



City of Sunnyvale

Agenda Item

23-0014

Agenda Date: 2/16/2023

2023 COUNCIL STUDY ISSUE

NUMBER

ESD 23-02

TITLE Improving Community Awareness of Indoor Air Quality for Climate Resiliency and Public Health

BACKGROUND

Lead Department: Environmental Services Department

Support Departments: Office of the City Manager
Office of the City Attorney
Department of Public Works
Information Technology Department

Sponsor(s): Sustainability Commission

History: 1 year ago: N/A
2 years ago: N/A

SCOPE OF THE STUDY

What precipitated this Study?

The Bay Area has been impacted by air quality issues caused or exacerbated by wildfires and heat waves. As the frequency of heat waves and wildfires increases from climate change, awareness of air quality becomes an important part of climate resilience. During the COVID-19 pandemic, the quality of indoor air was brought into the forefront as a public health concern.

What are the key elements of the Study?

The intent of this Study is for the City to examine how to enhance the community's understanding of indoor air quality (IAQ) issues to better enable their resilience. This Study would consider the following key elements:

- Regular monitoring of the IAQ of City facilities that are utilized by the public and displaying IAQ for the community to view
- Outreach to businesses and other public agencies in Sunnyvale on how to protect occupant's health, both in a business-as-usual circumstance or during a climate event causing bad air quality
- Provide lectures and workshops on IAQ including ventilation and air cleaning (e.g., do-it-yourself air cleaners, proper maintenance), household cleaning products affecting IAQ and sustainable alternatives

Estimated years to complete study: 1 years

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost): Minor
Funding Required for Non-Budgeted Costs: \$150,000
Funding Source: Will seek budget supplement

There would not be any non-budgeted costs for studying the outreach and education focused components of this Study. The outreach and education portions of the study will be funded through our existing Sustainability Program operating budget. There would be consultant costs associated with investigating the possibility of installing air quality monitors and connected display systems. The consultant would likely perform assessments of the buildings' HVAC systems, baseline data collection of indoor and outdoor air quality, foot traffic assessments for each building, etc. There would likely be 6 buildings in the assessment; Department of Public Safety, Recreation Building, Columbia Neighborhood Center, Public Library, Senior Center, and the Corporation Yard Administrative Building.

Cost to Implement Study Results

Unknown. If this Study led to a recommendation for displaying IAQ, there would be significant capital funding needed to install monitors and have those connected to a display system. There would also be ongoing maintenance and replacement costs associated with the monitors and display systems. There could be additional costs associated with corrective actions if the IAQ displayed is not within determined parameters. However, these costs are unknown. Increased outreach and education on the topic of IAQ could be folded into current Sustainability program operations.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No
Council Study Session: No
Reviewed by Boards/Commissions: Sustainability Commission

STAFF RECOMMENDATION

Drop. This policy issue does not merit discussion at the 2023 Study Issues Workshop.

Environmental Services implements education and outreach programs for environmental issues including climate action. Awareness and education regarding the benefits of building electrification to indoor air quality is already included in relevant program messaging such as induction cooktops. IAQ was also discussed in depth during the 2021-22 Sustainability Speaker Series event on building decarbonization. Staff is exploring how best to implement additional outreach activities for electrification, and indoor air quality can be considered in those efforts.

A study is not required to determine how to implement messaging that includes IAQ. Expanded messaging focused on public health separate from climate action would be outside the scope of current activities.

The majority of the City's managed buildings are older and not properly configured for indoor air quality monitoring nor IAQ results display. Ventilation and filtration of new buildings are considered during the design phase for new construction.

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