

# May 10, 2021

### AGENDA ITEM #3

**TO**: Environmental Commission

**FROM**: Emiko Ancheta, Staff Liaison

**SUBJECT**: Climate Action and Adaptation Plan Update Status Report

### RECOMMENDATION:

Receive update on Climate Action and Adaptation Plan (CAAP) progress

# **BACKGROUND**

In 2013 the City of Los Altos adopted the Climate Action Plan in accordance with the State Assembly Bill 32 which required public agencies in California to implement measures to reduce greenhouse gas (GHG) emissions to year 1990 levels by 2020. Cities needed to adopt a plan to addresses carbon emissions and establish an implementation plan for programs and facilities. A Climate Action Plan (CAP) is the policy document that provides the framework to achieve those goals. Since the adoption of the 2013 CAP, two annual report updates were done in 2015 and 2016. The City Council continues to make the environment a priority and directed staff to update the CAP. In December 2020, the City entered into contract with EcoShift Consulting to prepare a Climate Action and Adaptation Plan (CAAP) for the City of Los Altos.

In January 2021, staff began working with the consultant and the Environmental Commission Subcommittee to develop the Los Altos CAAP. The following summarizes the scope of services.

Task I: Project Management: Consultant Project Team will develop a project management plan in conjunction with City staff. The consultant will use best practices in project management methodologies to ensure the project remains on-task and on schedule. Task Deliverables include Kick-Off meeting with City staff, ongoing Bi-Weekly conference call meetings with City staff, attendance at meetings and public hearings for the Environmental Commission and City Council, presentation materials and summaries for meetings and public hearings and Ad hoc communication. Task II: Data Inventory, GHG Forecast and Vulnerability Assessment: Consultant Project Team will use ICLEI protocols for this project and ClearPath portal to conduct the inventories and forecasting. Task Deliverables include update of baseline GHG inventory workbooks, summary GHG Report detailing results of inventory and documenting any methodological changes, forecast municipal and community GHG emissions, update GHG emissions reduction targets, vulnerability Assessment assessing the threats of climate risks.

Task III: Review and Assess Relevant City Plans, Policies, Programs and Codes: Consultant Project Team will conduct a review of current City measures, followed by a systematic process to compile the City's current, relevant goals, strategies, actions, tactics, and recommendations. Task Deliverables include collection of all relevant existing GHG reduction efforts, quantify efforts using



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agreed-upon emission factors, develop matrix detailing the City's current emissions reduction efforts, and explaining the relevance of existing policies to each other and to future CAAP measures, and policy framework matrix.

Task IV: Develop and Evaluate GHG Reduction and Climate Adaptation Measures: Consultant Project Team's roadmap process will identify critical pathways to achieving the City's climate goals, help identify issues and barriers to each pathway, and recommend mitigation strategies to overcome barriers. Task Deliverables include list of proposed CAAP measures, summary of transportation scenarios and list of VMT and GHG reduction policies for possible inclusion in the CAAP, adaptation strategies, list of measures and actions to attain City goals, threat matrix detailing types and degree of threats from the effects of climate change and reporting template for reporting on adaptation measures.

Task V: Prepare Draft Climate Action and Adaptation Plan: Consultant Project Team will deliver a comprehensive and robust CAAP that will be designed to be complementary to existing policies for reducing waste and energy use, reducing single occupancy- vehicle trips, and encourage healthy lifestyles. Task Deliverables include draft CAAP that includes Executive Summary summarizing report's purpose, methodology, findings, and recommendations, and materials for ongoing outreach and education.

**Task VI: Finalize Climate Action and Adaptation Plan:** Consultant Project Team will compile all feedback from the draft CAAP review and integrate comments into the final CAAP document. **Task Deliverables** include finalized CAAP, meeting with City to discuss how input and comments were integrated info final CAAP, attendance at 3 public meetings (1 EC meeting and 2 CC meetings).

**Task VII: CEQA Compliance:** Consultant will prepare an Administrative Draft IS/MND with the following components:

- Project Description
- CEQA Environmental Checklist Form
- Mandatory Findings of Significance
- Contacts and Bibliography
- Mitigated Negative Declaration or Negative Declaration
- Notice of Determination

# **DISCUSSION**

The Environmental Commission CAAP sub-committee members, Bruno Delagneau, Raashina Humayun and Don Weiden attend CAAP meetings and provide support and input with staff and the consultant to develop the CAAP. Receive update on CAAP development progress and status.

## Attachments:

- A. CAAP Meetings Summary
- B. CAAP Schedule Timeline
- C. CAAP Outreach and Engagement Schedule
- D. CAAP Focus Group 1 Vulnerability Assessment

# **Climate Action & Adaptation Plan Meetings Summary**

### CAAP Kick-Off (January 14, 2021):

- Introduction of lead City staff, Environmental Commission subcommittee and consultant team
- Input for the CAAP development included:
  - Two focus areas should be existing buildings and reducing water use (the City is considering an energy audit of existing buildings).
  - Tie aspirational goals to concrete actions with specific reasons for the recommendations provided.
  - HR has some alternative commute benefits in place, including alternative work schedules and a public transit pre-tax benefit.
  - o Important to present the value proposition of the plan to residents and businesses (explain the costs & benefits) to gain buy-in.
  - Two important focus areas will be tracking & measurement of actions and defining the City's GHG reduction target(s).
  - o Community outreach will be important to engage the community and obtain input.
  - Action items and measures should be simple and conveyable to create a consistent repeatable message.
  - Important to identify the key drivers and goals of the plan (regulatory, leadership, etc.), as well as identifying where and how to best invest resources to achieve the plan's goals.
  - An updatable GHG model would be preferable, as well as an investigation of land userelated mitigation measures, and an investigation of future and retroactive actions (ex.: building codes to influence energy intensity).
  - A focus should be on creating a bold plan that incorporates technological advances, as well as raising the visibility of the plan in the eyes of the public and decision-makers.
  - o The Reach Codes will have a big impact on future energy use in the City.
  - Per-capita residential PV and EV charging adoption are high within the City there is interest in going off-grid among some residents.
  - The collection of data and using it in an effective reporting format will be important in demonstrating the plan's ongoing success, as well as communicating local and regional benefits.
- A brief presentation was given by the consultant team on the phases of the plan and the role Fehr & Peers' TrendLab+ tool.

### CAAP Bi-weekly Meeting (January 29, 2021):

- Definition of an innovative plan was discussed: A valuable starting point will be for the City and
  consultant team to exchange lists of plans they find interesting/important to this project and
  discuss (see attachment D). This could result in a menu of innovative plans, policies, etc. for
  consideration for this project.
  - National and international plans and measures should be considered, not just limited to local efforts.
- Potential areas of interest for innovations include:
  - Learning and building on the Open Streets events over the summer.

- o Community microgrids (potentially utilizing new Community Center).
- Utilizing carbon sinks and carbon capture to become Carbon Negative.
- Guidelines for private owners as well as enforceable policies for City-owned land and buildings should be looked at when considering innovative measures.
- Important to identify when to bring different stakeholder groups into the planning process.
   Bringing in different stakeholders at the right time will result in a more inclusive plan and help with the plan's adoption and implementation (ex.: downtown businesses will be impacted by changes to parking policies).
- The team discussed options for the timeframe for the Vulnerability Assessment (Mid Century vs End of Century). This should be determined by types of City infrastructure relevant to climate change. The original input from the City was that a Mid Century timeframe would be most appropriate.
- Alignment between the CAAP and the City's Emergency Preparedness Plan was discussed.
   Alignment between the CAAP and other City plans (current and future) in general will be an important consideration.
- The consultant team gave a brief intro to ClearPath. This will be the central GHG reduction planning tool, and also offers monitoring & reporting modules for ongoing use.
- An initial list of climate threats was reviewed (Flooding from creeks, Extreme Heat, Urban Heat Island effect, Wildfires, Air Pollution, and Drought). The consultant team will send this list to the City along with a framework for capturing stakeholder feedback on each threat. This is an important step in the Vulnerability Assessment.

# **CAAP Bi-weekly Meeting (February 12, 2021):**

- Options for stakeholder engagement were discussed. Stakeholders identified are listed below.
  - The City has a Youth Commission that could be a good group to engage with.
  - o The High School has a Green Team that engages regularly with the City Council.
  - Businesses will be important stakeholders (Anthony Carnesecca, Economic Development Coordinator).
  - Engage with groups that may be resistant to the measures in the final plan are important to engage with. Their concerns should be listened to and addressed.
  - Important Brown Act requirements to be strictly adhered to when considering meeting with commissions and committees as we plan outreach & engagement activities
  - Engage the City Council in the process to implement their feedback on goals, and development throughout.

### **Stakeholder Groups:**

- Los Altos Property Owners Downtown
- Los Altos Village Association
- Los Altos Chamber of Commerce
- Los Altos History Museum
- GreenTown Los Altos
- LAYCAT (Los Altos Youth Climate Action Team)
- Los Altos High School (Green Team Student Club)
- LAUSD Outdoor Educator
- Orchard Commons Committee

- Grass Roots Ecology
- Block Action Teams (BATs)
- Los Altos Community Foundation
- Los Altos Rotary Club
- Environmental Commission
- Parks & Recreation Commission
- Youth Commission
- Complete Streets Commission
- City Council
- An overview of the Vulnerability Assessment survey was given.
- An overview of the example CAPs and case study was given.
- There was a discussion of the Nature Communication article, and the reply by ICLEI. ICLEI's
  methods are still relevant for this project, but the issues the article raises should be
  considered in the CAAP (making sure all emissions are captured, including considerations of
  consumption patterns, flights by municipal and community members, and the way VMT is
  calculated).

# CAAP Bi-weekly Meeting (February 26, 2021):

- Outreach & Engagement options were briefly discussed. Tabling for Farmers' Market will begin in April or May. Several stakeholder groups were identified that could be good channels for sharing information and gathering feedback.
- The results of the Vulnerability Assessment Survey were shared. Climate hazards associated with temperature change were of highest concern, and flooding related to precipitation changes were also a concern.

Table 1: Average Scores and Ranking for Primary Climate Hazards

Primary Climate Hazards	Score					
Temperature Increase	2.3					
Precipitation Changes	1.7					
Sea Level Rise	1.3					

Table 2: Average Scores and Ranking for Secondary Climate Hazards

Secondary Climate Hazards	Score
Drought	2.7
Extreme Heat/Heat Waves	2.3
Wildfire	2.3
Air Pollution	2.3
Flooding (Riverine, Areal)	2.3
Urban Heat Island	1.8
Flooding (Coastal)	1.4
Landslide	1.2

- FEMA has flood maps for Los Altos these will be included in document requests. The Stormwater Master Plan will also be included.
- An overview of asset & population categories for the Vulnerability Assessment was given. A survey will be distributed to gather feedback on the importance of each category.
- A table of local and regional GHG emission reduction targets was shared (see below). As the
  City considers different target options, it will be valuable to know what targets other
  municipalities have set. The updated GHG inventory, costs & benefits of different targets,
  type of target (% based vs absolute), and feedback from different stakeholder groups will
  also be important.

# **Climate Targets Table**

Municipality/Source	Year	1st Target	2nd Target
IPCC	2018	45% below 2010 levels by 2030	Net Zero around 2050
EO-S-3-05/AB 32	2005/2006	1990 levels (or 15% below 2005 levels) by 2020	80% below 1990 levels by 2050
SB 32	2016	40% below 1990 levels by 2030	
Carlsbad CAP	2015	15% below 2005 levels by 2020	49% below 2005 levels by 2035
Mountain View CPR	2015	80% reduction by 2050	
Encinitas CAP	2018	13% below 2012 levels by 2020	41% below 2012 levels by 2030
Sunnyvale CAP	2019	56% reduction by 2030	80% reduction by 2050
Santa Monica CAAP	2019	80% below 1990 levels by 2030	Carbon Neutral by 2050
City of Alameda CARP	2019	50% below 2005 levels by 2030	Net Zero Emissions as soon as possible
Albany CAAP	2019	70% below 2004 levels by 2035	Carbon Neutral by 2045
San Francisco CAP	2019	Net Zero emissions by 2050	
San Rafael CCAP	2019	40% below 1990 levels by 2030	80% below 1990 levels by 2050
Menlo Park CAP	2020	Zero Carbon by 2030 (90% reduction, 10% removal)	
San Jose GHG Reduction Strategy	2020	40% below 1990 levels by 2030	
Oakland Equitable CAP	2020	56% below 2005 levels by 2030	

San Mateo CAP	2020	Reduce emissions to 4.3 MTCO2e per-capita by 2030	Reduce emissions to 1.2 MTCO2e per-capita by 2050
San Anselmo 2030 CAP	2019	45% below 2010 levels by 2030	80% below 1990 levels by 2050
Santa Clara CAP	updating now		

# CAAP Bi-weekly Meeting (March 12, 2021):

- Introduction of the City's PIO (Public Information Officer) team-Trevor and Sonia they will be assisting with community outreach and engagement efforts.
- Manny in Muncipal Services will provide refrigerant data (buildings and fleet).
- The results of the internal Community Sectors Survey was reviewed open-ended questions should be pared down for future surveys to improve the user experience.
- The group provided additional comment on the survey results, including sources of air quality effects, specific City resources, and at-risk populations related to climate change.
- A separate meeting will be set up to discuss next steps for outreach & engagement.
- Landfill reduction measures, specifically vinyl banners used for City events, looking for ways to address in the plan.
- Future land use decisions will be important (balancing City character, different types of businesses, etc.) related to climate mitigation and adaptation.
- The City implements green infrastructure (rain gardens, bioswales, etc.) guidelines and details to be provided to consultant.

### CAAP Bi-weekly Progress Report (March 26, 2021):

 Vulnerability Assessment: Cal-Adapt provides a view of how climate change might affect California, and its development is a key recommendation of the 2009 California Climate Adaptation Strategy.
 Using the Cal-Adapt tool, future conditions around precipitation, heat days, and fire hazards can be modeled using a suite of approved climate models.

Using Cal-Adapt, the findings indicate that the location of Los Altos relatively near the Pacific Ocean and on the eastern edge of the Santa Cruz mountains has defined the area's climate and will somewhat temper future climate hazards compared to other areas in California.

# • Temperature & Drought

- Average temperatures and the number of extreme heat days are projected to increase throughout the century, according to Cal-Adapt. The number of extreme heat days are projected to be almost 300% more in a high emissions scenario than in a medium scenario.
- Whether droughts get worse depends on the definition of drought. One definition is a prolonged period with below-average or no precipitation. The length of dry

spells is not expected to change nor is average annual precipitation. However, higher temperatures combined with less consistent rain will impact both water supply and outdoor water demand.

### Precipitation

Los Altos has experienced numerous severe winter storms that have caused flooding and multiple climate models predict at least one severe storm a year under high emissions scenarios by the end of the century. Interestingly, while severe storms will happen more frequently, they won't be much more intense. Similarly, the average annual precipitation is not expected to change

# Wildfires & Air Pollution

- O Despite increased temperatures, wildfires are not projected to be a significantly worse threat in the future. The average area burned by wildfires is projected to decrease. Regionally, Los Altos and the surrounding area is not high risk, though the relative risk for natural areas is projected to increase slightly. Long term summer air quality will be defined by counteracting forces from increased temperatures and increased vehicle electrification.
- Outreach & Engagement: The Outreach & Engagement subcommittee met on March 25th to discuss initial goals, strategies, and timeline for conducing community-facing engagement for the CAAP. Engaging diverse stakeholder groups will be important for soliciting feedback on community makeup, attitudes on climate change, and community priorities, as well as gathering input on proposed mitigation and adaptation measures. Although there are no prescriptive rules, stakeholder engagement is recommended for the climate change mitigation and adaptation work involved in the plan, and will ultimately help streamline its implementation.

Action items coming out of that meeting include:

- 1. The City has a number of tools at its disposal, including existing communication channels, community partners, and internal staff capacity.
- 2. EcoShift will provide support in the form of resources, tools, guidance, and advice as needed.
- 3. The City will consider a series of focus groups with City stakeholders (program directors, etc.) to gather their feedback on critical issues, as well as reformatting the bi-weekly meetings to more of a working meeting. City directors currently attending bi-weekly meetings could attend these workshops instead, with occasional touch points with the entire group.
- 4. EcoShift will work with staff to develop a schedule of engagements (see attachment C).
- Data Collection: Most data has been received and is in the process of being uploaded into ClearPath.
   The tables below contain the current status of data collection for the Community and Municipal inventories. Since the last update, streetlight, traffic signal, and additional energy data have been received. EcoShift will continue to provide updates as the data is processed.

## **Community Data**

DATA	RECEIVED?
Energy data (electricity & natural gas)	Yes
Municipal Solid Waste	Yes
Water usage	Yes
Wastewater	RWQCP is carbon neutral
Off-Road (construction and lawn & garden equipment,	No, awaiting housing data
calculated using housing and population data)	from County
Transportation	Developing methodology
	with Fehr & Peers

# **Municipal Data**

DATA	RECEIVED?
Building Energy use (electricity & natural gas)	Yes
Lighting (street lights & traffic signals)	Yes
Water usage	Yes
Fleet vehicle fuel use (gas & diesel)	Yes
Employee commute	Yes
Municipal Solid Waste	Yes
High Global Warming Potential gas leakage (refrigerants and	No
AC systems)	
Wastewater	RWQCP is carbon neutral

## Other Notes:

• The Parks & Rec Dept. is interested in having a representative attend future bi-weekly team meetings and outreach events. The representative will begin attending meetings starting at the next bi-weekly meeting on April 9th.

# CAAP Bi-weekly Progress Report (April 9, 2021):

- An update on data collection status was presented; there are a few outstanding requests but they make up a small percentage of overall emissions.
- The team was shown preliminary results from the 2018 inventory, as well as comparison to the 2005 inventory and CAP goals. There were a number of follow-up questions from the team around waste, energy, and transportation results; the consultant will follow up with detailed methodologies for all emissions sectors.
- An overview of forecasting methods was presented; ClearPath has baseline methods using factors like population growth, economic growth, fuel use forecasts, and State and federal

- actions. Improved methodologies based on local or regional data and methods will also be explored, which is consistent with ClearPath's recommendations.
- The team was updated on outreach & engagement efforts; Kristin gave an update on scheduled meetings and the purpose of each meeting. Identifying the Stakeholder groups to attend the focus groups will be determined next.
- There is a community workshop planned that the general public will be invited to in June.
- The team was updated on the project timeline; EcoShift is planning working on several tasks in parallel (forecasts, list of potential measures, vulnerability assessment) to meet project deadlines.
- Next steps include: completion of data collection, completion of emissions forecast, and then setting of targets and development of initial list of measures.
- First Focus Group is scheduled for April 23, 2021.

# CAAP Bi-weekly Progress Report (April 23, 2021) Focus Group #1:

Focus Group on Los Altos Climate Vulnerability

### **Natural Resources**

The Redwoods Grove is an important natural asset that is both under threat from wildfire and being addressed by Parks staff. Creek flooding is an issue that causes stream bank erosion and is addressed by Parks when it happens within park sites. CZU, Paradise and other fires located far outside of Los Altos have impacted air quality here. Drought is becoming an issue that the emergency management field is considering, even though it is different from other types of emergencies.

POLL: What Natural assets located in Los Altos are most important to the quality of life here?

- 1. Parks and Streams
- 2. Walking paths
- 3. Tree-lined streets in Downtown
- 4. Rural nature
- 5. Boulevard Trees
- 6. View Scape
- 7. Adobe watershed

# **Built Resources**

The Poll Everywhere survey results expanded the existing group of built resources to include parking facilities and art and cultural resources.

POLL: Are there any specific facilities or assets that are important to Los Altos and should be considered on their own?

- 1. Retail as well as restaurants
- 2. Pump station-wastewater and storm

- 3. Covered parking with solar charging
- 4. Routes of egress
- 5. Local water storage facilities
- 6. Bus Barn Theater
- 7. History House and Theater
- 8. Historic Buildings?

# **Economy**

Outdoor space is important to quality of life and an economic asset for downtown restaurants that are negatively impacted by poor air quality and heat.

POLL: Are there current programs and resources within the city that could support the economy during a climate crisis?

- 1. Protecting housing, protects our key revenue source--Property Tax
- 2. Impacts on supply chain
- 3. Poor air quality keeps people in their homes

# **Vulnerable Populations**

There are many day laborers who are not from Los Altos who perform landscaping and construction and would be vulnerable to extreme heat. There are many seniors in Los Altos who are "house rich, cash poor" and who may be potentially impacted by increasing energy costs as temperatures warm. Assisted care facilities have back-up generators. Senior centers do not – so the city's cooling centers are the Santa Clara County libraries. People are more familiar with N-95 masks thanks to the pandemic, so poor air quality may not limit people's mobility as much in the future. There have not been any local emergency declarations that have not also been County-wide declarations. There have not been substantial updates to the EOP or the LHMP.

### **Natural Environment**

Assets

Asset	Percent of Respondents
	answering as Most
	Important
Managed landscapes (yards, parks, street trees)	80%
Air & air quality	70%
Natural habitat (soil, plants, wildlife)	40%
Creeks, rivers and other waterbodies	40%

<sup>&</sup>quot;Poor air quality keeps people in their home"

<sup>&</sup>quot;Protecting housing protects our key revenue source – property tax"

### Temperature, Extreme Heat & Drought

- 1. Heat stress on plants with the potential for slow native species die-out and replacement by nonnative species.
- 2. Managed landscapes will require greater care and watering.

## Precipitation & Flooding

- 1. Increased stream bank erosion and flooding and erosion of managed landscapes.
- 2. Downed trees may be more common as trees rooted in soils saturated from storm previous events contend with heavy winds.

### Wildfires & Air Pollution

1. Increase in particulate matter will worsen air quality.

### QUESTIONS

Are these the types of impacts you expected to see? If so, have you already begun planning for them.

What has the impact been to the "natural environment" in previous winter storms? What do you think the impact would be if there are multiple severe storms every year?

How prepared do you think Los Altos is handle these hazards?

# **Built Environment**

Asset	Percent Selecting as Most
	Important
Housing	80%
Schools	60%
Transportation (roads, sidewalks, buses, trains, parking spots & bike	40%
racks)	
Utilities (power, drinking water, stormwater & sewer, natural gas,	40%
phone, internet)	

# Temperature, Extreme Heat & Drought

- 1. Cooling needs of all building types may tax the energy grid.
- 2. PG&E public safety power shut will require alternative and off-grid energy sources to cool homes, commercial, and government buildings and disrupt pumps in the water supply and wastewater systems.
- 3. Risk of asphalt softening is limited to extended temperatures above 100°F. Safety power shut offs and brown outs caused by heats can cause outages of traffic signals and street lights.
- 4. Impact the availability of the water supply in Santa Clara Valley Water District

### **Precipitation & Flooding**

- 1. Stream bank erosion and flooding may cause scour under the numerous bridges and creek crossings. Buried pipes may be exposed and or damaged.
- 2. Storm sewers may get backed up and cause localized flooding.
- 3. Wear and tear on roads and within pipes may require repair and replacement more frequently than planned for.

# Wildfires & Air Pollution

- 1. Fires can quickly cause a complete loss of a property.
- 2. Managing air pollution simply requires changing filters on buildings and vehicle fleets more frequently.

### **Economy**

Temperature, Extreme Heat & Drought

- 1. Spend more on air conditioning (and California-wide on food) to maintain the same quality of life.
- 2. Decreasing comfort negatively impacts worker productivity.
- 3. Temperature related mortality is also a projected loss.

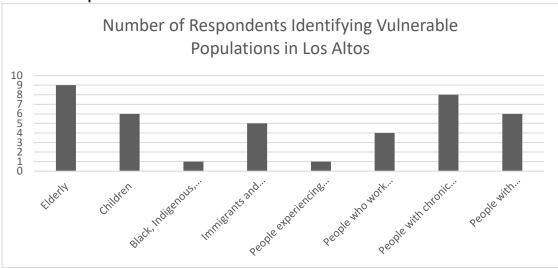
# **Precipitation & Flooding**

- 1. create temporary or extended loss of operations for businesses, particularly for businesses with nondurable goods.
- 2. Perceptions of flood risk and flood safety can influence the housing market.

# **Wildfires & Air Pollution**

1. Property damage and temporary disruption of utilities and infrastructure can create temporary or extended loss of operations.

# **Vulnerable Populations**



### **Temperature, Extreme Heat & Drought**

- 1. Parks, yards, and other outdoor areas will become undesirable during heat waves, and parking lots and streets may become dangerous to certain populations during extreme heat.
- 2. incidences of heat stroke, hospitalization, and heat-related mortality will increase first and foremost within these groups.

### **Precipitation & Flooding**

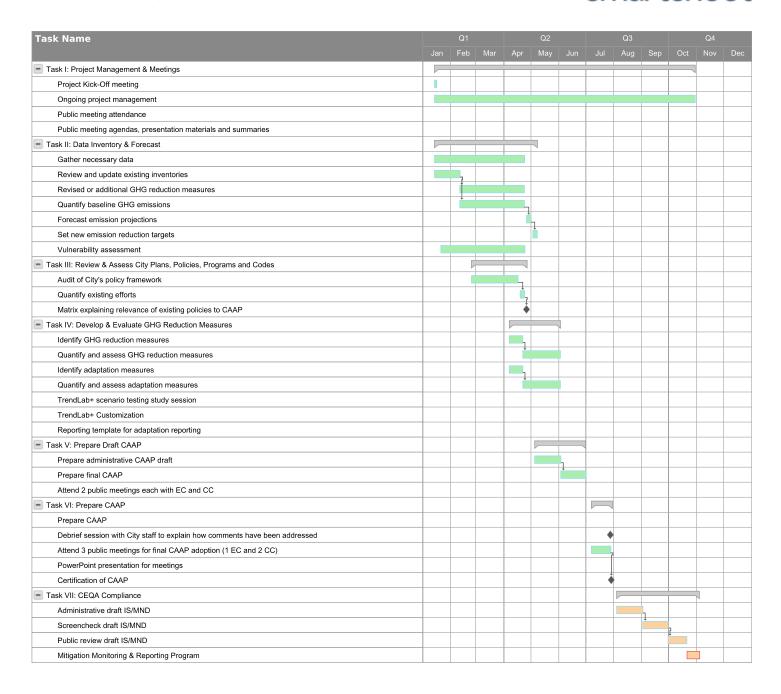
1. Vulnerable populations often have fewer resources and/or limited mobility. Preparations for flooding, evacuations, and clean ups are all made more difficult by these circumstances.

# **Wildfires & Air Pollution**

1. Air pollution will directly impact people with respiratory conditions and people who work outside. Wildfires far outside of Los Altos can create unhealthy levels of 2.5PM, especially since existing air quality is not moderate. Air pollution can limit the mobility and quality of life of sensitive groups.

# Los Altos CAAP

# smartsheet



# CAAP Outreach and Engagement Schedule

# Estimated Schedule for Community and Stakeholder Outreach and Engagement:

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		1	2 3	4	1 2	3	4	1 2	2 3	4	1	2 3	4	1	2	3 4	1	2	3 4	1	2 3	3 4
Date	Task Description																					
9-Apr	General Meeting with internal City Department Managers; Review this outreach plan																			brack		$\prod$
23-Apr	Focus Group #1: A Review of the Vulnerability Assessment	Ш																				
26-Apr	Survey Community #1: Informational																					
11-May	City Council Meeting; Poll #1 on Survey #1																					
23-May	Focus Group #2: A Review of the Gap Analysis																					
25-May	City Council Meeting; Poll #2 on Survey #1	П																				П
8-Jun	City Council Meeting; Poll #3 on Survey#1	П																				
6-Jun	Survey Community #1 Ends	П																				
18-Jun	Community Workshop #1: Potential Strategies and Tactics	П																				
25-Jun	Survey Community #2: Strategies																					
13-Jul	City Council Meeting; Poll #1 on Survey #2																					
16-Jul	Focus Group #3: Final implementation strategies																					
31-Jul	Survey Community #2 Ends	П																				

Focus Group	Focus Groups with Leads and specific stakeholders to gather input
Community Work	Public workshop open to residents to answer questions and gather input
Survey Communi	An open survey for residents to take
	Small polls about how well we are messaging the surveys; measuring our
City Council Poll	engagement; advertise survey



# CITY OF LOS ALTOS CLIMATE ACTION & ADAPTATION PLAN

VULNERABILITY ASSESSMENT FOCUS GROUP

# **INTRODUCTIONS:** ECOSHIFT TEAM



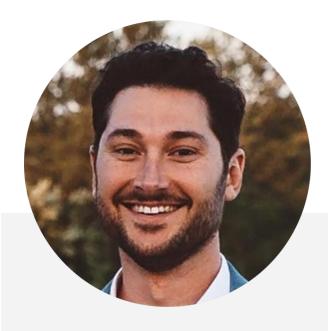
**KRISTIN CUSHMAN** 

CEO & STAKEHOLDER OUTREACH LEAD



**BEN FORDHAM** 

PROJECT MANAGER



**ZACH YOUNGERMAN** 

VULNERABILITY & ADAPTATION ADVISOR

# INTRODUCTIONS: COMMUNITY STAKEHOLDERS TACHMENT D



**Los Altos Village Association** 

**Chamber of Commerce** 

**GreenTown Los Altos** 

**BATs (Block Action Teams)** 

**Parks and Recreation** 

# FIRST STEPS



STEP 1

BASELINE ASSESSMENT



STEP 2

FORECAST EMISSIONS



STEP 3

VULNERABILITY ASSESSMENT



STEP 4

CAAP PLAN
DEVELOPMENT
AND REVIEW

# FRAMING THE ASSESSMENT

# **ASSETS AND COMMUNITY SECTORS**

- Natural Environment
- Built Environment
- Economy
- Vulnerable Populations

# **CLIMATE HAZARDS**

- Temperature, Extreme Heat & Drought
- Precipitation & Flooding
- Wildfires & Air Pollution

# **NATURAL ENVIRONMENT** ASSETS

MANAGED LANDSCAPES

Hill View Community Area

Native Landscape

AIR QUALITY

**TBD** 

NATURAL HABITAT

Shoup Park

Redwood Grove Nature Preserve

Bike Path

CREEKS & RIVERS

TBD

80%

**70**%

40%

40%



**DETAILED SURVEY RESPONSES** 

"What natural assets located in Los Altos are most important to the quality of life here?"

# **NATURAL ENVIRONMENT** CLIMATE HAZARDS

# **TEMPERATURE, EXTREME HEAT & DROUGHT**

- 1. Heat stress on plants with the potential for slow native species die-out and replacement by non-native species.
- 2. Managed landscapes will require greater care and watering.

# PRECIPITATION & FLOODING

- 1. Increased stream bank erosion and flooding and erosion of managed landscapes.
- Downed trees may be more common as trees rooted in soils saturated from storm previous events contend with heavy winds.

# **WILDFIRES & AIR POLLUTION**

1. Increase in particulate matter will worsen air quality.



# **DISCUSSION**

- Are these the types of impacts you expected to see? If so, do you have other examples?
- What do you think the impact would be if there are multiple climate hazards each year?
- How prepared do you think Los Altos is to handle these hazards? Do you have funding and staff available?
- Are there current programs/ maintenance policies that help prepare for these impacts?

# **BUILT ENVIRONMENT** ASSETS

HOUSING

**SCHOOLS** 

**TRANSPORTATION** 

**UTILITIES** 

**TBD** 

Child Care/Day Care Elementary Middle School High School Community Center Roads & Bridges Sidewalks Parking Garages Parking Spots Bike Trails Bike Racks Power Lines/Transformers
Drinking water pipes
Stormwater and sewer pipes
Wastewater Treatment Plant
Natural Gas Lines
Telecommunications

80%

60%

40%

40%



# **BUILT ENVIRONMENT** CLIMATE HAZARDS

# **TEMPERATURE, EXTREME HEAT & DROUGHT**

- 1. The energy grid will be taxed due to increased air conditioning which will lead to PG&E public safety power shut offs (PSPS)
- 2. PSPS events will require off-grid energy sources
- 3. PSPS events will disrupt pumps in the water supply and wastewater systems.

# **PRECIPITATION & FLOODING**

- 1. Stream bank erosion and flooding may cause scour under the numerous bridges and creek crossings. Buried pipes may be exposed and or damaged.
- 2. Storm sewers may get backed up and cause localized flooding.
- 3. Wear and tear on roads and within pipes may require repair and replacement more frequently than planned for.

# **WILDFIRES & AIR POLLUTION**

- 1. Fires can quickly cause a complete loss of a property.
- 2. Managing air pollution simply requires changing filters on buildings and vehicle fleets more frequently.



# **DISCUSSION**

- Are these the types of impacts you expected to see? If so, do you have other examples?
- What do you think the impact would be if there are multiple climate hazards each year?
- How prepared do you think Los Altos is to handle these hazards? Do you have funding and staff available?
- Are there current programs/ maintenance policies that help prepare for these impacts?

# **ECONOMY** SECTOR

# **RESTAURANTS**

**Tourism** 

# SCHOOL DISTRICT/ CITY SPENDING

Good School Districts Good Paying Jobs

# REAL ESTATE DEVELOPMENT & CONSTRUCTION

Property Value; Affordability Workforce Development



"Are there current programs and resources within the city that could support the economy during a climate crisis?"

# **ECONOMY** CLIMATE HAZARDS

# TEMPERATURE, EXTREME HEAT & DROUGHT

- 1. Spend more on air conditioning (and California-wide on food) to maintain the same quality of life.
- 2. Decreasing comfort negatively impacts worker productivity.

# PRECIPITATION & FLOODING

- 1. Create temporary or extended loss of operations for businesses, particularly for businesses with nondurable goods
- 2. Perceptions of flood risk and flood safety can influence the housing market.
- 3. Impact tourism

# **WILDFIRES & AIR POLLUTION**

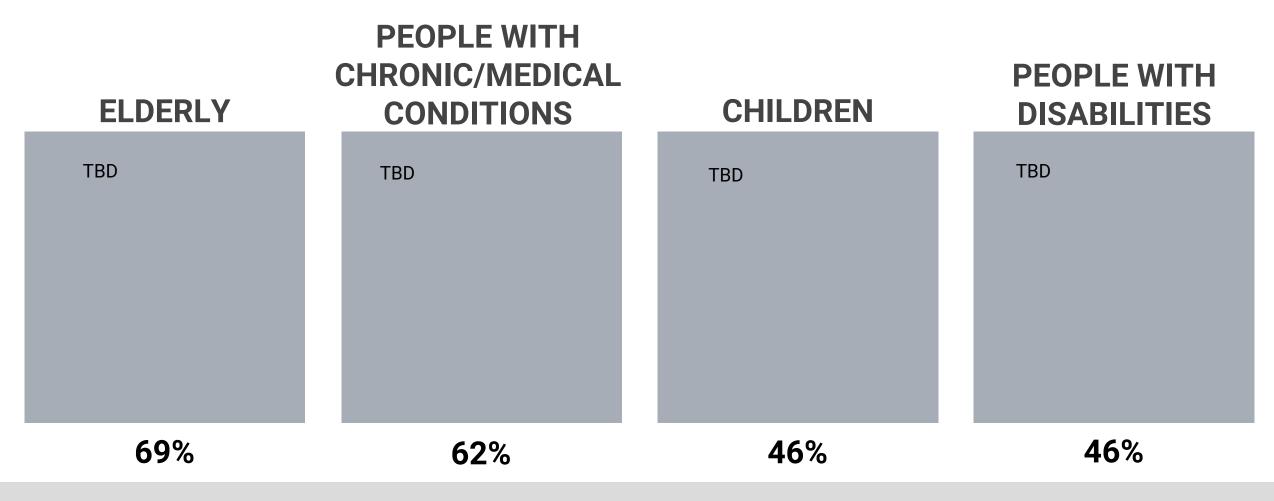
1. Property damage and temporary disruption of utilities and infrastructure can create temporary or extended loss of operations.



# **DISCUSSION**

- How has the business community been impacted by climate change? How could they be better prepared?
- Do you have other examples of climate hazards that have affected the economy sector?
- How prepared do you think Los Altos is to handle the potential economic impacts?
- Are there commercial policies that should be considered to help mitigate these impacts?

# **VULNERABLE POPULATIONS SECTOR**





# VULNERABLE POPULATIONS CLIMATE HAZARDS

# **TEMPERATURE, EXTREME HEAT & DROUGHT**

- 1. Parks, yards, and other outdoor areas will become undesirable during heat waves, and parking lots and streets may become dangerous to certain populations during extreme heat.
- 2. incidences of heat stroke, hospitalization, and heat-related mortality will increase first and foremost within these groups.

# PRECIPITATION & FLOODING

1. Vulnerable populations often have fewer resources and/or limited mobility. Preparations for flooding, evacuations, and clean ups are all made more difficult by these circumstances.

# **WILDFIRES & AIR POLLUTION**

1. Air pollution will directly impact people with respiratory conditions and people who work outside. Air pollution can limit the mobility and quality of life of sensitive groups.



# **DISCUSSION**

- How have vulnerable populations been impacted by climate change? How could they be better prepared?
- Do you have other examples of climate hazards that have affected the vulnerable populations in Los Altos?
- How prepared do you think Los Altos is handle the potential impacts on vulnerable populations?
- Are there additional programs/funding that should be considered to help mitigate these impacts?

