

EXHIBIT A

FINDINGS

Section 17958 of the California Health and Safety Code provides that the City may make changes to the provisions of the California Building Standards Code. Sections 17958.5 and 17958.7 of the Health and Safety Code require that for each proposed local change to those provisions of the California Building Standards Code which regulate buildings used for human habitation, the City Council must make findings supporting its determination that each such local change is reasonably necessary because of local climatic, geological, or topographical conditions. The City need not show that local conditions deviate from prevailing statewide conditions, only that the changes are “reasonably necessary because of local climatic, geological, or topographical conditions.” (Cal. Health & Safety Code § 17958.5; *ABS Inst. v. City of Lancaster* (1994) 24 Cal. App. 4th 285, 294.

Local building regulations having the effect of amending the uniform codes, which were adopted by the City prior to November 23, 1970, were unaffected by the regulations of Sections 17958, 17958.5 and 17958.7 of the Health and Safety Code. Therefore, amendments to the uniform codes which were adopted by the City Council prior to November 23, 1970, and have been carried through from year to year without significant change, need no required findings. Also, amendments to provisions not regulating buildings used for human habitation do not require findings.

General Findings

1. Climatic

a. Climate Change. Over the next century, increasing levels of atmospheric Greenhouse gas (GHGs) concentrates are expected to result in global temperature increases, causing a variety of local changes, including extreme weather conditions, sea level rise, more frequent heat waves and extended period of drought. The City of Sunnyvale in particular will experience (1) adverse air quality impacts, exacerbated by local features such as a major highways; (2) extreme heat; (3) flooding from severe storms, exacerbated by Sunnyvale’s low elevation and high groundwater table; (4) wildfires and smoke, owing to the City’s proximity to the Santa Cruz Mountains; (5) drought; and (6) sea level rise, particularly in the City’s northern area bordering the San Francisco Bay. Each of these impacts, as a result of climate change, can have a local impact on the health, safety, and welfare of the City’s population, especially those without resources to purchase air conditioning, the elderly, disabled, or those with children. Natural gas combustion and gas-fueled appliances emit a number of air pollutants contributing to indoor and outdoor air quality impacts and atmospheric GHGs. Failure to address and substantially reduce pollutants and GHG emissions creates an increased risk to the health, safety and welfare of the City’s residents.

b. Precipitation. Precipitation in Sunnyvale ranges from 4.83 to 30.30 inches per year with an average of approximately 13.86 inches per year. Approximately 90% falls during the months of November through April and 10% from May through October. This area experienced a major drought in 2021 and a moderate drought the following year. The local climate is characterized by markedly delineated rainy and dry seasons, which tend to maximize the expansive characteristics of soil. Drought conditions tend to create more frequent and larger fire incidents

c. Relative Humidity. Humidity generally ranges from 60% during daytime to 80% at night. It drops to 20% during the summer months and occasionally drops lower.

d. Temperatures. Temperatures have been recorded as high as 108° F. Average summer

highs are in the 78°-82° F. range.

e. Winds. Prevailing winds are from the Northwest or Southeast. However, winds are experienced from virtually every direction at one time or another. Velocities are generally in the 5-mph to 15-mph range, gusting to 7.4 mph to 30 mph, particularly during the summer months. Extreme winds, up to 60 mph, have been known to occur.

f. Summary and Analysis. These local climatic conditions affect the acceleration, intensity and size of fire in the community. Times of little or no rainfall, of low humidity and high temperatures create extremely hazardous conditions, particularly as they relate to wood shake and shingle roof fires and conflagrations. The winds experienced in this area can have a tremendous impact upon structure fires of buildings in close proximity to one another commonly found in Sunnyvale.

During wood shake and shingle roof fires, or exposure fires, winds can carry sparks and burning brands to other structures, thus spreading the fire and causing conflagrations. In building fires, winds can literally force fires back into the building and can create a blowtorch effect, in addition to preventing "natural" ventilation and cross-ventilation efforts. In developed areas of the City, fires can occur in buildings, rubbish, vehicles, and vegetation on vacant lots.

Local climatic conditions along with the pollutants and GHGs generated from residential and non-residential structures require exceeding the energy standards for building construction established in the 2025 California Buildings Standards Code. The local Energy Code Amendments adopted in this ordinance will ensure that existing buildings reduce their consumption of fossil-fuel-based energy and avoid exacerbating the hazards posed by local climatic conditions.

IMPACTS:

[California Building Code]

[California Residential Code]

[California Wildland-Urban Interface Code]

[California Energy Code]

[California Green Building Standards Code]

[Existing Building Code]

[International Property Maintenance Code]

2. Geological, Geographic and Topographic

a. Geographic Location. Sunnyvale is located in the Santa Clara Valley. It has taken its place as the second largest city in the "heart of the Silicon Valley," the center for an expanding and changing technology industry.

b. Seismic Location. Sunnyvale is situated on alluvial soils between San Francisco Bay and the San Andreas Fault zone. The City's location makes it particularly vulnerable to damage to taller and older structures caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and numerous potentially active faults.

c. Seismic and Fire Hazards. In the event of a seismic occurrence, many areas of the city can expect damage or collapse of buildings due to Sunnyvale's proximity to active earthquake faults. Secondary impacts could include ruptured gas lines, collapsed power lines, and breaks in the water distribution system. Gypsum wallboard and exterior portland cement plaster have

performed poorly during recent California seismic events. The shear values for gypsum wallboard and portland cement stucco contained in the code are based on mono-directional testing. It is appropriate to limit the use of these products until cyclic loading testing are performed and evaluated. Fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself.

Hazardous materials, particularly toxic gases, could pose the greatest threat to the largest number, should a significant seismic event occur. Public safety resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single dwelling or structure fires.

IMPACTS:

[California Building Code]

[California Residential Code]

[California Fire Code]

[Existing Building Code]

Other variables may tend to intensify the situation:

1. The extent of damage to the water system;
2. The extent of isolation due to bridge and/or freeway overpass collapse;
3. The extent of roadway damage and/or amount of debris blocking the roadways;

4. Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours;
5. The availability of timely mutual aid or military assistance;
6. The large portion of dwellings with wood shingle roof coverings could result in conflagrations.

d. Size and Population. The City has an area over 24 square miles in size and a population estimated to be 156,234.

e. Development. Sunnyvale is a community which is projected to add 20,000 new residential units within the next twenty years, primarily in multi-family configurations, for which building security is a matter of acute importance.

IMPACTS

[California Fire Code]

[California Building Code]

[California Residential Code]

f. Public Safety Department. Sunnyvale utilizes a public safety (joint police/fire) department with personnel who function as both fire suppression and police officers, resulting in fewer personnel than otherwise would be required for a city of its size. A premium is therefore placed on built-in physical techniques and devices as crime preventative measures. It is therefore also imperative that fire detection and suppression occur as quickly as possible to minimize loss of property and life. Added protection of fire sprinkler systems and other fire protection measures will supplement normal public safety response by providing immediate protection for the building occupants and by containing and controlling the fire spread to the area of origin. For these reasons the most stringent provisions are required concerning fire detection, alarm and suppression systems.

g. Industry. Sunnyvale is the site of many manufacturing and research industries which use toxic, flammable and explosive chemicals and materials in potentially hazardous combinations. Special precautions thus are required to minimize the risk of damage to adjoining persons and properties.

IMPACTS

[California Plumbing Code]

[California Fire Code]

[California Mechanical Code]

[California Electrical Code]

[California Building Code]

h. Mixed Industrial/Residential Uses. High-density residential uses are located near high-risk industries, necessitating special precautions such as complex fire protection designs and structural considerations.

IMPACTS

[California Fire Code]

[California Building Code]

[California Residential Code]
[Wildland-Urban Interface Code]
[California Plumbing Code]
[California Mechanical Code]
[California Electrical Code]

i. **Transportation.** Sunnyvale is divided by an interstate highway, which potentially could affect response times of fire suppression equipment necessitating the use of advanced fire suppression systems and fire extinguishing systems.

IMPACT:

[California Fire Code]
[California Building Code]

j. **Soil Conditions and Topography.** Sunnyvale lies at the southern end of San Francisco Bay and is built atop the alluvial deposits that surround the margins of the Bay. The alluvium was created by the flooding of the many streams emptying into the San Francisco Bay depression, and from intermittent seawater inundation that has occurred over the last 2 or 3 million years. The areas closest to the Bay are overlain by unconsolidated fine silty clay, known as "Bay Mud" which varies in thickness from a few feet to as much as 30 feet. Generally, the older, more stable alluvium is to the south and the younger, less stable material is to the north. Bedrock lies beneath the area at depths generally 300' or more. The topography is essentially flat, dropping from an elevation of 300 feet to sea level. The slope across the City is in a northeasterly direction from the high point in the southwest corner to the Bay. The average slope is approximately 0.9%.

The Silicon Valley is within a very active seismic area and local soil conditions can be highly expansive (clay soils). The Northridge earthquake provided hundreds of examples of damage to plain concrete footings. This type of damage is extremely expensive to repair, in contrast to the small expense of providing nominal footing reinforcement. Footing reinforcement is also necessary to prevent damage due to pumping action caused by local expansive soils, which shrink and swell during seasonal drying and wetting conditions.

Most of the surface soils in the Silicon Valley are relatively young and unconsolidated sedimentary materials formed from a wide variety of parent materials. The varying chemical composition, degree of weathering, and the relatively acid environment have created soils of varying types, which are particularly corrosive in nature. Much of the surface soil in the Silicon Valley is highly expansive (i.e., shrink-swell behavior) and has low bearing strength.

IMPACTS

[California Building Code]
[California Residential Code]

k. **Buildings, Landscaping and Clearances.** Many of the newer large buildings and building complexes are of designs which greatly limit visibility and approach to and accessibility by Public Safety resources. Many houses and other buildings with wood roofs and/or sidings are so close together that fire may readily spread from one to another by both radiation and convection.

IMPACTS:

[Wildland-Urban Interface Code]

[California Fire Code]

l. Business & Industry Centers. The current clusters of high-tech, bio-tech, manufacturing and similar companies create additional demands on water, sewer, and electrical facilities. These businesses offer opportunities and access to innovative products, services and technology, and may also be more likely to utilize such products, services, and technology. For example, the more businesses, the greater the demands on water, sewer and power facilities during peak midday periods, which could lead to shortages or service disruptions, or use of services and technology impacting health and safety. Similarly, the availability of high-tech and similar businesses creates unique access to innovative products and technology to reduce energy and water use to mitigate business demands.

IMPACTS:

[California Plumbing Code]

[California Mechanical Code]

[California Electrical Code]

[California Building Code]

[Existing Building Code]

m. Population. Sunnyvale has a current and rapidly growing population (both resident and daytime work) that impacts fire and police service. With more people, there is more traffic congestion during a greater part of the day, which not only slows emergency vehicle response but may also restrict access to fire and crime scenes. Similarly, more emergency incidents requiring a public safety response occur with a larger population, created a greater likelihood of simultaneous emergency incidents requiring a public safety response. This results in longer response times and fewer fire companies or police units to respond to emergencies within the community.

IMPACTS:

[California Fire Code]

[Wildland-Urban Interface Code]

n. Summary and Analysis. The stated local geological, geographic and topographical conditions increase the magnitude, exposure, accessibility problems and fire hazards presented to the Department of Public Safety and have a negative impact upon the response capability of public safety resources. Lying beneath Sunnyvale are thick layers of sand, gravel and clay, known as alluvium, which amplify the effects of earthquakes. Based on the combination of these conditions, local experience from the damage caused in Santa Clara Valley by the 1906 earthquake and the poor performance of alluvial deposits during earthquakes, this area could be subject to severe structural damage or failure, multiple major fires and additional fire dangers, and place a great strain on police, fire and rescue resources. A seismic event could also trigger

widespread damage to hazardous material storage vessels and cause substantial hazardous material releases into the environment.

The possibility of fire ignition increases as earthquake shaking increases. Fire due to broken gas lines or short circuits of electrical systems is a major established hazard associated with earthquakes. Most buildings in Sunnyvale are partially or entirely combustible which increases the City's vulnerability to fire. As discussed above, traffic conditions may slow or impede emergency response in any given fire or hazardous materials event, particularly in the event of a seismic event or other natural disaster. Thus, with the potential inability of emergency services to guarantee rapid response, it is necessary to mitigate this problem by requiring additional protections such as built-in fire protection systems, which will provide for early detection and additional fire control.

Impacts:

[California Building Code]

[California Residential Code]

[California Wildland-Urban Interface Code]

[California Fire Code]

Conclusion and Findings.

Local climatic, geologic, and topographic conditions impact crime prevention efforts and the frequency, spread, acceleration, intensity and size of fires involving buildings, strength of building structural systems to resist local hazards and ability to deliver uninterrupted services in the community. The potential for significant damage arising from these conditions makes it reasonably necessary to modify the uniform codes to mitigate the effects of the above conditions.

Therefore, the City Council finds that (with the exception of changes justified on administrative grounds), the local amendments of the 2025 California Building Codes are justified by all of the aforementioned general findings.

ADDITIONAL FINDINGS (AB 130)

These findings are made in compliance with AB 130 (2025), specifically those provisions codified at Health and Safety Code Section 17958(b) with respect to those local amendments applicable to residential units.

The City Council finds that said changes or modifications are substantially equivalent to changes or modifications that were previously filed-adopted by the City Council and filed by the City of Sunnyvale as local amendments to the 2022 California Building Standards Codes pursuant to Ordinance No. 3244-25 adopted on August 26, 2025, and which ordinance was in effect on September 25, 2025, and previously adopted local amendments. Ordinance No. 3244-25 made the modifications applicable to residential units that are carried over in Sections 38 and 51 of this Ordinance No. _____, and all other modifications affecting residential units in this Ordinance were reflected in and replicate those in the earlier adopted Ordinance No. 3202-22 and prior local amendments. (Health and Safety Code Section 17958(b)(1).)

The City Council further finds that the changes or modifications are necessary to implement a local code amendment that is adopted to align with a general plan approved on or before June 10, 2025, and that permits mixed-fuel residential construction consistent with federal law while also incentivizing all-electric construction as part of an adopted greenhouse gas

emissions reduction strategy. (Health and Safety Code Section 17958(b)(5).)

a. The City's General Plan was adopted on July 26, 2011. ~~Chapter 7, Environmental Management, outlines the City's air quality goals. Goal EM-11—Improved Air Quality: Improve Sunnyvale's Air Quality and Reduce the Exposure of its Citizens to Air Pollutants, and includes the following Goals related to implementing the City's Climate Action Plan and reducing emissions and other environmental impacts associated with buildings:~~

1. LT-1.11: Prepare for risks and hazards related to climate change prior to their occurrence. LT 1-11e: Integrate climate change adaptation into future updates of the Zoning Code, Building Code, General Plan, and other related documents.

2. LT-2.1: Enhance the public's health and welfare by promoting the City's environmental and economic health through sustainable practices for the design, construction, maintenance, operation, and deconstruction of buildings, including measure in the Climate Action Plan.

3. LT-2.2: Reduce greenhouse gas emissions that affect climate and the environment through land use and transportation planning and development.

4. H-6.6: Sustainable Building. Continue enforcement of City Reach Codes and require the use of sustainable and green building design in new and existing housing.

5. EM-11: Improved Air Quality: Improve Sunnyvale's Air Quality and Reduce the Exposure of its Citizens to Air Pollutants.

b. The City comprehensively updated its Climate Action Plan in 2014 and renamed it the Climate Action Playbook to provide a guide that shows how the City plans to reduce overall greenhouse gas emissions to align with the State's greenhouse gas reduction targets.

~~c.~~ Sunnyvale Municipal Code Section 16.43.070 adds the California Green Building Standards Code Section A4.204.1.1. The added section requires residential alterations addressing the end-of-life air conditioner system to be replaced with a heat pump system. The existing gas furnace can continue to be used. The strategy increases energy efficiency and reduces greenhouse gases while maintaining mixed-fuel options for the homeowner.

d. Sunnyvale Municipal Code Section 16.42.040 adds requirements to install electrical improvements at the time of certain remodels, alterations and additions that could affect the construction design of kitchens, outdoor appliances, water heaters and gas clothes dryers. However, since this ordinance does not restrict the gas use of existing or future appliances, it includes an incentive to move toward all-electric construction without impacting the use of mixed fuel construction.

~~e. The City adopted the Climate Action Playbook (adopted in 2014) to provide a guide that shows how the City plans to reduce overall greenhouse gas emissions to align with the State's greenhouse gas reduction targets.~~