



City of Sunnyvale

Notice and Agenda - Final Sustainability Commission

Tuesday, January 21, 2020

7:00 PM

West Conference Room, City Hall, 456 W.
Olive Ave., Sunnyvale, CA 94086

CALL TO ORDER

SALUTE TO THE FLAG

ROLL CALL

PRESENTATION

[20-0194](#)

PRESENTATION - Silicon Valley Clean Energy (SVCE)
Programs Update

[20-0197](#)

PRESENTATION - FoodCycle and Solid Waste Programs
Update

ORAL COMMUNICATIONS

This category provides an opportunity for members of the public to address the commission on items not listed on the agenda and is limited to 15 minutes (may be extended or continued after the public hearings/general business section of the agenda at the discretion of the Chair) with a maximum of up to three minutes per speaker. Please note the Brown Act (Open Meeting Law) does not allow commissioners to take action on an item not listed on the agenda. If you wish to address the commission, please complete a speaker card and give it to the Recording Secretary. Individuals are limited to one appearance during this section.

CONSENT CALENDAR

[20-0225](#)

Approve the Sustainability Commission Meeting Minutes of
December 16, 2019

Recommendation: Approve the Sustainability Commission Minutes of December
16, 2019 as submitted.

PUBLIC HEARINGS/GENERAL BUSINESS[20-0198](#)

Rank 2020 Study Issues

STANDING ITEM: CONSIDERATION OF POTENTIAL STUDY ISSUES**NON-AGENDA ITEMS & COMMENTS****-Commissioner Comments****-Staff Comments****INFORMATION ONLY REPORTS/ITEMS**[20-0232](#)

2020 Annual Master Work Plan

ADJOURNMENT*Notice to the Public:*

Any agenda related writings or documents distributed to members of this meeting body regarding any item on this agenda will be made available for public inspection in the Environmental Services Department located at 1444 Borregas Avenue, Sunnyvale or can be accessed through the Office of the City Clerk located at 603 All America Way, Sunnyvale during normal business hours and in the meeting location on the evening of the Sustainability Commission meeting, pursuant to Government Code §54957.5.

Agenda information is available by contacting Nupur Hiremath at (408) 730-7743. Agendas and associated reports are also available on the City's website at sunnyvale.ca.gov or at the Sunnyvale Public Library, 665 W. Olive Ave., Sunnyvale, 72 hours before the meeting.

Pursuant to the Americans with Disabilities Act, if you need special assistance in this meeting, please contact Nupur Hiremath at (408) 730-7743. Notification of 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35.160 (b) (1))



City of Sunnyvale

Agenda Item

20-0194

Agenda Date: 1/21/2020

PRESENTATION - Silicon Valley Clean Energy (SVCE) Programs Update



City of Sunnyvale

Agenda Item

20-0197

Agenda Date: 1/21/2020

PRESENTATION - FoodCycle and Solid Waste Programs Update



City of Sunnyvale

Agenda Item

20-0225

Agenda Date: 1/21/2020

SUBJECT

Approve the Sustainability Commission Meeting Minutes of December 16, 2019

RECOMMENDATION

Approve the Sustainability Commission Minutes of December 16, 2019 as submitted.



City of Sunnyvale

Meeting Minutes - Draft

Sustainability Commission

Monday, December 16, 2019

7:00 PM

West Conference Room, City Hall, 456 W.
Olive Ave., Sunnyvale, CA 94086

CALL TO ORDER

Chair Paton called the meeting to order at 7:00 p.m. in the West Conference Room.

SALUTE TO THE FLAG

Chair Paton led the salute to the flag.

ROLL CALL

Present: 6 - Chair Bruce Paton
Vice Chair Kristel Wickham
Commissioner Stephen Joesten
Commissioner Douglas Kunz
Commissioner Shana Padgett
Commissioner Murali Srinivasan

Absent: 1 - Steven Zornetzer

Commissioner Zornetzer– Absent

Council Liaison – Nancy Smith (Present)

Commissioner Zornetzer's absence is excused by general consent.

Commissioner Srinivasan left early at 8 p.m. after notifying Chair Paton.

PRESENTATION

[19-1267](#) PRESENTATION - Reach Codes in the Bay Area

John Supp, Account Services Manager of Silicon Valley Clean Energy (SVCE), presented an overview on Building Reach Codes in the Bay Area. Mr. Supp explained that Reach Codes encourages cost-effective, safer, healthier all-electric

buildings within the building code and supports cities in meeting their climate goals. He highlighted the variety of Reach Codes that have been adopted or are being considered by Bay Area cities to meet their needs. The Commission asked questions and SVCE staff provided clarifications.

Chair Paton opened the public comments.

A member of the public noted that the electrification of new buildings would not address the energy demands of existing homes. John Supp explained that existing homes are addressed through the retrofit section of the building code.

Chair Paton closed the public comments.

[19-1268](#) **PRESENTATION - Best Practices from Leading City Climate Action Plans**

Chair Paton and Commissioner Kunz presented information on Best Practices from Leading City Climate Action Plans. Chair Paton presented information on building retrofits and transportation elements of the climate action plans of six cities in the Bay Area, including San Francisco, Oakland, San Jose, Palo Alto, Mountain View, and Menlo Park. Commissioner Kunz presented an overview of the emerging practice of developing consumption-based greenhouse gas (GHG) emissions inventories, compared to the more traditional sector-based GHG emissions inventories, as an approach for tracking climate action plans. He highlighted the benefits and challenges of each approach. Commissioners asked clarification questions and discussed the information presented. Members of the public provided comments.

Chair Paton opened the public hearing.

A member of the public noted there was a regional study regarding incentivizing the switch to heat pump water heaters, with successful large scale adoption being contingent on an expedited permit process and funding being in place.

Chair Paton closed the public hearing.

ORAL COMMUNICATIONS

None.

CONSENT CALENDAR

1.A [19-1269](#) Approve the Sustainability Commission Meeting Minutes of November 18, 2019

Commissioner Kunz pulled the draft minutes of the November 18, 2019 meeting from the consent calendar to request a correction to the spelling of the word “microgrid.” Staff noted the edit recommended by Commissioner Kunz. Commissioner Joesten moved, and Commissioner Kunz seconded, a motion to approve the consent calendar, as amended. The motion carried by the following vote:

Yes: 5 - Chair Paton
 Vice Chair Wickham
 Commissioner Joesten
 Commissioner Kunz
 Commissioner Srinivasan

No: 0

Absent: 1 - Zornetzer

Abstain: 1 - Commissioner Padgett

Commissioner Padgett abstained as she was not present at the November 18, 2019 meeting.

PUBLIC HEARINGS/GENERAL BUSINESS

2 [19-1270](#) Annual Review of Code of Ethics and Conduct for Elected and Appointed Officials

Jana Marquardt, Environmental Engineering Coordinator, stated that the Commissioners are responsible for reading and agreeing to abide by the Code of Ethics and Conduct for Elected and Appointed Officials (hereafter, Code of Ethics).

Vice Chair Wickham moved, and Commissioner Kunz seconded, a motion declaring they will abide by the rules of the Code of Ethics. Chair Paton offered a friendly amendment to the motion to include that the Commission had read and will abide by the Code of Ethics. Vice Chair Wickham accepted the friendly amendment.

The motion carried by the following vote:

Yes: 6 - Chair Paton
Vice Chair Wickham
Commissioner Joesten
Commissioner Kunz
Commissioner Padgett
Commissioner Srinivasan

No: 0

Absent: 1 - Zornetzer

STANDING ITEM: CONSIDERATION OF POTENTIAL STUDY ISSUES

None.

NON-AGENDA ITEMS & COMMENTS

-Commissioner Comments

Commissioner Kunz noted that he attended an outreach meeting focused on the transitioning from Level of Service to Vehicle Miles Traveled (VMT) on December 12, 2019. The meeting highlighted the development of a new transportation policy, effective July 2020, to meet the state requirements set by Senate Bill (SB) 743 by shifting from using a level of service approach for CEQA analysis to using VMT. Commissioner Kunz remarked that this promising development dovetails with the VMT goals within the City's Climate Action Playbook.

Commissioner Kunz also shared that the Cumberland Elementary School Parent Teacher Association (PTA), of which he is the President, is preparing a resolution urging schools to develop a Climate Action Plan and inventory their emissions. The proposed action is going to the PTA for a vote on December 19, 2019, with the goal of getting statewide traction.

Chair Paton observed that the Catholic Diocese of San Jose also has a climate action plan.

Vice Chair Wickham shared that she attended the Sunnyvale Homeowner Energy Efficiency Workshop provided by the Bay Area Regional Energy Network (BayREN) on November 19, 2019, where residents learned about making energy efficiency improvements and available fuel switching incentives. She also mentioned attending the Active Transportation Plan Draft Recommendations community workshop on December 5, 2019. The workshop featured topics including the Active Transportation Plan, Vision Zero, Safe Routes to School program, and

pedestrian-friendly streets, and provided a meaningful opportunity for the community to provide input on how to improve walking and biking in Sunnyvale.

-Staff Comments

Melody Tovar, Regulatory Programs Division Manager, shared that at the City Council meeting on December 10, 2019, at which the EcoDistricts Study Issue was presented, some members of the City Council had expressed concerns about getting ahead of the Moffett Park Specific Plan Update process by adding the evaluation of EcoDistricts to that project but appreciated the parallel effort. She noted that the final Council vote supported the staff recommendation.

INFORMATION ONLY REPORTS/ITEMS

[19-1271](#)

Updated Annual Work Plan December 2019

ADJOURNMENT

The meeting was adjourned at 9:25 p.m.



City of Sunnyvale

Agenda Item

20-0198

Agenda Date: 1/21/2020

Rank 2020 Study Issues

Board/Commission Process for Ranking Study Issues

The Study Issues process is designed to assist City Council with setting policy study priorities for the coming calendar year. Board and commission members have two roles in this process:

- To advise Council regarding the identification of policy issues to study (i.e., the generation of study issue ideas for Council's consideration); and
- To advise Council on those issues Council has decided to study.

All procedures must comply with Council Policies [7.2.19 Boards and Commissions](#), [7.3.26 Study Issues Process](#), and Administrative Policy [Chapter 1, Article 15 Boards and Commissions](#). All board and commission members shall adhere to those operational practices and procedures as contained in the *Board and Commission Handbook* prepared by the Office of the City Clerk.

To ensure consistency in approach and practice, all boards/commissions shall use the same ranking process as Council for all proposed Study Issues (described below and captured in Council Policy [7.3.26 Study Issues Process](#)).

Ranking Process

Step 1: Review issues

Staff provides a brief summary of each proposed Study Issue. Any Study Issue ranked by a Board/Commission, must be signed/approved by the City Manager prior to ranking. Boards and commissions shall review and take action on only those issues under their purview, as determined by the City Manager. Items not under the specific purview of a board or commission may be presented to them for "information only".

Step 2: Questions of Staff

Staff will address questions Commissioners may have regarding each study issue.

Step 3: Public Hearing

Chairperson opens Public Hearing for public input on any of the issues under consideration. (Note: the Commission may not take action on, or rank any new issue raised by the public for which there is not already a study issue paper developed. Those seeking to raise new issues at this point in the process should be informed that their options are to seek Council sponsorship of their issue or submit it to the Board/Commission for the following year's process.) Chairperson will close the Public Hearing.

Step 4: Determine which issues, if any, will be dropped

Commissioners may make motions to drop issues from consideration. After the motion is seconded, discussion on each item may ensue. If the motion passes by a simple majority of those present, the Board/Commission will drop the issue. Such action suggests that there is no need to study the issue.

If the Board/Commission votes to drop an issue that was initiated by the Commission that same year, the issue will not be forwarded to City Council for the Council's consideration. If, however, the Commission votes to drop an issue that was not initiated by the Commission - meaning that it was initiated by staff, Council or another Commission - or that had been deferred or fell below the line in the previous year, the issue would be forwarded to Council with a notation that the Commission recommended it be dropped from consideration.

Step 5: Determine which issues, if any, will be deferred

Commissioners may make motions to defer issues from consideration to a later year. After the motion is seconded, discussion on each item may ensue. If the motion passes by a simple majority of those present, the Commission will not rank the issue. Such action suggests only that the issue is not currently a priority and/or it is not the appropriate time to study the issue.

If the Commission votes to defer an issue that was initiated by the Commission that year, the issue will not be forwarded to City Council for the Council's consideration. If the Commission votes to defer an issue that was not initiated by the Commission - meaning that it was initiated by staff, Council or another Commission - or that had been deferred or fell below the line in the previous year, the issue would be forwarded to Council with a notation that the Commission recommended it be deferred from consideration.

Step 6: Commission discussion on issues to be ranked

Commissioners have the opportunity to speak to the remaining issues to be ranked and to discuss merits and priorities before ranking the remaining issues. No motion is required.

Step 7: Commissioners rank issues individually

Depending on the number of issues left to rank, the Board/Commission shall utilize one of the following ranking methods:

Simple Majority/Borda Count (for ranking ten or fewer issues) – Commissioners individually and simultaneously rank each of the remaining issues. Rankings are from 1 to the total number of issues, with “1” representing the issue with the highest priority for study. Each number can be used only once (no ties) and each issue must receive a ranking.

Choice Ranking (for ranking eleven or more issues) – the number of items to be ranked is divided by three and each Commissioner is given that many votes. Each Commissioner allocates his or her votes, one each, to different issues. Some issues will receive votes, others may not, depending on the total number of issues and the number targeted for selection. A tally is made for each issue selected. Two-way ties between issues are resolved by quick votes of the group. Multiple ties are resolved in the same manner as before: dividing by three (if four items are tied, for example, each member gets one vote to assign to one of those issues). The issues that receive the most votes are thereby prioritized. If necessary and desired, the process is repeated for the remaining issues (the ones that didn't get votes the first time).

Regardless of ranking method, all individual Commissioner ranking votes and final Board/Commission rank recommendations will become a part of the official record and shall be made available to the public.

Step 8: Combined ranking determined

A combined Commission ranking is determined when staff totals the individual ranking from all Commissioners for each issue.

Simple Majority/Borda Count The issue with the lowest total becomes the Commission's Priority 1 issue; the next lowest total is Priority 2, etc.

Choice Ranking The issues that receive the most votes becomes the Commission's Priority 1 issue; the next lowest total is Priority 2, etc.

Step 9: Tie Breaks

Two-way ties should be resolved by quick hand votes of the Board/Commission.

Three-way (or more) ties should be resolved using a tie break ranking sheet. The sheet lists all tied issues and the Board/Commission ranks in order, first to last choice. The issues receiving the most votes get the higher priority. This step is repeated if there are multiple ties.

Step 10: Acceptance of rankings

A motion is then made to accept, reject or modify the overall Commission rankings for issues. After the motion is seconded, discussion may ensue. Simple majority is required for passage.

After the Commission Ranking

B/C liaisons are responsible for inputting the commission's rankings in the B/C Ranking Spreadsheet provided by OCM. The completed sheet is due to OCM in early December.

Council will hold a Public Hearing on Study Issues in early January. The Chair or his/her appointee is encouraged to speak before Council and share the Board/Commission's recommended rankings.

Issues Sponsored AFTER Commission Ranking

If a study issue is sponsored after the Commission has held its ranking meeting, the issue will identify the paper as "too late to rank" for the B/C. In this instance, Commissioners are able to attend the January Public Hearing, identify themselves as Commissioners, and testify on how they would have voted (as an individual) had this item gone before the Commission (I would have voted to [drop, defer, rank] this item).

Key Dates for each year are available on Sunspot at <http://ocm/pams/default.aspx>

Note: There is no proxy ranking: Commissioners must be present to rank study issues.

Rank 2020 Study Issues Sustainability Commission

NUMBER	TITLE
CDD 20-04	Encourage Decarbonization Readiness During Electrical Upgrades
DPW 20-01	Reducing the City of Sunnyvale's Fossil Fuel Infrastructure and Equipment
DPW 20-08	Create a New City Board and Commission or Staff Advisory Committee Focused on Mobility Issues, Especially Commutes Into and Out of the City
DPW 20-09	Subsidized Public Transit
CDD 19-08	Consider New Requirements or Policies to Reduce Greenhouse Gas Emissions from new Development Projects
CDD 19-09	Evaluate the Feasibility of Requiring New Non-Residential Development Projects to Meet Specific Energy Performance Measures to Reduce Greenhouse Gas Emissions
ESD 19-02	Encourage Adoption of Electric Vehicles
CDD 18-09	Require Installation of Solar Energy Systems on New Buildings
ESD 17-01	Eliminate the Use of Chemical Pesticides on City Owned or Leased Property



City of Sunnyvale

Agenda Item

20-0145

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

CDD 20-04

TITLE Encourage Decarbonization Readiness During Electrical Upgrades

BACKGROUND

Lead Department: Community Development Department

Support Departments: Office of the City Manager
Office of the City Attorney
Environmental Services Department

Sponsor: Board/Commission: Sustainability Commission

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

SCOPE OF THE STUDY

What precipitated this Study?

The Sustainability Commission has identified an opportunity to increase ease of replacing gas appliances with electric appliances in existing buildings through early education and corresponding earlier upgrades in electrical systems. In existing buildings, replacing gas appliances with electric appliances may require the property owner to upgrade their existing electrical systems, including electrical panels, wiring, and conduits, which can be expensive and time-consuming. Educating property owners or incentivizing options for upgrading electrical systems at the point of remodeling, when they apply for building permits, may enable an easier switch to electrical appliances in the future.

What are the key elements of the Study?

This Study would evaluate what steps and resources the City would take to implement education, incentives, and policies to encourage the future electrification of gas appliances in existing residential or non-residential buildings. Study elements would include:

- Determining appropriate strategies and time points for educating owners on the benefits of switching to electrical appliances during building renovation or remodels,
- Examining policies to encourage the action of upsizing a building's electrical service panel during major upgrades to have sufficient size to accommodate a future all-electric building, and
- Identifying and consolidating information on available resources to facilitate ease of upgrades (e.g., logistical or design support) or incentives to offset costs (e.g., rebates).

Estimated years to complete study: 1 year

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost): Moderate
Funding Required for Non-Budgeted Costs: \$0
Funding Source: N/A

Cost to Implement Study Results

Implementation costs would be determined as part of the Study.

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 2020 Study Issues Workshop.

The City recently adopted its updated climate action plan, called the Climate Action Playbook, which includes six major strategies needed to reduce GHG emissions by 80 percent by 2050.

With Strategy 2 (Decarbonizing Buildings), both existing and new buildings are addressed. Within this Strategy, Play 2.2 is to “Support electrification of existing buildings” and Move 2.C is to “Develop a program to accelerate the adoption of heat pump water heaters and space heaters.” Silicon Valley Clean Energy’s (SVCE) FutureFit pilot program currently offers rebates for upgrading to heat pump water heaters, including rebates for upgrading associated electrical systems. This pilot effort addresses the element of the proposed Study Issue focused on incentives.

Further, Strategy 5 of the Climate Action Playbook is Empowering our Community. Within it, Play 5.1 is to “Enhance community awareness and engagement” and Move 5.B is to “Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).” In alignment with this Move, SVCE is developing a public-facing Customer Resource Center (CRC) that will allow customers to understand costs and benefits of newer all-electric technologies and to connect with vendors or installers for moving towards full electrification of existing buildings. Once the CRC is active, staff will evaluate how best to promote it as a resource, including at the One Stop Permit Center to prospective permit applicants. This addresses the element of the proposed Study Issue focused on education.

For these reasons, staff recommends dropping this Study Issue at this time. In addition, staff will consider whether a policy approach to encourage electrical upgrades for existing buildings may be appropriate as a Next Move in a subsequent CAP Game Plan.

Prepared by: Nupur Hiremath, Environmental Programs Manager

Reviewed by: Ramana Chinnakotla, Director, Environmental Services

Reviewed by: Trudi Ryan, Director, Community Development

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager



City of Sunnyvale

Agenda Item

20-0185

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

DPW 20-01

TITLE

Reducing the City of Sunnyvale's Fossil Fuel Infrastructure and Equipment

BACKGROUND

Lead Department: Department of Public Works

Support Departments: Office of the City Manager
Office of the City Attorney
Environmental Services Department
Community Development 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 Climate Action Playbook (adopted August 2019) includes Strategies 2 and 3 to decarbonize buildings and transportation. The Sustainability Commission has proposed that the City should review methods to support these Strategies and proactively prepare the City's infrastructure to ensure a transition to decarbonizing the City's facilities, operations, and vehicles. Furthermore, identifying ways to implement targets in the Climate Action Playbook Strategies 2 and 3, also supports Council Policy 1.1.9 - Sustainable Development and Green Buildings, as well as Council Policy 3.7.2 - Reduction of Carbon Dioxide Emissions from City Operations.

What are the key elements of the Study?

The intent of the Study is to ascertain what would be required to reduce the City's fossil fuel infrastructure and equipment to optimize energy efficiency, electrify buildings and equipment, increase zero-emissions City fleet, and decarbonize City buildings.

Key Elements:

- 1) Identify fossil fuel infrastructure within the City that, under normal circumstances would need preventive maintenance, repair or replacement over the next 30 years (the span of the Climate Action Playbook targets). This could include, but is not limited to, underground gasoline fuel tanks and associated equipment for supplying gasoline fleet vehicles (e.g., police, fire, general); natural gas vehicle fleet capital equipment; equipment that uses natural gas (such as for heating buildings and water) at City facilities; and natural gas pipelines throughout the City.
- 2) Comprehensively evaluate a pathway for electrifying all City-controlled vehicles, including those under contract (such as recycling/garbage).

- 3) For each category of infrastructure, identify the projected amount of money that would be needed to replace existing or anticipated future infrastructure with new non-fossil fuel infrastructure through 2050.
- 4) Develop a plan to phase out (or minimize) fossil fuel use in City operations and use associated savings to calculate costs of alternatives and return on investment. Use current funding to replace existing infrastructure with electric or renewable energy infrastructure in alignment with the Climate Action Playbook priorities.

Estimated years to complete study: 2 years

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost):	Moderate
Funding Required for Non-Budgeted Costs:	\$500,000
Funding Source:	Will seek budget supplement

The cost is for consultant services that are necessary to complete the Study. The consultant team will require different levels of expertise including engineering, environmental, and transportation.

Cost to Implement Study Results

Unknown. Study would include assessment of potential costs, including capital and operating, as well as revenue/savings.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Sustainability Commission

STAFF RECOMMENDATION

Defer. This policy issue merits discussion at a future Study Issues Workshop.

Identifying fossil fuel infrastructure and equipment and examining a pathway to electrification is essential for the City to decarbonize its buildings, fleet, and other infrastructure over the next 30 years and achieve the City's Climate Action Playbook targets for Strategies 2 and 3.

City staff is already working on electrifying all new (City-owned) buildings and pool cars. Staff is also investigating the feasibility of replacing the existing compressed natural gas garbage trucks with electric trucks as they come up for replacement as part of the new solid waste collection franchise agreement.

As a part of the City's Climate Action Playbook implementation, the City has immediate plans to begin addressing fossil fuel infrastructure by addressing its end uses, namely use of fossil fuels in buildings and vehicles. Specific Next Moves that address this are:

- Move 2.D - Electrify municipal buildings upon rebuild or significant remodel, including Civic Center, and
- Move 3.L - Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure.

Addressing the end uses through these moves will facilitate eventual phasing out fossil fuel infrastructure that serves buildings and the fleet today.

Furthermore, there is a limited or no market for certain types of electric vehicles and equipment, such as police interceptors, backhoes, and fire trucks. All of these may still require ongoing support infrastructure, such as underground fuel tanks, and for the foreseeable future will be dependent on fossil fuel. An evaluation of how all existing buildings can be converted from natural gas to electricity, heavy-duty and public safety vehicles to electric, plus viable options for non-fossil fueled backup generators should wait until technology evolves a bit further. For this reason, staff recommends that this Study Issue be deferred to a later date.

Prepared by: Tamara Davis, Sr. Management Analyst

Reviewed by: Chip Taylor, Director, Department of Public Works

Reviewed by: Ramana Chinnakotla, Director, Environmental Services

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager



City of Sunnyvale

Agenda Item

20-0143

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

DPW 20-08

TITLE Create a New City Board and Commission or Staff Advisory Committee Focused on Mobility Issues, Especially Commutes Into and Out of the City

BACKGROUND

Lead Department: Public Works
Support Departments: Office of the City Manager
Office of the City Attorney
Environmental Services
Sponsor(s): Sustainability Commission
History: 1 year ago: N/A
2 years ago: N/A

SCOPE OF THE STUDY

What precipitated this Study?

In August 2019, Sunnyvale adopted the Climate Action Playbook to set a vision for the city to reduce carbon emissions by 2050. Transportation is the largest source of greenhouse gas (GHG) emissions both in Sunnyvale and in the state of California. In Sunnyvale, transportation is responsible for 54% of the city's GHG emissions. In order to achieve the State of California's target emissions reductions of 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050, the Climate Action Playbook proposes a goal to reduce vehicle miles traveled (VMT) by 20% by 2030.

Reducing VMT by 20 percent by 2030 will require transformations in lifestyle, infrastructure, and technology. It is advisable to have a standing board and commission or advisory committee to guide staff or Council in mobility related planning and policy development. Boards and commissions advise Council on specific policy issues and provide a forum and opportunity for broad community input. Advisory committees assist staff with legislative decision-making on specific topics. Establishing a new board and commission or advisory committee would facilitate more in-depth education, dialogue, and deliberations on relevant policy issues and will, therefore, provide a more open and transparent public review process. It would also provide a forum for residents, employees, and employers to understand and provide input on regional decisions affecting our collective ability to achieve our goals to reduce VMT and related congestion issues.

What are the key elements of the Study?

Establishment of a new board and commission or staff advisory group would need to be considered by the Council (per Council Policy 7.3.1 Legislative Management). The study should compare the roles and responsibilities between a board and commission and staff advisory committee for Sunnyvale. It should identify jurisdictions with a mobility related board and commission or staff

advisory committee. The Study should summarize their roles and responsibilities, and perform a comparison of those jurisdictions' boards and commissions/committees with Sunnyvale's existing mobility-related boards and commissions/committees. It will identify existing boards and commissions/advisory committees in Sunnyvale with similar goals and mission.

Another element of the Study will be a public outreach component to obtain input from the community. Public outreach will include a community workshop and an online survey to gather input on how the city can provide a more open and transparent public review process. It will also provide recommendations on how to help facilitate residents, employees and employers understand how they could contribute to and comply with the City's policies on greenhouse gas reduction.

The Study should develop a recommendation of whether a) to create a new board and commission or advisory committee, b) to assign additional roles to an existing board and commission/advisory committee, or c) to restructure any existing mobility-related boards and commissions/advisory committees. If the recommendation is to create a new board and commission/advisory committee, the Study will include a review of the City Council Policy to determine how overlapping roles and responsibilities could be resolved between the new board and commission/advisory committee and existing boards and commissions/advisory committees.

The Study will also include recommendations on membership numbers, membership requirements, term duration, meeting location, meeting frequency, dates, and the required staff resources needed to support the mobility-related board and commission/advisory committee. In addition, the Study should consider the board and commission/advisory committee's potential role concerning GHG reduction strategies, implementation of Climate Action Playbook programs, and advocacy and communication to the public.

Estimated years to complete study: 1 year

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost):	Major
Funding Required for Non-Budgeted Costs:	\$350,000
Funding Source:	Will seek budget supplement

The cost associated with this Study would be for consultant services to conduct research on jurisdictions with a mobility-related board and commission/advisory committee and their roles and responsibilities, to compare the findings with current boards and commissions/advisory committees in Sunnyvale, and to make a recommendation on whether to form a new board and commission/advisory committee. City staff will work with the consultant throughout the project process in the development of the recommendations.

Cost to Implement Study Results

Unknown. Study would include assessment of potential costs, including capital and operating, as well as revenue/savings.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: No

Reviewed by Boards/Commissions: N/A

STAFF RECOMMENDATION

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

The Sunnyvale Bicycle and Pedestrian Advisory Commission acts in an advisory role to the City Council on bicycle and pedestrian issues and provides recommendations on bicycle and pedestrian infrastructure improvements. Through these efforts, the City works toward shifting from vehicular travel to alternative mobility travel modes such as walking, biking and taking transit. The Sunnyvale Sustainability Commission acts in an advisory capacity to the City Council to provide expertise on major policy areas related to the environmental sustainability goals of the Climate Action Plan (CAP) and General Plan. Sunnyvale also has an Advisory Committee on Accessibility, which provides input to City staff on accessibility and mobility issues.

The proposed Board and Commission or staff Advisory Committee would be partially redundant and overlap the efforts in providing guidance to the City Council and staff since the already formed Boards and Commissions and Staff Advisory Committee are currently working in the same capacity.

Prepared by: Ralph Garcia, Senior Transportation Engineer, Public Works

Reviewed by: Chip Taylor, Director, Public Works

Reviewed by: Ramana Chinnakotla, Director, Environmental Services

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager



City of Sunnyvale

Agenda Item

20-0144

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

DPW 20-09

TITLE Subsidized Public Transit

BACKGROUND

Lead Department: Public Works
Support Departments: Office of the City Manager
Office of the City Attorney
Environmental Services
Finance
Sponsor(s): Sustainability Commission
History: 1 year ago: N/A
2 years ago: N/A

SCOPE OF THE STUDY

What precipitated this Study?

One of the key areas of the Climate Action Plan 2.0 is to reduce the vehicle miles traveled metric; the use of public transit will be a key element in the success of reducing greenhouse gas emissions (GHG). This Study Issue would investigate the use of reduced fares for public transit to encourage more use. The study would encompass all forms of mass transit including VTA, Caltrain, ACE train, and any other type of alternate transit available to the residents of Sunnyvale.

The Study would investigate the barriers to the use of public transit, including cost, convenience, and time, and determine if a reduced fare would increase ridership.

The Study would also include data from other cities that provide subsidies to transit riders including San Francisco, Portland, and Baltimore. The study of cities that currently offer reduced fare structures will be important in understanding what does work and what does not work as well as give some insight into the cost for offering reduced fares.

What are the key elements of the study?

Study of subsidized public transit for Sunnyvale residents will need to include a survey of residents to determine commute patterns, barriers, public perception of transit, and willingness to use public transit based on accessibility, service areas, reliability, and travel times. Input from transit operators will be included to determine how increased ridership can be accommodated within their business model and its potential impacts. The Study would also identify what makes jurisdictions that offer subsidized public transit successful, how they compare to Sunnyvale in resident demographics, land use, transit density/service, jurisdictional characteristics, and quantify the cost of commuting. Additionally, the appropriate level of public transit subsidy and how the subsidy will be funded, will

need to be studied.

The cost to fund a subsidized transit program could be significant as it would also need to include staff time, online support, the cost of the transit passes, and the coordination with various transit agencies such as VTA, Caltrain, and Altamont Corridor Express (ACE). The coordination would need to include determining whether the current transit capacity could accommodate the new demand that this program would create.

Estimated years to complete study: 2 years

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost):	Major
Funding Required for Non-Budgeted Costs:	\$300,000
Funding Source:	Will seek budget supplement

The cost associated with this Study will be for consultant services to determine the feasibility and process in implementing a transit subsidy program. The analysis will include a review of policies, travel demand, socioeconomic factors, and City operating costs to implement the program. The analysis will also include community outreach events and surveys.

Cost to Implement Study Results

Unknown. Study would include assessment of potential costs, including capital and operating, as well as revenue/savings.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: Yes

Council Study Session: Yes

Reviewed by Boards/Commissions: Sustainability Commission

STAFF RECOMMENDATION

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

Many development projects within the City have requirements to reduce the number of trips to and from the development. As those projects implement measures to reduce trips such as shuttles, bicycle storage, transit subsidies and carpool incentives, a number of trips will be reduced throughout the City.

As part of the Peery Park Specific Plan, a shuttle will provide services around and within the Peery Park Specific Plan Area for residents and commuters. The shuttle would be provided for free for the first two years with a grant from the Metropolitan Transportation Commission (MTC) with the likelihood of continuation as part of the Transportation Management Association (TMA) in Peery Park. Depending on the success of this program, there is the potential of increasing the service area and partnering with neighboring jurisdictions to provide a local shuttle service.

Also, Sunnyvale Community Services (SCS), a nonprofit emergency assistance agency, is currently providing subsidized monthly VTA bus passes to qualified low-income individuals and families. In

October, SCS increased the number of monthly VTA bus passes they offer from 201 to 286, and in the future, the number of passes might increase depending on available funding.

Prepared by: Lillian Tsang, Principal Transportation Engineer, Public Works

Reviewed by: Chip Taylor, Director, Public Works

Reviewed by: Ramana Chinnakotla, Director, Environmental Services

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager



City of Sunnyvale

Agenda Item

20-0127

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

CDD 19-08

TITLE Consider New Requirements or Policies to Reduce Greenhouse Gas Emissions from new Development Projects

BACKGROUND

Lead Department: Community Development

Support Departments: Office of the City Manager

Office of the City Attorney

Environmental Services

Sponsor(s): Sustainability Commission

History: 1 year ago: Deferred by Council

2 years ago: N/A

SCOPE OF THE STUDY

What precipitated this Study?

Accelerating Climate Action is a Council Policy Priority. Since 100 percent greenhouse gas-free electricity was made available through Silicon Valley Clean Energy in 2017, the use of natural gas in buildings has been the second largest contributor to Sunnyvale greenhouse gas (GHG) emissions. Given that Sunnyvale is attempting to decrease its GHG emissions, new buildings represent an opportunity to reduce the GHG emission levels in Sunnyvale and bring the City further in line with the goals of the recently adopted Climate Action Playbook.

What are the key elements of the Study?

The Study would focus on reducing GHG emissions on new construction by creating a program and regulations for the community to promote the construction of zero carbon buildings.

The Study may include:

- Identifying costs and savings to the City, developers, residents and businesses for constructing zero carbon buildings;
- Identify the benefits zero carbon buildings would have on the community and the environment;
- Identify standards or certification programs already being used by the City that may help further the goal of the study;
- Consult with Silicon Valley Clean Energy (SVCE) staff, or other groups with expertise on the topic, to discuss potential standards, policies or regulations for new construction projects;
- Study the impacts the above measures may have on design, building, marketing and other costs of new construction projects, and identify measures (e.g., strengthened voluntary incentives) to mitigate their impacts;

- Consider voluntary incentives for existing buildings that make the choice to retrofit and become zero carbon; and
- Study the potential costs of implementing an outreach and education program to encourage adoption of zero emission building systems, including zero emission cooking technologies (e.g., induction).

Estimated years to complete Study: 2 years

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost):	Moderate
Funding Required for Non-Budgeted Costs:	\$100,000
Funding Source:	Will seek budget supplement

Funding would be used to hire a specialized consultant; staff does not have the technical expertise needed to conduct this study internally. Funding may also be utilized to hire an outside source to aid in conducting effective outreach, and the necessary education.

Cost to Implement Study Results

Unknown. Study would include assessment of potential costs, including capital and operating, as well as revenue/savings.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: Yes

Reviewed by Boards/Commissions: Planning Commission, Sustainability Commission

STAFF RECOMMENDATION

Drop. This policy issue does not merit discussion at a future Study Issues Workshop.

- The City recently adopted its CAP 2.0 (Climate Action Playbook), which includes Decarbonizing Buildings as one of six major strategies needed to reduce GHG emissions by 80 percent by 2050. Within this strategy (Strategy 2) is Play 2.3 - Achieve all-electric new construction, which specifically addresses emissions from new buildings, with a goal of 100 percent all-electric new buildings by 2030. Further, the City plans to implement the following "Next Moves" (specific actions) from the Playbook in the next three years: Move 2.E - Evaluate code and permitting processes to streamline building electrification
- Move 2.G - Continue to incentivize energy efficient and high performance buildings through Green Building Program updates.

The City is examining the viability of streamlining for electric buildings (e.g., Reach Codes) as a part of Move 2.E. In line with Move 2.G, the City adopted revised Green Building Program standards in May 2019, which specifically incentivizes all-electric, zero-emission buildings. Given these developments, staff believes a study at this time is not needed.

Prepared by: Amber Blizinski, Principal Planner

Reviewed by: Trudi Ryan, Director, Community Development

Reviewed by: Ramana Chinnakotla, Director, Environmental Services

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager



City of Sunnyvale

Agenda Item

20-0128

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

CDD 19-09

TITLE Evaluate the Feasibility of Requiring New Non-Residential Development Projects to Meet Specific Energy Performance Measures to Reduce Greenhouse Gas Emissions

BACKGROUND

Lead Department: Community Development

Support Departments: Office of the City Manager

Office of the City Attorney

Environmental Services

Sponsor(s): Sustainability Commission

History: 1 year ago: Deferred by Council

2 years ago: N/A

SCOPE OF THE STUDY

What precipitated this Study?

The proposed Study Issue arose from a discussion at the Sustainability Commission on July 16, 2018, regarding the degree to which the City should be “leaning forward” to meet or exceed State Greenhouse Gas (GHG) emission reduction requirements by 2030.

What are the key elements of the Study?

As the California Public Utilities Commission (CPUC) implements the California Long-Term Energy Efficiency Strategy Plan, a foundational goal is ensuring all new residential buildings be Zero Net Energy (ZNE) by 2020 and all new commercial buildings be ZNE by 2030. Additionally, 50 percent of existing commercial buildings will need to be retrofitted to be ZNE by 2030.

In cities, the building sector is a major contributor to carbon emissions and energy use accounting for up to 40% of the total energy consumed. This Study evaluates the feasibility and need to accelerate the energy efficiency performance of new non-residential construction in the City to ensure the City meets the CPUC goal of ZNE by 2030.

The Study may include:

- Review of similar requirements or incentive programs from other jurisdictions;
- Evaluate and create a set of common metrics that will be used to measure building performance;
- Establish standards for new non-residential buildings to achieve the goal of ZNE;
- Consider cost/savings impacts to property owners and tenants of ZNE development;
- Consider incorporating an outcome-based compliance model for new building owners to meet

ZNE goals in a non-prescriptive manner;

- Consider impacts/benefits to the City for requiring and facilitating ongoing active energy usage monitoring and collection of actual energy use performance (to support compliance with current requirements in AB 802, or expanding applicability of AB 802 requirements to more buildings); and
- Evaluate requirements or incentives for retrofitting existing buildings to ZNE if modifications are proposed.

Estimated years to complete Study: 2 years

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost):	Major
Funding Required for Non-Budgeted Costs:	\$125,000
Funding Source:	Will seek budget supplement

Funding would be used to hire a specialized consultant; staff does not have the technical expertise needed to conduct this Study internally. Funding may also be utilized to hire an outside source to aid in conducting effective outreach, and the necessary education.

Cost to Implement Study Results

Unknown. Study would include assessment of potential costs, including capital and operating, as well as revenue/savings.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Planning Commission, Sustainability Commission

STAFF RECOMMENDATION

Drop. This policy issue does not merit discussion at a future Study Issues Workshop.

The City recently adopted its updated climate action plan, called the Climate Action Playbook, which includes Decarbonizing Buildings as one of six major strategies needed to reduce GHG emissions by 80 percent by 2050. Within this strategy (Strategy 2), both existing and new buildings are addressed. Further, the City plans to implement the following “Next Moves” (specific actions) from the Playbook in the next three years:

- Move 2.A - Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems.
- Move 2.E - Evaluate code and permitting processes to streamline building electrification
- Move 2.G - Continue to incentivize energy efficient and high performance buildings through Green Building Program updates.

The City will research and evaluate potential for energy disclosure and benchmarking to ensure compliance with regulations such as AB 802, as a part of Move 2.A. The City is examining the viability of streamlining for electric buildings (e.g., Reach Codes), as a part of Move 2.E.

Lastly, in line with Move 2.G, the City adopted revised Green Building Program standards in May 2019, which specifically incentivize all-electric, zero-emission buildings. Given these developments that specifically target all-electric and highly energy efficient buildings, staff believes this Study is no longer necessary.

Prepared by: Amber Blizinski, Principal Planner

Prepared by: Nupur Hiremath, Environmental Programs Manager

Reviewed by: Trudi Ryan, Director, Community Development

Reviewed by: Ramana Chinnakotla, Director, Environmental Services

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager



City of Sunnyvale

Agenda Item

20-0138

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

ESD 19-02

TITLE Encourage Adoption of Electric Vehicles

BACKGROUND

Lead Department: Environmental Services Department

Support Departments: Office of the City Manager
Office of the City Attorney
Department of Public Works
Community Development

Sponsor(s): Sustainability Commission

History: 1 year ago: Deferred by Council
2 years ago: N/A

SCOPE OF THE STUDY

What precipitated this Study?

On-road transportation is the largest contributor (54% of total) to communitywide greenhouse gas emissions in Sunnyvale. A combination of strategies is necessary to address these emissions, which includes, among others, fuel switching traditional gasoline powered private vehicles to zero emission or electric vehicles (EVs). With the implementation of Silicon Valley Clean Energy (SVCE), which provides carbon-free electricity to our community, Sunnyvale is poised to decarbonize transportation by fuel, switching from fossil fuel-driven vehicles to electric vehicles (EVs).

The Bay Area has witnessed rapid growth in both EV ownership as well as EV infrastructure in the last several years. As of 2017, several neighboring communities, such as Mountain View, Cupertino, Los Altos, and Saratoga, had greater electric vehicle (EV) adoption rates than Sunnyvale (Source: County of Santa Clara, Department of Motor Vehicles, 2018). With more than 44 battery electric and plug-in hybrid electric vehicles available to consumers and growing EV charging infrastructure at public and private locations in Sunnyvale, the City has an opportunity to advance the growth of EVs. Further, reducing emissions by fuel switching to EVs is aligned with Council's Policy Priority of Accelerating Climate Action and with the City's Climate Action Playbook (adopted August 2019) Strategy 3: Decarbonizing Transportation and Sustainable Land Use.

What are the key elements of the Study?

The Study would:

- Review best practices employed by leading cities for promoting adoption of EVs.

- Explore viable public outreach and education approaches to be implemented in Sunnyvale (possibly in partnership with SVCE) to provide information on: (a) electric vehicles, and (b) residential and workplace charger installations.
- Evaluate options for strengthening City policies to enhance requirements for direct installation of EV chargers or for pre-wiring to support them, in new construction and in significant remodels of existing buildings, for both residential and commercial properties.
- Evaluate options to encourage installation of public DC Fast-Charging (Level 3) infrastructure, including possible ownership, installation, and operation by third parties (e.g., Electrify America, Tesla).
- Study potential for establishing standards for placement and appearance of signage to direct EV drivers to public EV charging stations.
- Identify the key elements needed for electrifying the City's vehicle fleet, including funding strategies, modeled on cities that have already electrified their fleets.
- Evaluate potential for installing public EV charging stations in key city locations, including potential installations on City-owned streetlights.
- Identify costs and savings to the City, developers, residents and businesses of pursuing each of the potential actions above.
- Identify benefits to the community and the environment.

Estimated years to complete Study: 1-2 years

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost):	Moderate
Funding Required for Non-Budgeted Costs:	\$100,000
Funding Source:	Will seek grant or partnership funding

Potential costs to the City to conduct this Study would be for consultant support to develop a Community EV Readiness and Infrastructure Plan that would address all the elements of this Study. In addition, it would require staff time to guide the consultant, to collaborate across departments (ESD, DPW and CDD), and to collaborate with external partners (SVCE or other cities).

Cost to Implement Study Results

Unknown. Study would include assessment of potential costs, including capital and operating, and identify cost-sharing opportunities such as partnering with SVCE, given that SVCE and neighboring jurisdictions have expressed a strong interest in collaboration around several of the elements in this study.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Sustainability Commission, Planning Commission

STAFF RECOMMENDATION

Drop. This policy issue does not merit discussion at the 2020 Study Issues Workshop.

The City has recently adopted an updated Climate Action Playbook (adopted August 2019), which addresses the elements of this Study Issue. The Playbook identifies “Decarbonizing Transportation and Sustainable Land Use” as one of the six key strategies for reducing greenhouse gas emissions by 2050. Within this strategy, Play 3.3 specifically focuses on increasing zero-emission vehicles, and includes the following specific actions (called Next Moves) that the City plans to implement within the next three years:

- Move 3.J - Develop a Community EV Readiness and Infrastructure Plan
- Move 3.K - Promote and seek incentives for community adoption of EVs
- Move 3.J - Electrify municipal fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure

The implementation of these Moves will address all the elements of the proposed Study, and many are already underway. For example, staff is working on the development of a community EV education and awareness program (anticipated to launch in spring 2020) and held a Sustainability Speaker Series event that featured an EV expo and a workshop on November 9, 2019.

In addition, interest from surrounding South Bay communities and SVCE on this topic provides opportunities for gaining information or developing collaborative programs to address several elements of this study. For example, SVCE has already developed an Electric Vehicle Infrastructure Joint Action Plan for identifying a strategy to enhance charging infrastructure in its service area.

Given adoption of the Playbook and the progress made on implementation, staff recommends dropping this topic as a study issue.

Prepared by: Nupur Hiremath, Environmental Programs Manager, Environmental Services Department

Reviewed by: Ramana Chinnakotla, Director, Environmental Services Department

Reviewed by: Chip Taylor, Director, Department of Public Works

Reviewed by: Trudi Ryan, Director, Community Development Department

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager



City of Sunnyvale

Agenda Item

20-0125

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

CDD 18-09

TITLE Require Installation of Solar Energy Systems on New Buildings

BACKGROUND

Lead Department: Community Development

Support Departments: Environmental Services
Office of the City Manager
Office of the City Attorney

Sponsor(s): Councilmembers: Goldman, Melton

History: 1 year ago: Deferred by Council
2 years ago: Deferred by Council

SCOPE OF THE STUDY

What precipitated this Study?

This Study Issue was sponsored by the City Council on December 12, 2017. The topic was suggested by two members of the public during oral communications. There are several groups and individuals in Sunnyvale who are advocating acceleration of “green building” and renewable energy solutions for the City.

What are the key elements of the Study?

Solar energy systems are frequently installed on new and existing residential and commercial structures/properties. The California Building Code currently requires that new buildings be “solar ready” (every new building must have dedicated roof space for installation of solar panels). Beginning in 2020, the Building Code will require rooftop solar on most new residences and major home renovations under 3 stories. Several jurisdictions in California have already adopted local requirements for solar energy systems on new structures. Each jurisdiction’s requirements vary greatly on what must be installed, and to which development types (residential vs. commercial) the requirements apply.

In the last several years, the City has approved several new industrial development projects with requirements for installation of solar energy systems; however, these were approved on a project-by-project basis. Staff also regularly approves permits for solar energy systems on new and existing single-family residential structures when property owners voluntarily request these permits. The City also allows a maximum shading of 10% of the sum of all the rooftops of buildings adjacent to new development projects (over two stories) to assure that the neighboring property still has sufficient access to sunlight, to install viable solar energy systems on the rooftops of those structures.

The study on whether the City should require solar energy systems on new structures may include:

- Evaluation of the different types of solar energy systems;
- Review of what other jurisdictions require or incentivize;
- Consideration of cost impacts to the property owners of different types of new development (e.g., single-family homeowners, commercial and office developers);
- Evaluation of which buildings have a requirement for actual installation of solar panels;
- Safety implications and requirements for installation of solar energy systems on new structures; and
- Other benefits and/or impacts of requiring solar energy systems to be installed on new buildings.

Estimated years to complete study: 1-2 years

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost): Moderate
Funding Required for Non-Budgeted Costs: \$0

Cost to Implement Study Results

Minimal or no cost expected to implement.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Sustainability Commission and Planning Commission

STAFF RECOMMENDATION

Drop. This policy issue does not merit discussion at a future Study Issues Workshop.

The City has adopted the new state Building Code requirements for residential solar as part of the 2019 Building Code updates. These requirements went into effect on January 1, 2020 and mandate solar on new residential developments.

Additionally, one of the Building Division's near-term moves from the City's adopted Climate Action Playbook will be to study mandatory solar on non-residential structures. Therefore, this Study will be completed as part of the Climate Action Playbook and does not need to be a separate study issue.

Prepared by: Trudi Ryan, Director, Community Development

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager



City of Sunnyvale

Agenda Item

20-0137

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

ESD 17-01

TITLE Eliminate the Use of Chemical Pesticides on City Owned or Leased Property

BACKGROUND

Lead Department: Environmental Services
Support Departments: Office of the City Manager
Office of the City Attorney
Public Works
Library and Community Services
Sponsor(s): Sustainability Commission
History: 1 year ago: Deferred by Council
2 years ago: Below the Line

SCOPE OF THE STUDY

What precipitated this Study?

The Sustainability Commission raised concerns that using chemicals to control weeds and pests may contaminate water and soil leading to negative long-term impacts to human health and non-targeted species (e.g., bees, aquatic life, birds, pets, and beneficial insects).

What are the key elements of the Study?

The purpose of this Study is to evaluate the effectiveness of the City's current Integrated Pest Management Policy, levels of pesticide use on City property, assess community support for eliminating pesticide use on City property and identify the potential impact on City operations. Additionally, the Study will also consider opportunities for educating residents about chemical pesticide alternatives.

Key Study elements include:

- Identify current costs to the City for purchasing and applying pesticides (i.e., insecticides, herbicides, fungicides and rodenticides) that are covered in the Integrated Pest Management Plan (IPM). Separately identify costs of "Pesticides of Concern" and other chemical pesticides (for example glyphosate) used that are not on the 'concern' list. Identify expected net costs of further reducing and eliminating all pesticide use on City property (e.g., increased cost of mechanical weed removal, physical barriers, etc. as prescribed in the IPM plan minus savings from not purchasing pesticides, using mulch etc.).
- Identify benefits to community and environment. These will not be monetized since it is beyond the scope of this Study to assess the value of environmental benefits.
- Identify cost of a pilot study in selected parks or City properties to measure costs/savings in a

real application.

- Study cost of implementing a public outreach program to encourage pesticide elimination at homes, schools and businesses and provide information on alternative control means.
- Through a survey of residents and businesses, identify level of awareness and concern by the public on this topic and the desire for the City to devote attention to further pesticide reduction and eventual elimination.
- Benchmark and monitor progress of other cities in the region who have undertaken similar actions.
- Review the City's IPM Plan (effective June 1, 2010) and consider cost/benefit to add:
 1. Public notification prior to the application of pesticides in public areas;
 2. Reporting measures to allow the public to be informed on the quantities of each chemical pesticide used by the City (or associated contractors) on an annual basis; and
 3. Annual targets for reduction of pesticide use down to zero.

Estimated years to complete Study: 1 year

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost):	Major
Funding Required for Non-Budgeted Costs:	\$100,000
Funding Source:	Would seek budget supplement

The Study would be completed with a mix of staff time and additional consultant services. DPW is responsible for landscape management including the application of pesticides and herbicides on City property. ESD, with support from DPW, will take the lead in evaluating the public outreach aspects of the study and complete a survey of residents and businesses. The consultant, with management from ESD and support from DPW staff, will survey and monitor what other cities in the area have undertaken for similar projects, complete a cost analysis for current practices and possible changes, and identify options for a pilot project and costs associated with it. The cost does not anticipate a time-in-motion study to estimate potential cost impacts of chemical alternatives such as mechanical weed removal. The determination of the net cost impact of chemical alternatives, as identified in the study scope, would be estimated based on research of cost impacts experienced by the benchmarked communities. Additional funding beyond the \$100,000 may be needed to conduct time-in-motion studies and such costs will be included in the development of the potential pilot project to measure costs/savings in a real application as identified in this Study Issue.

Cost to Implement Study Results

Unknown. Study would include assessment of potential costs, including capital and operating, as well as revenue/savings.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Sustainability, Parks and Recreation

STAFF RECOMMENDATION

Support. This policy issue merits discussion at the 2020 Study Issues Workshop.

The City's current IPM policy has been in place since 2010. City maintenance staff receives annual training on the IPM policy and contractors are required to also comply with the policy when working on City property. In accordance with the IPM policy, pesticides are used only after other controls have been considered and applied. Additionally, the City provides education on IPM at environmental outreach events and participates in regional educational campaigns and hosts sustainable landscaping classes in partnership with the Bay Area Water Supply and Conservation Associate in spring and fall. While staff believes that the City's IPM Policy has been effective and overall use of pesticides of concern is minimal, staff supports Council consideration of the Study and an evaluation of the program.

Other cities in the region are piloting (Mountain View and San Mateo), or implementing (Menlo Park) the elimination of pesticides in city parks (Reference [Menlo Park action in February 2018](https://www.menlopark.org/DocumentCenter/View/16607/I2---Herbicide-Free-Parks?bidId=>) [<https://www.menlopark.org/DocumentCenter/View/16607/I2---Herbicide-Free-Parks?bidId=>](https://www.menlopark.org/DocumentCenter/View/16607/I2---Herbicide-Free-Parks?bidId=>) to eliminate herbicide use on all City parks. Menlo Park is also considering eliminating herbicide use on medians and sports fields maintained by the City).

Prepared by: Melody Tovar, Regulatory Programs Division Manager, Environmental Services

Reviewed by: Ramana Chinnakotla, Director, Environmental Services

Reviewed by: Chip Taylor, Director, Public Works

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager



City of Sunnyvale

Agenda Item

20-0232

Agenda Date: 1/21/2020

2020 Annual Master Work Plan

2020 Master Work Plan

Sustainability Commission Annual Calendar

MEETING DATE	AGENDA ITEM/ISSUE
January 21	<ul style="list-style-type: none"> SVCE Programs Update [SVCE] FoodCycle and Solid Waste Programs Update [Staff presentation] Rank 2020 Study Issues
February 18	<ul style="list-style-type: none"> Climate Action Playbook Quarterly Update Review Community Condition Indicators
March 16	<ul style="list-style-type: none"> Update on Water Supply and Conservation [Staff presentation] Topic TBD [Commissioner Presentation]
April 20	<ul style="list-style-type: none"> Water Pollution Control Plant and Clean Water Program Update [Staff presentation]
May 18	<ul style="list-style-type: none"> Review Recommended Budget Climate Action Playbook Quarterly Update
June 15	<ul style="list-style-type: none"> Recognition of Service Study Issue: Single-Use Plastics Strategy [Staff presentation¹] Best Practices for Pesticide Management² [Commissioner presentation: Wickham]
July 20	<ul style="list-style-type: none"> Selection of Chair and Vice Chair Best Practices in Mobility or Transportation Planning [Commissioner Presentation: Paton]
August 17	<ul style="list-style-type: none"> Review and Discuss Draft Study Issues Climate Action Playbook Quarterly Update Draft Proposal for FY 2021-2022 Sustainability Speaker Series [Commission Subcommittee presentation]
September 21	<ul style="list-style-type: none"> Review and Discuss Draft Study Issues Civic Center Update [Staff presentation]
October 19	<ul style="list-style-type: none"> Final month to Propose Study Issues Draft 2021 Master Work Plan
November 16	<ul style="list-style-type: none"> Climate Action Playbook Quarterly Update Approve 2021 Annual Master Work Plan Topic TBD [Commissioner Presentation]
December 21	<ul style="list-style-type: none"> Annual Review of Code of Ethics and Conduct for Elected and Appointed Officials

Additional items to be scheduled:

- Study Issues ranking date to be determined based on 2020 Study Issues Workshop date
- Sunnyvale Reach Codes Proposal [Staff presentation/public hearing]
- Sustainable Purchasing Policy [Staff presentation/public hearing]
- Lawrence Station Area Plan [Staff presentation]
- El Camino Real Corridor Plan [Staff presentation/public hearing]

- Moffett Park Specific Plan [Staff presentation/public hearing]

Additional Presentations/Updates from Staff requested by Commission:

- Updates on Reach Codes and Natural Gas Bans [Staff presentation]
- Resilience Practices in Sunnyvale [Staff presentation]
- Sunnyvale Transportation Demand Management Program [Staff presentation]
- Update on Air Quality in Sunnyvale [Staff presentation/presentation by BAAQMD staff]
- Update on Peery Park Rides Shuttle Program [may be provided via email]

¹ SI findings may not be presented separately to the Commission, if presented to City Council in a Study Session.

² Commissioner presentation will be provided, only if Study Issue ESD 17-01 (Eliminate the Use of Pesticides on City Owned or Leased Property) falls below the line in Council's 2020 Study Issues Workshop.

³ These items will be completed if staff time and resources permit.