoline, deterioration of lead paint.	Learning disabilities, brain and kidney damage. Control metal smelters.	No lead in gasoline or paint.
Sulfur Dioxide (SO ₂)	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Reduce use of high sulfur fuels (e.g., use low sulfur reformulated diesel or natural gas). Conserve energy.
Sulfates	Produced by reaction in the air of SO ₂ , (see SO ₂ sources), a component of acid rain.	Breathing difficulties, aggravates asthma, reduced visibility.	See SO ₂

Pollutant	Sources	Health Effects	Typical Controls
Hydrogen Sulfide	Geothermal power plants, petroleum production and refining, sewer gas.	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations).	Control emissions from geothermal power plants, petroleum production and refining, sewers, and sewage treatment plants.
Visibility Reducing Particulates	See PM _{2.5}	Reduced visibility (e.g., obscures mountains and other scenery), reduced airport safety.	See PM _{2.5}
Vinyl Chloride	Exhaust gases from factories that manufacture or process vinyl chloride (construction, packaging, and transportation industries).	Central nervous system effects (e.g., dizziness, drowsiness, headaches), kidney irritation, liver damage, liver cancer.	Control emissions from plants that manufacture or process vinyl chloride, installation of monitoring systems.
Toxic Air Contaminant (TAC)	Combustion engines (stationary and mobile), diesel combustion, storage and use of TAC-containing substances (i.e., gasoline, lead smelting, etc.)	Depends on TAC, but may include cancer, mutagenic and/or teratogenic effects, other acute or chronic health effects.	Toxic Best Available Control Technologies (T-BACT), limit emissions from known sources.

Source: Compiled by Rincon Consultants, Inc. in October 2021

Appendix B

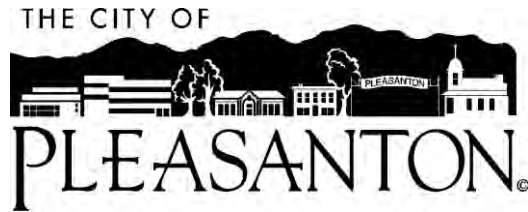
Description of Greenhouse Gases of California Concern

Description of Greenhouse Gases of California Concern

Greenhouse Gas	Physical Description and Properties	Global Warming Potential (100 years)	Atmospheric Residence Lifetime (years)	Sources
Carbon dioxide (CO ₂)	Odorless, colorless, natural gas.	1	50–200	Burning coal, oil, natural gas, and wood; decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; oceanic evaporation; volcanic outgassing; cement production; land use changes
Methane (CH ₄)	Flammable gas and is the main component of natural gas.	28	12	Geological deposits (natural gas fields) extraction; landfills; fermentation of manure; and decay of organic matter
Nitrous oxide (N ₂ O)	Nitrous oxide (laughing gas) is a colorless GHG.	298	114	Microbial processes in soil and water; fuel combustion; industrial processes
Chloro-fluoro-carbons (CFCs)	Nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (level of air at the Earth's surface); formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms.	3,800–8,100	45–640	Refrigerants aerosol propellants; cleaning solvents
Hydro-fluoro-carbons (HFCs)	Synthetic human-made chemicals used as a substitute for CFCs and contain carbon, chlorine, and at least one hydrogen atom.	140 to 11,700	1–50,000	Automobile air conditioners; refrigerants
Per-fluoro-carbons (PFCs)	Stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface.	6,500 to 9,200	10,000–50,000	Primary aluminum production; semiconductor manufacturing
Sulfur hexafluoride (SF ₆)	Human-made, inorganic, odorless, colorless, and nontoxic, nonflammable gas.	22,800	3,200	Electrical power transmission equipment insulation; magnesium industry, semiconductor manufacturing; a tracer gas
Nitrogen trifluoride (NF ₃)	Inorganic, is used as a replacement for PFCs, and is a powerful oxidizing agent.	17,200	740	Electronics manufacture for semiconductors and liquid crystal displays

Source: Compiled by Rincon Consultants, Inc. in October 2021

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ATTACHMENT 3A: COMMENTS RECEIVED VIA EMAIL

From: Varsha Nene <[REDACTED]>
Sent: Monday, November 29, 2021 7:23 PM
To: Megan Campbell <mccampbell@cityofpleasantonca.gov>
Subject: Re: Draft CAP 2.0

Hello Megan,

Great work by City staff and consultants on this urgent matter in a very thorough format. I missed the deadline to comment on the report but wanted to send some comments here:

1. For Green Space, parking lots of retail & office buildings could be explored to install trees with large canopies to provide shade for cars as well as help reduce GHG. For existing parking lots, city should allow a slight reduction in required parking spaces to convert into spaces to install trees. Medians don't work well for trees since there isn't enough space for roots to grow.
2. City parking lots which need repaving to be installed with permeable asphalt to allow rainwater to percolate into the ground to replenish natural aquifers.
3. Carbon sequestration by applying a thin layer of compost on open lands.
www.stopwaste.org/about-stopwaste/news/stopwaste-and-partners-fight-climate-change-with-compost

Thank you for your hard work & dedication!

Varsha Nene
Principal
Harmony Architects
[REDACTED]

<http://www.harmonyarchitects.com/>

From: Mick Hanou [REDACTED]
Sent: Thursday, December 2, 2021 10:49 AM
To: Megan Campbell <mcampbell@cityofpleasantonca.gov>
Subject: RE: Draft CAP 2.0 - feedback from Hanou

Hello Meghan,

I've been following this over the last few months and thank folks for their efforts.

I may not be able to attend today's meeting but wanted to have some input – which you may be able to share or pass on to the audience.

- | • BE1 Decarbonization – P1 – Electrification of new buildings for heating is not as efficient as gas. This follows the basic laws of thermodynamics – (science) engineering that can't be disputed. Loss of transmission in moving the electricity is one main reason. But it just takes more electricity to heat something than does gas.
 - o **Unless that electricity is generated by solar/wind/hydroelectric, all it is doing is moving CO2 emissions to elsewhere as it would still be generated by gas-fired plants (or worse).**
- | • BE1 Decarbonization – P2 – I'm glad to see that forcing existing residential buildings to switch from gas to electric is off the Cap 2.0! Really a silly thing to have ever proposed. In addition to the points above, the costs would be prohibitive and basically waste the costs of the existing gas infrastructure.
- | • BE3 – P4 – Solar – **Has the Cap 2.0 considered that there is now an effort underway to eliminate or reduce residential solar NEM rebates?** (Independent November 25, 2021, page 8). That would totally undermine our efforts towards reducing power generation from Gas Power plants by using solar. **This one is pretty important to consider!**

I've also attached an article in the Economist from April 10, 2021. "**A New Use for Microwaves**". Though the science is about microwaves, **there are a lot of good points about the inefficiency and cost of converting from gas to electric heating.**

- | • Page 21 of the [Draft IS-ND](#) is a negative declaration. Although some of the subsections are a bit confusing as to whether they are contributing to the effort to reduce Energy use (6, page 45) or GHG (8, page 54). One heck of a thorough analysis though! Took a long time to go through.

Has anyone considered giving credits for those of us whose yards sequester 100s of pounds of CO2 that go into our green waste bins? I consider myself close to carbon-neutral, with easily a couple of tons of green waste recycled, roof solar panels, effective retrofit of insulation to reduce cooling bills, use of a small portable heater rather than heating the entire house in the winter, and only one or two fires in the fireplace I have at Christmas – all sourced by wood grown in my yard.

Take your time answering as I know you are getting ready for the meeting.

Regards,

Mick Hanou

[REDACTED]
Pleasanton, Ca 94566

[REDACTED]
(after 9:30am Pacific Time)

ATTACHMENT 3: PUBLIC COMMENTS

Prepared for the December 15, 2021, Committee on Energy and the Environment Meeting

Covid-19 vaccines

Sorting signal from noise

With millions vaccinated, rare side-effects of covid jabs are coming to light

CHRIS WHITTY, England's chief medical officer, vividly recalls a nerve-racking moment on December 8th 2020. That was the day when England became the first country to roll out a covid-19 vaccine, a jab developed by Pfizer and BioNTech. Near midnight on vaccination day one "We were discussing it and just thinking 'What are we dealing with here? These are small numbers and we've already had several dangerous near misses,'" said Dr Whitty in a recent talk at the Royal Society of Medicine. In some people, it had turned out, the vaccine sets off anaphylaxis, a life-threatening allergic reaction. But this is rare. It occurred just once among the 22,000 or so people vaccinated in the trial, which could have been by chance. Now, with hundreds of millions vaccinated, the rate at which it occurs is clearer: five per million.

Fortunately, this side-effect is not only extremely rare but shows up soon after the jab. And treatment for it exists. Everyone who receives the Pfizer vaccine is now asked to stick around for 15 minutes, just in case. There have been no deaths from anaphylaxis related to the vaccine.

As millions of jabs of various covid-19 vaccines are administered every day, such rare adverse reactions will inevitably emerge. On April 7th both Britain's health officials and the European Medicines Agency (EMA), which regulates drugs in the European Union, said there is strong evidence that AstraZeneca's covid-19 vaccine may be linked with very rare blood clots, often in the brain or the abdomen. The EMA experts reached their conclusion based on a review of 86 reported cases, 38 of which were fatal. Britain's experts reached the same conclusion from data on 79 cases, 19 of which were fatal. Both the EMA and Britain's drug regulator concluded that the vaccine's benefits outweigh the potential risk of the clots. But Britain's officials, armed as usual with some nifty charts for their televised briefing, said that for people under 30 the risks and benefits from the vaccine were "finely balanced", so a different jab may be preferable.

The investigation of the suspected clots from the AstraZeneca jab has been a prime example of the challenge of sorting the signal of a vaccine's side-effects from the cacophony of medical emergencies that happen to millions of people every day. Vaccine-safety experts have two ways to un-



Platelets at work

caused by a vaccine, says Kathryn Edwards of the Vanderbilt University School of Medicine, in Nashville, Tennessee. They can compare its rate in vaccinated people against the "background" rates of it that are observed in the unvaccinated. And they can look for unusual features of the medical condition being investigated.

The first signals emerged in late February, when doctors in several European countries noticed clusters of blood clots in people recently given the AstraZeneca jab, some of whom died. Most were women under 60, which was not terribly surprising because many EU countries were, at first, not convinced that the jab worked in the elderly and used it largely for essential workers, such as nurses, teachers and social-care workers—professions in which most employees are women.

The EMA's data as of March 22nd suggested that the rate of brain clots in people under the age of 60 who had had AstraZeneca's vaccine was one in 100,000—higher than would be expected normally. Precisely how much higher, though, is hard to tell. The rates of such rare and difficult-to-diagnose conditions vary a lot by country, age and sex. Estimates of the incidence of such brain clots have ranged from 0.22 to 1.57 cases per 100,000 people per year, and they are more common in younger people and women.

As doctors began to look more closely, something curious emerged. Many patients with suspected clots from the vaccine had unusually low levels of platelets. These are fragments of special precursor cells that float in the blood. Their job is to form blood clots (they rush to the site of a cut or other bleeding). Low platelet levels therefore usually result in uncontrolled bleeding, not clots.

With this new information to hand, Britain's medical regulators searched their data on vaccinated people for the unusual tandem of clots and low platelet counts. They found four cases per million people vaccinated, a rate several times lower than in the EU. One explanation is that Britain, unlike the rest of Europe, had used the jab primarily in older people. The rate at which the clots occurred in Britain declined steadily with age. Importantly, Britain's experts found that the clots occurred as much in men as they did in women.

This combination of blood clots and low platelet counts is something that doctors know how to diagnose and treat, says Jean Marie Connors, a haematologist at Brigham and Women's Hospital, in Boston. It resembles a condition seen in some people who are given heparin, a drug used widely to treat blood clots. For unknown reasons, some people develop an immune reaction to heparin, which results in blood clotting so profound that it depletes their platelets. The same reaction appears to be provoked by the vaccine.

Medical societies in several countries have already issued guidelines to doctors on how to spot and treat this rare reaction to the AstraZeneca vaccine. With vigilance and appropriate care, the extremely rare deaths that may result from it will become even rarer. ■

Domestic heating

A new use for microwaves

If you can have microwave ovens, why not microwave boilers?

DECARBONISING AN ECONOMY is a big job. Coal- and gas-fired power plants must be swapped for wind, solar or nuclear ones. Petrol-driven cars must be replaced by electric versions. Less attention is paid to heating. But in cold countries such as Britain, warming houses, offices and the like consumes more fossil fuel than either electricity generation or transport.

The fuel involved is usually natural gas. This is burned in a central boiler in order to heat water that flows to radiators elsewhere in the building. Britain's government would like to change this. From 2025 gas-fired boilers will be banned in newly built homes. By the mid-2030s installing new gas boilers in existing houses will be banned, too.

The question is what will replace them. Unlike electricity generation, where renewables are proving popular, or cars, where battery-powered vehicles are rapidly becoming established, the market for

green heating is anyone's to play for. The usual suspects (assuming any electricity supplied is generated using appropriately carbon-free means) include electric immersion heaters, heat pumps (devices that work a bit like refrigerators in reverse, in that they extract heat from a building's surroundings and then pump it into that building), and burning hydrogen instead of natural gas. Engineers at a small British company called Heat Wayv, though, think they have another contender: microwaves.

The principle is the same as in a microwave oven. Many molecules, water included, are electrically dipolar. This means they have a positive charge at one end and a negative one at the other. They will therefore rotate to align themselves with a strong electromagnetic field. If that field is oscillating, as is the case with electromagnetic radiation such as microwaves, then the molecules themselves will oscillate too—bumping and jostling their neighbours as they do so, and thus creating heat.

But there is more to building a microwave boiler than simply repurposing the parts used for an oven, says Phil Stevens, one of Heat Wayv's founders. Most microwave ovens employ magnetrons—chunky devices built by surrounding a cathode with a carefully shaped anode that is designed to produce electromagnetic radiation of a specific frequency. With the help of a pair of big chipmakers, Heat Wayv has come up with a solid-state device that performs the same job, but which fits on a 10-square-centimetre silicon chip.

Arrays of these devices beam microwaves into water in a boiler, heating it up. The pipes that carry the water are also made of microwave-sensitive materials, as is the insulation that lags them. And a heat exchanger recycles residual waste warmth. The upshot, says Mr Stevens, is a boiler that is about 96% efficient. The best existing gas boilers rarely exceed 90%.

Efficiency matters, because the move away from gas may mean higher heating bills. Electricity generated from fossil fuels is necessarily more expensive than the fuels themselves. In Britain, at the moment, a given amount of energy delivered as electricity costs three or four times as much as the same amount delivered by natural gas. Switching to renewables is unlikely to change that much. Though the "fuel" involved (wind or sunlight) is free, other costs are often higher than for conventional power stations. Forced by law to switch from gas, then, customers will surely have their eyes on the cost.

Heat Wayv argues its technology offers advantages over rival methods. Immersion heaters must run continuously to deliver water at a suitable temperature. That often warms water which is never used. By contrast, and like existing gas boilers, microwaves heat water quickly enough to pro-

vide it only when it is needed.

Heat pumps, too, have drawbacks. Their efficiency plummets on cold days, when they are needed most. They are also bulky. And they generate water that is warm rather than hot, often requiring the retrofitting of bigger radiators or underfloor heating.

Hydrogen, meanwhile, must either be extracted from natural gas or created by running electrical currents through water. Both processes are inherently inefficient

and the former is hardly green. Also, the infrastructure needed to produce and deliver hydrogen in quantity does not yet (and may never) exist.

Heat Wayv hopes to be producing microwave boilers for sale by 2024, in time for the first stage of the government's ban. Mr Stevens says the idea has attracted interest from most of Britain's big housebuilders. Soon, perhaps, microwaves may heat people's water as well as their food. ■

Model misbehaviour

For the second time in a month, an anomaly in the laws of physics has been noted

“WHO ORDERED that?” This was the reaction, famous in particle-physics circles, of Isidor Isaac Rabi to the discovery of the muon. Rabi, a Nobel laureate who helped America develop the atom bomb, was reflecting physicists' general surprise that muons, which are, to all intents and purposes, just heavy and unstable versions of electrons, actually exist. To an orderly physicist's mind they somehow seemed superfluous to Nature's requirements.

Establishing the muon's nature was, though, an important part of the creation of what is known as the Standard Model of particle physics. This, along with Einstein's general theory of relativity (actually a theory of gravity), is one of the two foundation stones on which modern physics is built. Yet the Standard Model is known to be incomplete for several reasons, one of which is precisely the fact that it does not yet embrace gravity. So it seems fitting that an answer to Rabi's question, and with it a path to an explanation of physics beyond the Standard Model, may now have been opened

by a measurement made on muons.

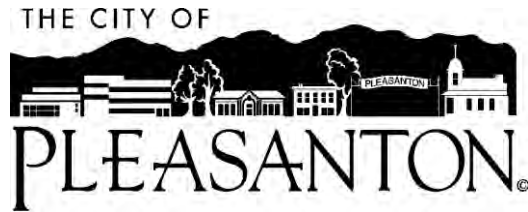
The study in question, called Muon g-2, used a superconducting storage device (pictured) to look at the magnetic behaviour of muons. Experiments conducted with this machine at Brookhaven National Laboratory, in New York state, in the 1990s, had suggested an anomaly in such behaviour—a deviation of about 0.1% from theoretical predictions about the way that muons should spin in magnetic fields—but without sufficient statistical power to be sure. If this anomaly were real, it would suggest that an unknown force was tugging on the muons in the experiment.

To have another go at finding out, the storage device was shipped to Fermilab, outside Chicago, in 2013. There, it was linked to equipment which gave it more oomph. This boost has, indeed, confirmed the previous result—though irritatingly not quite unambiguously enough for physics' finicky requirements. These demand “five sigma” of significance (five standard deviations from the mean, for the mathematically inclined). The new data, added to the old, and announced on April 7th, give only 4.2 sigma. That, nevertheless, suggests there is only one chance in 40,000 that the result is a fluke.

This is the second time in a month that a group of physicists has published a result which might lead beyond the Standard Model, for on March 23rd researchers on a project being conducted at CERN, home of the Large Hadron Collider, the world's largest particle accelerator, pulled a similar surprise. Their work involved the decay of particles called B-mesons into electrons, muons and their antimatter equivalents. Again, the details are not yet quite as statistically robust as might be desired. But two such findings in short order give hope that the hunt for physics beyond the Standard Model may soon run its quarry down.



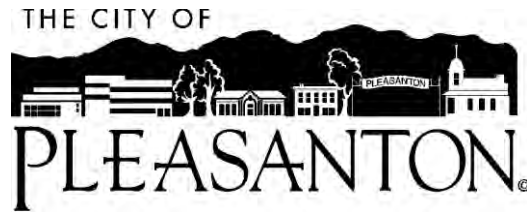
A magnetic moment



ATTACHMENT 3B: COMMUNITY MEETING FEEDBACK

The City held a Community Meeting to receive feedback on the draft CAP 2.0. The City heard from about 10 participants and key themes/comments from the discussion are summarized below:

- **Desire to be a leader.** Participants want to see Pleasanton as a stronger leader on climate action across the state.
- **General support for the draft CAP 2.0, with the acknowledgement we need to do more.** Participants supported more substantial and expedited action than what is presented in the draft CAP 2.0. Specific areas mentioned include renewable energy storage, green building, commuting, and carbon sequestration.
- **Housing.** The importance of housing element implementation and locating affordable housing near places of employment in town was noted as a critical element to reduce commutes.
- **Education.** Participants emphasized the importance of educating the community, however, there was also some concern that education alone will not be enough. Participants discussed tactics for educating the public, such as induction cooktop demonstrations, green home tours, and farmers market outreach. The education may go hand in hand with incentives and rebates to encourage change. The suggestion was also made to shift as much as possible from incentives to requirements.
- **School Partnerships.** Participants supported partnering with schools to foster discussion and raise awareness of climate issues and needs.
- **Behavior change.** Participants discussed the roles of individual action in making progress on climate change.
- **Shifting “secondary” to “primary” actions.** Participants supported moving actions from “secondary” to “primary” in the draft CAP 2.0. Specifically, Action P16 (to prepare and build resilience to wildfires) was mentioned as an action to move to primary.
- **City staffing.** Participants encouraged the City to hire an FTE to manage the CAP 2.0 program noting sufficient staffing will be critical.
- **Consideration of greywater** was mentioned as something that should be included in the CAP 2.0.
- It was discussed that one challenge will be to **receive consistent funding** to implement the CAP 2.0. Many important initiatives are included, but they will need to be funded throughout the next ten years.



ATTACHMENT 3C: COMMENTS RECEIVED THROUGH ONLINE KONVEIO PLATFORM

Page	Comment	Comment From
3	Does the City have a standard indigenous land acknowledgment? This would be an appropriate place for it. See UC-Berkeley's which specifically identifies the Verona Band (i.e., near Castlewood): link	Todd Nelson
12	I really like this graphic depiction of CAP 2.0 vision in concrete and digestible terms.	Terry Chang
24	Because climate change is so volatile (wildfires today and floods tomorrow; funding today and none tomorrow). It's important for our city to have shelf ready projects, waiting for the right funding source or partner. From my experience Pleasanton has missed out on grant opportunities in the past. In adopting this plan we will need the authority (not quite the right word, but you get the drift) to jump on opportunity.	Jocelyn Combs
29	Employee housing belongs in this diagram somewhere. Otherwise the green bike and trail transportation is purely recreational, and won't cut GHG emissions significantly. Where would staff recommend placing the house icon?	Becky Dennis
30	Why specify "those without vehicles"? Wouldn't viable alternatives be attractive to those *with* vehicles and therefore have greater impact on emissions reduction?	Todd Nelson
30	Let's look at adding services closer to where residents live. For instance Ruby Hill residents have to drive for all of their services. Having neighborhood services (grocery, banking, etc.) within their neighborhood could cut their vehicle miles traveled.	Jocelyn Combs

Page	Comment	Comment From
30	Encourage residents to walk, ride bikes, and drive electrical golf carts around town. Golf carts can be charged during the day, fleets of them can be stationed throughout the town. Anything to get people out of gas-powered vehicles.	Jocelyn Combs
35	Does this mean "...shifting *heating* from natural gas to electric fuels..."? I wouldn't think any building is generating its own electricity on-site, but rather buying it from PG&E - so PG&E determines the source of electricity. Is this strategy about converting natural gas heating to electric heating?	Todd Nelson
36	Staff and the E&E Commission would draft, for council approval, an "electrification trigger policy". This would require electrification of commercial and industrial buildings (and perhaps residential) when they are sold or expanded or any other trigger that would open the door to this modification.	Jocelyn Combs
37	"Covered Projects" Will all new commercial and residential projects then be emissions free and/or carbon neutral? What about projects that increase VMT and commute related GHG emissions? Can the City require 100% mitigation on these anticipated impacts through developer participation in Pleasanton's other CAP 2.0 programs on site or within Pleasanton's planning area? Can we develop incentive programs to attract projects that will be net neutral?	Becky Dennis
38	Storage systems vary widely in capacity. A residential storage system capable of supporting an hour of power outage is much different than one capable of sustaining a house solely on solar panels continuously. At some point, storage capacity will need to be defined.	Todd Nelson
39	One important indicator of improved sustainability would be a significant increase in the percentage of Pleasanton residents who work in Pleasanton. Providing housing opportunities for the employees of businesses located, in Pleasanton, most of whom earn 60%AMI or less, will do the most to reduce emissions and VMT. Those earning above 80% AMI commute to locations outside the Tri-Valley.	Becky Dennis
39	Was there any discussion of urban heat islands? This would be in support of "adaptation" rather than reducing GHG emissions. The City is currently making our existing streets blacker by resurfacing, thereby making our ambient temperature hotter which worsens the effects mentioned earlier. Other technologies are available for road surfaces but there are trade-offs.	Todd Nelson
40	Does this include the Alameda County Safe Routes to School (SR2S) program?	Todd Nelson

Page	Comment	Comment From
44	Can we measure and report numbers for Pleasanton residents who work within Pleasanton? I suspect the balance is quite bad for those commuting in/out vs those who work locally. A baseline metric would be useful.	Todd Nelson
44	Building housing in infill areas will reduce VMT and support active and shared transportation investments. Does this strategy include building more housing? If yes, this should be made more clear.	Krute Singa
44	Transportation and Land Use A measure of succes should be an increased percentage of Pleasanton residents who work in Pleasanton.	Becky Dennis
44	Can we ask the school district to keep a count of students who walk, bike or take a bus vs getting dropped off by car? Having a baseline number would allow us to measure improvement.	Todd Nelson
56	"Green infrastructure" and "stormwater management" seem like buzzwords. Are they defined somewhere else?	Todd Nelson
57	While "resilience" and "sustainability" are related, they are not the same. The Performance section shows very little about resilience. Do we need a tri-valley evacuation plan? Do we need an additional fire station closer to fire-prone or remote areas? Do we need different fire-fighting equipment for remote areas? What precautions do we need for radioactivity should Lawrence Livermore lose power or suffer fire damage? Do we need to improve notification in the event of excessive water contamination (PFAS, etc.)? That's what I expected here.	Todd Nelson
73	"Miles of new infrastructure" is not a defined metric in the Bike/Ped Master Plan. Is this a readily available metric from the City? Regardless, I think "mode share" is a better metric because it covers multiple modes of travel (even though I question the accuracy of that number ...as a member of the Bike/Ped & Trails Committee).	Todd Nelson