



Environment & Climate Commission

REGULAR MEETING OF THE ENVIRONMENT AND CLIMATE COMMISSION

**Wednesday, September 27, 2023
6:00 PM**

**North Berkeley Senior Center
1901 Hearst Avenue**

LAND ACKNOWLEDGEMENT

The City of Berkeley recognizes that the community we live in was built on the territory of xučyun (Huchiun (Hooch-yoon)), the ancestral and unceded land of the Chochenyo (Cho-chen-yo)-speaking Ohlone (Oh-low-nee) people, the ancestors and descendants of the sovereign Verona Band of Alameda County. This land was and continues to be of great importance to all of the Ohlone Tribes and descendants of the Verona Band. As we begin our meeting tonight, we acknowledge and honor the original inhabitants of Berkeley, the documented 5,000-year history of a vibrant community at the West Berkeley Shellmound, and the Ohlone people who continue to reside in the East Bay. We recognize that Berkeley’s residents have and continue to benefit from the use and occupation of this unceded stolen land since the City of Berkeley’s incorporation in 1878. As stewards of the laws regulating the City of Berkeley, it is not only vital that we recognize the history of this land, but also recognize that the Ohlone people are present members of Berkeley and other East Bay communities today. The City of Berkeley will continue to build relationships with the Lisjan Tribe and to create meaningful actions that uphold the intention of this land acknowledgement.

PRELIMINARY MATTERS

1. Call to Order and Roll Call:

Tregub, Igor	Mayor	Mayor
Ranney, Sarah	Kesarwani	District 1
Hedlund, Marc	Taplin	District 2
McGuire, Brianna	Bartlett	District 3
Tahara, Daniel	Harrison	District 4
Allen, Shannon	Hahn	District 5
Guliasi, Les	Wengraf	District 6
Lunaparra, Cecilia	Robinson	District 7
Gould, Ben	Humbert	District 8

2. Public Comment: Comments on subjects not included on the agenda (3-minute limit per individual)

3. Approval of Minutes: [Approval of Minutes from last meeting \(July 19, 2023\)](#)

4. **Agenda Check:** Commissioners may rearrange items on the agenda
5. **Update from Chair** (Acting Chair Lunaparra)
6. **Update from Staff** (Billi Romain & Rebecca Milliken)

DISCUSSION AND ACTION ITEMS

7. **Action:** [Updated Environment & Climate Commission calendar](#)
8. **Presentation & Discussion:** Municipal Energy Use and Green Building Policy (Alice LaPierre and Kurt Hurley)
 - a. [Green Building and LEED Requirements - Resolution # 62284](#)
 - b. [Energy Commission FY2023-24 Budget Recommendations - November 30, 2022 Council Report](#)
9. **Presentation & Discussion:** Native Plants & Pesticide Reduction Subcommittee (Ranney, McGuire, Allen)

10. Reports from Commission Liaisons

- a. Planning Commission (Ben Gould)
- b. Transportation and Infrastructure Commission (Brianna McGuire)
- c. Parks, Recreation and Waterfront Commission (Cecilia Lunaparra)
- d. Zero Waste Commission (Sarah Ranney)
- e. Disaster and Fire Safety Commission (Les Guliasi)
- f. Housing Advisory Commission (Marc Hedlund)

11. Workplan Subcommittee Updates

- a. Transportation Public Space Reallocation Subcommittee (Hedlund, McGuire, Lunaparra, Gould)
- b. Native Plants and Pest Reduction Subcommittee (Ranney, McGuire, Allen)
- c. Electrification Subcommittee (Tregub, Hedlund, Guliasi, Tahara)

12. Items for Future Agenda

- BESO Time of Sale Requirements (October)
- Fleet Electrification and EV Infrastructure (November)
- Community Resilience Centers

INFORMATION ITEMS

13. Communications

14. Announcements from Commissioners

ADJOURNMENT

 This meeting will be conducted in accordance with the Brown Act, Government Code Section 54953. Any member of the public may attend this meeting. Questions regarding this matter may be addressed to Billi Romain, 510-981-7432, bromain@berkeleyca.gov.

Communications to Berkeley boards, commissions or committees are public record and will become part of the City's electronic records, which are accessible through the City's website. Please note: E-mail addresses, names, addresses, and other contact information are not required but, if included in any communication to a City board, commission, or committee, will become part of the public record. If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the secretary of the relevant board, commission, or committee. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the secretary to the relevant board, commission, or committee for further information.

Any writings or documents provided to a majority of the commission regarding any item on this agenda will be made available for public inspection at the Planning Department located at 1947 Center Street.

**COMMUNICATION ACCESS INFORMATION:**

This meeting is being held in a wheelchair-accessible location. To request a disability-related accommodation(s) to participate in the meeting, including auxiliary aids or services, please contact the Disability Services specialist at 981-6418 (V) or 981-6347 (TDD) at least three business days before the meeting date. Please refrain from wearing scented products to this meeting.

 I hereby certify that the agenda for this regular/special meeting of the Berkeley City Commission on Commissions was posted at the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way, as well as on the City's website.
 Billi Romain, Commission Secretary



Environment & Climate Commission

ENVIRONMENT AND CLIMATE COMMISSION DRAFT MINUTES
Wednesday, July 19, 2023

Tregub, Igor	Mayor	Mayor
Ranney, Sarah	Kesarwani	District 1
Hedlund, Marc	Taplin	District 2
McGuire, Brianna	Bartlett	District 3
Tahara, Daniel	Harrison	District 4
Allen, Shannon	Hahn	District 5
Guliasi, Les	Wengraf	District 6
Lunaparra, Cecilia	Robinson	District 7
Gould, Ben	Humbert	District 8

1. Call to Order and Roll Call
The meeting was called to order by Billi Romain at 6:03 pm.
Commissioners Present: Tregub, Hedlund, McGuire, Tahara, Allen, Guliasi, Lunaparra, Gould
Commissioner Leave of Absence: Ranney
Commissioner Absent: None
Staff: Billi Romain, Rebecca Milliken, Valerie Nguyen
2. Public Comments and Announcements:
2 member(s) of the Public
0 comment(s)
3. Approval of Minutes:
Motion/second to approve the June 21, 2023 Minutes (Hedlund, Tahara). The motion carried:8-0-0-1; Tregub, Hedlund, McGuire, Tahara, Allen, Guliasi, Lunaparra, Gould.
Noes: None. Abstain: None. Absent: Ranney
4. Agenda Check
5. Update from Chair
6. Update from Staff
 - a. Solar +Storage

DISCUSSION AND ACTION ITEMS

7. Presentation & Discussion: Principles of Equitable Community Engagement (Valerie Nguyen)

8. Discussion & Action: Letter to Council regarding Transportation Division staffing

Motion/second to approve the draft letter with amended language and reformatted as an Information Item (Tregub, McGuire). The motion carried:8-0-0-1; Tregub, Hedlund, McGuire, Tahara, Allen, Guliasi, Lunaparra, Gould. Noes: None. Abstain: None. Absent: Ranney

9. Reports from Commission Liaisons

- a. Planning Commission (Gould)
- b. Transportation and Infrastructure (McGuire)
- c. Parks, Recreation and Waterfront Commission (Lunaparra)
- d. Zero Waste Commission (Ranney)
- e. Disaster and Fire Safety Commission (Guliasi)
- f. Housing Advisory Commission (Hedlund)

10. Workplan Subcommittee Updates

- a. Transportation Public Space Reallocation Subcommittee (Hedlund, McGuire, Lunaparra, Gould)
- b. Native Plants and Pesticide Reduction Subcommittee (Ranney, McGuire, Allen)
- c. Electrification Subcommittee (Tregub, Hedlund, Tahara, Guliasi)

11. Items for Future Agenda

- a. BESO Time of Sale requirements & Building Performance Standards (September)
- b. Native Plants & Pesticide Reduction Subcommittee presentation (September)
- c. Municipal buildings (October)
- d. Fleet Electrification and EV Infrastructure (November)
- e. Community Resilience Centers

INFORMATION ITEMS

12. Communications

13. Announcements from Commissioners

ADJOURNMENT

Motion/second to adjourn at 7:40 pm (McGuire, Tahara)

Minutes Approved:

/S/ Billi Romain, Berkeley Energy Commission Secretary

Name of Commission: Environment and Climate Commission

Commission Secretary: Billi Romain

Revised 2023 Commission Meeting Dates 8/30/2023

The ECC generally meets the 4th Wednesday of the month from 6:00pm – 8:00pm

Month	Meeting Day & Date	Time
January 2023	Wednesday 1/18/23 <i>(1/25/23: Conflict with Chinese New Year)</i>	6:00pm
February 2023	Wednesday 2/22/23	6:00pm
March 2023	Wednesday 3/29/23 <i>(3/22/23: Conflict with Ramadan)</i>	6:00pm
April 2023	Wednesday 4/26/23	6:00pm
May 2023	Wednesday 5/24/23	6:00pm
June 2023	Wednesday 6/21/23 <i>(6/28/23: Conflict Eid al-Adha)</i>	6:00pm

Month	Meeting Day & Date	Time
July 2023	Wednesday 7/19/26 <i>(7/26/23: Conflict Tish'a B'Av)</i>	6:00pm
August 2023	No Meeting (Council recess)	NA
September 2023	Wednesday 9/27/2023	6:00pm
October 2023	Wednesday 10/18/23 <i>(10/25/23: Conflict Staff Training)</i>	6:00pm
November 2023	Wednesday 11/29/23 <i>(11/22/23: Conflict Thanksgiving)</i>	6:00pm
December 2023	No Meeting	NA

Dates to Avoid: Holiday schedule (attached) and other Planning Department Commission meetings:

- Planning Commission – 1st Wednesdays, 7:00pm
- Landmarks Preservation Commission – 1st Thursdays, 7:00pm
- Design Review Committee – 3rd Thursdays, 7:00pm
- Zoning Adjustments Board (ZAB) – 4th Thursdays, 7:00pm

City Policy Regarding the Scheduling of City Meetings on All Significant Religious Holidays

Pursuant to Resolution No. 70,066-N.S., it is the policy of the City to avoid scheduling meetings of City Legislative Bodies (City Council, Commissions and Boards, Council Policy Committees, Task Forces) on religious holidays that incorporate significant work restrictions.

City legislative bodies must avoid scheduling meetings on the religious holidays listed below.

Religion	Holiday	Date	2023 Date
Christian	Good Friday	Varies (March or April)	4/7/23
Christian	Easter Sunday	Varies (March or April)	4/9/23
Christian	Christmas	December 25	12/25/23
Jewish	Rosh Hashanah	Varies (Sept. or Oct.)	9/15/23-9/17/23
Jewish	Yom Kippur	Varies (Sept. or Oct.)	9/24/23-9/25/23
Jewish	Sukkot - first and last day	Varies (Sept. or Oct.)	9/29/23, 10/6/23
Jewish	Shmini Atzeret/ Simchat Torah	Varies (Sept. or Oct.)	10/6/23-10/8/23
Jewish	Chanukah (1 st night)	Varies (Nov. or Dec.)	12/7/23
Jewish	Passover (Nights 1, 2, 7, 8)	Varies (March or April)	4/5,4/6,4/12,4/13
Jewish	Shavuot	Varies (May or June)	5/25/23-5/27/23
Jewish	Shabbat	Weekly	Friday sunset to Saturday sunset
Jewish*	Purim	Varies (February or March)	3/6/23-3/7/23
Jewish*	Tish'a B'Av	Varies (July or August)	7/26/23-7/27/2023
Jewish*	Yom HaShoah	Varies (April or May)	4/17/23-4/18/23
Buddhist	Vesak	Varies (April or May)	5/5/23
Hindu	Diwali	Varies (Oct. or Nov.)	11/12/23
Hindu	Dussera	Varies (Oct.)	10/24/2023
Hindu	Holi	Varies (March)	3/8/23
Hindu	Makar Sankranti	Varies (January or February)	1/14/2023
Islam	Eve & First Night of Ramadan	Varies	3/22/23 – 3/23/23
Islam	Eid al-Fitr	Varies	4/21/23-4/22/23
Islam	Eid al-Adha	Varies	6/28/23-6/29/23
Shinto	New Year	January 1-3	1/1/23-1/3/23
Shinto	Obon Ceremony	August 13-15	8/13/23-8/15/23
Baha'i Faith	Birth of Baja'u'llah	Varies	10/16/23-10/17/23
Baha'i Faith	Birth of Bab	Varies	10/16/23-10/17/23
Cultural	Chinese New Year (Day 1-7)	Varies (Jan. 21 – Feb. 20)	1/21/23-1/27/23
Cultural	Kwanzaa	Dec. 26 – Dec. 31	12/26/23-1/1/24

* No work restriction, but avoid scheduling meetings if possible

City Policy Regarding the Scheduling of City Meetings on All Significant Religious Holidays

Observances in Chronological Order

Religion	Holiday	Date	2023 Date
Shinto	New Year	January 1-3	1/1/23-1/3/23
Hindu	Makar Sankranti	Varies (January or February)	1/14/2023
Cultural	Chinese New Year (Day 1-7)	Varies (Jan. 21 – Feb. 20)	1/21/23-1/27/23
Jewish*	Purim	Varies (February or March)	3/6/23-3/7/23
Hindu	Holi	Varies (March)	3/8/2023
Islam	Eve/ First Night of Ramadan	Varies	3/22/23 – 3/23/23
Jewish	Passover (Nights 1, 2, 7, 8)	Varies (March or April)	4/5,4/6,4/12,4/13
Christian	Good Friday	Varies (March or April)	4/7/2023
Christian	Easter Sunday	Varies (March or April)	4/9/2023
Jewish*	Yom HaShoah	Varies (April or May)	4/17/23-4/18/23
Islam	Eid al-Fitr	Varies	4/21/23-4/22/23
Buddhist	Vesak	Varies (April or May)	5/5/2023
Jewish	Shavuot	Varies (May or June)	5/25/23-5/27/23
Islam	Eid al-Adha	Varies	6/28/23-6/29/23
Jewish*	Tish'a B'Av	Varies (July or August)	7/26/23-7/27/23
Shinto	Obon Ceremony	August 13-15	8/13/23-8/15/23
Jewish	Rosh Hashanah	Varies (Sept. or Oct.)	9/15/23-9/17/23
Jewish	Yom Kippur	Varies (Sept. or Oct.)	9/24/23-9/25/23
Jewish	Sukkot - first and last day	Varies (Sept. or Oct.)	9/29/23, 10/6/23
Jewish	Shmini Atzeret/Simchat Torah	Varies (Sept. or Oct.)	10/6/23-10/8/23
Baha'i Faith	Birth of Baha'u'llah	Varies	10/16/23-10/17/23
Baha'i Faith	Birth of Bab	Varies	10/16/23-10/17/23
Hindu	Dussera	Varies (Oct.)	10/24/2023
Hindu	Diwali	Varies (Oct. or Nov.)	11/12/2023
Jewish	Chanukah (1 st night)	Varies (Nov. or Dec.)	12/7/2023
Christian	Christmas	Dec. 25	12/25/2023
Cultural	Kwanzaa	Dec. 26 – Dec. 31	12/26/23-1/1/24
Jewish	Shabbat	Weekly	Friday sunset to Saturday sunset

* No work restriction, but avoid scheduling meetings if possible

RESOLUTION NO. 62,284–N.S.

ADOPTING POLICIES AND ACTIONS REQUIRING THE USE OF THE UNITED STATES GREEN BUILDING COUNCIL'S LEED™ (LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN) GREEN BUILDING RATING SYSTEM STANDARDS FOR CITY OWNED AND OPERATED PROJECTS

WHEREAS, the purpose of this resolution is to enhance the public welfare and assure that further commercial and civic development is consistent with the City's desire to create a more sustainable community by incorporating green building measures into the design, construction, and maintenance of its buildings; and

WHEREAS, the green building practices referenced herein are designed to encourage resource conservation, to reduce the waste generated by construction projects, to increase energy efficiency, and to promote the health and productivity of residents, workers and visitors to the city; and

WHEREAS, the City finds that the design, construction, and maintenance of buildings within the City can have a significant impact on the City's environmental sustainability, resource usage and efficiency, waste management, and the health and productivity of residents, workers, and visitors to the City; and

WHEREAS, the City finds, based on studies by the Alameda County Waste Management Authority, that construction and demolition debris comprise up to 21% of materials disposed in Alameda County landfills; and

WHEREAS, the City finds that green building design, construction, and operation can have a significant positive effect on energy and resource efficiency, waste and pollution generation, and the health and productivity of a building's occupants over the life of the building; and

WHEREAS, the City finds that green building benefits are spread throughout the systems and features of the building. Green buildings use recycled-content building materials, consume less energy and water, have better indoor air quality, and use much less natural resources than conventional buildings. Construction waste is often recycled and remanufactured into other building products; and

WHEREAS, the City finds that green design and construction decisions made by the City in the construction and remodeling of City buildings can result in significant cost savings to the City over the life of the buildings; and

WHEREAS, the City finds that in recent years, green building design, construction and operational techniques have become increasingly widespread. Many homeowners, businesses, and building professionals have voluntarily sought to incorporate green building techniques into their projects. A number of local and national systems have been developed to serve as guides to green building practices. At the national level, the U.S. Green Building Council, developer of

the Leadership in Energy and Environmental Design (LEED™) Green Building Rating System and LEED™ Reference Guide, has become a leader in promoting and developing green building; and

WHEREAS, the City finds that green design and construction decisions made by the City in the construction and remodeling of City buildings can result in significant cost savings to the City over the life of the buildings; and

WHEREAS, the City finds that requiring certain City-sponsored projects to incorporate LEED™ green building measures is necessary and appropriate to achieve the benefits of green building; and

WHEREAS, for the purposes of this Article, the following definitions shall apply:

- a. "Building" means any Structure used for support or shelter of any use or occupancy. "Building" includes Structures of occupied space, as defined by the California Building Code.
- b. "City-Sponsored Project" means any Construction Project primarily funded or sponsored by the City or on City-owned land.
- c. "Construction" means the building of any Building or Structure or any portion thereof, including the Renovation of an existing Building or Structure.
- d. "Covered Project" means any City-Sponsored Construction Project constructing or renovating 5,000 gross square feet or more of occupied space, as defined by the California Building Code, and has a construction estimate that exceeds \$200,000 in 2003 dollars, that enters design and construction after the effective date of this Resolution.
- e. "Green Building Compliance Official" means the Green Building Coordinator in the Office of Economic Development or his or her designee.
- f. "LEED™ Rating System" means the most recent version of the Leadership in Energy and Environmental Design (LEED™) Green Building Rating System approved by the United States Green Building Council. City staff shall maintain the most recent version of the LEED™ Rating System at all times.
- h. "Renovation" means any change, addition, or modification to an existing Building or Structure.
- i. "Structure" means that which is built or constructed, an edifice or building of any kind or any piece of work artificially built or composed of parts joined together in some definite manner and permanently attached to the ground.

NOW THEREFORE, BE IT RESOLVED that the Council of the City of Berkeley adopts a policy that all Covered Projects that enter design and construction after January 1, 2004 shall meet a minimum LEED™ "Certified" rating.

BE IT FURTHER RESOLVED, that all Covered Projects that enter design and construction after January 1, 2006 shall meet a minimum LEED™ "Silver" rating.

BE IT FURTHER RESOLVED, that City-Sponsored Projects or Structures deemed historic under any federal, state or local law are exempt from, but encouraged to comply with, the requirements of this Article whenever feasible.

BE IT FURTHER RESOLVED, that if, due to specific economic circumstances, compliance would defeat the intent of this resolution or create an unreasonable burden on the Construction Project or City Department, a request for an exemption shall be submitted in writing to the City Manager or his/her designee, but that in applying for an exemption, the burden is on the applicant to show hardship or infeasibility, and all economic hardship documentation must be performed on a life-cycle cost basis, and in the event a Waiver from the resolution is granted, the project will continue to pursue the maximum feasible number of LEED™ credits reasonably achievable for the covered project.

BE IT FURTHER RESOLVED, that the City Manager or his/her designee shall make the final determination as to whether: (1) a project is covered by this resolution, and (2) a Covered Project has achieved the required LEED™ rating. All Council reports requesting authority to contract for the design and/or construction services shall specify whether each project is a Covered Project or not and, in the case of Covered Projects, whether or not the project has been granted an Exemption.

BE IT FURTHER RESOLVED, that LEED™ registration and certification through the United States Green Building Council are encouraged but not required under this Article.

BE IT FURTHER RESOLVED, that if the City Manager or his/her designee determines that a Covered Project has not met the requirements for the applicable LEED™ rating, he or she may require additional reasonable green building measures be taken, as may be possible for the established budget for the project.

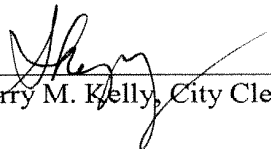
BE IT FURTHER RESOLVED, that all non-covered projects, in the public and private sector, are encouraged to use their best efforts to incorporate as many green building measures as feasible from the LEED™ Rating System and to pursue LEED™ registration and certification. This includes, but is not limited to, projects undertaken by the University of California at Berkeley, the Berkeley Unified School District, and Lawrence Berkeley National Laboratories.

The foregoing Resolution was adopted by the Berkeley City Council on November 18, 2003 by the following vote:

Ayes: Councilmembers Breland, Hawley, Maio, Olds, Shirek, Spring, Worthington, Wozniak and Mayor Bates.

Noes: None.

Absent: None.

Attest: 
Sherry M. Kelly, City Clerk


Tom Bates, Mayor



ACTION CALENDAR
November 3, 2022

To: Honorable Mayor and Members of the City Council
From: Energy Commission
Submitted by: Bentham Paulos, Chairperson, Energy Commission
Subject: Recommendation on Climate, Building Electrification, and Sustainable Transportation Budget Priorities for Fiscal Year 2023 and 2024

RECOMMENDATION

The Energy Commission recommends that the Berkeley City Council prioritize and include in the City's budget for the Fiscal Years Ending (FYE) 2023 and 2024 several staff positions, pilot projects, investments in electric vehicles and charging infrastructure, and other measures to ensure that the City's budget is aligned with and provides adequate and needed funding to implement the City's adopted Climate Action Plan, Electric Mobility Roadmap, Building Emissions Saving Ordinance, 2019 ban on gas in new construction, and the Existing Buildings Electrification Strategy.

POLICY COMMITTEE RECOMMENDATION

No action was taken by the Budget & Finance Committee. Item is automatically returning to the Council agenda pursuant to the 120-day time limit for items referred to policy committees.

SUMMARY

In this memo, the Energy Commission (which disbanded March 31, 2022, and was merged with the Community Environmental Advisory Commission in April 2022) provides details on specific budget and funding priorities for: staffing an Electric Mobility Coordinator and the Green Buildings Program Manager; fully funding the Building Electrification and Just Transition pilot project (especially to avoid risking loss of state funding); accelerate funding for the City's delayed fleet replacement with electric vehicles, residential electric vehicle charging infrastructure, and electric bike parking infrastructure; expanding public engagement and outreach; leveraging street maintenance budgets to incorporate and promote low-carbon mobility; and adopting policies and creating incentive programs to advance transportation and building electrification such as using the Transportation Network Company (TNC) User Tax General Fund revenue to fund bike and pedestrian projects and using a portion of the Transfer Tax to create an incentive program for residential building electrification.

FISCAL IMPACTS OF RECOMMENDATION

The specific fiscal impacts are detailed in the budget recommendations below. At least one of our priority budget recommendations – to fully fund the Building Electrification and Just Transition pilot – is urgent and time-sensitive and cannot wait until the June

budget process. Any delay risks Berkeley losing access to substantial state funding that could support this pilot.

CURRENT SITUATION AND ITS EFFECTS

Berkeley has been a world leader on climate change and building electrification, as well as on zero waste. The City has already adopted an ambitious climate action plan and greenhouse gas (GHG) emission reduction goals.¹ Between our Building Emissions Savings Ordinance², 2019 ban on gas in new construction, the 100% renewable option with East Bay Community Energy, and the Existing Buildings Electrification Strategy³ (BEBES), approved by the Council last year⁴, we continue to lead the world with our thoughtfulness and action.

However, the task in front of us is daunting. With 60% of the City's emissions coming from the transportation sector and 36% from the building sector,⁵ we must redouble our efforts to reduce climate emissions from transportation and buildings through electrification of buildings and transportation, sustainable low- and zero-carbon transportation modes, and other efforts. With the upcoming budget processes, we have ample opportunity to take necessary next steps to reach our zero emissions goals.

The Energy Commission has identified the following priority items related to climate, buildings, and transportation in the City's Fiscal Year (FY) 2023 budget to ensure that

¹ In 2006, voters overwhelmingly passed ballot Measure G and established Berkeley's goal to *Reduce our entire community's greenhouse gas emissions by 80% below 2000 levels by 2050*. Since then, the City has adopted a Climate Action Plan (2009).

On June 12, 2018, the Council passed item 30 which adopted a resolution establishing the goal of becoming a Fossil Fuel-Free City. Of the recommendations in the resolution, one was that "All future City government procurements of vehicles should minimize emissions and set a goal of transitioning the city's vehicle fleet to all electric vehicles."

Also, on June 12, 2018, the Council passed item 49 "Declaration of a Climate Emergency" which refers "to the Energy Commission to study and report back to Council on a path for Berkeley to become a "Carbon Sink" as quickly as possible, and to propose a deadline for Berkeley to achieve this goal" ideally by 2030.

² <https://www.cityofberkeley.info/BESO/>

³ https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/Berkeley%20Existing%20Bldg%20Elect%20Strategy_Final_102021.pdf

⁴ https://www.cityofberkeley.info/Clerk/City_Council/2021/12_Dec/Documents/2021-12-14_Item_06_Minutes_for_Approval.aspx

⁵ https://www.cityofberkeley.info/Clerk/City_Council/2022/02_Feb/Documents/2022-02-08_Presentations_Item_17_Pres_Planning_pdf.aspx

the budget aligns with the City's adopted climate action plan and greenhouse gas (GHG) emission reduction goals.

At least one of our priority budget recommendations – to fully fund the Building Electrification and Just Transition pilot – is urgent and time-sensitive and cannot wait until the June budget process. Any delay risks Berkeley losing access to substantial state funding that could support this pilot.

At its meeting of February 23, 2022, the Energy Commission voted to send this recommendation to the City Council by a vote of 6-0-0-1 [Moved Tahara, Second Paulos. Ayes: Paulos, Wolf, Tahara, Moore, Guliasi, Zuckerman. Noes: None. Abstain: None. Absent: de Tournay Birkhahn].

Budget Priorities Recommended by the Energy Commission

I. Budget Priorities to Increase Staff Capacity to Implement the City's Established Climate, Transportation, and Clean Energy Policies and Priorities

- 1. Fund and Hire Staff to Implement the Electric Mobility Roadmap.** The City had previously approved the hiring of an Electric Mobility Coordinator within the Public Works Department⁶ to assist with implementation of the Berkeley Electric Mobility Roadmap adopted in July 2020⁷; but, at the time of writing, no position has been posted, now a year and a half after approval of the Roadmap.

The Council has been a leader in adopting resolutions acknowledging the need for a prompt transition away from fossil fuels and strategies for how to do so.⁸ But, without additional staff capacity, and exacerbated by recent staff departures and necessary pandemic re-assignments, the City has not been able to make adequate progress on implementing initiatives to reduce global warming pollution from the transportation sector, which is the largest emitter of global warming pollution in Berkeley.⁹ Existing staff's capacity is simply inadequate to lead implementation of the groundbreaking, transformative Roadmap in addition to their current responsibilities, and relying only on existing staff to implement will continue to cause unacceptable delays. **To**

⁶ Budget Referral from Councilwoman Harrison, March 30, 2021. The Energy Commission's understanding is that this position was included in the FY21-22 Budget to commence half-way through the fiscal year or as an "unfunded council referral," which was supposed to be funded via savings from other cuts or delayed expenses.

https://www.cityofberkeley.info/Clerk/City_Council/2021/03_Mar/Documents/2021-03-30_Item_25_Budget_Referral_Allocate_Funding.aspx

⁷ On July 21, 2020, the Council passed item 1, adopting the [Berkeley Electric Mobility Roadmap](#).

⁸ *Ibid.*

⁹ 59% of GHG emissions in Berkeley come from transportation, followed by 39% from buildings..

https://www.cityofberkeley.info/Clerk/City_Council/2020/07_Jul/Documents/2020-07-21_Special_Item_05_Climate_Action_Plan_pdf.aspx (July 21, 2020).

implement the Electric Mobility Roadmap, it is critical that the City fund and hire additional staff beginning in the FY 2023 budget.¹⁰

- 2. Increase Staff Necessary to Implement the Berkeley Existing Buildings Electrification Strategy, and Ensure Durable Funding for Critical Staff Positions.** In addition to the Electric Mobility Coordinator position, the Energy Commission believes it should also be a priority for the City to enhance staff capacity for implementing other climate and clean energy initiatives, such as, but not limited, to the Berkeley Existing Building Electrification Strategy¹¹ and Climate Equity Action Fund.¹²

City staff has and continues to do impressive work with limited staff. However, the scope of the task ahead of us is massive. As laid out by the BEBES, there are no fewer than 57 policy actions (Table 3-5, BEBES) that the City should take in order to decarbonize the building sector by 2045, let alone by 2030, which the science demands of comparatively wealthy municipalities such as ours. Many of these actions involve substantial education and regulatory initiatives, which can only be achieved with the addition of dedicated, skilled staff.

Although we defer to staff with respect to the specifics of what additional positions might be most useful, some critical actions include:

- Ensuring durable, long-term funding for the Green Buildings Program Manager. Although hiring has only recently begun, this role was approved as part of the 2019 gas ban,¹³ and its extension will be critical in helping to develop future code

¹⁰ This single staff person will have an outsized impact, as they will be responsible for establishing and coordinating the Electric Mobility Roadmap Implementation Working Group as called for in the Roadmap. This Working Group was supposed to be convened within six months of the Roadmap's approval, but in the absence of staff capacity, it still has not been done. The Working Group's mandate includes tracking and evaluating Roadmap implementation progress. Without the Working Group, there is no accountability for the City to deliver against its stated electric mobility plans.

¹¹ On November 30, 2021, the Council passed item 13, adopting the [Berkeley Existing Building Electrification Strategy](#). Phase 1 (2021-2025) actions for the Berkeley Existing Building Electrification Strategy will lay the groundwork to support wide-spread transition to electrified buildings in Berkeley. Policies included in Phase 1 will involve continued community engagement, pilot projects, education campaigns to demonstrate the benefits and feasibility of electrification, collaboration with labor and workforce organizations to advance inclusive high road jobs, alignment of existing programs and incentives, and the development of additional incentive programs as well as larger scale funding and financing programs such as tariffed on-bill financing. The City of Berkeley will work with partners such as East Bay Community Energy and Pacific Gas & Electric to develop larger scale Phase 2 projects. There will also be a need to collaborate with regional and State partners to align State policies to support Phase 2 actions. (Berkeley Existing Building Electrification Strategy, p. 95.)

¹² The City recently issued an [RFP](#) for the Climate Equity Action Fund. but existing staff do not have the capacity to maximize program impact and collect lessons learned from this innovative fund.

¹³ https://www.cityofberkeley.info/Clerk/City_Council/2019/12_Dec/Documents/2019-12-03_Supp_2_Reports_Item_24_Supp_Arreguin_pdf.aspx

amendments and help to reduce permitting overhead, improve compliance, and address the myriad other regulatory questions identified in the BEBES.

- Supporting and expanding staffing across the City for programs related to tenant protections and anti-displacement, such as those listed in Appendix C of the BEBES. As we electrify our existing building stock, we will need to evolve and augment our existing policies to protect marginalized communities at risk of displacement (CC-9, BEBES). We cannot afford for these policies to lag behind the pace and scale of electrification measures in the city.
- Supporting and expanding OESD staff to facilitate updates to the 2009 Climate Action Plan as appropriate and programs to facilitate Berkeley's ambitious new greenhouse gas limit goals. For example, last year the Council passed a Resolution establishing a 2030 emission reduction target that reflects Berkeley's fair share of the 50% global reduction in CO₂e – 60.5% from 2018 levels by 2030.¹⁴ Council is also actively considering more stringent and binding targets across its sector-based and consumption inventories. These new initiatives will have significant implications for the City's approach to building decarbonization. While we fully support these ambitious targets, efforts to implement them have been largely unfunded and understaffed. Achieving these targets will require a significant expansion of the City's climate staff capacity.

II. Budget Priorities to Advance Clean Transportation in Berkeley

1. **Fund City Fleet Electrification and Charging.** On June 29, 2021, the City adopted item 25 approving the recommendations in the City Auditor's report "Fleet Replacement Fund Short Millions"¹⁵, which directed staff to adjust the fleet replacement funding model and budget, ensuring that the City's transition to electric vehicles (EVs) aligns with its adopted GHG emissions goals. On September 14, 2021, the Council adopted the recommendation from item 27 "Recommendations for Fleet Electrification Policy and Financing",¹⁶ made by the Energy Commission, which referred to the City Manager to update the Municipal Fleet Electrification Assessment and EV charging funding priorities to respond to the City Auditor's Report and align with the objectives stated in the Electric Mobility Roadmap and prioritize municipal fleet modal shift to electric bicycles and other forms of zero-emissions mobility where feasible.

¹⁴https://www.cityofberkeley.info/Clerk/City_Council/2021/11_Nov/Documents/2021-11-30_Item_14_Cities_Race_to_Zero_Campaign__2030_emission_reduction_target.aspx

¹⁵ Fleet Replacement Fund Short Millions, Berkeley City Auditor, June 29, 2021.
https://www.cityofberkeley.info/Clerk/City_Council/2021/06_June/Documents/2021-06-29_Supp_2_Reports_Item_25_Supp_Auditor_pdf.aspx.

¹⁶ Recommendations for Fleet Electrification Policy and Financing, From Energy Commission, Sept 14, 2021.
https://www.cityofberkeley.info/Clerk/City_Council/2021/09_Sep/City_Council__09-14-2021_-_Regular_Meeting_Agenda.aspx - Item 27

The Fleet EV Plan identified 32 vehicles to replace with EVs in FY 2021, requiring an estimated \$1.16 million; but, as of June 2021, Public Works had only \$747,000 to replace 29 vehicles scheduled to be replaced with EVs in FY 2021. The Energy Commission's recommendation noted that delaying replacement of these vehicles in 2021 would result in greater GHG emissions:

“For example, per the Fleet EV Plan, if the City does not replace light-duty internal combustion cars with EVs as scheduled in 2021, it will produce an estimated additional 10.6 MT of GHG emissions in 2021; if not replaced as planned in 2022 an additional 19.5 MT of GHGs would be emitted in 2022; and so on.” (page 4).

It is the Energy Commission's understanding that East Bay Community Energy (EBCE) has offered to provide substantial investments in the City of Berkeley for EV charging infrastructure, which would support progress on the City's fleet electrification and free up City funds that would otherwise have been spent on EV charging infrastructure. The Energy Commission urges the Council to resolve the budget gaps identified in the Auditor's report and explore additional funding sources so that the City can accelerate its purchases of EVs and the associated EV charging infrastructure in FY 2023.

A global microchip shortage resulting in prolonged supply chain delays and long wait times for the delivery of EVs is compounding the necessity for the City to take immediate action on fleet replacement. These delays are being exacerbated by the recent surge in demand for EVs. As more municipalities similarly pass electrification plans, Berkeley will see increasing competition for the same vehicles. The City must thus plan and order ahead if it wants to have a smooth fleet transition. The City should also commence its purchase of e-bikes for the years ahead, as replacements to existing City vehicles where appropriate. E-bikes are both highly cost effective and may not face the same supply chain delays as electric cars and trucks. The Energy Commission recommends that the Council prioritize these municipal fleet EV replacements, along with the associated EV charging infrastructure, in the FY 2023 budget.

- 2. Expand Infrastructure for Residential EV Charging and E-Bike Parking.** The City should prioritize funds to address solutions for residential curbside EV charging. The City's Residential Curbside EV Charging Pilot Program¹⁷ sunset in 2020. The development model the pilot used – private ownership of a charger on the side of a public street – was not successful. While 62 residents applied for the program, only four on-site and seven curbside chargers were installed - high permitting fees, restrictive engineering requirements, lack of control of the parking space adjacent to

¹⁷ https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/Manual%20with%20attachments%2012-1-14.pdf

the charger, and poor access to electrical supply resulted in high costs.¹⁸ Given the number of Berkeley residents who do not have access to a driveway or garage, the Electric Mobility Roadmap identified as a high priority the need to deploy curbside charging for electric cars, particularly in neighborhoods with high rates of multifamily and rental housing. The next phase of curbside charging will incorporate lessons learned from the Pilot, investigate alternative strategies, identify state and federal funding sources, and explore partnerships with EBCE and EV charging companies.

The City should also investigate the potential to provide public secure parking for other types of fossil fuel-free vehicles, namely e-bikes and cargo bikes, for apartment dwellers. E-bikes and cargo bikes tend to be larger and heavier than regular bicycles, making them difficult to carry up steps. A paid, public parking system, such as the BikeLink lockers at BART stations, may be adapted to street parking near apartment buildings.

The Council should allocate funds in the budget for an electric mobility staff person who would oversee new projects — research other cities' approaches, evaluate Berkeley's codes, standards, and permitting processes, and conduct feasibility studies — along with funds for the pilot projects themselves.

- 3. Incorporate Low-Carbon Mobility into Street Maintenance Budget.** While Council is considering a bond measure that would make capital investments in our transportation system, the City should also revisit how the maintenance budget can be used to promote low-carbon mobility.

The Council has approved multiple plans to promote safe, equitable, and low-carbon mobility for all. These “complete streets” concepts are captured in the Bicycle Plan, Pedestrian Plan, Vision Zero Action Plan, and analysis of Safe Routes to School.¹⁹ But many of the measures in these plans have been implemented slowly, if at all. The Council should direct the Public Works Department to follow these plans to the letter, and integrate all low-cost and rapidly deployable concepts from the plans into their ongoing maintenance. The timing of deploying higher cost measures may necessarily depend on funding.²⁰

¹⁸ https://www.cityofberkeley.info/Clerk/City_Council/2018/02_Feb/Documents/2018-02-27_Item_16_Residential_Curbside_Electric.aspx

¹⁹ See [Bicycle Plan](#), [Pedestrian Plan](#), [Vision Zero Action Plan](#), [Safe Routes to School](#).

²⁰ A related concept is that the Council should consider giving a more formal policy status to Bicycle Boulevards. While the Boulevards serve as a useful wayfinding tool for cyclists, their designation does not give the streets a meaningful status, and no prioritization when it comes to City planning or operations. For example, places where Bicycle Boulevards cross busy streets, such as at California/Dwight or Channing/San Pablo, face years of delay before safe crossing solutions can be implemented. Numerous Bicycle Boulevards suffer from extremely poor pavement condition. Stop signs often favor cars instead of the Boulevards, and lighting can often be sub-standard. All of these factors undermine achievement of City plans, threaten public safety, and lock in carbon pollution. Direction from the Council to staff could

On January 18, 2022, the Council adopted item 19, referring a budget item to use Transportation Network Company (TNC) User Tax General Fund revenue to build and maintain protected bicycle lanes and crossings, pedestrian street crossings, and quick-build public transit projects under the Street Repair Program. The Energy Commission recommends that the Council follow through on its plan to use this revenue to benefit transportation projects in Berkeley.

III. Budget Priorities and Financial Incentives to Advance Building Decarbonization in Berkeley

- 1. Fully Fund the Building Electrification and Just Transition Pilot Project.** In the December 2021 Annual Adjustment Ordinance (AAO) budget process, the Mayor declared, and the Council approved, that the Building Electrification and Just Transition pilot (“the pilot”)²¹ be a first priority to be funded in the May 2022 AAO.²² Consistent with the City’s “targeted universalism” approach to building electrification,²³ the pilot intends to kick-start electrification among affordable housing and low income (LMI) communities through incentives, and develop high-road jobs through labor standards and contractor prequalification.

Funding for this item in the May AAO is critical, and cannot wait until the June budget process. Any delay risks losing access to substantial state funding that could multiply the reach and impact of the pilot. The California TECH initiative, an \$120 million initiative established by SB 1477, recently began offering incentives for heat pump space and water heating that can defray nearly \$10,000 of cost per home,²⁴ including the cost of an electric panel upgrade. These incentives are accessible to contractors via the BayREN Home+ programs, which will simplify administration of the pilot due to its use of pre-qualified contractors.

There is additional urgency as well. The Bay Area Air Quality Management District (BAAQMD) is looking at phasing out the sale of NOx-emitting appliances by the end of the decade,²⁵ which will significantly affect the availability of non-electric space

take the form of a formal designation of the Boulevards as a category of street, just as Public Works delineates “arterials” and “collectors” when it comes to planning and operations.

²¹ https://www.cityofberkeley.info/Clerk/City_Council/2021/11_Nov/City_Council_11-30-2021_-_Regular_Meeting_Agenda.aspx

²² https://www.cityofberkeley.info/Clerk/City_Council/2021/12_Dec/Documents/2021-12-14_Supp_2_Reports_Item_44_Supp_Mayor_pdf.aspx

²³ According to the BEBES: “Targeted Universalism is the practice of setting a universal policy goal...while identifying targeted strategies and actions specifically for marginalized communities to ensure that those communities can benefit from the policy goal.”

²⁴ For single-family homes (up to 4 units), including “enhanced” incentives for HPWH. See: <https://energy-solution.com/wp-content/uploads/2021/12/TECH-Single-and-Multifamily-Incentives.pdf>

²⁵ <https://www.baaqmd.gov/rules-and-compliance/rule-development/building-appliances>

and water heating. However, BAAQMD recognizes that such a rule can only be effective if there is sufficient financial support for disadvantaged communities and a robust installer network (things the BEBES also calls out) so that everyone can reap the benefits of zero-pollution appliances without facing substantial costs. **These costs cannot be borne by cities alone, but Berkeley can lay the groundwork to leverage state and federal money with its pilot and thus significantly contribute to the regional effort to improve air quality and GHG emissions.**

- 2. Use Transfer Tax Revenues to Provide Incentives for Electrification.** With soaring home prices, the transfer tax represents a durable source of funds that the City should leverage to accelerate our building electrification goals. There are two potential models to consider.

First, would be to model a rebate program after the Seismic Retrofit Refund Program²⁶ that would rebate a percentage of the transfer tax with a value up to the cost of a typical electrification package for electrification measures completed within one year of transfer. This would incentivize electrification at a time when there is large access to capital, and could lay the groundwork for an ultimate requirement to retrofit at time of sale. OESD staff have already provided Council with a draft ordinance and indicate that each year on average 800 units would qualify through this mechanism.²⁷

The Energy Commission recommends that Council move forward with this ordinance but with a cap on the amount of eligible homeowner rebates per year. These rebates are critical to the City's long-term strategy of phasing in potential electrification mandates as feasible.

At the same time, as a diverse and majority renter city, it is critical that electrification subsidies are also available for units occupied by rent controlled or below market rate tenants. As a second model option, a percentage of the transfer tax refund program (for example, the difference between the reserved and actual rebate amounts) might be simultaneously allocated to expand electrification work among those LMI and minority communities most affected by inequality, pollution, climate change, or at risk of displacement. This could come in the form of expanding the Building Electrification and Just Transition pilot and Climate Equity Fund to reach more households, or other incentive programs targeted at those same communities.

- 3. Adopt Policies to Promote Implementation of Low-cost, Partial Electrification measures.** In addition to enacting full retrofit programs, we recommend that the Council consider low-cost, partial electrification measures to maximize the

²⁶ https://www.cityofberkeley.info/Finance/Home/Real_Property_Transfer_Tax_Seismic_Refunds.aspx

²⁷ https://www.cityofberkeley.info/Clerk/City_Council/2020/07_Jul/Documents/2020-07-21_Special_Item_03_Referral_Response_Ordinance_pdf.aspx

immediate climate and health impacts of electrification measures. For example, a requirement that any AC installation instead be a heat pump (TR-7, BEBES) could be coupled with a subsidy for LMI communities to pay for the cost difference between an AC and an equivalent heat pump model, which is estimated to be between just \$200 and \$500 wholesale.²⁸ An installer subsidy of \$676 alone could be enough to nearly double heat pump market share even absent a mandate²⁹. Other low-cost measures might include the purchasing and distribution of portable heat pumps to provide cooling to households on our increasing number of hot days (newer inverter models offer substantial energy savings over traditional portable ACs³⁰), portable induction units as both a gateway into electric cooking and a mechanism to reduce indoor NOx pollution that has been demonstrated to cause asthma in small children,³¹ as well as weatherization work to make homes safer, more comfortable, and to reduce energy use. Council might also consider rebates for electrification at time of replacement, or provide access to equipment purchased under bulk purchasing agreements as part of the Building Electrification and Just Transition pilot program.

IV. Budget Priorities to Educate and Engage Berkeley Residents in Implementing Transportation and Building Electrification

- 1. Expand Sustainability Outreach Events.** In conjunction with implementation of the Electric Mobility Roadmap and Existing Building Electrification Strategy, it is appropriate for the City to continue and expand public engagement on alternative transportation and green building solutions.

Increasing electric mobility awareness and education is a key strategy in the Electric Mobility Roadmap for achieving the City's zero net carbon goals. Berkeley has already organized four highly successful annual Ride Electric events, which brought the public together to learn about and, in certain cases, test drive EVs and e-bikes. The City has also partnered successfully with other local groups to organize in-person and virtual green building tours that feature clean energy, energy and water conservation, gray water, electric appliances, and garden features.

As technologies and incentives evolve, more members of the public consider adopting electric mobility and building electrification technologies, and as the City increases its e-mobility expertise through additional staffing, these events can and should continue to play an important role in getting Berkeley residents to transition away from fossil fuels. The Roadmap states that the City will expand electric mobility

²⁸ <https://www.clasp.ngo/research/all/3h-hybrid-heat-homes-an-incentive-program-to-electrify-space-heating-and-reduce-energy-bills-in-american-homes/>

²⁹ *ibid*

³⁰ <https://www.midea.com/us/air-conditioners/portable-air-conditioners/midea-duo-smart-inverter-portable-air-conditioner-map12s1tbl>

³¹ <https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=310879>

education and outreach activities, with a goal of increasing awareness of electric mobility options and incentives.³² To deliver on this commitment, the City must allocate funds for these events in its next budget.

With its recent adoption of the Existing Building Electrification Strategy, the Council must expand funding for sustainability outreach events to also address needs identified in the Strategy. For example, the Strategy identified a need for education to address the steep learning curve and cultural sensitivity around cooking with electric stoves, as cooking is a cultural asset and many feel strongly about cooking with gas stoves.³³ While the City has hosted building electrification events, including loan programs for residents to try out electric induction cooktops, it will need to do more to engage residents in adopting electric heat pumps, induction stoves, and other technologies.

BACKGROUND

The City has existing mandated climate goals and emissions reductions commitments, and already-adopted strategies, such as the Electric Mobility Roadmap and the Existing Buildings Electrification Strategy. Furthermore, the City has already approved certain staff positions and investments, such as an Electric Mobility Coordinator position and commitments to replace the City's vehicle fleet with electric vehicles on a schedule. The City is falling behind in hiring and filling needed positions and in executing on needed investments. The budget recommendations proposed by the Energy Commission in this memo seek to ensure the City stays on track to meet its goals.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

If the Council further delays investments or doesn't include our recommended priorities in the upcoming budget, it puts at risk the health and safety of Berkeley's residents, the City's achievement of its adopted and mandated climate, clean energy, and transportation goals, and its national and global leadership on addressing climate change in innovative ways.

RATIONALE FOR RECOMMENDATION

The Energy Commission commends the Council for its many years of leadership to reduce Berkeley's global warming pollution and to advance clean energy solutions for the transportation and building sectors. Our budget is a declaration of our values. We have a tremendous opportunity to accelerate building decarbonization while improving equity through targeted universalism, and we must seize the moment to secure a safer, healthier, more resilient future.

However, if the Council further delays investments in staffing, fleet electrification and electric vehicle charging infrastructure, building maintenance and retrofits, and public

³² Berkeley Electric Mobility Roadmap, p. 43.

³³ Berkeley Existing Building Electrification Strategy, p. 42.

Page 12 of 12

Energy Commission Recommendation FYE 23 and 24 Budget Priorities

Action Calendar
November 3, 2022

education in the FYE 2023 and 2024 budget, it puts at risk the health and safety of Berkeley's residents, the City's achievement of its adopted and mandated climate, clean energy, and transportation goals, and its national and global leadership on addressing climate change in innovative ways. The Energy Commission thus urges the City Council to incorporate the above stated priorities into its FYE 2023 and 2024 budget.

ALTERNATIVE ACTIONS CONSIDERED

We did not consider excluding these items from the budget.

CITY MANAGER

The City Manager recommends that the content and recommendations of the Commission's Report be referred to the budget process.

CONTACT PERSON

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