



**BERKELEY CITY COUNCIL BUDGET & FINANCE COMMITTEE
REGULAR MEETING**

**Thursday, March 9, 2023
10:00 AM**

2180 Milvia Street, 6th Floor - Redwood Room

Committee Members:

Mayor Jesse Arreguin, Councilmembers Rashi Kesarwani and Kate Harrison
Alternate: Councilmember Sophie Hahn

This meeting will be conducted in a hybrid model with both in-person attendance and virtual participation. For in-person attendees, face coverings or masks that cover both the nose and the mouth are encouraged. If you are feeling sick, please do not attend the meeting in person.

Remote participation by the public is available through Zoom. To access the meeting remotely using the internet: Join from a PC, Mac, iPad, iPhone, or Android device: Use URL - <https://cityofberkeley-info.zoomgov.com/j/1601862854>. If you do not wish for your name to appear on the screen, then use the drop down menu and click on "rename" to rename yourself to be anonymous. To request to speak, use the "raise hand" icon on the screen. To join by phone: Dial **1-669-254-5252 or 1-833-568-8864 (Toll Free)** and Enter Meeting ID: **160 186 2854**. If you wish to comment during the public comment portion of the agenda, press *9 and wait to be recognized by the Chair.

To submit a written communication for the Committee's consideration and inclusion in the public record, email policycommittee@cityofberkeley.info.

Written communications submitted by mail or e-mail to the Budget & Finance Committee by 5:00 p.m. the Friday before the Committee meeting will be distributed to the members of the Committee in advance of the meeting and retained as part of the official record.

AGENDA

Roll Call

Public Comment on Non-Agenda Matters

Minutes for Approval

Draft minutes for the Committee's consideration and approval.

1. Minutes - February 23, 2023

Committee Action Items

The public may comment on each item listed on the agenda for action as the item is taken up. The Chair will determine the number of persons interested in speaking on each item. Up to ten (10) speakers may speak for two minutes. If there are more than ten persons interested in speaking, the Chair may limit the public comment for all speakers to one minute per speaker.

Following review and discussion of the items listed below, the Committee may continue an item to a future committee meeting, or refer the item to the City Council.

2. **Unfunded Liability Obligations and Unfunded Infrastructure Needs** (*Item contains supplemental materials*)

From: City Manager

Recommendation: Receive a report on the City's Unfunded Liability Obligations and Unfunded Infrastructure Needs, including pension and other post-employment benefits; discuss strategies to address unfunded liabilities, including funding recommendations for the Section 115 Pension Trust; and provide direction to staff.

Financial Implications: See report

Contact: Sharon Friedrichsen, Budget Manager, (510) 981-7000

Committee Action Items

3. **Approval of the Public Bank East Bay Viability Study**
From: Councilmember Robinson (Author), Mayor Arreguin (Author)
Referred: February 14, 2023
Due: July 5, 2023
Recommendation: Refer to the Budget & Finance Policy Subcommittee to review and discuss the Public Bank East Bay Viability Study and consider the following recommendations for the full Council:
- (1) Adopt a resolution formally adopting the viability study
 - (2) Adopt a resolution of intention to form the Public Bank East Bay alongside Oakland & Richmond
 - (3) Refer to the City Manager to coordinate with the Friends of the Public Bank of the East Bay and the staff of the cities of Oakland and Richmond on the development of a business plan for the Public Bank of the East Bay, or designate the appropriate staff to do so
 - (4) Refer to the City Manager to engage an independent consultant with expertise in banking operations and financing to advise city staff as they coordinate with the Friends of the Public Bank East Bay in the production of a business plan for a public bank
- Financial Implications:** See report
Contact: Rigel Robinson, Councilmember, District 7, (510) 981-7170

Unscheduled Items

These items are not scheduled for discussion or action at this meeting. The Committee may schedule these items to the Action Calendar of a future Committee meeting.

4. **Investment Report Update - Investment Policies of Other Jurisdictions**
From: City Manager
Contact: Henry Oyekanmi, Finance, (510) 981-7300

Unscheduled Items

5. Accept the Risk Analysis for Long-Term Debt (Bonding Capacity) Report provided by Government Finance Officers Association

From: City Manager

Referred: April 26, 2022

Due: April 30, 2023

Recommendation: Accept the report titled 'Risk-Based Analysis and Stress Test of Long-Term Debt Affordability' as provided by the Government Finance Officers Association (GFOA). This report is based on their research and development of a risk-modeling tool to address issuing long-term debt related to City of Berkeley Vision 2050.

On April 26, 2022, the City Council referred this item to the City Manager and Budget & Finance Committee to return to Council with recommendations or analysis on as many of the following items as possible by October 2022, if feasible. 1)

Consideration of reserves policies for operational funds other than the General Fund; 2) Potential reduction of the maximum indebtedness rate from 15% of assessed property value down to 4-8% range; 3) A new policy to not incur indebtedness when interest rates go above 5% or a different specific threshold; 4) Tools for increased transparency for taxpayers; 5) Updated report and discussion of pension and healthcare costs; 6) Refer the full Report to the Budget & Finance Committee for consideration.

Financial Implications: None

Contact: Henry Oyekanmi, Finance, (510) 981-7300

**6. Additional Allocation of Measure P Funding to "Step Up Housing" Project
From: Councilmember Bartlett (Author), Councilmember Wengraf (Co-Sponsor), Councilmember Kesarwani (Co-Sponsor)**

Referred: August 3, 2022

Due: May 31, 2023

Recommendation: Adopt a resolution allocating an additional \$114,660 per year for 10 years, from Measure P transfer tax receipts to support the increased costs for the lease and operation of a new permanent supportive housing project for the unhoused at the Step-Up Housing Project at 1367 University Avenue. In addition, refer to the next meeting of the Budget and Finance Policy Committee to confirm the availability of requested funding.

On August 3, 2022, the City Council adopted Resolution No. 70,491-N.S. as amended and referred to the Budget & Finance Committee to consider future General Fund needs for this project and confirm availability of funds for the operating budget.

Financial Implications: See report

Contact: Ben Bartlett, Councilmember, District 3, (510) 981-7130

Unscheduled Items

7. **Recommendation on Climate, Building Electrification, and Sustainable Transportation Budget Priorities for Fiscal Year 2023 and 2024**
From: Energy Commission
Referred: November 3, 2022
Due: April 25, 2023
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.
Financial Implications: See report
Contact: Billi Romain, Commission Secretary, (510) 981-7400

8. **Fire Department Vacancy and Overtime**
From: City Manager
Contact: David Sprague, Fire, (510) 981-3473

Items for Future Agendas

- **Discussion of items to be added to future agendas**

Adjournment

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*Written communications addressed to the Budget & Finance Committee and submitted to the City Clerk Department will be distributed to the Committee prior to the meeting.*

*This meeting will be conducted in accordance with the Brown Act, Government Code Section 54953 and applicable Executive Orders as issued by the Governor that are currently in effect. Members of the City Council who are not members of the standing committee may attend a standing committee meeting even if it results in a quorum being present, provided that the non-members only act as observers and do not participate in the meeting. If only one member of the Council who is not a member of the committee is present for the meeting, the member may participate in the meeting because less than a quorum of the full Council is present. Any member of the public may attend this meeting. Questions regarding this matter may be addressed to Mark Numainville, City Clerk, (510) 981-6900.*



### 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 (510) 981-6418 (V) or (510) 981-6347 (TDD) at least three business days before the meeting date. Attendees at public meetings are reminded that other attendees may be sensitive to various scents, whether natural or manufactured, in products and materials. Please help the City respect these needs.

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I hereby certify that the agenda for this meeting of the Standing Committee of the Berkeley City Council 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, on Thursday, March 2, 2023.



Mark Numainville, City Clerk

Communications

Communications submitted to City Council Policy Committees are on file in the City Clerk Department at 2180 Milvia Street, 1st Floor, Berkeley, CA, and are available upon request by contacting the City Clerk Department at (510) 981-6908 or policycommittee@cityofberkeley.info.

**BERKELEY CITY COUNCIL BUDGET & FINANCE COMMITTEE
REGULAR MEETING MINUTES**

**Thursday, February 23, 2023
10:00 AM**

Committee Members:

Mayor Jesse Arreguín, Councilmembers Rashi Kesarwani and Kate Harrison
Alternate: Councilmember Sophie Hahn

**PUBLIC ADVISORY: THIS MEETING WILL BE CONDUCTED EXCLUSIVELY THROUGH
VIDEOCONFERENCE AND TELECONFERENCE**

Pursuant to Government Code Section 54953(e) and the state declared emergency, this meeting of the City Council Budget & Finance Committee will be conducted exclusively through teleconference and Zoom videoconference. The COVID-19 state of emergency continues to directly impact the ability of the members to meet safely in person and presents imminent risks to the health of attendees. Therefore, no physical meeting location will be available.

To access the meeting remotely using the internet: Join from a PC, Mac, iPad, iPhone, or Android device: Use URL - <https://cityofberkeley-info.zoomgov.com/j/1612304851>. If you do not wish for your name to appear on the screen, then use the drop down menu and click on "rename" to rename yourself to be anonymous. To request to speak, use the "raise hand" icon on the screen.

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MINUTES

Roll Call: 10:04 a.m.

Present: Kesarwani, Harrison, Arreguín

Public Comment on Non-Agenda Matters: 1 speaker

Minutes for Approval

Draft minutes for the Committee's consideration and approval.

1. Minutes - February 9, 2023

Action: M/S/C (Harrison/Arreguín) to approve the February 9, 2023 minutes.

Vote: All Ayes.

Committee Action Items

The public may comment on each item listed on the agenda for action as the item is taken up. The Chair will determine the number of persons interested in speaking on each item. Up to ten (10) speakers may speak for two minutes. If there are more than ten persons interested in speaking, the Chair may limit the public comment for all speakers to one minute per speaker.

Following review and discussion of the items listed below, the Committee may continue an item to a future committee meeting, or refer the item to the City Council.

Committee Action Items

2a. Allocation of \$3 Million Over Two Years, FY 2024 and FY 2025, to Reduce Consumption and Health Impacts of Sugar-Sweetened Beverages (SSBs).

From: Sugar Sweetened Beverage Product Panel of Experts

Referred: January 4, 2023

Due: June 5, 2023

Recommendation: Adopt a Resolution allocating \$3 million from the General Fund in FY24 (July 1, 2023 through June 30, 2024) and FY25 (July 1, 2024 through June 30, 2025) that shall be invested in a grant program administered and coordinated by the Department of Health, Housing, and Community Services' (HHCS) Public Health Division (HHCS/PHD) consistent with the Sugar-Sweetened Beverage Product Panel of Experts (SSBPPE) Commission's goals to reduce the consumption of sugar sweetened beverages (SSB) in Berkeley and to address the health effects of SSB consumption. The total of \$3 million will be distributed in two installments of \$1.5 million per year for FY24 and FY25. In each of these years, the funds will be distributed as follows:

- a. Direct the City Manager to award up to 42.5% of the allocated funds to Berkeley Unified School District (BUSD) through a grant proposal to reduce the consumption of sugar-sweetened beverages (SSBs) through the implementation and enhancement of the BUSD cooking and gardening programs. The BUSD funding process is separate from the RFP process for the general community-based organization funding process and shall be guided by the SSBPPE Commission's Criteria for BUSD Funding.
- b. Direct the City Manager to award at least 42.5% of the allocated funds through an RFP process managed by HHCS/PHD for grants to community-based organizations consistent with the SSBPPE Commission's goals to reduce the consumption of SSBs and to address the effects of SSB consumption. The community-based organization funding RFP process is separate from the BUSD funding process and shall be guided by the SSBPPE Commission's Criteria for Community Agency Grants.
- c. Direct the City Manager to utilize up to 15% of the allocated funds to support HHCS/PHD to coordinate and monitor the grant process, coordinate the overall program evaluation, and produce an annual report that disseminates process and outcome data from the epidemiologist resulting from the SSBPPE Commission funding program as well as pay certain City of Berkeley Finance Department costs related to the sugary drink tax.

Financial Implications: See report

Contact: Roberto Terrones, Commission Secretary, (510) 981-5400

Action: No action taken on Item 2a. See action taken on Item 2b.

2b. Companion Report: Allocation of \$3 Million Over Two Years, FY24 and FY25, to Reduce Consumption and Health Impacts of Sugar-Sweetened Beverages (SSBs).

From: City Manager

Referred: January 4, 2023

Due: June 5, 2023

Committee Action Items

Recommendation: Adopt a Resolution allocating \$2 million from the General Fund in FY24 (July 1, 2023 through June 30, 2024) and FY25 (July 1, 2024 through June 30, 2025) that shall be invested in a grant program administered and coordinated by the Department of Health, Housing, and Community Services' (HHCS) Public Health Division (HHCS/PHD) consistent with the Sugar-Sweetened Beverage Product Panel of Experts (SSBPPE) Commission's goals to reduce the consumption of sugar sweetened beverages (SSB) in Berkeley and to address the health effects of SSB consumption. The total of \$2 million will be distributed in two installments of \$1 million per year for FY24 and FY25. The funds will be distributed as follows:

- a. Direct the City Manager to award up to \$712,000 of the allocated funds to Berkeley Unified School District (BUSD) for the period, July 1, 2023 to June 30, 2025 through a grant proposal to reduce the consumption of sugar-sweetened beverages (SSBs) through the implementation and enhancement of the BUSD cooking and gardening programs. The BUSD funding process is separate from the RFP process for the general community-based organization funding process and shall be guided by the SSBPPE Commission's Criteria for BUSD Funding (Attachment 1).
- b. Direct the City Manager to award at least \$712,000 of the allocated funds for the period, July 1, 2023 to June 30, 2025 through an RFP process managed by HHCS/PHD for grants to community-based organizations consistent with the SSBPPE Commission's goals to reduce the consumption of SSBs and to address the effects of SSB consumption. The community-based organization funding RFP process is separate from the BUSD funding process and shall be guided by the SSBPPE Commission's Criteria for Community Agency Grants (Attachment 2).
- c. For the period, July 1, 2023 to June 30, 2025, direct the City Manager to allocate \$125,000 to fund Finance Department costs for staffing and MuniServices fees and \$451,000 to HHCS/PHD for staffing, operating and consulting costs to coordinate and monitor the grant process, manage resulting contracts awarded, support activities aligned with the goal of the sugary beverage tax, including the Healthy Retail Checkout ordinance, and provide an annual presentation to the SSBPPE Commission that includes process and outcome data and updates on Finance Department fees related to the sugary drink tax for the SSBPPE Commission to inform the development of the Commission's annual report.
- d. Carryover any sugary drink tax revenue received in excess of \$2 million during FY24 and FY25 to be awarded for related services in FY25 – FY27.

Financial Implications: See report

Contact: Henry Oyekanmi, Finance, (510) 981-7300, Lisa Warhuus, Health, Housing, and Community Services, (510) 981-5400

Action: 4 speakers. M/S/C (Harrison/Arreguín) To forward the item to Council with a Qualified Positive Recommendation to approve staff's recommendation, with an additional amount of \$35,590 in FY24 and FY25, and any additional revenues beyond the projected amounts being prioritized for grants.

Vote: All Ayes.

Committee Action Items

3. Receive a Report on the Fiscal Year 2023 Mid-Year Budget Update

From: City Manager

Contact: Sharon Friedrichsen, Budget Manager, (510) 981-7000

Action: 1 speaker. Discussion held.

4. Unfunded Liability Obligations and Unfunded Infrastructure Needs

From: City Manager

Recommendation: Receive a report on the City's Unfunded Liability Obligations and Unfunded Infrastructure Needs, including pension and other post-employment benefits; discuss strategies to address unfunded liabilities, including funding recommendations for the Section 115 Pension Trust; and provide direction to staff.

Financial Implications: See report

Contact: Sharon Friedrichsen, Budget Manager, (510) 981-7000

Action: Item continued to the March 9, 2023 meeting of the committee.

5. Approval of the Public Bank East Bay Viability Study

From: Councilmember Robinson (Author), Mayor Arreguín (Author)

Referred: February 14, 2023

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Recommendation: Refer to the Budget & Finance Policy Subcommittee to review and discuss the Public Bank East Bay Viability Study and consider the following recommendations for the full Council:

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Financial Implications: See report

Contact: Rigel Robinson, Councilmember, District 7, (510) 981-7170

Action: Item continued to the March 9, 2023 meeting of the committee.

Unscheduled Items

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Unscheduled Items

6. Investment Report Update - Investment Policies of Other Jurisdictions

From: City Manager

Contact: Henry Oyekanmi, Finance, (510) 981-7300

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Financial Implications: None

Contact: Henry Oyekanmi, Finance, (510) 981-7300

8. Additional Allocation of Measure P Funding to "Step Up Housing" Project

From: Councilmember Bartlett (Author), Councilmember Wengraf (Co-Sponsor), Councilmember Kesarwani (Co-Sponsor)

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Financial Implications: See report

Contact: Ben Bartlett, Councilmember, District 3, (510) 981-7130

Unscheduled Items

9. Recommendation on Climate, Building Electrification, and Sustainable Transportation Budget Priorities for Fiscal Year 2023 and 2024

From: Energy Commission

Referred: November 3, 2022

Due: April 25, 2023

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.

Financial Implications: See report

Contact: Billi Romain, Commission Secretary, (510) 981-7400

Items for Future Agendas

- None

Adjournment

Action: M/S/C (Arreguín/Harrison) to adjourn the meeting.

Vote: All Ayes.

Adjourned at 11:57 am.

I hereby certify that the foregoing is a true and correct record of the Budget & Finance Committee meeting held on February 23, 2023.

Sarah K. Bunting, Assistant City Clerk

Fiscal Year 2023 Unfunded Liabilities and Unfunded Infrastructure Needs Report

Budget and Finance Policy Committee
23 February 2023

▪ **Purpose:**

- Receive a report on unfunded liabilities and infrastructure needs
- Discuss strategies to address unfunded liabilities
- Provide direction on staff (report to Council, short and long-term funding)

▪ **Overview:**

- Purpose biennial report on current and projected liabilities
 - Resolution No. 65,748-N.S.
- City's pension (CalPERS) & other-post employment benefits retiree medical plans
- City workers' compensation plan
- City debt obligations
- Capital assets and infrastructure needs
- Long-term financial forecast

▪ **Presentation from City's Actuarial on Pension and OPEB**

▪ **Questions and Responses**

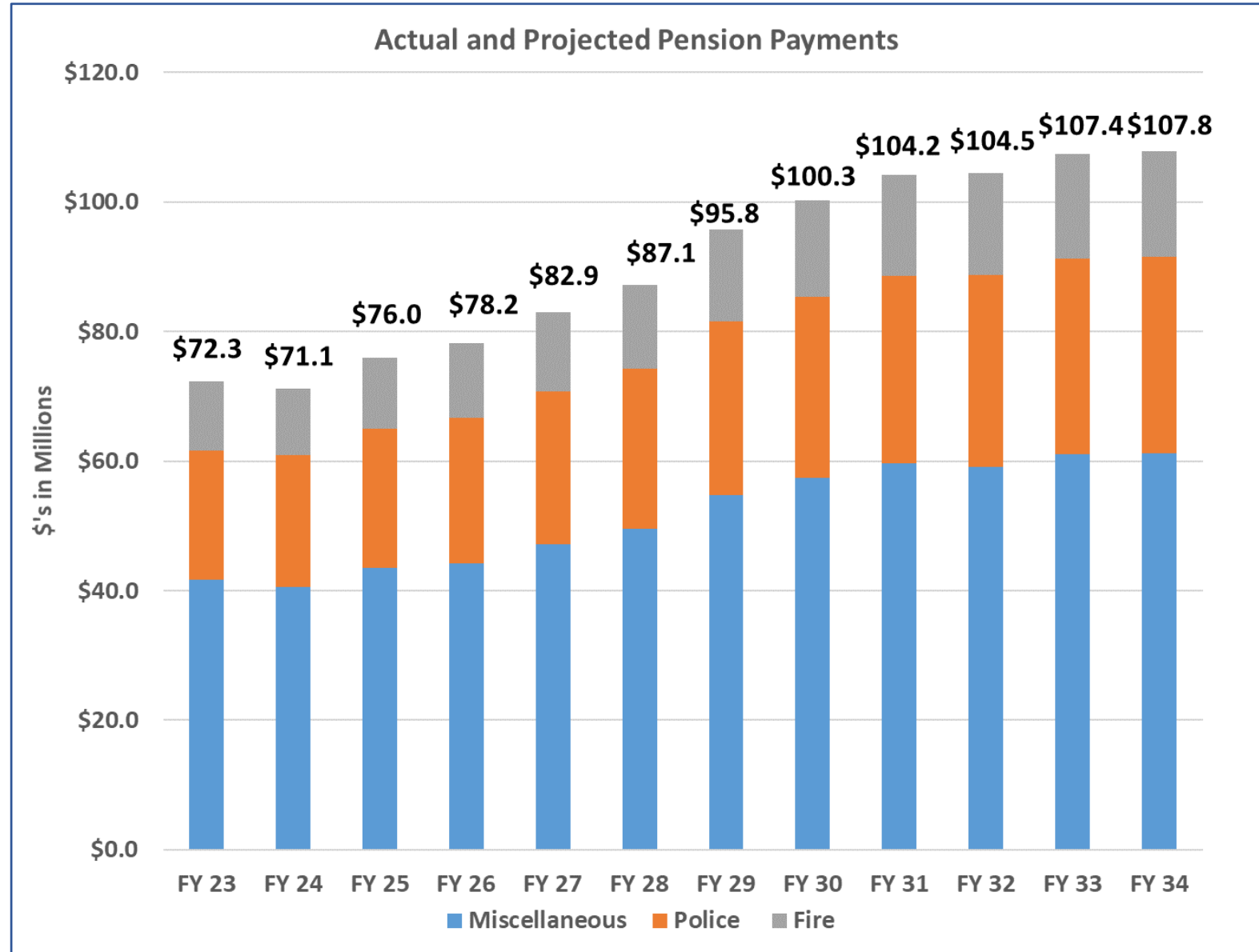
▪ **Discussion on Report and Funding Recommendations**

Funded Status:

- City provides retirement (defined benefit pension plan) through CA Public Employees' retirement System (CalPERS)
- As of June 30, 2021, CalPERS plans funding status:
 - Miscellaneous: 80%
 - Police: 69%
 - Fire: 81%

Estimated Payments

- \$31.8M projected increase in PERS costs from FY 2025 to FY 2034; estimated \$107.8M in FY 2034 due to CalPERS recent financial loss



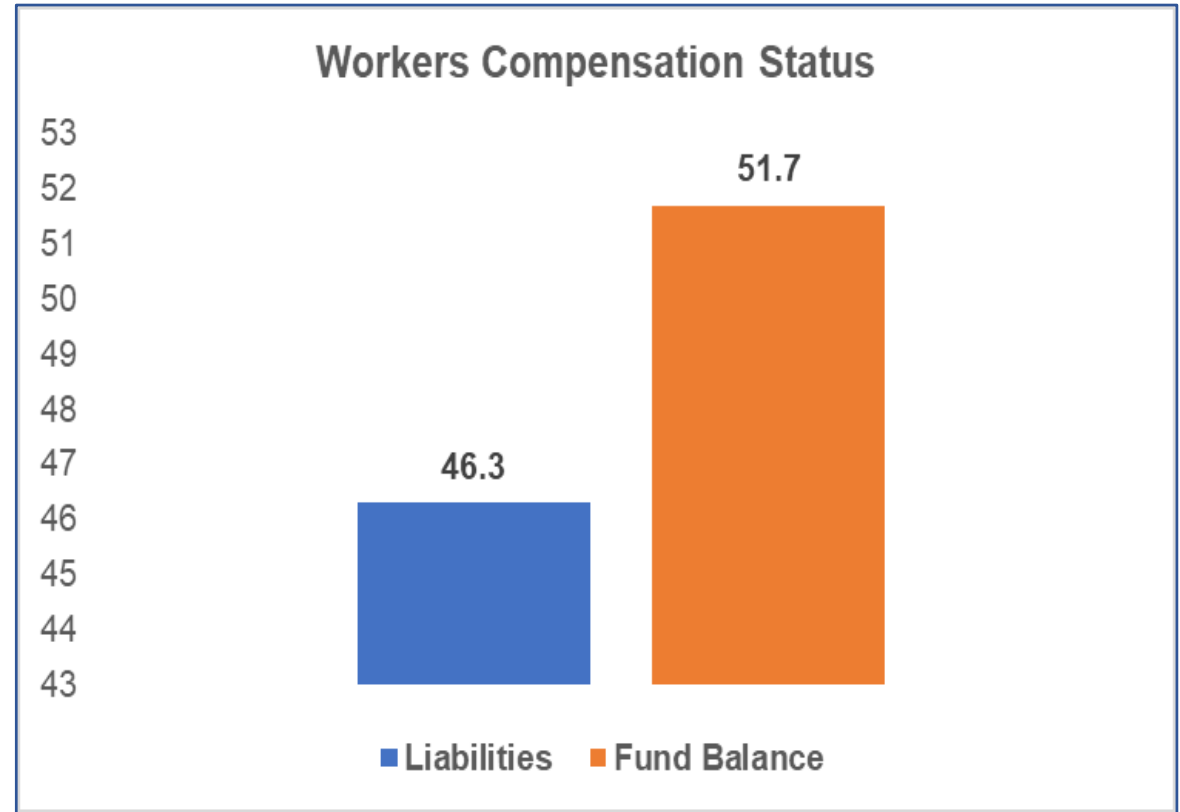
Funded Status:

- City provides post-retirement health insurance benefits
- Retiree health plans are significantly underfunded
- Funded status range from 6.93% to 51.22%
- More details on status and funding options in actuarial report

WORKERS COMPENSATION SUMMARY

Funded Status:

- Self-insured workers' compensation program
- Liabilities at \$46.3M (6/30/23)
- Fund balance at \$51.7M (6/20/22)
- Improvement since 2021:
Liabilities of \$42.4M (6/30/21)
Fund balance of \$41.5M (6/30/20)



Summary:

- Includes 5 outstanding general obligation bond authorizations
- Oldest authorization from 1992
- Aggregate bond tax rate for FY 2023 is 0.0623 (\$62.30 for each \$100,000 in assessed value)
- Aggregate bond tax rate of 0.0540 in FY 2020 (last report)
- This rate has dropped from a historical peak of approximately \$95 (per \$100,000 in assessed value) in the tax year 1999-2000

Summary:

- 95 public buildings: 56 maintained by Public Works, 39 by PRW
- Replacement value for Public Works maintained facilities of \$540M

- 54 parks, 4 community centers, 2 clubhouses, 2 pools, 3 resident camps
- 15 athletic fields, 49 sports courts, 63 play areas, 36 picnic areas
- 11.5 miles of landscaped street medians and triangles; 45,000 trees

- 215 centerline miles of improved streets; estimated replacement value of \$816,753,950; Average PCI of 56

- 400 miles of sidewalk; estimated replacement value of \$400,000,000

- 255 miles of sewer mains; 165 miles of lower laterals; estimated replacement value of \$820,000,000

Summary:

- Unfunded infrastructure needs have increased over the years and is anticipated to range around \$2.23 billion from FY 2024 to FY 2028.
- Breakdown of the unfunded needs:
 - Parks Recreation & Waterfront - \$443M
 - Public Works - \$1.79B
 - Information Technology - \$13.6M

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PRELIMINARY GENERAL FUND FIVE-YEAR REVENUE ASSUMPTIONS

Revenue

- Secured Property Tax Revenues assumed to grow 5.5% annually (as compared to 3.5% in prior years); \$75.6M in FY 2023 to \$90.8M in FY 2034
- Transfer Tax revenues to remain basically flat from FY 2024 – FY 2027 \$34.5 in FY 2023 to \$30.1 in FY 2027; Measure P at \$14.1M annually
- Sales tax almost back to FY 2019 levels; growth to level off to 4% in FY 2024; \$19.1M in FY 2023 to \$2.12M in FY 2027
- Business license growth of 5%; \$19.0M in FY 2023 to \$19.8M in FY 2027
- Utility Tax remain flat thereafter at \$15.0M annually
- **Total revenues from \$258.7 in FY 23 to \$272.5 in FY 2027**

PRELIMINARY GENERAL FUND FIVE-YEAR PROJECTION

General Fund Revenues v.s. Expenditures - Demonstrative Comparison (dollars in millions)						
	FY 2023 Adopted	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected
GF Revenues Baseline	\$ 258.70	\$ 272.90	\$ 274.60	\$ 262.20	\$ 267.60	\$ 272.50
GF Expenditures - Zero COLA	\$ 280.70	\$ 275.60	\$ 280.20	\$ 293.70	\$ 295.00	\$ 299.60
Surplus/(Deficit)	\$ (22.00)	\$ (2.70)	\$ (5.60)	\$ (31.50)	\$ (27.40)	\$ (27.10)

Assumptions:

- Staffing level held constant using the FY 2023 Adopted Budget
- No cost of living adjustments (COLA) beyond what is currently negotiated
- PERS rates based on rates provided by the City’s actuarial agency
- Other Fringe Benefits increase annually by 8 percent
- Non-Personnel costs increase annually by 3 percent
- Transfer to CIP of ~\$19M annually

Summary:

- Pension and Other Post Employment Benefits liabilities total \$614 million
- Projected structural deficit as pension costs increase
- Unfunded infrastructure needs total \$2.23 billion

Action To Date:

- Council created Section 115 Pension Trust
- Council created fiscal policies to allocate funding into trust annually
- Council adopted fiscal policies to address funding of infrastructure

▪ Next steps

- Discuss funding recommendations by actuarial
- Explore incorporating funding recommendations into FY 2024 and beyond
- Continue discussion on options to address unfunded liabilities and infrastructure



Office of the City Manager

ACTION ITEM
February 23, 2023

To: Budget and Finance Policy Committee
From: Dee Williams-Ridley, City Manager
Submitted by: Sharon Friedrichsen, Budget Manager
Subject: Unfunded Liability Obligations and Unfunded Infrastructure Needs

RECOMMENDATION

Receive a report on the City's Unfunded Liability Obligations and Unfunded Infrastructure Needs, including pension and other post-employment benefits; discuss strategies to address unfunded liabilities, including funding recommendations for the Section 115 Pension Trust; and provide direction to staff.

INTRODUCTION

On May 29, 2012, the City Council adopted Resolution No. 65,748 N.S. "Requiring that the City Manager Develop and Publish a Biennial Report of Current City Liabilities and Projections of Future Liabilities. The purpose of this report is to provide a thorough overview of the City's long-term expenditure obligations in a format that is easily understandable in a single report.

This report includes the following information set forth in that Resolution:

1. Employee and retiree benefit costs over a 10-year horizon
2. Costs for current active employees including:
 - a. total payroll costs for active employees during the current year;
 - b. projected payroll costs for the same number of employees for the next 10-year period with costs increases based on MOU's with bargaining units.
3. A summary of all current City obligations including:
 - a. general obligation bonds;
 - b. revenue bonds.
4. Summary of all capital assets and infrastructure including:
 - a. Appraisal of Public Buildings valued at \$5 million or more

- b. Condition of Streets and Roads using the “Street Saver” information projecting costs to bring streets and roads condition to an average Pavement Condition Index (PCI) of 75 within 5 years.
- c. Sewers: updated asset management plan for public sewers including projected costs for succeeding 5 years and projected revenue from sewer fees for the succeeding 5 years.

This report is required to be published every two years, in the second year of the biennial budget, in advance of the Council’s consideration of the upcoming biennial budget. Instead of preparing a two-year budget for FY 2022 & FY 2023, the City prepared a one-year budget for FY 2022 and subsequently prepared a two-year budget for FY 2023 & FY 2024. Therefore, this report is now being presented in the first year of the biennial budget in order to maintain the requirement of the report being published every two years.

The projections in this report were developed by staff in the City Manager’s Budget Office and the Finance Department, with the assistance of several financial advisors including the City’s sales tax consultant and actuaries. Revenues are, of course, sensitive to normal business cycles as well as unanticipated economic volatility. Thus, it is important that the City continue its fiscally prudent planning to balance expenditures against projected revenues while addressing employee compensation as well as historically underfunded infrastructure needs.

SUMMARY

The following is a summary of key points that will be explained in detail in this report:

- Due to projected increases in personnel expenses, the City currently projects a General Fund structural deficit in FY 2024 through FY 2026.
- The City has a significant pension liability that is anticipated to grow due to recent financial losses experienced by CalPERS. Also, of note, the City’s pension contributions for all City employees are anticipated to increase more than \$32 million over the next ten years putting a strain on resources and services.
- The City’s retiree health plans are significantly underfunded with the funded status of the City’s plans ranging from a low of 6.93% to a high of 51.22%.
- Due to the age of the City’s infrastructure and limited resources allocated to infrastructure, the City’s unfunded needs tied to infrastructure have increased over the years and is anticipated to range around \$2.23 billion from FY 2024 to FY 2028.
- Despite the recent adoption of Measure T1 and Measure O, the City has an aggregate bond tax rate for FY 2023 of 0.0623% (which represents \$62.30 for each \$100,000 in assessed value (“A.V.”), which is below the historical peak of approximately \$95 (per \$100,000 in A.V) in tax year 1999-2000.

CURRENT SITUATION AND ITS EFFECTS**1. Employee and Retiree Benefit costs over a 10-year horizon****a. CalPERS Retirement Benefits**

The City provides retirement benefits for employees through its participation in the California Public Employees' Retirement System (CalPERS). This is a defined benefit pension plan funded by a combination of employee contributions that are set by statute and employer contributions that fluctuate from year to year based on an annual actuarial valuation performed by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Benefits are based on years of credit service, equal to one year of full-time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits.

On January 1, 2013, the Public Employee Pension Reform Act (PEPRA) went into effect. The State law applies to employees hired after January 1, 2013, who are new to CalPERS. These employees are termed PEPRA members and employees that were enrolled in CalPERS (without significant separation) prior to January 1, 2013, are now referred to as "classic" members.¹

The City contributes to three plans in the CalPERS system: Police Safety Plan, Fire Safety Plan, and Miscellaneous Employee Plan. Each plan has a different rate for the City's annual employer contribution which is generally based on the demographics of the plan participants and the value of investment returns of the City's assets in the CalPERS system. In addition, employees' contributions vary by plan based on negotiated Memorandum of Understandings (MOU).

In 2013, the CalPERS Board voted to change the actuarial model for the pension plans along with certain actuarial assumptions upon which rates are based. First, the model anticipated that the plans would be 100 percent funded in a fixed 30-year time period. Second, the time period to "smooth out" the impacts of CalPERS' investment losses due to the recession was reduced from 15 years to 5 years. Finally, the rates were structured in such a way that the first five years were considered to be a "ramp up" period to improve the plans funded percentage. That meant that FY 2016, 2017, 2018, 2019, and 2020 were expected to have higher rates, and the years following were projected to plateau for some time before decreasing in the last five years of the 30-year funding period.

¹ PEPRA miscellaneous members are enrolled in a 2% at 62 plan and PEPRA safety members (Fire and Police) are enrolled in a 2.7% at 57 plan. PEPRA members are required to pay half the normal cost of their plans.

In February 2014, the CalPERS Board voted to retain its current long-term assumed rate of return of 7.5 percent but adopted new mortality assumptions due to the fact that retirees are living longer. As a result of the new assumptions, the cost of employer contributions increased, again.

In December 2016, the CalPERS Board lowered the discount rate from 7.50 percent to 7.00 percent using a three-year phase in beginning with the June 30, 2016, actuarial valuation. The employer contribution for FY 2020 was calculated using a discount rate of 7.25 percent. CalPERS reduced the return rate to 7.25 percent in July 2018, with a further reduction to 7.0 percent. CalPERS lowered the discount rate because they determined that achieving a 7.5 percent rate of return was now far less likely. The result of this lowered discount rate is that liabilities have grown and the City's pension contributions have significantly increased.

Changes to the Unfunded Actuarial Liability (UAL) due to actuarial gains or losses, as well as changes in actuarial assumptions or methods, are amortized using a 5-year ramp up. This method phases in the impact of changes in UAL over a 5-year period and attempts to minimize employer cost volatility from year to year. As a result, however, required contributions can change gradually, but significantly, over the next five years.

Effective with the June 30, 2019, actuarial valuation, the CalPERS Board adopted a new amortization policy that shortens the period over which actuarial gains or losses are amortized from 30 years to 20 years with the payments computed using a level dollar amount. In addition, the new policy removes the 5-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains or losses. These changes will apply only to new UAL bases established on or after June 30, 2019.

In July 2021, high investment returns triggered an automatic discount rate reduction from 7 percent to 6.8 percent. This automatic reduction was the result of the Funding Risk Mitigation Policy put in place by the CalPERS Board of Directors in 2015, which was designed to lower the discount rate in years of extraordinary investment returns to reduce future funding risk over time.

For FY 2022, CalPERS announced a -6.1 percent net return on investments. This is obviously below CalPERS assumed 6.8 percent discount rate. As a result, the City's pension contributions will likely increase for miscellaneous employees plan by 2-4 percent and safety members by 4-6 percent for fiscal year 2024-25.

With respect to future liabilities for the costs of these plans, the City has regularly retained an outside actuary to review the CalPERS' estimates and provide independent actuary estimates that the City can use in budget planning. The chart below provides CalPERS payment amounts for FY 2023 and FY 2024 as provided to the city by CalPERS. The outside actuary provided estimated payment amounts for FY 2025 through FY 2034.

Future Payments to California Public Employees Retirement System All Plans (dollars in millions)												
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Misc.	41.64	40.57	43.51	44.21	47.10	49.53	54.80	57.35	59.69	59.15	61.00	61.18
Police	20.04	20.32	21.47	22.43	23.59	24.71	26.74	27.94	28.96	29.52	30.19	30.32
Fire	10.58	10.24	10.97	11.54	12.24	12.89	14.27	14.96	15.57	15.80	16.24	16.28
Total	72.26	71.13	75.95	78.18	82.93	87.13	95.81	100.25	104.22	104.47	107.43	107.78
FY 2023 and FY 2024 are based on amounts provided by CalPERS.												
FY 2025 through FY 2034 amounts are based on actuary's projections.												
Rates used reflect current MOU agreements: Miscellaneous includes the 8% employee share paid by the City on behalf of the employee as well as the negotiated employee's contribution to the employer rate.												

There are a couple of important points about the chart. The first is that over the next 10 years there is close to an estimated \$32 million dollar increase in pension costs to the City from FY 2025 to FY 2034. The next point is that regardless of the City's financial position the payments will have to be made to CalPERS. This financial challenge will require us to be fiscally prudent over this period of time.

The changes made by CalPERS in the last few years are planned to achieve 100% funding for all plans within a 30-year time period. This means that there will be sufficient funds held in each plan to pay obligations for all inactive participants (including retirees) and benefits as a result of prior service for actives.

The funded status of a pension plan is defined as the ratio of assets to a plan's accrued liabilities. Based on the CalPERS' actuarial valuations as of June 30, 2021, the City's plans are currently funded as follows: Miscellaneous 80.1%; Police Safety 68.7%; and Fire Safety 80.9%.

California Public Employees Retirement System Funded Status						
Fund Name	Valuation Date	Actuarial Source	Estimated Liability	Plan Assets	Unfunded Liability	% Funded
Miscellaneous	6/30/2021	CalPERS	\$ 1,181.2	\$ 946.3	\$ 234.90	80.1%
Police	6/30/2021	CalPERS	\$ 483.8	\$ 332.5	\$ 151.30	68.7%
Fire	6/30/2021	CalPERS	\$ 306.7	\$ 248.1	\$ 58.60	80.9%

On June 26, 2018, Council authorized the City Manager to establish an IRS Section 115 Pension Trust Fund ("Trust"). The Trust can act as a rate stabilization fund and can be used to ease budgetary pressures resulting from unanticipated spikes in employer contribution rates. On May 14, 2019, Council authorized the City Manager to execute a contract with Keenan Financial Services to establish, maintain, and invest the Trust.

The Trust currently has a balance of \$14,762,850.42 as of June 30, 2022 and receives funding through transfer from the General Fund and Capital Improvement Fund and savings from annually prepaying the City's CalPERS payment. In addition, the City Council adopted a new fiscal policy on June 30, 2022 to allocate 1/3 of additional revenue earned from investments that is over the annual (fiscal year) baseline of \$6 million to the Section 115 Pension Trust.

b. Retiree Medical Plans

The City provides post-retirement health insurance benefits in accordance with the Memoranda Agreements between the City and the various collective bargaining units (and to unrepresented employees via Council adopted resolutions). The City has individual trusts for each bargaining unit that fund the medical plans, as well as the closed plan for Police that provides a cash benefit. In 2012 the City and the Berkeley Police Association agreed to a new Retiree Medical plan that provides health insurance premium payments, rather than the pre-existing cash payments, to retirees. The original plan is now a "closed" plan meaning that employees who retire after September 2012 will receive benefits from the new plan. However, the original plan must still make benefit payments to existing retirees and thus must continue to be funded until those payment obligations cease.

The City obtains actuarial reports for each of these plans at least every two years and the City is responsible for investing the assets in these plans. The results of that investment activity are provided to the City Council in the regular Investment Report.

In some cases, the City's actual contribution to each plan on an annual basis is based on the actuarially established "Annual Required Contribution" or as a percent of payroll. However, some of the plans are funded on a "pay-as-you-go" basis. Funding on a pay-as-you-go basis is sufficient to cover the annual benefit payments made from the plan assets but impacts the ability to achieve the long-term funding targets.

On April 24, 2017, the City actuary presented various options that would reduce the City's unfunded liabilities tied to post-employee benefits to meet the long-term funding targets. Recommended for Council's consideration were fully prefunding annual actuarially determined contributions, investment reallocations to increase returns, and establishing an irrevocable supplemental trust. Council has already acted on some of these recommendations.

The following retiree medical plans are discussed in detailed below:

- Police Retiree Income Benefit Plan (closed plan)
- Police Retiree Health Premium Assistance Plan
- Fire Employees Retiree Health Plan
- Retiree Health Premium Assistance Plan (Non-safety Members)

Police Retiree Income Benefit Plan (closed plan)

The City provides a Retiree Income Benefit Plan for prior Police retirees. To be eligible for benefits, Police employees must retire from the City on or after July 1, 1989 and before September 19, 2012, be vested in a CalPERS pension, have ten years of service with the Berkeley Police department, and retire from the City on or after age 50 or with a disability benefit. Benefits commence 10 years after retirement for retirements before July 6, 1997, 5 years after retirement for retirements before July 1, 2007, and 2 years after retirement for retirements on or after July 1, 2007.

Benefits are payable for the retiree's lifetime and continue for the life of the surviving spouse. For employees retiring before September 19, 2012, the City pays a monthly income benefit equal to the City's Active 2-party Kaiser premium regardless of marital status. In 2022, the City's monthly payment per participant for this benefit ranged from \$457.35 to \$1,829.38, depending on the retirees' years of service at retirement. The monthly benefit is pro-rated based on years of service.

As of June 30, 2022, the most recent actuarial valuation date, the plan was 7.14% funded. The actuarial accrued liability for benefits in this plan was \$64.81 million, and the actuarial value of assets was \$4.63 million, resulting in an unfunded accrued liability of \$60.18 million. Since the implementation of GASB 67 and 68, the Annual Required Contribution (ARC) is no longer provided. In addition, the Police Retiree Income Benefit Plan is a closed plan and therefore no "Actuarially Determined Contribution" is provided due to no new members and no payroll information.

Police Retiree Health Premium Assistance Plan

Effective September 19, 2012, the City replaced the "Berkeley Police Retirement Income Benefit Plan" with the "Retiree Health Premium Assistance Coverage Plan" for any police employees hired on or after that date, as well as any current employees who retire on or after such date. Under the newly established retiree health premium assistance plan, benefits will be paid by the City directly to the provider who is providing retiree health coverage to the retiree or his or her surviving spouse. The maximum amount will be equal in value to the City sponsored health plan.

To be eligible for benefits, Police employees must retire from the City on or after September 19, 2012, be vested in a CalPERS pension, have ten years of service with the Berkeley Police department, and retire from the City on or after age 50. Benefits commence immediately upon retirement, but may also be deferred for a period during which the member is covered under another health insurance plan. Benefits are payable for the retiree's lifetime.

In 2022 the City paid for employees retiring on or after September 19, 2012, a maximum of \$823.85/month toward the cost of single-party coverage and up to \$1,647.69/month toward the cost of two-party coverage for retirees under age 65 enrolled in the City's Retiree Health Plan.

For retirees over age 65 the City's share of single/two-party coverage is a maximum of \$436.14/\$872.28 per month and retirees must pay the difference of the actual premium cost. The City's share will increase by either the amount Kaiser increases the retiree medical premium for that year or 6%, whichever is less. The monthly benefit is pro-rated based on years of service. The City pays this benefit plan on a pay-as-you-go basis.

As of July 1, 2021, the most recent actuarial valuation date, the Actuarially Determined Contribution (ADC) was \$4.64 million and the plan was 6.93% funded. The actuarial accrued liability for benefits was \$37.25 million, and the actuarial value of assets was \$2.58 million, resulting in an unfunded accrued liability of \$34.67 million

Fire Employees Retiree Health Plan

The City sponsors a retiree health benefit plan for its Fire employees. To be eligible for benefits, Fire employees must retire from the City on or after July 1, 1997, be vested in a CalPERS pension, and retire from the City on or after age 50. Retirees can select from among any of the health plans offered to active employees. Benefits commence immediately upon retirement, but may also be deferred for a period during which the member is covered under another health insurance plan.

Benefits are payable for the retiree's lifetime and continue for his or her covered spouse's/domestic partner's lifetime. The City contributions toward the medical premium depending on whether the retiree has dependent coverage and date of retirement. The City's contribution increases by 4.5% per year regardless of the amount of increase in the underlying premium rate. The City's contribution is prorated based on years of service. In 2019, the City's monthly premium cost per participant for this benefit was a maximum of \$662.85 for single party and \$1,322.35 for two-party

As of July 1, 2021, the most recent actuarial valuation date, the plan was 38.62% funded. The actuarial accrued liability for benefits was \$32.78 million, and the actuarial value of assets was \$12.66 million, resulting in an unfunded accrued liability of \$20.12 million.

Retiree Health Premium Assistance Plan (Non-Safety Members)

Effective June 28, 1998, the City adopted the City of Berkeley Retiree Health Premium Assistance Plan (for Non-Safety Members). Employees who retire from the City are eligible for retiree health benefits beginning on or after age 55 if they terminate employment with the City on or after age 50 with at least 8 years of service. Retirees can select a non-City sponsored health plan or enroll in any of the health plans offered to active employees. A retiree living outside the coverage area of the City's health plans can select an out-of-area health plan.

Benefits are payable for the retiree's lifetime and continue for his or her covered spouse's/domestic partner's lifetime. The City pays the monthly cost of the monthly premiums up to a Participant's applicable percentage of the Base Dollar Amount and subject to annual 4.5% increases as specified in the Retiree Health Premium Assistance Plan document. In 2022, the City's monthly premium cost per participant for this benefit was a maximum of \$546.40 for single party and \$940.10 for two-party. A participant's applicable percentage is based on years of service with the City. The City funds the plan based on the MOU. Contribution amounts are negotiated and vary by bargaining unit.

As of July 1, 2021, the most recent actuarial valuation date, the plan was 38.62% funded. The actuarial accrued liability for benefits was \$61.48 million, and the actuarial value of assets was \$31.49 million, resulting in an unfunded accrued liability of \$29.99 million.

Safety Members Pension Fund (closed plan)

The City also maintains the Safety Members Pension Fund (SMPF). This plan is a single-employer defined benefit pension plan for fire and police officers that retired before March 1973. In March 1973 all active fire and police officers were transferred from SMPF to CalPERS. Service and disability retirement benefits from the SMPF are based on a percentage of salary at retirement, multiplied by years of service. Benefits are adjusted annually by either:

- Current active salary increases (based on the same rank at retirement) or
- The income in the California Consumer Price Index (with a 1% minimum and a 3% cap). SMPF also provides surviving spouse benefits.

The City pays SMPF benefits on a pay-as-you-go basis. In February 1989, the Berkeley Civic Improvement Corporation purchased, on behalf of the City, a Guaranteed Income Contract (GIC) from Mass Mutual. This contract provides annual payments through 2018 and an annual guaranteed 9.68% rate of return (net of expenses).

The City was paying the difference between the total SMPF benefits and the amount received from the Massachusetts Mutual Guaranteed Income Contract (GIC). The City will receive declining amounts from the GIC through FY 2019. At June 30, 2022, the unfunded accrued liability was \$1.13 million. There were 6 participants remaining in the plan with the average age at 98.4 years.

Retiree Medical Plan Actuarial Data								
<i>(dollars in millions)</i>								
Plan	Measurement Date	Actuarial Estimated Liabilities	Plan Assets	Net Pension Liability	Actuarially Determined Contribution (ADC)	Actual Contribution *	% Funded	Total Plan Members
Police Employee Retiree Income Benefit Plan (closed)*	6/30/2022	\$ 64.81	\$ 4.63	\$ 60.18	\$ -	\$ 2.15	7.14%	148
Police Employees Retiree Health Premium Assistance Plan (new)	7/1/2021	\$ 37.25	\$ 2.58	\$ 34.67	\$ 4.64	\$ 0.40	6.93%	199
Fire Employees Retiree Health Plan	7/1/2021	\$ 32.78	\$ 12.66	\$ 20.12	\$ 3.07	\$ 0.74	38.62%	226
Retiree Health Premium Assistance Plans (Non-Safety Members) *	7/1/2021	\$ 61.48	\$ 31.49	\$ 29.99	\$ 5.07	\$ 2.22	51.22%	1669
Safety Members Pension Fund	6/30/2022	\$ 1.55	\$ 0.41	\$ 1.13	\$ -	\$ 0.50	26.71%	6
		\$ 197.87	\$ 51.77	\$ 146.09	\$ 12.78	\$ 6.01	26.17%	2248

*Actual contribution does not include interest income

*Since the implementation of GASB 67 and 68 the Annual Required Contribution (ARC) is no longer provided. In addition, it is a closed plan and therefore no "Actuarially Determined Contribution" is provided due to no new members and no payroll information.

Supplemental Retirement Income Plan (SRIP) I (closed plan)

On January 1, 1983, Ordinance No. 5450-N.S., which was codified in the Berkeley Municipal Code under Chapter 4.36.101 et seq., established SRIP I. The SRIP I plan consists of two components: 1) a defined contribution money purchase pension plan adopted in accordance with Sections 401(a) and 501(a) of the internal revenue code and 2) an employer paid disability benefit.

The City administrators of the money purchase pension plan are Hartford Life Insurance and Prudential Retirement Services. The plan is a defined contribution plan whereby the City contributes 5.7% of salary up to a salary of \$32,400 into a tax-deferred and self-directed investment account and 1% of salary up to a salary of \$32,400 into a disability reserve account for each permanent City employee. The total assets of SRIP I available for benefits at June 30, 2022, was \$6,193,509 which was comprised of 98 participant accounts. These assets are the property of the individual account holders and not the property of the City. These assets cannot be used to pay disability benefits.

The disability benefit is for employees hired after January 1, 1983 but prior to July 22, 1988, who became disabled and are entitled to receive a disability income benefit equal to 60% of their highest compensation, reduced by any disability payments they receive from Social Security, State Disability Insurance, or Worker's Compensation. Employees hired after July 21, 1988, are not eligible for benefits under this plan which was closed to new enrollees.

Benefits are payable for the disabled participant's lifetime or until recovery from disability. The third-party administrator is Cigna. Currently, the City pays the cost of the monthly disability benefits on a pay-as-you-go basis. As of July 1, 2022, there were a total of 54 closed group participants, 6 active employees and 48 disabled participants receiving benefits. The unfunded liability for SRIP I at July 1, 2022, the date of the last actuarial study, was \$10,018,000.

Workers' Compensation Program

The City of Berkeley began its self-insured workers' compensation program on March 1, 1975. The City's self-insured retention (SIR) has varied between \$100,000 and \$1,000,000 prior to 2004/05 and is currently unlimited. Every two years, the City has an actuarial review conducted to determine the outstanding liabilities and determine the rates to use for budgeting and payroll purposes to fund the program annually.

The recent actuarial study by Bickmore Actuarial showed the City's estimated outstanding liabilities, as of June 30, 2023, at an 80% confidence level to be at \$46,316,000 for the workers' compensation program. The City's Workers' Compensation Fund ended FY 2022 with a fund balance of \$51,696,189, meaning that the City is able to fund its estimated liabilities in its Workers' Compensation Program.

2. Current Costs for Active Employees

As of July 1, 2022, the City budgeted for 1,791.84 full-time equivalents (FTE). At any given time, the number of employees on the payroll is generally less than the budgeted number of FTE due to retirements and employment separations for other reasons. For purposes of this report, the analysis of the projected payroll costs for the next 10 years is based on the number of authorized budgeted FTE. That number was then projected based on the negotiated cost of living adjustments (COLA) established in collective bargaining agreements. Other increases were also assumed for medical costs, dental costs, cash in lieu, shoes and tools allowance, commuter checks, and other benefits.

Based on these assumptions, total payroll costs for all funds would grow from \$342.4 million in FY 2024 to \$486.9 million in FY 2034. For modeling purposes, the projected cost assumes no (0%) COLA, which means that the estimated increase of \$144.5 million is due to the rise in the costs of benefits only.

Citywide Total Personnel Costs and Fringe Rate Over Time with Zero COLAS												
Zero COLA	FY 2023 Adopted	FY 2024 Adopted	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Total Payroll	\$ 205.7	\$ 208.1	\$ 208.1	\$ 208.1	\$ 208.1	\$ 208.1	\$ 208.1	\$ 208.1	\$ 208.1	\$ 208.1	\$ 208.1	\$ 208.1
Total Benefits	\$ 128.5	\$ 134.3	\$ 154.9	\$ 160.4	\$ 169.4	\$ 178.1	\$ 192.0	\$ 222.0	\$ 232.7	\$ 243.6	\$ 267.1	\$ 278.8
Fringe Rate	62%	65%	74%	77%	81%	86%	92%	107%	112%	117%	128%	134%
Total Personnel Costs	\$ 334.3	\$ 342.4	\$ 363.1	\$ 368.5	\$ 377.5	\$ 386.3	\$ 400.1	\$ 430.1	\$ 440.8	\$ 451.7	\$ 475.2	\$ 486.9

A couple of significant factors driving the increase in benefit costs include:

- Health care premiums for active employees (meaning exclusive of retiree medical contributions). The cost of premiums for medical alone is estimated to grow from \$30.8 million in FY 2024 to almost \$95.8 million in FY 2034 assuming annual increases of 12 percent as has been historically budgeted in the past.
- Employer Paid Portion of PERS Costs is expected to rise from approximately \$78 million in FY 2024 to \$130 million in FY 2034. This does not take include any contributions made by employees towards overall City CalPERS costs that will be paid to PERS annually as shown in a previous chart.

3. Summary of all current City Obligations (GO bonds)

The City’s debt includes General Obligation Bonds and Revenue Bonds. Attachment 2 includes the detailed debt service payment schedules for each of these debt issuances.

The City currently has five outstanding general obligation (GO) bond authorizations (each with multiple series of bonds) related to public safety, libraries, senior centers, animal shelter, street and integrated watershed improvements, infrastructure and facilities improvement, and affordable housing. The oldest of the authorizations dates back to 1992. The City has an aggregate bond tax rate for FY 2023 of 0.0623 (which represents \$62.30 for each \$100,000 in assessed value (“A.V”). This rate has dropped from a historical peak of approximately \$95 (per \$100,000 in A.V) in the tax year 1999-2000. Based on projected annual increases in A.V and decreasing aggregate annual debt service over time, the tax rate will drop with the final tax collected in FY 2051 based on the current outstanding debt (Measure O is the latest bond authorization).

<u>Bond Authorization</u>	<u>Authorization</u> <u>Year</u>	<u>Authorization</u> <u>Amount</u>	<u>Bond issued</u> <u>Amount</u>	<u>Unissued</u> <u>Amount</u>	<u>Outstanding Debt Services</u> <u>as of 6-30-2022</u>	<u>Final</u> <u>Maturity</u>	<u>FY 2022</u> <u>Bond Tax</u>	<u>FY 2023</u> <u>Bond Tax</u>
Measure FF	2008	\$ 26,000,000	\$ 26,000,000	\$ -	\$ 17,925,000	2040	0.0059%	0.0058%
2015 General Obligation Refunding Bonds (Refunding Measure G, S, I Consolidated)	2015	88,700,000	88,700,000	0	20,950,000	2038	0.0135%	0.0130%
Measure M	2015	30,000,000	30,000,000	0	26,345,000	2047	0.0077%	0.0075%
Measure T1	2016	100,000,000	80,000,000	20,000,000	75,480,000	2052	0.0170%	0.0160%
Measure O	2018	135,000,000	78,000,000	57,000,000	76,440,000	2053	0.0088%	0.0200%
Total		\$ 379,700,000	\$ 302,700,000	\$ 77,000,000	\$ 217,140,000		0.0529%	0.0623%

It has been the City's debt policy to issue each series of bonds with level amortization and terms of either 25 or 30 years. Many of the series have been refinanced for lower interest rates over time. Given the fixed term for each bond series, the aggregate annual debt service for all outstanding bonds decreases over time as each bond reaches its final maturity.

4. Summary of All Capital Assets and Infrastructure

The City has an extensive portfolio of capital assets and infrastructure, which includes 95 public buildings, 254 miles of public sanitary sewer mains and 130 miles of public sewer laterals, 54 parks, 2 pools, 3 camps, and 42 different facilities served by the City's IT systems. Maintaining these assets is a costly and time-consuming enterprise that requires significant resources and constant attention. Additionally, Berkeley is an aging city and thus its infrastructure faces challenges that other younger cities do not.

Due to the age of the City's infrastructure and limited resources allocated to infrastructure, the City's **unfunded needs tied to infrastructure** have increased over the years and are anticipated to rise to **\$2.23 billion from FY 2024 to FY 2028**. These reflects staff's best estimate of both the deferred maintenance in the City's public infrastructure and the unfunded need to deliver public infrastructure that achieves a service level consistent with City Council's direction, typically set through Council's adoption of a comprehensive plan related to that category of public infrastructure.

Several recent items adopted by voters have provided a much-needed increase in the resources available for the City to address its infrastructure needs:

- Measure T1:** In November 2016, Berkeley voters passed [Measure T1](#),² authorizing the City to sell \$100 million of General Obligation Bonds to repair, renovate, replace, or reconstruct the City's aging infrastructure and facilities, including sidewalks, storm drains, parks, streets, senior and recreation centers, and other important City facilities and buildings. Council approved 45 projects to be completed in Phase 1. The majority of these [projects are now complete](#)⁸¹, with the balance to be completed in 2023. On December 15, 2020, Council approved 36 additional projects to be completed in Phase 2, between 2021 and 2026.
- Measure F:** The November 2014 voter approval of Measure F (a City-wide special parks parcel tax) provided an additional \$750,000 per year for major maintenance projects, raising annual funding for parks capital and major maintenance projects from the prior \$250,000 to \$1 million.
- Clean Storm Water Fund:** The Clean Storm Water fund provides the funding for the maintenance and improvement of the City's storm water drainage system to reduce the pollutants in storm water from entering local creeks and the Bay. Revenue to this fund is from the collection of fees charged to every owner of real property in the city of Berkeley and is collected through property taxes. Prior to FY 2019, Clean Storm Water Fund revenues were fee-supported and are capped at 1996 levels by Proposition 218, set at flat \$34 fee per year. The revenues generated by this fee were no longer sufficient to pay for the Clean Storm Water program. The City conducted a Proposition 218 rate increase process that was approved by the voters and the City Council. The new fees generated by the 2018 Clean Storm Water Fee are shown as separate line item on property tax bills from the 1991 Clean Storm Water Fees. The fee is subject to an annual adjustment based on the Consumer Price Index in future years.
- Streetlight Assessment District Fund:** The Streetlight Assessment District Fund provides for maintenance of the City's 7,860 streetlights along the public streets, parking lots, pathways, recreation facilities, and marina. Also, it is to be used for installation or construction of public lighting facilities. Revenue to this fund is collected through annual property taxes and is capped by Proposition 218, allowing for no rate increase to this assessment without voter approval. Property owners and the City Council approved a new 2018 Streetlight Assessment District that is shown as a separate line on the property tax bills. The Proposition 218 revenue increase provides additional revenue to support the program and maintain service levels.

² See <https://www.cityofberkeley.info/MeasureT1/>.

The approved ballot measure also allows for an inflation adjustment based on the Consumer Price Index, but no more than 3% per year. The inflation index can be applied to the sum of the 1982 and 2018 assessments. Starting in FY 2022, Public Works will focus on an annual capital improvement projects for the street light program. Fund balance is mostly due to compounding salary savings from freezing and vacant positions. As the work on the streetlight deferred maintenance and capital plan ramps up, frozen positions will be reassessed.

As part of the FY 2023-2024 Budget adoption, the Council authorized a significant new infusion of investment in capital infrastructure. For Public Works this included an additional \$5 million in FY 2023 and \$9.1 million in FY 2024 for additional paving funds, as well as an additional \$750,000 for deferred building maintenance and \$750,000 for ADA Transitional Plan funding for the same period. An additional \$1.5 million in FY 2023 and \$2 million in FY 2024 were allocated to Parks, Recreation & Waterfront (PRW) capital improvements. These investments have been critical to improving public infrastructure, especially in light of recent escalation in construction costs.

Despite these measures, City facilities and infrastructure needs continue to outpace available funding. The unfunded needs for existing and new planned infrastructure in parks, pools, camps, and the Waterfront exceeds \$380 million. The current annual allocation to PRW capital of \$3.815 million – despite being the highest level of annual commitment in recent history – is still not enough to keep pace with the unfunded needs, (see Attachment 3, Exhibit A).

The unfunded needs in City buildings, sidewalks, streets, streetlights, sewer, storm water, green infrastructure, traffic signals, parking infrastructures, undergrounding, Veterans and Old City Hall buildings, transfer station, bike and pedestrian plan projects, and transit projects, exceed \$1.6 billion. With the recent funding increases, the amount of recurring funding to address these needs is now an estimated \$42.4 million as of FY 2024.

It is anticipated that infrastructure costs will continue to increase through typical wear and tear on our City infrastructure in the coming years, plus the pressures of long-deferred maintenance. As needed improvements continue to be deferred, operating and maintenance costs rise and rehabilitation and replacement costs increase substantially.

UNFUNDED NEEDS

The following describe the various unfunded needs by program category:

- City Buildings:** Public Works is responsible for the maintenance of 56 of the City’s 95 facilities. The other 39 are maintained by PRW. The total replacement value of the Public Works-maintained buildings in this inventory exceeds \$540 million. Library facilities and facilities leased to other entities are not included in this analysis. A third-party expert has provided facility condition assessments for many of these buildings. These assessments identify building components replacements (plumbing, electrical, HVAC, wall/door finishes, etc.) that either should have already been completed or schedules them before the useful life of the component is over. Based on these assessments, the City’s existing facility needs are estimated at approximately \$314,500,000, while the current budget allocation for building component replacement over the 5-year planning period is \$13 million. An alternative analysis provided by the City’s Strategic Asset Management Plan identified an annual funding shortfall of \$5.2 million to \$11.7 million. Some of the funding gap is covered by one-time allocations from the General Fund or T1 funds.
- Parks, Recreation & Waterfront:** The Parks, Recreation & Waterfront Department (PRW) operates, maintains and manages 54 parks, 4 community centers, 2 clubhouses, 2 pools, 3 resident camps, 15 athletic fields, 49 sports courts, 63 play areas, 36 picnic areas, 45,000 trees, 11.5 miles of landscaped street medians and triangles, 263 irrigation systems, and 30 restrooms and buildings. In addition, PRW operates and maintains the Berkeley Waterfront and its related facilities, including the docks, pilings, channel, streets, pathways, parking lots, buildings, trails, Shorebird Nature Center, Adventure Playground, and 1,000 boat slips. The recurring funding available for capital and major maintenance is \$3.185 million, as shown in the table below.

Funding Source	Annual Capital & Major Maintenance Funding
Parks Tax Fund	\$1,065,000
Capital Improvement Fund	\$2,400,000
Marina Fund	\$350,000
Camps Fund ³	\$0
Total Funding Available	\$3,815,000

³ Due to the loss and rebuilding of Berkeley Tuolumne Camp, the Camps Fund does not have sufficient funds at this time to cover any annual investment in capital or major maintenance.

Unfunded needs for existing PRW infrastructure are summarized in the table below.

Unfunded PRW Capital Needs – Existing infrastructure	
Improvements	Cost Estimate
Resident Camps	\$8,460,855
Waterfront	\$160,995,276
Pools	\$7,581,600
Park Buildings/Facilities	\$4,749,030
Parks (General)	\$15,163,200
Parks (Specific)	\$39,279,006
Park Restrooms	\$2,316,600
Total Need	\$238,545,567

In addition, there is \$145M in unfunded needs for planned PRW improvements that are not currently existing infrastructure, shown in the table below.

Unfunded PRW Capital Needs – New Planned Infrastructure	
Improvements	Cost Estimate
San Pablo Park: New Community Center and Pool	\$39,000,000
King Park: New 25M Competitive Pool / Locker Room	\$16,000,000
Tom Bates Sports Complex: New Youth Soccer Field, Pickleball Courts and Restroom	\$1,980,000
New Restrooms in Parks over 1 Acre: James Kenney, Aquatic, Civic Center, King, and John Hinkel Parks	\$2,630,000
James Kenney Park: Skate Spot	\$369,000
Waterfront: New Bike Park adjacent to University Ave.	\$1,650,000
Waterfront: Pier/Ferry Preferred Concept with landside and waterside improvements	\$83,500,000
Total Need	\$145,129,000

These new infrastructure improvements would add new community amenities, and are included because conceptual planning processes have been completed or Council has provided direction to implement. If this new planned infrastructure is built, there will be approximately \$44M in savings realized in existing infrastructure cost estimates, as they would replace some existing infrastructure. The estimates do not reflect funding arrangements. For example, for the pier/ferry, the City and the Water Emergency Transit Authority (WETA) would share responsibility for identifying funding for the [preferred concept](#) developed during a year-long community process.⁴

⁴ See https://berkeleyca.gov/sites/default/files/documents/2021-12-07%20Item%2002%20Large%20Scale%20Ferry%20Feasibility%20Study%20E2%80%93%20A%20Preferred%20Concept_0.pdf

The majority of PRW unfunded needs are at the Waterfront, where many of the docks, pilings, buildings, parking lots and streets have reached the end of their useful life and are starting to fail. As documented in multiple reports over the last several years⁵, there is a diminishing ability to pay for the pressing capital needs in the Waterfront. From the Marina Fund, \$350,000 per year is budgeted for capital improvements. This amount is insufficient to address Waterfront needs. The Marina Fund is projected to need \$1.4M in the next budget cycle just to maintain baseline Waterfront operations and does not currently have the ability to support capital projects. Capital needs at the Waterfront are otherwise dependent on General Fund, external funding and grants. Over \$40M has been invested into the Waterfront by the City over the last fifteen years⁶, but it is only a small percentage of the investment needed. The City is working on a Waterfront Specific Plan⁷, which will explore new revenue generating opportunities to help address the structural deficit, exhausted reserves, and declining operating revenue that makes it impossible for the Marina Fund to reinvest in its facilities.

⁵ See March 16, 2022 BMASP Community Meeting #2 presentation (https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3_-_General/2022-03-16-FINAL-Mtg_deck-CW2-Deck.pdf); April 29, 2021 PRW Budget Presentation to the Council Budget & Finance Policy Committee, (<https://www.cityofberkeley.info/uploadedFiles/Clerk/PRW%20FY22%20Budget%20Presentation%20Rev2.pdf>); February 16, 2021 Council report and presentation for the BMASP and Pier/Ferry Worksession (https://www.cityofberkeley.info/Clerk/City_Council/2021/02_Feb/Documents/2021-02-16_WS_Item_02_Berkeley_Marina_Area_Specific_Plan_pdf.aspx); November 10, 2020 Marina Fund presentation to Council Budget & Finance Policy Committee (https://www.cityofberkeley.info/uploadedFiles/Clerk/2020-11-12_Item_2c_Budget.pdf); December 13, 2018 Off-Agenda Memo (https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Marina%20Fund%20Update%20121318.pdf); November 15, 2018 Worksession Report (https://www.cityofberkeley.info/Clerk/City_Council/2018/11_Nov/Documents/2018-11-15_WS_Item_02_Parks_Recreation_Waterfront_pdf.aspx); July 1, 2018 Off-Agenda Report ([https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/CM%20Update%20-%20Waterfront%20-%20Hs%20%20Lordships%20\(w%20attachments\).pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/CM%20Update%20-%20Waterfront%20-%20Hs%20%20Lordships%20(w%20attachments).pdf)); May 8, 2018 Worksession Report (https://www.cityofberkeley.info/Clerk/City_Council/2018/05_May/Documents/2018-05-08_WS_Item_03_Parks_Recreation_Waterfront.aspx); May 8, 2018 Proposed Budget Update (https://www.cityofberkeley.info/Clerk/City_Council/2018/05_May/Documents/2018-05-08_WS_Item_01_FY_2019_Proposed_Budget_Update.aspx); April 12, 2018 Off-Agenda Report (https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Marina%20Fund%20Update%20041218.pdf); and November 7, 2017 Worksession Report (https://www.cityofberkeley.info/Clerk/City_Council/2017/11_Nov/Documents/2017-11-07_WS_Item_02_Parks_Recreation_and_Waterfront_CIP.aspx).

⁶ See <https://berkeleyca.gov/sites/default/files/2022-04/Waterfront%20CIP%20Projects%20021622.pdf> and <https://berkeleyca.gov/sites/default/files/documents/2022-12-13%20Special%20Item%2002%20Grant%20Contracts%20with%20the%20State%20Coastal.pdf>

⁷ See <https://berkeleyca.gov/your-government/our-work/capital-projects/berkeley-marina-area-specific-plan-bmasp-project>

- **Streets & Roads:** There are approximately 215 centerline miles of improved streets in Berkeley and their estimated replacement value is \$816,753,950. Every two to three years, portions of Berkeley's streets are inspected using the Metropolitan Transportation Commission's Pavement Management System (PMS) to identify repair needs and assign a pavement condition index (PCI). The City uses the PMS and PCI to track and prioritize pavement rehabilitation and maintenance needs on individual asphalt streets and the overall condition of the City's street pavement network.

The current overall average PCI rating is 56 (out of 100). This puts Berkeley's streets in the 'at-risk' category. The recently updated Street Maintenance and Rehabilitation Policy (2022) identified a goal of good condition for the City's streets, which is a PCI between 70 to 79. To keep the streets from deteriorating further, City Council has adopted a policy allocated \$8 million annually in General Fund money. That \$8 million contribution, along with existing transportation funds totaling \$7.3 million, would ensure the pavement condition is at least maintained and does not decline. If that committed is continued, the City would have to spend an additional \$247,500,000 to achieve a PCI of 75 within 15 years. This funding only assumes treatment of pavement surface, markings, and curb cuts, not costs related to drainage improvements, green infrastructure, and implementation of the City's bicycle, pedestrian, and Vision Zero plans.

- **Sidewalks & Pathways:** The City has 400 miles of sidewalk. Public Works manages a sidewalk repair program to keep the City's sidewalks safe and provide for safe pedestrian passage, including make safe repairs, annual proactive repair program, and the City's 50/50 replacement cost-share program in which the City shares the costs for broken sidewalks with property owners. Public Works responds to all reported sidewalk hazards, assesses each situation and installs an asphalt make-safe or grinds the sidewalk hazard if applicable, and on occasion perform limited sidewalk removal and replacement if a sidewalk hazard cannot be made reasonably safe. These sidewalks have an estimated replacement value of \$400,000,000. Deferred maintenance in this asset is estimated at \$60,000,000, primarily derived from the recently completed ADA Transition Evaluation that proactively assessed all of the City's sidewalks and identified repair locations. However, the City has only \$1 million available in annual funding towards sidewalks maintenance and repair from baseline allocations from the Capital Improvement Fund and 50/50 Program contributions from residents.
- **Sewers:** The City owns and operates 255 miles of sewer mains and 165 miles of lower laterals. Their estimated replacement value is \$820,000,000. The estimated cost of rehabilitating all of the City's sewer pipes per the City's adopted plans is \$183,500,000. This is one of the asset categories with a dedicated fee that has been adjusted every five years. It is adequately funding a maintenance and capital renewal program, resulting in the deferred maintenance declining over time. The City's Strategic Asset Management Plan also found proper maintenance funding for

this asset. In 2014, the City (along with EBMUD and all agencies conveying flows to EBMUD) concluded negotiations with the Environmental Protection Agency and the Department of Justice for violation of the Clean Water Act and agreed to a stipulated settlement known as the final Consent Decree. To comply with the Consent Decree, the City is required to rehabilitate an average of 4.2 miles of sewer pipeline annually based on a three-year rolling average. Effectively, this mandated significant additional maintenance activities and capital improvements, and resulted in increased costs of managing the City's existing sewer system.

- **Storm Water & Green Infrastructure:** The City owns and operates 255 miles of sewer mains and 165 miles of lower laterals. Their estimated replacement value is \$820,000,000. The estimated cost of rehabilitating all of the City's sewer pipes per the City's adopted plans is \$183,500,000. This is one of the asset categories with a dedicated fee that has been adjusted every five years. It is adequately funding a maintenance and capital renewal program, resulting in the deferred maintenance declining over time. The City's Strategic Asset Management Plan also found proper maintenance funding for this asset. In 2014, the City (along with EBMUD and all agencies conveying flows to EBMUD) concluded negotiations with the Environmental Protection Agency and the Department of Justice for violation of the Clean Water Act and agreed to a stipulated settlement known as the final Consent Decree. To comply with the Consent Decree, the City is required to rehabilitate an average of 4.2 miles of sewer pipeline annually based on a three-year rolling average. Effectively, this mandated significant additional maintenance activities and capital improvements, and resulted in increased costs of managing the City's existing sewer system.
- **Traffic Signals & Parking Infrastructures:** The City currently has 142 traffic signals, 20 rectangular rapid flashing beacons, 2,100 parking meters and 240 pay stations. Staff estimated \$23,500,000 in unfunded needs related to the replacement and renewal of these infrastructure components.
- **Undergrounding Project:** The City has approximately 15 miles (as identified in the Phase 3 Report for undergrounding) of key evacuation routes where undergrounding utility wire needs to take place in Berkeley. The estimated cost is approximately \$7,000,000 per mile with a 4% annual escalator factor applied. The estimated cost of these improvements is currently \$109,200,000.
- **Vets & Old City Hall:** Both Old City Hall and Veteran's Buildings are in need or renovation and were built prior to seismic standards and must be retrofitted. Staff estimated a cost of \$110,000,000 to complete these renovations and retrofits.
- **Transfer Station:** The Transfer Station, which was constructed in 1982, requires a redesign and replacement estimated at \$76 million. The Solid Waste & Recycling Transfer Station Replacement Project Feasibility Study was completed in November 2019 after a robust public input process.

Currently, the Transfer Station has two below-grade refuse and organic materials load out tunnels that top-load trailers who transfer the material off the site for recycling and/or disposal. The Transfer Station and its ancillary structures are showing considerable wear and tear after 38 years of operation, and the current facilities are not configured for efficient diversion or customer-friendly recycling of incoming materials.

- **Bike & Pedestrian Projects:** City Council has approved the Bicycle Plan (2017) and Pedestrian Plan (2021). Staff estimate the unfunded need to implement these plans and the projects derived from them to be at least \$129 million. These projects also are important to the Vision Zero Action Plan (2020), which seeks to eliminate severe injuries and fatalities on our City Streets, a high proportion of which are bicyclists and pedestrians.
- **Transit Projects:** The City is committed to encouraging transit use. An AC-Transit Major Corridor Study (2016) recommended a series of improvements throughout the City. Those improvements are currently estimated at \$53 million, including funds sufficient to install new and/or replace bus pads. The City is currently developing a Transit First Implementation Plan to help guide and focus ongoing transit operations improvements on City streets.

Information Technology Infrastructure

Technology infrastructure presents unique challenges with respect to forecasting long term requirements because technology evolves quickly compared to other types of infrastructure. The City's needs in terms of network bandwidth, data storage, and wireless devices may be dramatically different in the future than they are today. Additionally, unlike traditional infrastructure replacement projects which can be done incrementally, some technology tools require a large upfront investment to implement but cost significantly less to upgrade as the technology becomes more common. City staff currently use and maintain a vast technology infrastructure to provide services to the community each day. Current information technology infrastructure will expand as the City uses more technology tools to gain efficiencies.

Historical Background and Summary

The Department of Information Technology provides the City's computing infrastructure, supporting desktops, laptops, mobile devices, back-end server infrastructure, network accessibility and digital data security. Examples of such infrastructure include:

- Computer asset inventory comprising approximately 1,412 desktops, 796 laptops, 240 tablets, and 118 Public Safety Mobile Data Computers (MDCs), which continues to increase due to remote work expansion.

- Replacement of aging, end-of-life enterprise systems such as the FUND\$ financial system.⁸
- A major update of the City's phone system (Voice over IP or VOIP) via unfunded upgrades to address eFax, Automation of line move/add/change, softphones, VOIP security, etc.
- Increased capacity for City's digital data storage needs and cybersecurity initiatives.

Many of the above prior projects were unfunded and were the result of a need to respond to an immediate or impending threat (such as a breach, or aging, unsupported, end-of-life equipment), as the timing of the needs often outpaced the ability to anticipate and plan for long term sustainability due to a number of factors, including loss of institutional knowledge through personnel departures and retirements or lack of "pipeline" funding (i.e., what would be needed for the next *n*-years to replace an end-of-life system).

For FY 2023 through FY 2025, which is about the limit of future foresight as it applies to IT systems, at least six critical projects need to be addressed through unfunded liabilities to preserve the City's digital assets:

1. Continued implementation of Cybersecurity Resiliency Plan:

In late 2018, the City began development of its Cyber Resilience Plan (CRP) to help ensure the City is sufficiently and prudently equipped to handle cyberattacks and to help the City mitigate the effects of a successful cyberattack, should one occur. Information Technology continues to implement the solutions identified in the CRP.

2. Customer Relationship Management (CRM):

In FY 2019, the City upgraded its existing CRM software application, used by 311, Public Works and Parks, Recreation and Waterfront (PRW). Beginning November 2021, Public Works and PRW implemented a separate work order system called NextGen, which is not well integrated with the existing Lagan system still in use by 311 (the Lagan system is still being used by 311 to field over 100,000 requests for service per year). A new 311 CRM system replacement and implementation was targeted for FY2021 but delayed due to COVID and a related proposed budget reduction. 311 paused the release of the RFP until the Public Works NextGen work order system was implemented and the Zero Waste billing system vendor was selected.

An RFP for a new CRM system will be published in late FY 2023 with an estimated implementation completion date of FY 2025. During this period, 311 will remain on Verint-Lagan (\$33,000 per year) until the new CRM is fully implemented. The new CRM will give 311 the ability to capture, route, and manage all forms of requests through multiple communication channels with integration to the Public Works and PRW NexGen work order system, and Zero Waste billing system. A new CRM cloud-based system will allow community members to make service requests online via a City of Berkeley CRM portal on the City's website. Community members, City Staff and Council will be able to view status of service requests and view integrated knowledge documents online through the 311 CRM portal.

3. Geographical Information Systems (GIS)– Master Address Database (MAD) to address the Non-Compliance with NENA GRID and e911 Technology:

As the City deploys new systems such as work order, zero waste billing, digital permitting CRM and others, it is critical to have a modern, centralized address/parcel database that can easily feed accurate and consistent GIS information. Having one source of truth for address data will allow for ease of maintenance, timely updates, and consistency. This will bring greater efficiencies for city departments through various workflows including permitting, building inspections, work orders, billing, assessments and more. It will result in service that is more effective to our community by providing real time and accurate address data across departments. This project will be in conjunction the Property Tax Replacement Project, which is scheduled to begin in FY 2024.

4. IT Department Move to 1947:

The Department of Information Technology was in the planning stages to relocate to 1947 Center Street to accommodate all of its staff, as well as several City Manager's Office (CMO) personnel, totaling over 55 total employees. The move to 1947 Center Street was delayed in FY20 due to COVID related proposed budget deductions, and again delayed in FY 2022 due to unexpected asbestos abatement construction delays. The move is now targeted to begin before the end of FY 2023 and complete in FY 2024.

5. Improvement to City-wide Facilities Wi-Fi:

Currently all City of Berkeley facilities are not setup to provide seamless Wi-Fi connectivity. Furthermore, those locations providing current Wi-Fi are serviced with aging, deprecated and/or non-enterprise quality equipment which has proven to be troublesome and failure-prone. In anticipation of a more disbursed work culture, it is imperative that the City provide enterprise quality, secure and high-speed Wi-Fi access at all its facilities serving both employees and the public. This includes outdoor areas of the Marina and other PRW facilities.

The availability of such service will enhance productivity and safety for all, and is consistent with needs of all City departments as well as an outside audit finding.

Information Technology will engage a managed service provider to install, upgrade and/or replace all Wi-Fi access points and accompanying technology at all City managed facilities and areas. This managed service will alleviate the heavy service demands placed on staff to provide field support for maintaining equipment, as the managed service will provide full, turnkey support of all equipment with designated response windows.

6. Implementation of City-wide collaboration tools (MS TEAMS and SharePoint):

The City lacks an enterprise solution for collaboration and productivity. Microsoft Teams and SharePoint are licensed products that the City subscribes to and provides for unified messaging for all organizations. It is a platform solution and workspace for real-time collaboration and communication, meetings, file and app sharing. Implementation of MS TEAMS and SharePoint will allow City to collaborate on a broader scale, and increase security and accessibility of electronic media and documents. It also will allow the City to better manage any file retention policies. Implementation of MS TEAMS and SharePoint will require the services of both internal staff as well as a qualified professional consultant and implementer.

Options to Address Long Term Retirement and Infrastructure Costs

The City continues to consider how to prioritize expenditures to address some of its long-term obligations in order to maintain a healthy future.

As mentioned earlier in this report, Council has already taken the following actions to address the City's unfunded liabilities.

- On June 26, 2018, Council authorized the City Manager to establish an IRS Section 115 Pension Trust Fund (Trust) to be used to help pre-fund pension obligations. On May 14, 2019, Council authorized the City Manager to execute a contract with Keenan Financial Services to establish, maintain, and invest the pension Section 115 Trust.
- The Section 115 Trust currently has a balance of \$14,762,850.42 and is being funded annually through transfers from the General Fund and Capital Improvement Fund and the savings from prepayment of the annual PERS payment, and, beginning in FY 2023, through any additional earned investment revenue over the baseline projection.

Infrastructure is starting to be addressed through the Adopted Budget including funding of \$18.3 million for street rehabilitation in FY 2023, which includes \$7.1 million from the CIP Fund (\$2.1 million baseline and \$5.0 million additional funding), State gas tax, Measure BB and other sources. In FY 2024, the CIP Fund contributes nearly \$11.0 million and funding from all sources total \$19.4 million.

While additional resources are necessary to address deferred maintenance needs, funding is also required to respond to several one-time critical public safety projects including the Jail Control Panel Replacement project, the Waterfront piling project; Telegraph/Channing Garage Elevator Repairs, and various traffic calming and improvement projects. In total, the General Fund supports funding of approximately \$14.0 million in capital projects each respective fiscal year funded by a portion of projected excess property transfer tax revenues.

Berkeley voters have approved several bond measures to improve the City's infrastructure, including Measure F for parks, Measure M for streets, and most recently Measure T1, which authorized the City to sell \$100 million of General Obligation Bonds to repair, renovate, replace or reconstruct the City's aging infrastructure and facilities.

General Fund Revenue Projections

As noted in the introduction, when this report was originally presented in 2013, members of the City Council requested that staff include long-term revenue projections in the next biennial report, in addition to the expenditure projections identified in Council Resolution No. 65,748-N.S. The intent was to present a more complete and informative forecast, and provide a better long-term perspective on Berkeley's ability to achieve financial stability through future economic cycles. The projections presented in this report are limited to the General Fund as those funds are the most discretionary in terms of allocation, and also highly subject to economic conditions. The General Fund typically comprises about one-half of the City's total budget; the remainder of the budget consists of various Special Funds which are restricted in purpose (e.g. Zero Waste, Permit Services Center, Sewer, Public Health, and Mental Health).

The chart below provides a summary of total General Fund Revenues projected through FY 2027. The revenue projections have been updated to reflect results from the first six months of Fiscal Year 2023. Fifty percent (50%) of the City's FY 2023 Projected General Fund revenue is derived from Secured Property, Sales Tax, Business License Taxes, and Property Transfer Taxes. Each major contributing revenue stream is described in more detail below. Additional detail on General Fund Revenue Projections can be found in Attachment 4.

General Fund Revenues Projections (dollar in millions)						
	FY 2023 Adopted	FY 2023 Projected	FY 2024	FY 2025	FY 2026	FY 2027
GF Revenues						
Baseline	\$ 258.7	\$ 272.9	\$ 274.6	\$ 262.2	\$ 267.6	\$ 272.5

Property Tax

Given the continued high collection rate, and the resilience of property values in the City, as well as a large volume of recent property sales (which bring assessed values to market value), we are projecting that annual growth will be approximately 5.5% over the next several years. The persistence of strong growth of property valuations in recent years, as well as the spike in current year sales (which bring properties assessed valuations to market value), have caused staff to increase the projected growth rate from the 3.5% that we have used in prior long-term projections.

Sales Tax

The immense effects of COVID-19 on sales tax revenue in FY 2021 were largely reversed in FY 2022, with revenue levels almost back to FY 2019 levels, and staff now project growth to level off to approximately 4% in FY 2024. There is still some potential risk that an overall slowdown in underlying economic recovery will be reflected in reduced growth in consumer spending and sales tax collections

Business License Taxes

We are projecting a 5% growth in Business License Tax revenue from heavily impacted FY 2021 levels, as economic activity recovers from the recession caused by the pandemic. Long-term projections will be adjusted as the post-pandemic economic environment becomes clearer. 2023 business license returns (for 2022 gross receipts) are just now being received, so we will know more about how revenues are trending once they are processed over the next month or so.

Transfer Tax

Given the continued strength in property values and in sales activity, we expect Transfer Tax revenues to remain basically flat from FY 2024 – FY 2027. The spike in revenue being seen in FY 2022, and to a lesser extent in FY 2023, is likely due to sales triggered by looming interest rate increases that have been signaled by the Federal Reserve, as well as some pent-up demand from mildly depressed sales during the pandemic. Over the 5 years prior to the pandemic, transfer tax revenues grew 6% per year on average, but interest rate increases will probably negatively impact sales prices and volumes somewhat in the next few years. We also expect revenues from Measure P supplemental tax on high value property transfers to remain basically flat.

General Fund Revenues versus General Fund Expenditures

One value of producing long term General Fund revenue projections is to compare them against General Fund expenditure projections. Since about 57% of the General Fund expenditures are personnel costs, any change in those costs has an impact on the balance between revenues and expenditures.

The expenditure projections assumes the following:

- Staffing Levels remaining at the FY 2023 Adopted Budget Levels
- No cost of living adjustments (COLA) beyond what is currently negotiated
- PERS rates based on rates provided by the City’s actuarial agency
- Other Fringe Benefits increase annually by 8 percent
- Tier 1 Personnel positions continue as recurring costs
- Tier 1 Non-Personnel allocations end after FY 2024
- Non-Personnel costs increase annually by 3 percent

The chart below is offered as a demonstration only and is not a proposal or budget plan.

General Fund Revenues v.s. Expenditures - Demonstrative Comparison (dollars in millions)						
	FY 2023 Adopted	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected
GF Revenues Baseline	\$ 258.70	\$ 272.90	\$ 274.60	\$ 262.20	\$ 267.60	\$ 272.50
GF Expenditures - Zero COLA	\$ 280.70	\$ 275.60	\$ 280.20	\$ 293.70	\$ 295.00	\$ 299.60
Surplus/(Deficit)	\$ (22.00)	\$ (2.70)	\$ (5.60)	\$ (31.50)	\$ (27.40)	\$ (27.10)

Staff is in the process of developing the FY 2024 Mid-Biennial Budget Update, however, the preliminary forecast above indicates that the City has a structural deficit that needs to be addressed in FY 2024 through FY 2026.

CONCLUSION

One of the terms that is often used with respect to the long-term obligations that are described above is “unfunded liabilities.” Unfunded liabilities are defined as identifiable obligations of an organization for which the organization does not have 100% of the funding (cash or other assets) set aside to cover the cost should all obligations become immediately due. Generally, an organization manages a balance between funding a portion of the entire obligation and the associated risk that the obligation will be due at the same time. This balance is considered the practical and responsible approach since payment demands of these obligations rarely, if ever, occur simultaneously. The alternative would be to 100% fund the obligations causing a great portion of cash to be reserved and not available for providing services or meeting other immediate obligations, needs, or desires of the community. Maintaining a careful

balance between cash on hand to fund daily operations and liquidity to cover unfunded liabilities is a key challenge for all governments. With that said, the City's unfunded liabilities tied to benefits total \$614 million, and the City's unfunded infrastructure needs total \$2.23 billion.

POSSIBLE FUTURE ACTION

The information contained in this report will be referenced throughout the budget planning meetings in advance of the FY 2024 Mid-Biennial Budget Update and during the FY 2025 & FY 2026 Biennial Budget process.

FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

See information described above.

ENVIRONMENTAL SUSTAINABILITY

Actions included in the budget will be developed and implemented in a manner that is consistent with the City's environmental sustainability goals and requirements.

CONTACT PERSON

Sharon Friedrichsen, Budget Manager, City Manager's Office, 981-7000
Rama Murty, Senior Management Analyst, City Manager's Office, 981-7000
Henry Oyekanmi, Finance Director, Department of Finance, 981-7300

Attachments:

1. Employee and Retiree Benefits Funded Status
2. City's Debt Obligations
 - Exhibit A: General Obligation bonds
 - Exhibit B: Revenue Bonds
3. Capital Assets
 - Exhibit A: Infrastructure
 - Exhibit B: Appraisal of Buildings Valued at \$5 million or more
4. General Fund Revenues

Employee and Retiree Benefits Funded Status (dollars in millions)						Attachment 1
Fund Name	Valuation Date	Estimated Liability	Plan Assets	Funding Target	Net Liability	% Funded
Police Retiree Income Plan (closed)*	6/30/2020	\$ 79.95	\$ 5.83	2	\$ 74.1	7.29%
Police Employee Retiree Health Plan (new)*	7/1/2019	\$ 40.43	\$ 2.49	2	\$ 37.9	6.16%
Fire Employees Retiree Health Plan*	7/1/2019	\$ 25.83	\$ 11.31	1	\$ 14.5	43.8%
Retiree Health Premium Assistance Plan (Non-Safety Members)*	7/1/2019	\$ 68.46	\$ 27.81	1	\$ 40.7	40.62%
Safety Members Pension Fund*	6/30/2020	\$ 1.86	\$ 0.10	2	\$ 1.76	5.4%
Miscellaneous CalPERS Plan*	6/30/2021	\$ 1,181.2	\$ 946.3	1	\$ 234.9	80.1%
Police CalPERS Plan*	6/30/2021	\$ 483.8	\$ 332.5	1	\$ 151.3	68.7%
Fire CalPERS Plan*	6/30/2021	\$ 306.7	\$ 248.1	1	\$ 58.60	80.9%
TOTAL		\$ 2,188.2	\$ 1,574.4	-	\$ 613.8	72.0%

Since the implementation of GASB67 and 68 the Annual Required Contribution (ARC) is no longer provided.

Funding Target:

1 - percentage of payroll

2 - pay as you go

**Retiree Medical Plan & CalPERS Plans data from actuarial reports from Foster & Foster, Inc.*

General Obligation Bonds

FY	2014 Measure M (2014 Street and Integrated Watershed)		2015 GO Refunding Bonds (Refunding Measure G, S, I)		2016 Measure M (2016 Street and Integrated Watershed)		2017 Measure T1 Infrastructure and Facilities Improvements		2020 Measure O Affordable Housing		2020 G.O Bonds (Series A)		2020 G.O Bonds (Series B)		2021 G.O Bonds (Measure T1)		2022 Measure O Affordable Housing		Total		Annual Total P & I	End of FY GO Bonds Balance
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest		
2023	370,000	526,000.00	2,270,000	779,837.50	320,000	420,112.50	730,000.00	1,000,556.26	740,000.00	1,265,540.00	265,000.00	272,075.00	395,000.00	409,312.50	1,500,000.00	1,258,325.00	-	560,733	6,590,000	6,492,492	13,082,491.51	217,140,000
2024	385,000	507,125.00	2,380,000	663,587.50	335,000	403,737.50	765,000.00	963,181.26	770,000.00	1,237,265.00	275,000.00	258,575.00	415,000.00	389,062.50	1,750,000.00	1,177,075.00	805,000	2,081,070	7,880,000	7,680,679	15,560,678.76	202,670,000
2025	405,000	491,425.00	2,495,000	541,712.50	350,000	386,612.50	805,000.00	923,931.26	800,000.00	1,209,790.00	285,000.00	244,575.00	435,000.00	367,812.50	920,000.00	1,110,325.00	580,000	2,032,770	7,075,000	7,308,954	14,383,953.76	195,595,000
2026	420,000	478,787.50	2,625,000	413,712.50	370,000	370,462.50	845,000.00	882,681.26	825,000.00	1,181,352.50	300,000.00	229,950.00	455,000.00	345,562.50	965,000.00	1,063,200.00	615,000	1,997,970	7,420,000	6,963,679	14,383,678.76	188,175,000
2027	430,000	465,237.50	2,760,000	306,687.50	385,000	355,362.50	885,000.00	843,856.26	855,000.00	1,151,952.50	315,000.00	214,575.00	485,000.00	322,062.50	1,010,000.00	1,013,825.00	650,000	1,961,070	7,775,000	6,634,629	14,409,628.76	180,400,000
2028	445,000	449,350.00	2,840,000	222,687.50	405,000	339,562.50	920,000.00	807,756.26	885,000.00	1,121,502.50	335,000.00	198,325.00	505,000.00	297,312.50	1,065,000.00	961,950.00	690,000	1,922,070	8,090,000	6,320,516	14,410,516.26	172,310,000
2029	465,000	431,150.00	1,960,000	150,687.50	425,000	322,962.50	960,000.00	779,156.26	915,000.00	1,090,002.50	355,000.00	181,075.00	530,000.00	271,437.50	1,115,000.00	907,450.00	730,000	1,880,670	7,455,000	6,014,591	13,469,591.26	164,855,000
2030	480,000	412,250.00	880,000	108,087.50	450,000	307,712.50	980,000.00	757,911.26	950,000.00	1,057,365.00	370,000.00	162,950.00	555,000.00	244,312.50	1,170,000.00	850,325.00	775,000	1,836,870	6,610,000	5,737,804	12,347,803.76	158,245,000
2031	500,000	392,650.00	305,000	89,931.25	470,000	299,912.50	1,000,000.00	731,906.26	980,000.00	1,023,590.00	395,000.00	143,825.00	585,000.00	215,812.50	1,230,000.00	796,475.00	820,000	1,790,370	6,285,000	5,478,473	11,763,472.51	151,960,000
2032	520,000	372,250.00	315,000	79,856.25	485,000	279,587.50	1,030,000.00	701,456.26	1,015,000.00	989,946.25	410,000.00	125,750.00	615,000.00	188,887.50	1,280,000.00	752,675.00	860,000	1,749,370	6,530,000	5,239,779	11,769,778.76	145,430,000
2033	540,000	350,712.50	325,000	69,253.13	500,000	264,812.50	1,060,000.00	670,106.26	1,050,000.00	956,390.00	430,000.00	108,950.00	640,000.00	163,787.50	1,320,000.00	713,675.00	915,000	1,697,770	6,780,000	4,995,457	11,775,456.89	138,650,000
2034	565,000	327,921.88	335,000	57,906.26	515,000	250,875.00	1,095,000.00	637,781.26	1,085,000.00	921,696.25	450,000.00	94,725.00	660,000.00	137,687.50	1,355,000.00	673,550.00	965,000	1,642,870	7,030,000	4,745,013	11,775,013.15	131,620,000
2035	590,000	304,100.01	345,000	46,006.26	530,000	237,812.50	1,125,000.00	604,481.26	1,120,000.00	885,865.00	460,000.00	82,200.00	690,000.00	114,037.50	1,400,000.00	632,225.00	1,025,000	1,584,970	7,285,000	4,491,698	11,776,697.53	124,335,000
2036	610,000	278,587.51	360,000	33,668.76	550,000	223,968.75	1,160,000.00	570,206.26	1,155,000.00	848,896.25	480,000.00	68,700.00	715,000.00	95,643.75	1,440,000.00	596,825.00	1,085,000	1,523,470	7,555,000	4,239,966	11,794,966.28	116,780,000
2037	640,000	251,243.76	370,000	20,662.51	570,000	209,268.75	1,195,000.00	534,881.26	1,190,000.00	807,815.00	495,000.00	54,675.00	730,000.00	76,650.00	1,470,000.00	567,725.00	1,145,000	1,463,795	7,805,000	3,986,716	11,791,716.28	108,975,000
2038	665,000	222,696.88	385,000	6,978.13	590,000	193,675.00	1,230,000.00	497,737.51	1,235,000.00	762,346.25	510,000.00	39,600.00	750,000.00	56,325.00	1,500,000.00	538,025.00	1,205,000	1,406,545	8,070,000	3,723,929	11,793,928.77	100,905,000
2039	695,000	192,946.88			610,000	177,175.00	1,270,000.00	458,675.01	1,285,000.00	715,096.25	525,000.00	24,075.00	770,000.00	35,400.00	1,530,000.00	507,725.00	1,265,000	1,346,295	7,950,000	3,457,888	11,407,388.14	92,955,000
2040	725,000	161,884.38			630,000	160,125.00	1,310,000.00	418,362.51	1,330,000.00	666,065.00	540,000.00	8,100.00	795,000.00	11,925.00	1,560,000.00	476,825.00	1,325,000	1,284,943	8,215,000	3,188,229	11,403,229.39	84,740,000
2041	760,000	128,925.00			655,000	142,456.25	1,350,000.00	375,956.26	1,380,000.00	615,252.50					1,590,000.00	445,325.00	1,390,000	1,220,680	7,125,000	2,928,595	10,053,595.01	77,615,000
2042	790,000	94,050.00			680,000	124,100.00	1,395,000.00	331,350.01	1,435,000.00	562,471.25					1,620,000.00	413,225.00	1,460,000	1,153,265	7,380,000	2,678,461	10,058,461.26	70,235,000
2043	830,000	57,600.00			705,000	104,175.00	1,440,000.00	285,281.26	1,485,000.00	507,711.25					1,655,000.00	380,475.00	1,530,000	1,082,455	7,645,000	2,417,708	10,062,707.51	62,590,000
2044	865,000	19,462.50			735,000	82,575.00	1,485,000.00	237,750.01	1,545,000.00	450,908.75					1,685,000.00	347,075.00	1,605,000	1,008,250	7,920,000	2,146,021	10,066,021.26	54,670,000
2045					765,000	60,075.00	1,535,000.00	188,675.01	1,600,000.00	394,740.00					1,720,000.00	311,950.00	1,685,000	928,000	7,305,000	1,883,440	9,188,440.01	47,365,000
2046					795,000	36,675.00	1,585,000.00	137,975.01	1,655,000.00	339,405.00					1,760,000.00	274,975.00	1,765,000	843,750	7,560,000	1,632,780	9,192,780.01	39,805,000
2047					825,000	12,375.00	1,635,000.00	84,628.13	1,710,000.00	282,200.00					1,795,000.00	236,081.25	1,855,000	755,500	7,820,000	1,370,784	9,190,784.38	31,985,000
2048							1,690,000.00	28,518.75	1,770,000.00	223,040.00					1,835,000.00	107,943.75	1,950,000	662,750	7,245,000	1,022,253	8,267,252.50	24,740,000
2049									1,830,000.00	161,840.00					1,875,000.00	174,600.00	2,045,000	565,250	5,750,000	901,690	6,651,690.00	18,990,000
2050									1,890,000.00	98,600.00					1,920,000.00	132,412.50	2,150,000	463,000	5,960,000	694,013	6,654,012.50	13,030,000
2051									1,955,000.00	33,235.00					1,960,000.00	89,212.50	2,255,000	355,500	6,170,000	477,948	6,647,947.50	6,860,000
2052															2,005,000.00	45,112.50	2,370,000	242,750	4,375,000	287,863	4,662,862.50	2,485,000
2053																	2,485,000	124,250	2,485,000	124,250	2,609,250.00	-
Grant Total	\$ 12,695,000	\$ 6,916,356	\$ 20,950,000	\$ 3,591,263	\$ 13,650,000	\$ 5,760,169	\$ 30,480,000	\$ 14,454,778	\$ 36,440,000	\$ 21,561,890	\$ 7,195,000	\$ 2,512,700	\$ 10,730,000	\$ 3,743,031	\$ 45,000,000	\$ 17,556,588	\$ 40,000,000	\$ 39,169,020	\$ 217,140,000	\$ 115,265,795	\$ 332,405,795	

Revenue Bonds

FY	Berkeley Rep. 2012 Refunding		1947 Center 2012 Refunding		2010 Animal Shelter COP 2021 Refunding Revenue Bonds		2016 Parking Revenue Bond		Total		Annual Total P & I	End of FY Rev Bonds Balance
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest		
2022												52,045,000
2023	352,498.83	146,881.34	1,152,501	480,231.16	0.00	138,200.00	840,000	1,074,650.00	2,345,000	1,839,963	4,184,962.50	49,700,000
2024	366,551.94	130,667.56	1,198,448	427,219.93	0.00	138,200.00	870,000	1,041,050.00	2,435,000	1,737,137	4,172,137.49	47,265,000
2025	386,460.51	111,842.25	1,263,539	365,670.25	0.00	138,200.00	905,000	1,006,250.00	2,555,000	1,621,963	4,176,962.50	44,710,000
2026	405,197.99	92,050.79	1,324,802	300,961.71	0.00	138,200.00	945,000	970,050.00	2,675,000	1,501,263	4,176,262.50	42,035,000
2027	427,448.74	71,234.62	1,397,551	232,902.88	0.00	138,200.00	980,000	932,250.00	2,805,000	1,374,588	4,179,587.50	39,230,000
2028	442,672.95	53,908.31	1,447,327	176,254.19	0.00	138,200.00	1,020,000	893,050.00	2,910,000	1,261,413	4,171,412.50	36,320,000
2029	459,068.24	40,095.28	1,500,932	131,092.22	190,000.00	133,450.00	1,060,000	852,250.00	3,210,000	1,156,888	4,366,887.50	33,110,000
2030	320,879.33	16,461.17	1,049,121	102,695.08	280,000.00	121,700.00	1,105,000	809,850.00	2,755,000	1,050,706	3,805,706.25	30,355,000
2031			1,450,000	74,187.50	290,000.00	107,450.00	1,145,000	765,650.00	2,885,000	947,288	3,832,287.50	27,470,000
2032			1,500,000	25,312.50	305,000.00	92,575.00	1,190,000	719,850.00	2,995,000	837,738	3,832,737.50	24,475,000
2033					320,000.00	76,950.00	1,240,000	672,250.00	1,560,000	749,200	2,309,200.00	22,915,000
2034					335,000.00	60,575.00	1,290,000	622,650.00	1,625,000	683,225	2,308,225.00	21,290,000
2035					350,000.00	46,950.00	1,340,000	571,050.00	1,690,000	618,000	2,308,000.00	19,600,000
2036					360,000.00	36,300.00	1,380,000	530,850.00	1,740,000	567,150	2,307,150.00	17,860,000
2037					375,000.00	27,150.00	1,425,000	489,450.00	1,800,000	516,600	2,316,600.00	16,060,000
2038					380,000.00	19,600.00	1,465,000	446,700.00	1,845,000	466,300	2,311,300.00	14,215,000
2039					390,000.00	11,900.00	1,510,000	402,750.00	1,900,000	414,650	2,314,650.00	12,315,000
2040					400,000.00	4,000.00	1,555,000	357,450.00	1,955,000	361,450	2,316,450.00	10,360,000
2041							1,600,000	310,800.00	1,600,000	310,800	1,910,800.00	8,760,000
2042							1,650,000	262,800.00	1,650,000	262,800	1,912,800.00	7,110,000
2043							1,700,000	213,300.00	1,700,000	213,300	1,913,300.00	5,410,000
2044							1,750,000	162,300.00	1,750,000	162,300	1,912,300.00	3,660,000
2045							1,805,000.00	109,800.00	1,805,000	109,800	1,914,800.00	1,855,000
2046							1,855,000.00	55,650.00	1,855,000	55,650	1,910,650.00	-
Grand Total	\$ 3,160,779	\$ 663,141	\$ 13,284,221	\$ 2,316,527	\$ 3,975,000	\$ 1,567,800	\$ 31,625,000	\$ 14,272,700	\$ 52,045,000	\$ 18,820,169	\$ 70,865,169	

	FY 2024 Year 1	FY 2025 Year 2	FY 2026 Year 3	FY 2027 Year 4	FY 2028 Year 5	Total Year 1- 5
Parks, Park Buildings, Pools, Waterfront, and Camps - Existing Infrastructure						
Available Funding ⁽¹⁾	\$3,815,000	\$3,815,000	\$3,815,000	\$3,815,000	\$3,815,000	\$19,075,000
Expenditures	\$3,815,000	\$3,815,000	\$3,815,000	\$3,815,000	\$3,815,000	\$19,075,000
Capital & Maint. Need ⁽²⁾	\$238,550,000					
Unfunded Liability	(\$243,889,665)	(\$249,437,577)	(\$255,201,857)	(\$261,190,945)	(\$267,413,607)	(\$267,413,607)
Parks, Park Buildings, Pools, Waterfront - New Planned Infrastructure⁽³⁾						
San Pablo Park: Community Center and Pool; King Park: 25M Competitive Pool / Locker Room; Tom Bates Sports Complex: Youth Soccer Field, Pickleball Courts and Restroom; New Restrooms in Parks over 1 Acre: James Kenney, Aquatic, Civic Center, King, and John Hinkel Parks; James Kenney Park: Skate Spot; Waterfront Bike Park; Pier/Ferry Preferred Concept with landside and waterside improvements						
Available Funding	\$0	\$0	\$0	\$0	\$0	\$0
Expenditures	\$0	\$0	\$0	\$0	\$0	\$0
Capital & Maint. Need	\$145,130,000					
Unfunded Liability	(\$150,790,070)	(\$156,670,883)	(\$162,781,047)	(\$169,129,508)	(\$175,725,559)	(\$175,725,559)
City Buildings						
Available Funding	\$1,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$13,000,000
Expenditures	\$1,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$13,000,000
Capital & Maint. Need	\$314,500,000					
Unfunded Liability	(\$324,895,300)	(\$334,657,017)	(\$344,799,440)	(\$355,337,419)	(\$366,286,378)	(\$366,286,378)
Sidewalks & Pathways						
Available Funding	\$1,035,000	\$1,035,000	\$1,035,000	\$1,035,000	\$1,035,000	\$5,175,000
Expenditures	\$1,035,000	\$1,035,000	\$1,035,000	\$1,035,000	\$1,035,000	\$5,175,000
Capital & Maint. Need	\$60,000,000					
Unfunded Liability	(\$61,264,635)	(\$62,578,591)	(\$63,943,791)	(\$65,362,234)	(\$66,835,996)	(\$66,835,996)
Streets & Roads						
Available Funding	\$15,920,000	\$14,820,000	\$14,820,000	\$14,820,000	\$14,820,000	\$75,200,000
Expenditures	\$15,920,000	\$14,820,000	\$14,820,000	\$14,820,000	\$14,820,000	\$75,200,000
Capital & Maint. Need	\$248,750,000					
Unfunded Liability	(\$241,910,370)	(\$235,946,894)	(\$229,750,843)	(\$223,313,146)	(\$216,624,379)	(\$216,624,379)
Street Lights						
Available Funding	\$0	\$0	\$0	\$0	\$0	\$0
Expenditures	\$0	\$0	\$0	\$0	\$0	\$0
Capital & Maint. Need	\$5,250,000					
Unfunded Liability	(\$7,297,500)	(\$7,582,103)	(\$7,877,804)	(\$8,185,039)	(\$8,504,255)	(\$8,504,255)
Sewers						
Available Funding	\$20,813,315	\$24,489,500	\$21,967,500	\$20,885,000	\$20,885,000	\$109,040,315
Expenditures	\$20,813,315	\$24,489,500	\$21,967,500	\$20,885,000	\$20,885,000	\$109,040,315
Capital & Maint. Need	\$183,500,000					
Unfunded Liability	(\$169,031,466)	(\$150,179,102)	(\$133,211,855)	(\$116,707,602)	(\$99,559,684)	(\$99,559,684)
Storm Water & Green Infrastructure						
Available Funding	\$2,305,000	\$1,350,000	\$1,300,000	\$1,300,000	\$1,300,000	\$7,555,000
Expenditures	\$2,305,000	\$1,350,000	\$1,300,000	\$1,300,000	\$1,300,000	\$7,555,000
Capital & Maint. Need	\$362,000,000					
Unfunded Liability	(\$373,723,105)	(\$386,895,656)	(\$400,633,887)	(\$414,907,908)	(\$429,738,617)	(\$429,738,617)
Traffic Signals & Parking Infrastructure						
Available Funding	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$2,000,000
Expenditures	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$2,000,000
Capital & Maint. Need	\$23,500,000					
Unfunded Liability	(\$24,000,900)	(\$24,521,335)	(\$25,062,067)	(\$25,623,888)	(\$26,207,619)	(\$26,207,619)
Undergrounding Project						
Available Funding	\$0	\$0	\$0	\$0	\$0	\$0
Expenditures	\$0	\$0	\$0	\$0	\$0	\$0
Capital & Maint. Need	\$110,750,000					
Unfunded Liability	(\$115,069,250)	(\$119,556,951)	(\$124,219,672)	(\$129,064,239)	(\$134,097,744)	(\$134,097,744)

Vets & Old City Hall							
Available Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital & Maint. Need	\$130,000,000						
Unfunded Liability	(\$135,070,000)	(\$140,337,730)	(\$145,810,901)	(\$151,497,527)	(\$157,405,930)	(\$157,405,930)	
Transfer Station							
Available Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital & Maint. Need	\$76,000,000						
Unfunded Liability		\$78,964,000	\$82,043,596	\$85,243,296	\$85,243,296	\$85,243,296	
Bike & Ped Projects							
Available Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital & Maint. Need	\$129,000,000						
Unfunded Liability	(\$134,031,000)	(\$139,258,209)	(\$144,689,279)	(\$150,332,161)	(\$156,195,115)	(\$156,195,115)	
Transit Projects							
Available Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital & Maint. Need	\$53,000,000						
Unfunded Liability	(\$55,067,000)	(\$57,214,613)	(\$59,445,983)	(\$61,764,376)	(\$64,173,187)	(\$64,173,187)	
TOTAL							
Available Funding	\$46,088,315	\$48,709,500	\$46,137,500	\$45,055,000	\$45,055,000	\$231,045,315	\$231,045,315
Expenditures	\$46,088,315	\$48,709,500	\$46,137,500	\$45,055,000	\$45,055,000	\$231,045,315	\$231,045,315
T1 Funding: \$100M Infrastructure Bond ⁽⁴⁾	\$16,978,333	\$8,093,333	\$4,105,000	\$0	\$0	\$29,176,666	\$29,176,666
Capital & Maint. Need	\$2,079,930,000						
Unfunded Liability	(\$2,095,521,023)	(\$2,120,443,510)	(\$2,152,898,306)	(\$2,191,806,340)	(\$2,232,231,788)	(\$2,232,231,788)	

⁽¹⁾ Unless otherwise noted, available funding includes recurring sources of capital and major maintenance funding.

⁽²⁾ Capital & Maint. Needs are current estimates of unfunded needs. Needs are estimated to increase at a rate of 3.9% per year.

⁽³⁾ If new planned infrastructure is built, there will be approx. \$44M in savings realized in existing infrastructure cost estimates.

⁽⁴⁾ The \$100M T1 bond funding allocations started in 2017 and are planned to be exhausted in 2026.

		FY 2024 Year 1	FY 2025 Year 2	FY 2026 Year 3	FY 2027 Year 4	FY 2028 Year 5	Total Year 1- 5
Cybersecurity Resiliency Plan¹							
Available Funding		\$919,000	\$489,000	\$489,000	\$0	\$0	\$1,897,000
Expenditures		(\$3,801,500)	(\$2,439,500)	(\$2,398,975)	(\$2,189,500)	(\$2,298,975)	(\$13,128,450)
Capital & Maint. Need	\$11,231,450						
Unfunded Liability		(\$2,882,500)	(\$1,950,500)	(\$1,909,975)	(\$2,189,500)	(\$2,298,975)	(\$11,231,450)
Customer Relationship Management (CRM) System							
Available Funding		\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
Expenditures		(\$200,000)	(\$133,000)	(\$100,000)	(\$100,000)	(\$100,000)	(\$633,000)
Capital & Maint. Need	\$233,000						
Unfunded Liability		(\$120,000)	(\$53,000)	(\$20,000)	(\$20,000)	(\$20,000)	(\$233,000)
GIS: Master Address Database (MAD)							
Available Funding		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
Expenditures		(\$250,000)	(\$100,000)	(\$50,000)	(\$50,000)	(\$50,000)	(\$500,000)
Capital & Maint. Need	\$250,000						
Unfunded Liability		(\$200,000)	(\$50,000)	\$0	\$0	\$0	(\$250,000)
Information Technology Move to 1947							
Available Funding		\$0	\$0	\$0	\$0	\$0	\$0
Expenditures		(\$200,850)	(\$206,876)	(\$213,082)	(\$219,474)	(\$226,058)	(\$1,066,339)
Capital & Maint. Need	\$1,066,339						
Unfunded Liability		(\$200,850)	(\$206,876)	(\$213,082)	(\$219,474)	(\$226,058)	(\$1,066,339)
Improvement to City-wide Facilities Wi-Fi							
Available Funding		\$0	\$0	\$0	\$0	\$0	\$0
Expenditures		(\$350,000)	(\$40,000)	(\$41,200)	(\$42,436)	(\$43,709)	(\$517,345)
Capital & Maint. Need	\$517,345						
Unfunded Liability		(\$350,000)	(\$40,000)	(\$41,200)	(\$42,436)	(\$43,709)	(\$517,345)
Implementation of City-wide collaboration tools (MS TEAMS and SharePoint):							
Available Funding		\$200,000	\$0	\$0	\$0	\$0	\$200,000
Expenditures		(\$300,000)	(\$40,000)	(\$41,200)	(\$42,436)	(\$43,709)	(\$467,345)
Capital & Maint. Need	\$267,345						
Unfunded Liability		(\$100,000)	(\$40,000)	(\$41,200)	(\$42,436)	(\$43,709)	(\$267,345)
TOTAL							
Available Funding		\$0	\$0	\$0	\$0	\$0	\$0
Expenditures		(\$3,853,350)	(\$2,340,376)	(\$2,225,457)	(\$2,513,846)	(\$2,632,451)	(\$13,565,480)
Capital & Maint. Need	\$13,565,480						
Unfunded Liability		(\$3,853,350)	(\$2,340,376)	(\$2,225,457)	(\$2,513,846)	(\$2,632,451)	(\$13,565,480)

Other ID.	Address	Sq Feet	Year Built	Last Appr.	Occupied As	Leased Owned	Total Values
MAIN LIBRARY	2090 KITTREDGE STREET (FRONT)	102,000	1931	2021	LIBRARY - HIGH END	OWNED	\$ 83,882,271
CIVIC CENTER BUILDING ANNEX	1947 CENTER STREET	112,798	1947	2021	PUBLIC WORKS ENGINEERING AND TRANSPORTATION	OWNED	\$ 80,731,494
CENTER STREET GARAGE AND COMMERCIAL SPACE	2025 CENTER STREET	248,000	2018	2021	CITY AND PUBLIC PARKING AND OFFICE	OWNED	\$ 44,950,008
MARTIN LUTHER KING JR. CIVIC CENTER	2180 MILVIA STREET	89,075	1940	2021	OFFICE BUILDING	OWNED	\$ 76,798,274
PUBLIC SAFETY BUILDING (INCLUDES PRIIMARY EOC)	2100 MARTIN LUTHER KING JR WAY	60,108	2000	2021	POLICE STATION/FIRE STATION OFFICES	OWNED	\$ 40,144,015
OLD CITY HALL	2134 MARTIN LUTHER KING JR. WAY	38,400	1908	2021	OFFICE	OWNED	\$ 29,831,879
TELEGRRAPH/CHANNING (SATHER GATE) MALL AND GARAGE	2438 DURANT AVENUE/CHAN NING AVENUE	186,890	1990	2021	PARKING GARAGE W/RETAIL	OWNED	\$ 22,081,096
FIRE DEPARTMENT WAREHOUSE	1011 FOLGER AVENUE	8,021	2011	2019	WAREHOUSE	OWNED	\$ 13,373,058
DONA SPRING ANIMAL SHELTER	1 BOLIVAR DRIVE	11,700	2013	2021	ANIMAL SHELTER	OWNED	\$ 9,875,519
LIBRARY-WEST BRANCH	1125 UNIVERSITY AVENUE	9,300	2013	2021	LIBRARY	OWNED	\$ 8,446,998
TAREA HALL PITTMAN SOUTH BRANCH	1901 RUSSELL STREET	8,700	2013	2021	LIBRARY	OWNED	\$ 7,789,776
OXFORD STREET GARAGE	2165 KITTREDGE STREET	42,128	2009	2021	PARKING/RETAIL	OWNED	\$ 6,241,391
BERKELEY REP THEATER	2025 ADDISON STREET	24,893	2000	2016	THEATRE	OWNED	\$ 6,678,445
VETERANS MEMORIAL HALL	1931 CENTER STREET	33,254	1923	2021	ASSEMBLY AND HOMELESS SHELTER	OWNED	\$ 20,390,535

Other ID.	Address	Sq Feet	Year Built	Last Appr.	Occupied As	Leased Owned	Total Values
NORTH BERKELEY SENIOR CITIZENS CENTER	1901 HEARST AVENUE	20,880	1977	2021	SENIOR CENTER	OWNED	\$ 6,661,453
JAMES KENNEY RECREATION CENTER	1718 & 1720 8TH STREET	17,724	1973	2019	RECREATION CENTER/ASSEMBLY	OWNED	\$ 6,740,269
LIBRARY-NORTH BRANCH	1170 THE ALAMEDA	9,555	1936	2019	LIBRARY	OWNED	\$ 6,571,658
LIBRARY - CLAREMONT BRANCH	2940 BENVENUE AVENUE	8,110	1924	2019	LIBRARY	OWNED	\$ 5,403,431
SOUTH BERKELEY SENIOR CENTER	2939 ELLIS STREET	17,156	1977	2019	SENIOR CENTER	OWNED	\$ 6,441,480
BERKELEY MARINA	201 UNIVERSITY AVENUE	152,571	1974	2019	BOAT DOCKS	OWNED	\$ 6,171,038
BERKELEY TUOLUMNE CAMP	31585 HARDIN FLAT RD, GROVELAND, CA	34,365	2022		DINING HALL/TENT CABINS/DESK	OWNED	\$ 13,470,651
HS LORDSHIPS	199 SEAWALL	25,000	1967	2021	RESTAURANT AND SPECIAL EVENT VENUE	OWNED	\$ 10,246,736
TOTAL							\$ 512,921,475

5 YEARS PROJECTED GENERAL FUND REVENUES

	Projected General Fund Revenue FY 2023 through FY 2027					
	FY 2023 Adopted	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Undesignated Revenues						
Secured Property Taxes	75,664,920	79,091,256	81,859,450	84,724,531	87,689,889	90,759,035
Supplemental Taxes	2,000,000	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000
Unsecured Property Taxes	3,516,000	3,516,000	3,516,000	3,516,000	3,516,000	3,516,000
Property Transfer Taxes	18,000,000	18,000,000	16,000,000	16,000,000	16,000,000	16,000,000
Property Transfer Tax - Measure P	14,073,750	14,073,750	14,073,750	14,073,750	14,073,750	14,073,750
Sales Taxes	19,016,546	19,634,807	19,391,714	20,231,914	21,146,495	22,043,410
Soda Tax	990,210	1,025,800	1,025,800	1,025,800	1,025,800	512,900
Utility Users Taxes	13,800,000	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000
Transient Occupancy Taxes(TOT)	5,000,000	7,500,000	7,725,000	7,956,750	8,195,453	8,441,316
Short-term Rentals	1,000,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000
Business License Taxes	19,000,000	19,000,000	19,000,000	19,380,000	19,767,600	19,767,600
Recreational Cannabis	1,400,000	1,400,000	1,400,000	1,428,000	1,456,560	1,456,560
Measure U1	4,900,000	4,900,000	4,900,000	4,998,000	5,097,960	5,097,960
Other Taxes	2,631,441	3,331,441	3,331,441	3,331,441	3,331,441	3,331,441
Vehicle In Lieu Taxes	15,926,168	16,626,651	17,208,584	17,810,884	18,434,265	19,079,464
Parking Fines - Regular Collections	4,326,450	4,800,000	4,800,000	4,800,000	4,800,000	4,800,000
Parking Fines - Booting Collections	-	-	-	-	-	-
Moving Violations	132,600	132,600	132,600	135,252	137,957	137,957
Ambulance Fees	3,880,779	5,330,779	5,350,779	3,880,779	3,880,779	3,880,779
Interest Income	6,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000
Franchise Fees	1,613,283	1,720,056	1,720,056	1,720,056	1,720,056	1,720,056
Other Revenues	6,729,977	7,529,977	7,529,977	7,529,977	7,529,977	7,529,977
Indirect cost reimbursements	5,490,000	5,990,000	5,990,000	5,990,000	5,990,000	5,990,000
Transfers	17,096,148	17,096,148	21,023,924	4,472,621	4,562,074	4,562,074
Total Undesignated Revenues	242,188,272	256,399,265	261,679,074	248,705,755	254,056,056	258,400,279

Designated Revenues						
Prop. Transfer Taxes for capital improvements	16,462,172	16,462,172	12,962,172	13,541,415	13,541,415	14,132,244
Total Designated Revenues	16,462,172	16,462,172	12,962,172	13,541,415	13,541,415	14,132,244
TOTAL REVENUES AND TRANSFERS						
	258,650,444	272,861,437	274,641,246	262,247,170	267,597,471	272,532,523

Property Taxes

Given the continued high collection rate, and the resilience of property values in the City, as well as a large volume of recent property sales (which bring assessed values to market value), we are projecting that annual growth will be approximately 5.5% over the next several years. The persistence of strong growth of property valuations in recent years, as well as the spike in current year sales (which bring properties assessed valuations to market value), have caused staff to increase the projected growth rate from the 3.5% that we have used in prior long-term projections.

Sales Taxes

The immense effects of COVID-19 on sales tax revenue in FY 2021 were largely reversed in FY 2022, with revenue levels almost back to FY 2019 levels, and staff now project growth to level off to approximately 4% in FY 2024. There is still some potential risk that an overall slowdown in underlying economic recovery will be reflected in reduced growth in consumer spending and sales tax collections.

Business License Taxes

We are projecting a 5% growth in Business License Tax revenue from heavily impacted FY 2021 levels, as economic activity recovers from the recession caused by the pandemic. Long-term projections will be adjusted as the post-pandemic economic environment becomes clearer. 2023 business license returns (for 2022 gross receipts) are just now being received, so we will know more about how revenues are trending once they are processed over the next month or so.

Transient Occupancy Tax

With recovery of business at the City's hotels expected to lag behind general economic recovery, and relying on industry guidance regarding predicted occupancy levels, we are currently projecting only 3% annual growth from current revenue levels. Even after taking into consideration the new downtown hotel, we will continue to monitor the major hotels' projections of future occupancies and will adjust long-term projections as necessary.

Utility Users Tax

We expect UUT revenue to rise marginally from FY 2022 through FY 2024, after increasing slightly in the current year due to rate increases approved by the Public Utilities Commission. Revenues are expected to remain flat after FY 2024 and beyond after all the rate increases have been actualized.

Transfer Tax

Given the continued strength in property values and in sales activity, we expect Transfer Tax revenues to remain basically flat from FY 2024 – FY 2027. The spike in revenue being seen in FY 2022, and to a lesser extent in FY 2023, is likely due to sales triggered by looming interest rate increases that have been signaled by the Federal Reserve, as well as some pent- up demand from mildly depressed sales during the pandemic. Over the 5 years prior to the pandemic, transfer tax revenues grew 6% per year on average, but interest rate increases will probably negatively impact sales prices and volumes somewhat in the next few years. We also expect revenues from Measure P supplemental tax on high value property transfers to remain basically flat.



CITY OF BERKELEY



Pension and OPEB Funding Study

Mary Elizabeth Redding, FSA, EA, MAAA

Bianca Lin, FSA, EA, MAAA

Katherine Moore, ASA, MAAA

Wai Man Yam

Foster & Foster, Inc.

February 23, 2023

Agenda

- OPEB
- OPEB Funding Recommendation
- CalPERS
- CalPERS Funding Recommendation
- Summary



OPEB



Definitions

- OPEB: Other (than pension) Post Employment Benefits: Medical benefits paid to retirees
 - No legal requirement to provide OPEB
 - Depends on bargaining agreements
 - Unlike pensions, could be eliminated for future hires
 - Depending on bargaining agreements, could be changed for current employees/retirees



Definitions

- Normal Cost (NC): value of benefits earned by employees in the coming year
- Actuarial Accrued Liability (AAL): value of benefits earned to date
- Unfunded Actuarial Accrued Liability (UAL):
AAL minus Assets
- Discount Rate (DR): Rate used to calculate present value of future benefits.
 - Based on expected rate of return on invested assets.
 - Higher rate => lower present value



Definitions

- Actuarially Determined Contribution (ADC): Full Prefunding:
 - Normal Cost plus
 - Amortization (payment over time) of UAAL

- Why is there a UAAL?
 - OPEB was not fully funded in the past
 - Cost of benefits being earned every year should have been paid since plan inception
 - Cost of benefits being earned is currently \$8 million/year
 - Things did not always happen as expected



OPEB Funding Study Assumptions

- Projection assumptions for study
 - Current investment policy: 3%/year future returns
 - Full prefunding = normal cost + 20 year amortization of unfunded actuarial accrued liability
 - No change in number of active employees
- Note: Investing funds for the long term should provide higher returns, on average, and reduce needed City contributions.



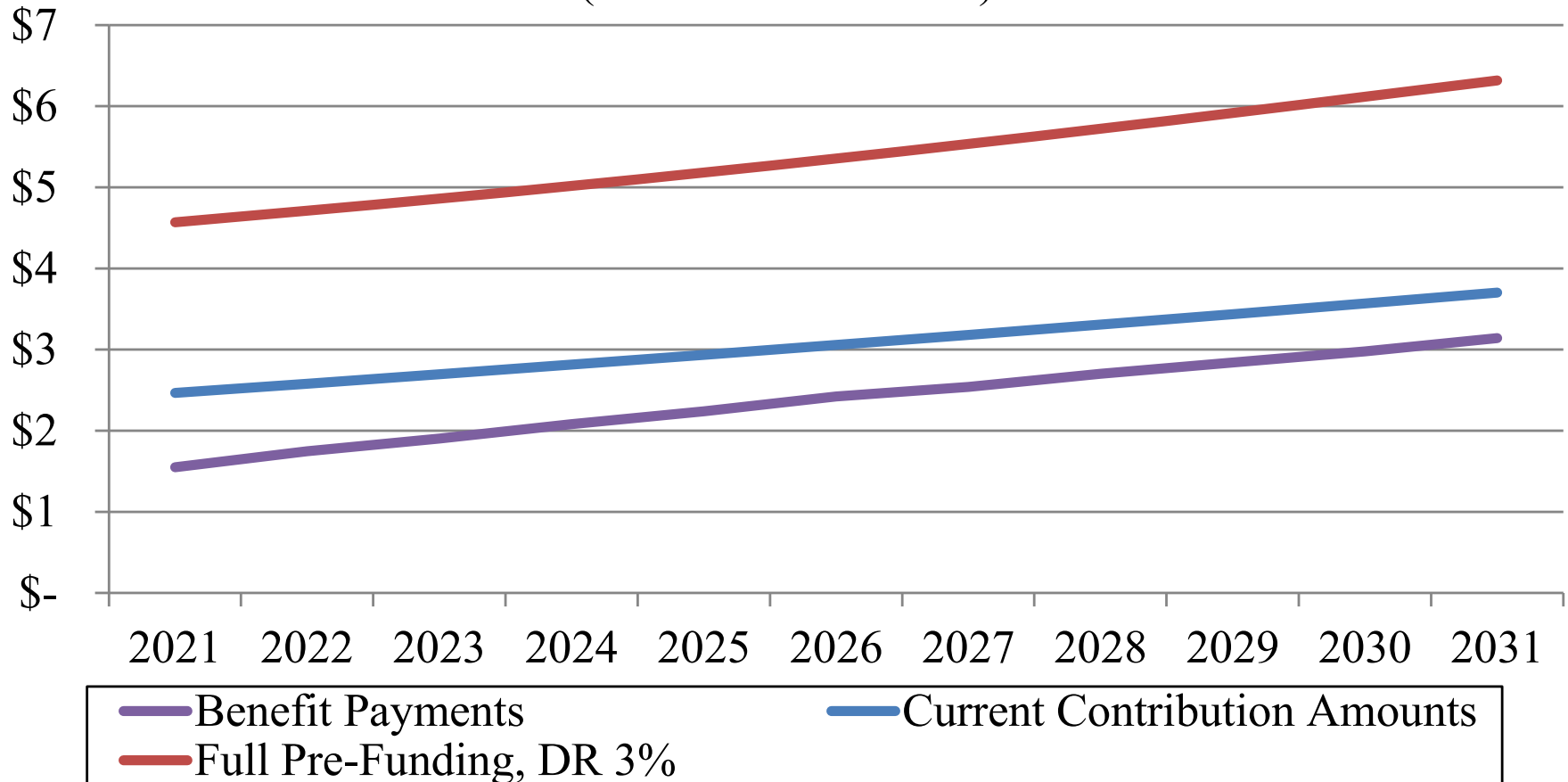
OPEB Benefit Summary

	Miscellaneous	Fire	PERIP	Police
Benefit	Up to cap	Up to cap	Kaiser 2-party premium amount	Up to cap
Cap depends on	Retirement date, Bargaining Unit, Coverage	Retirees after 1997 only	Retirement before September 2012	Retirement after September 2012
100% of Cap	20 years	25 years	N/A	20 years
Cap Increases	Kaiser premium increases, up to 4.5%/Year	4.5% per year	No limit	Kaiser premium increases, up to 6%/Year
Current Trust Contributions	% of payroll; in MOUs	About 1/3 of recommended contribution	Retiree premium amount	About 8% of recommended contribution



OPEB - Miscellaneous

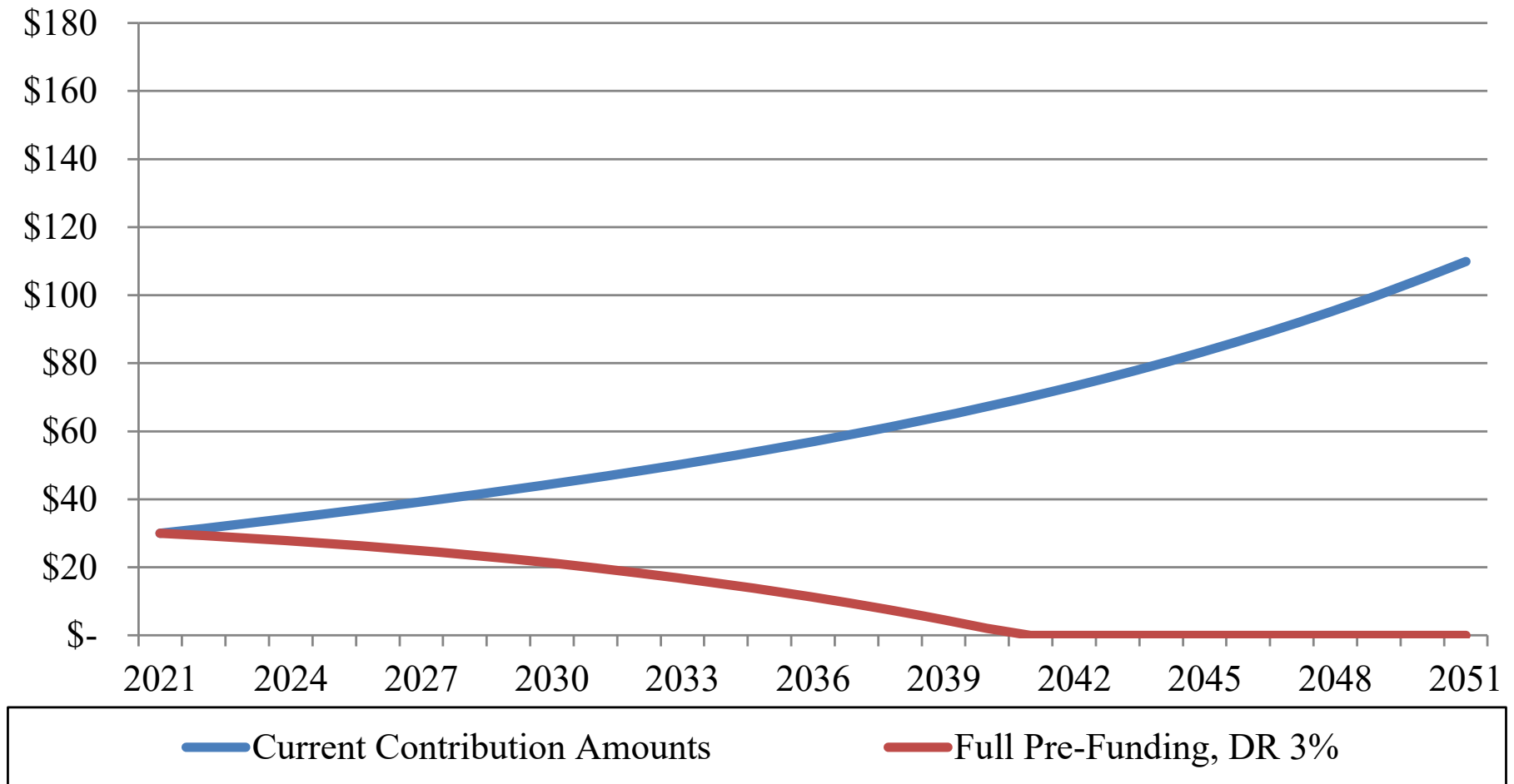
Contribution (Amounts in millions)



OPEB - Miscellaneous

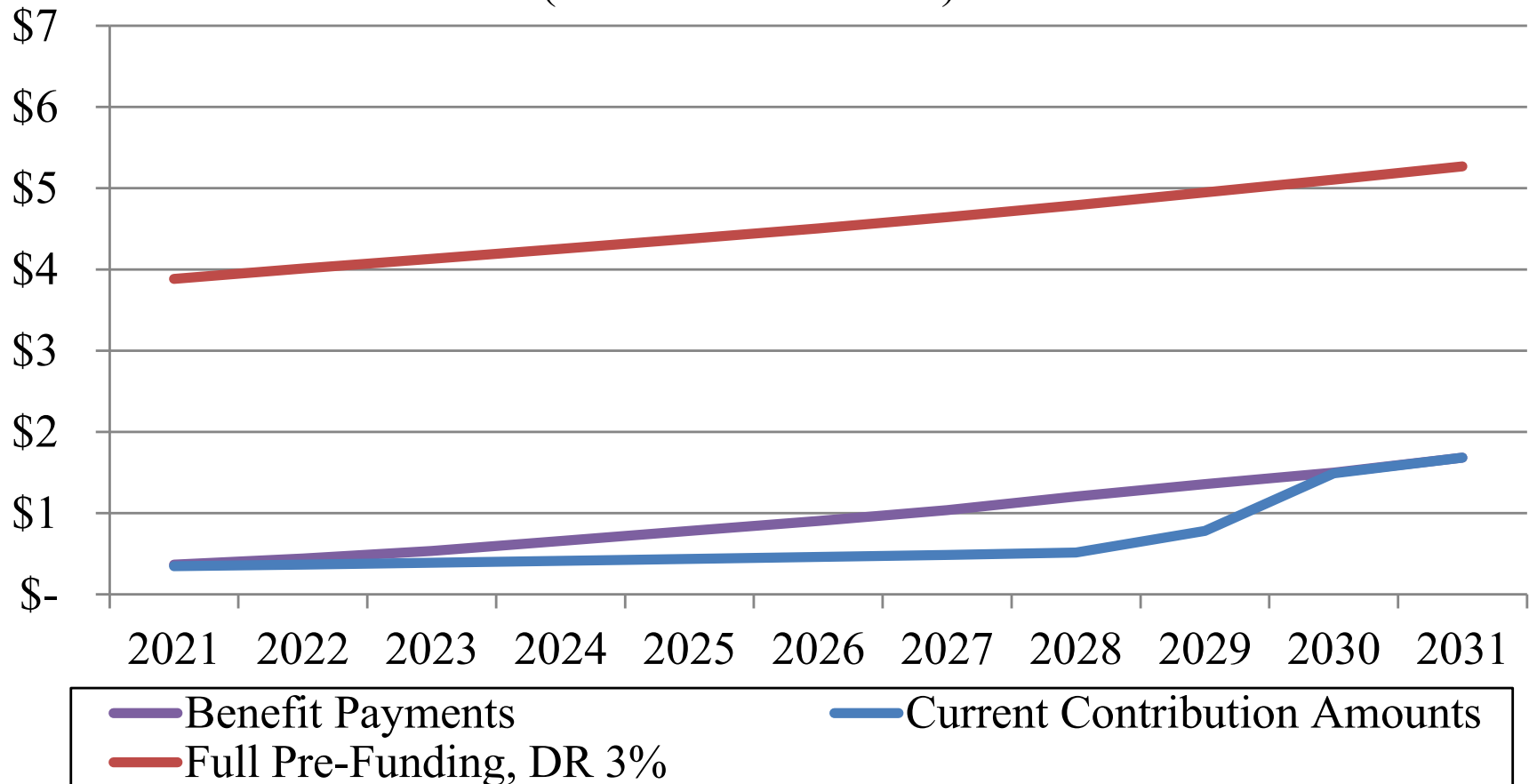
Unfunded Actuarial Accrued Liability

(Amounts in millions)



OPEB – Police

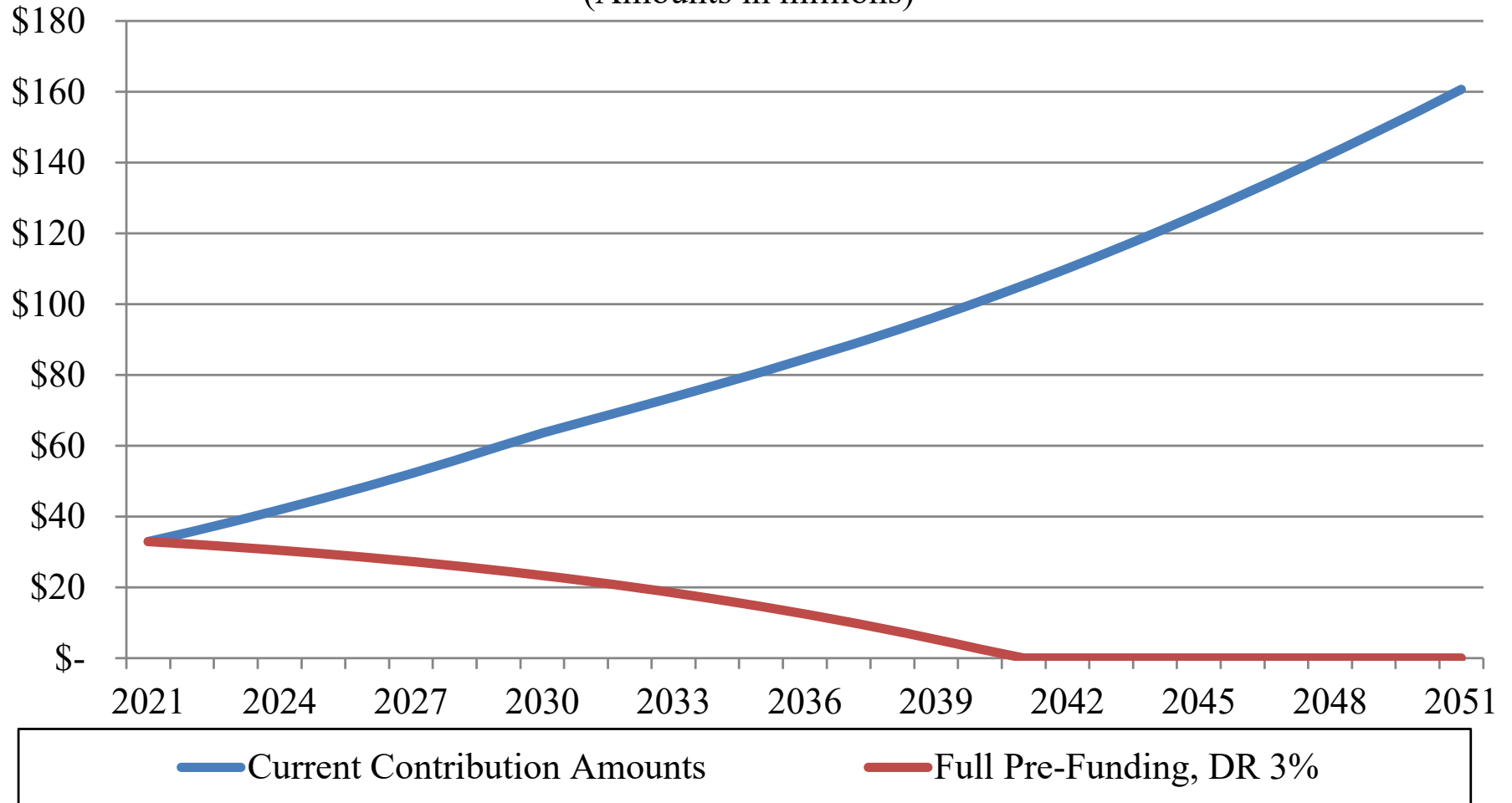
Contribution (Amounts in millions)



OPEB – Police

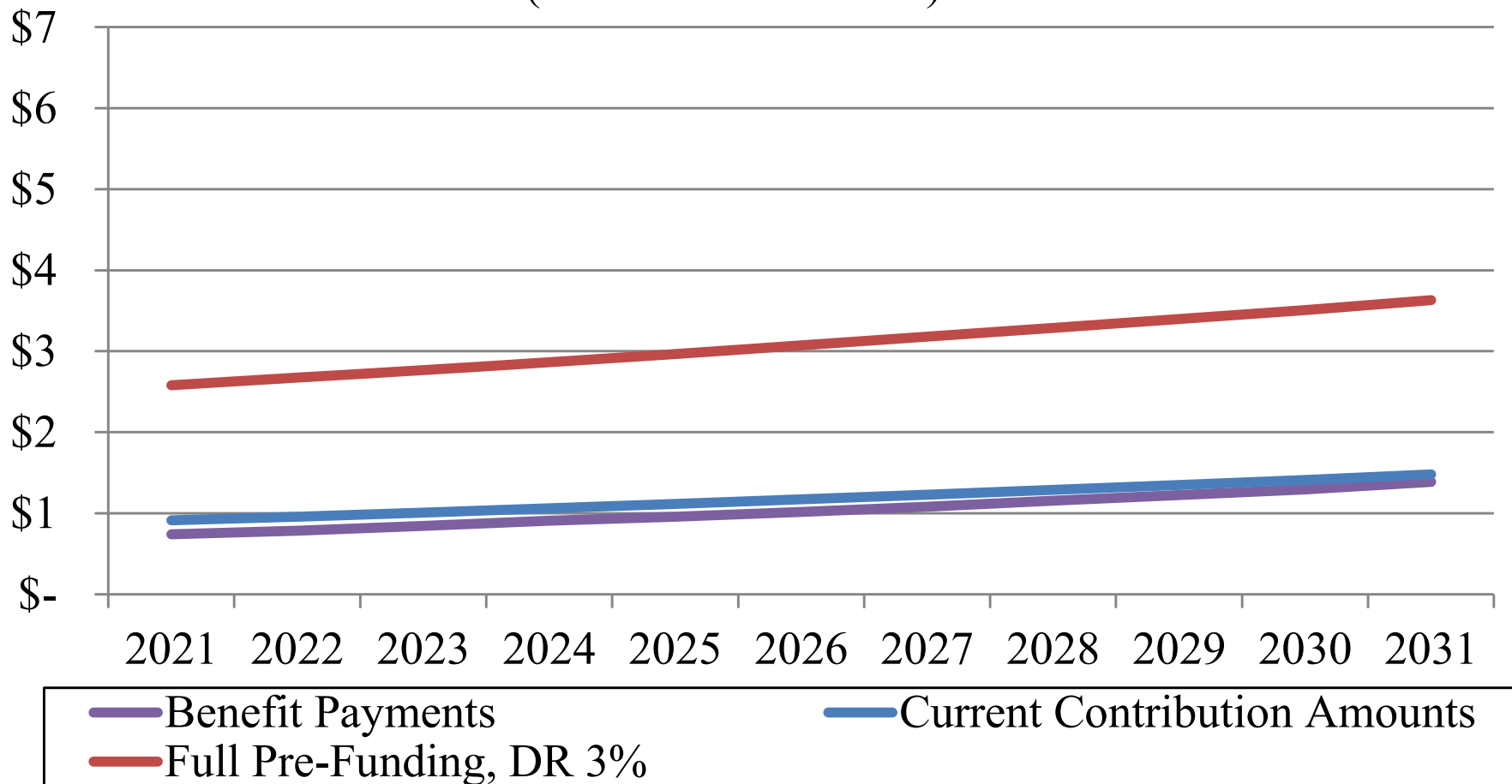
Unfunded Actuarial Accrued Liability

(Amounts in millions)



OPEB – Fire

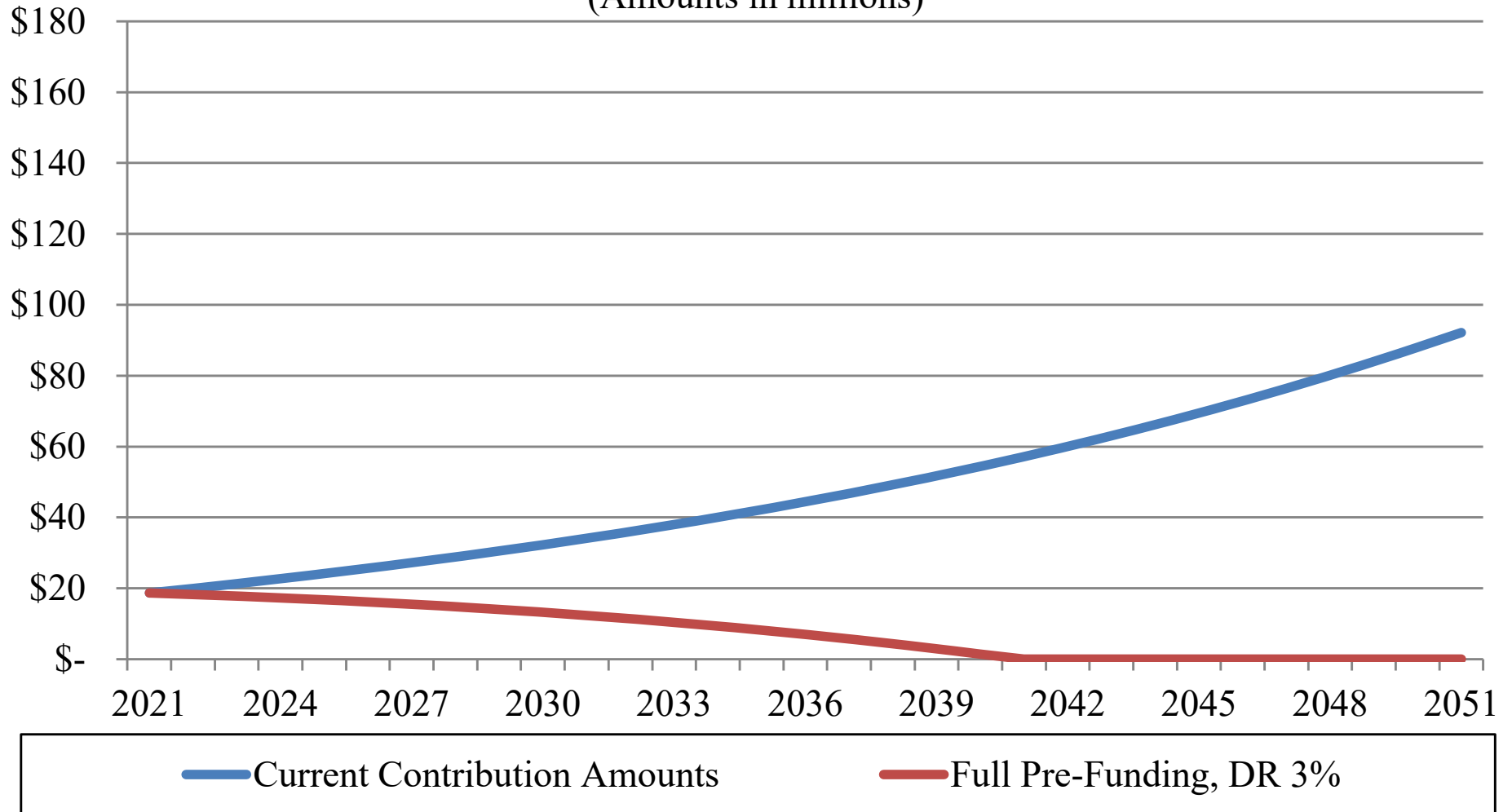
Contribution (Amounts in millions)



OPEB - Fire

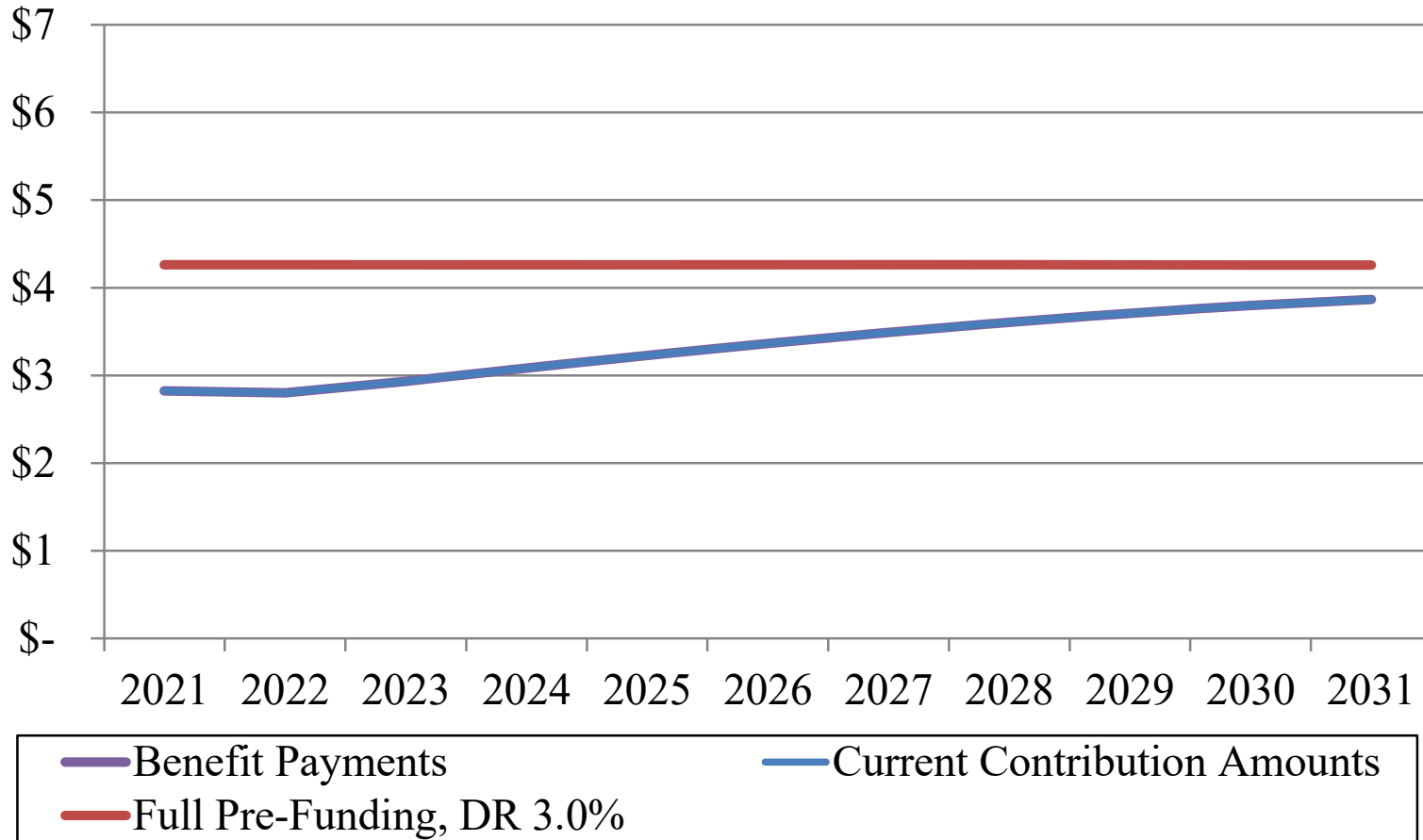
Unfunded Actuarial Accrued Liability

(Amounts in millions)



Police Retirement Income Plan (PERIP)

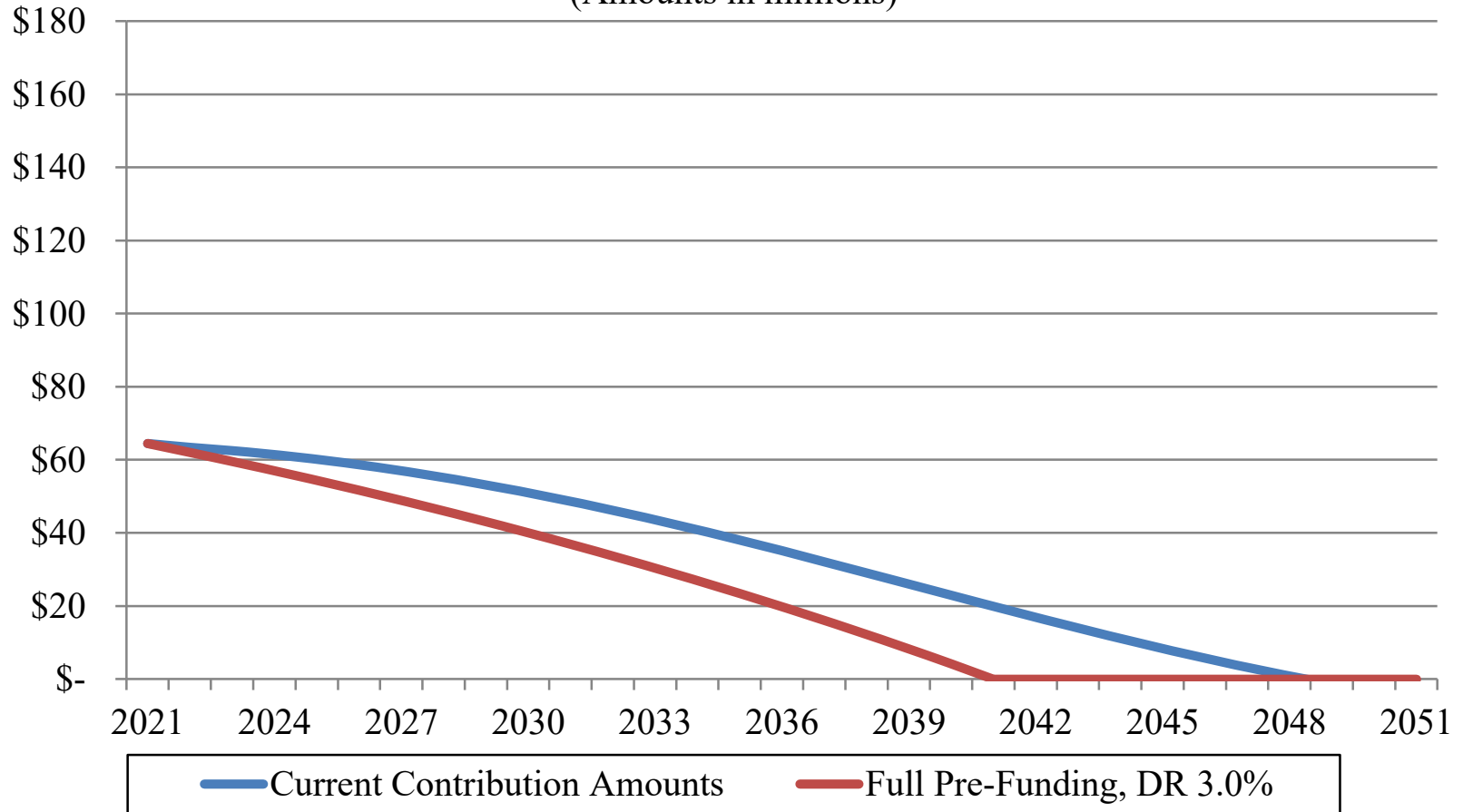
Contribution (Amounts in millions)



Police Retirement Income Plan (PERIP)

Unfunded Actuarial Accrued Liability

(Amounts in millions)



Total of All OPEB Plans

Summary of Recommendation

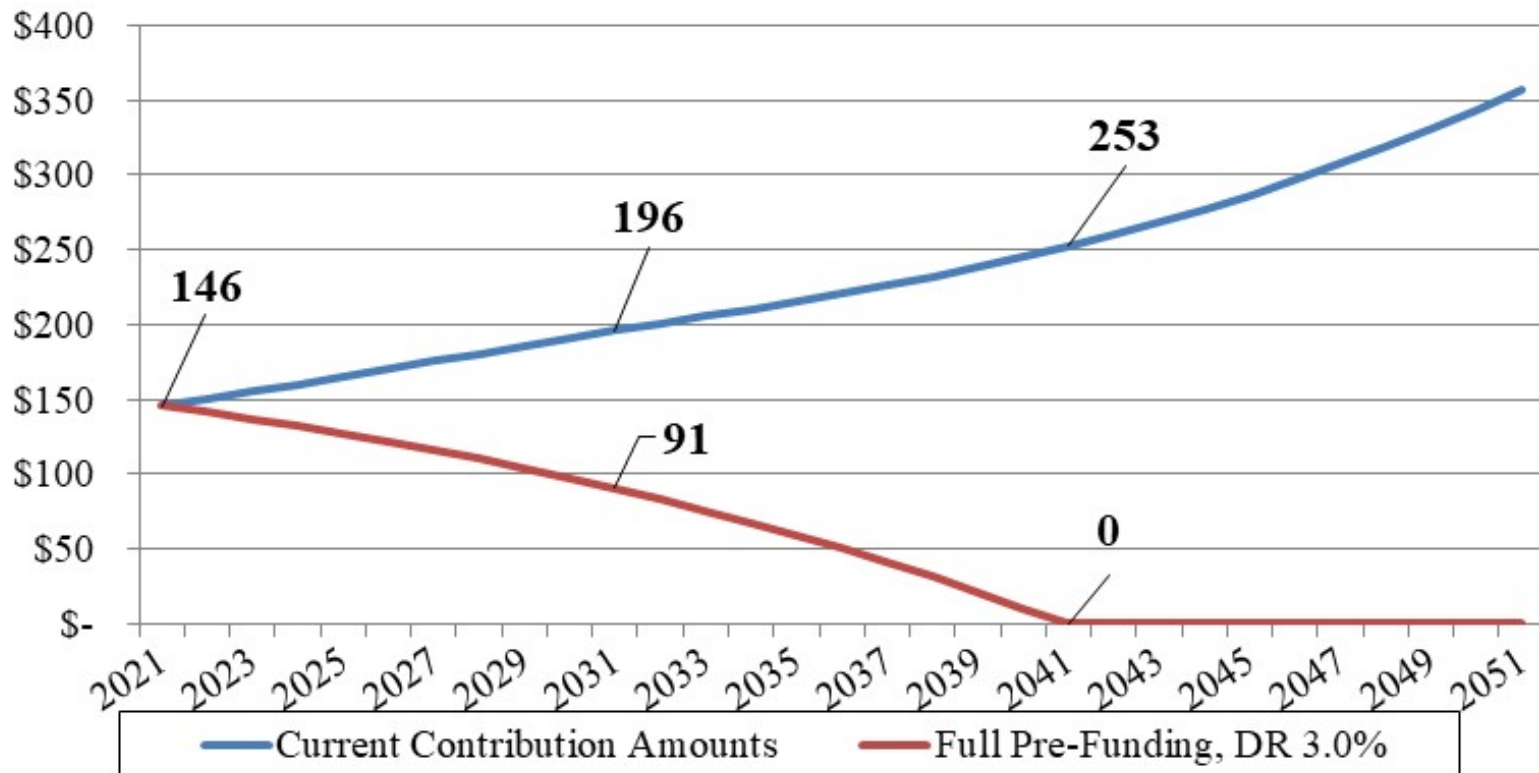
(\$ Millions)

Plan	Current Contribution Amounts	Increase	Full Pre-Funding ADC (DR 3%)
Miscellaneous	\$2.5	\$2.1	\$4.6
Fire	0.9	1.7	2.6
PERIP	<u>2.8</u>	<u>1.4</u>	<u>4.3</u>
Police	0.3	3.5	3.9
Total	\$6.5	\$8.8	\$15.3

Recommended contributions are based on 3% expected annual return on trust funds. Higher expected returns would lower needed funding.

Total of All OPEB Plans

Unfunded Actuarial Accrued Liability Combined Plans (Amounts in \$ millions)



CalPERS Pensions

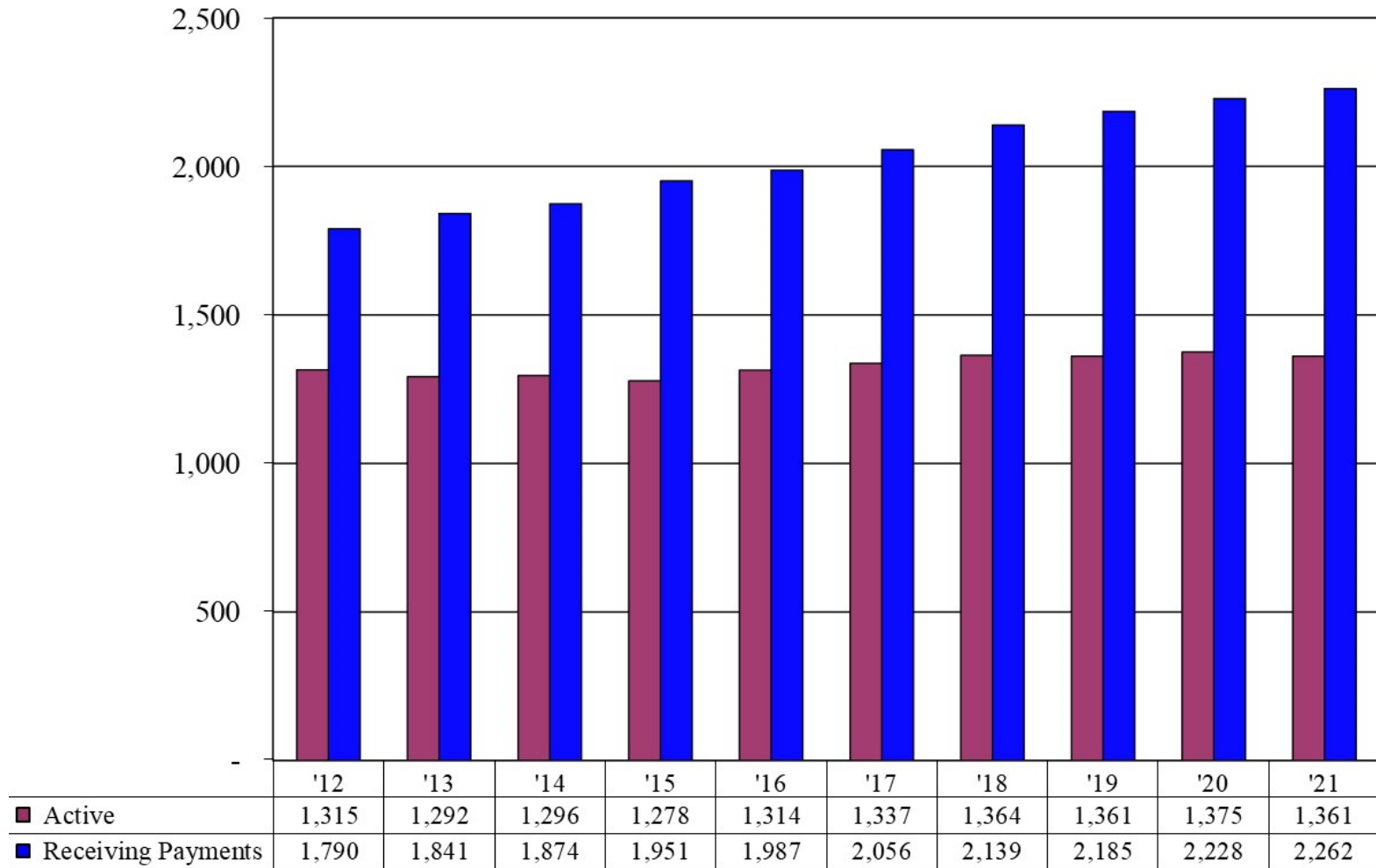


How Did We Get A Large CalPERS Unfunded Liability?

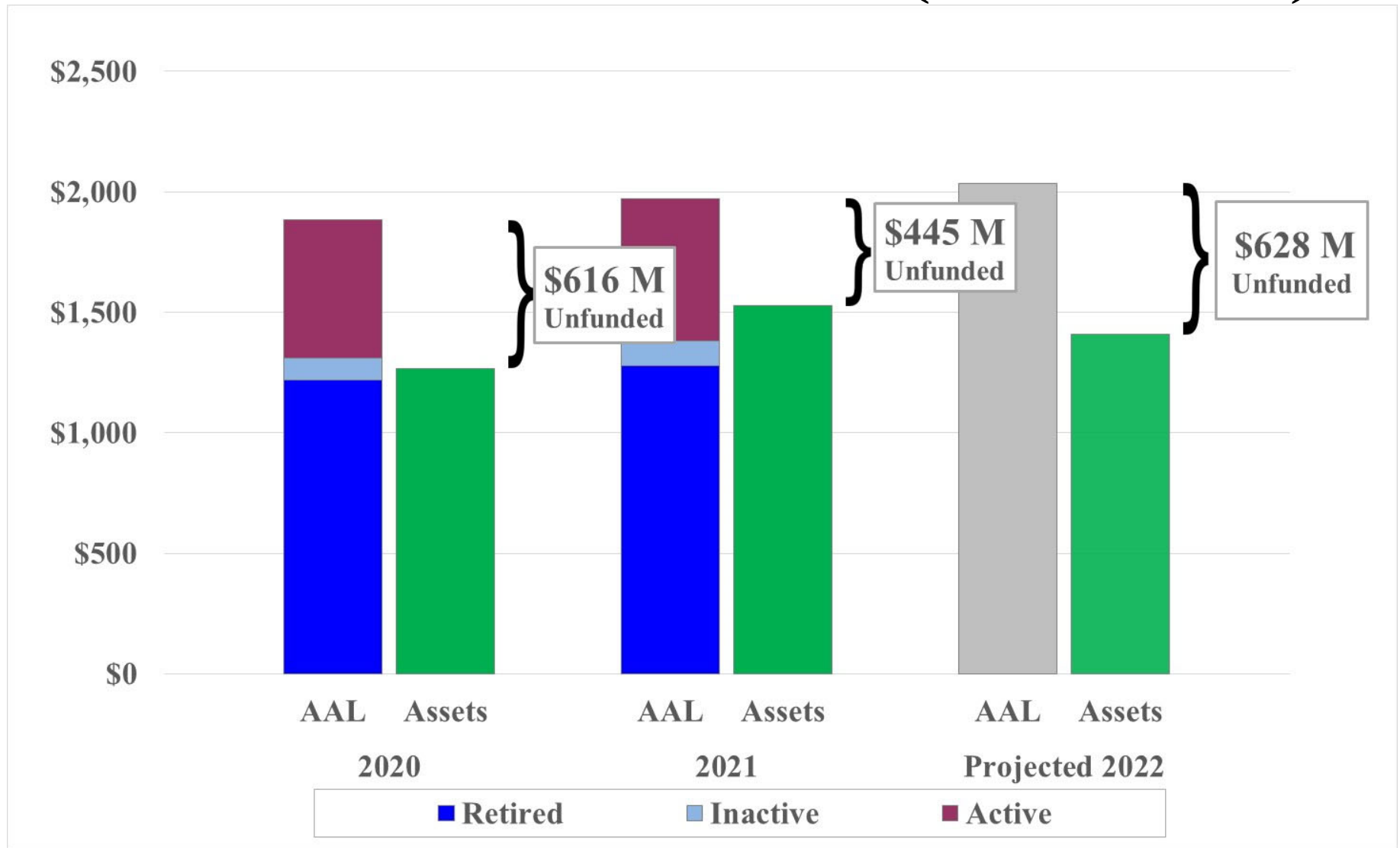
- Combination of many factors
 - Large investment losses in some years combined with “smoothing” policy delayed funding improvement.
- Enhanced benefits
- Demographics - growing number of retirees
- Updated & strengthened actuarial assumptions
- PEPRRA (hires after 1/1/2013) beginning to help contributions
- The City has always paid the required CalPERS contributions



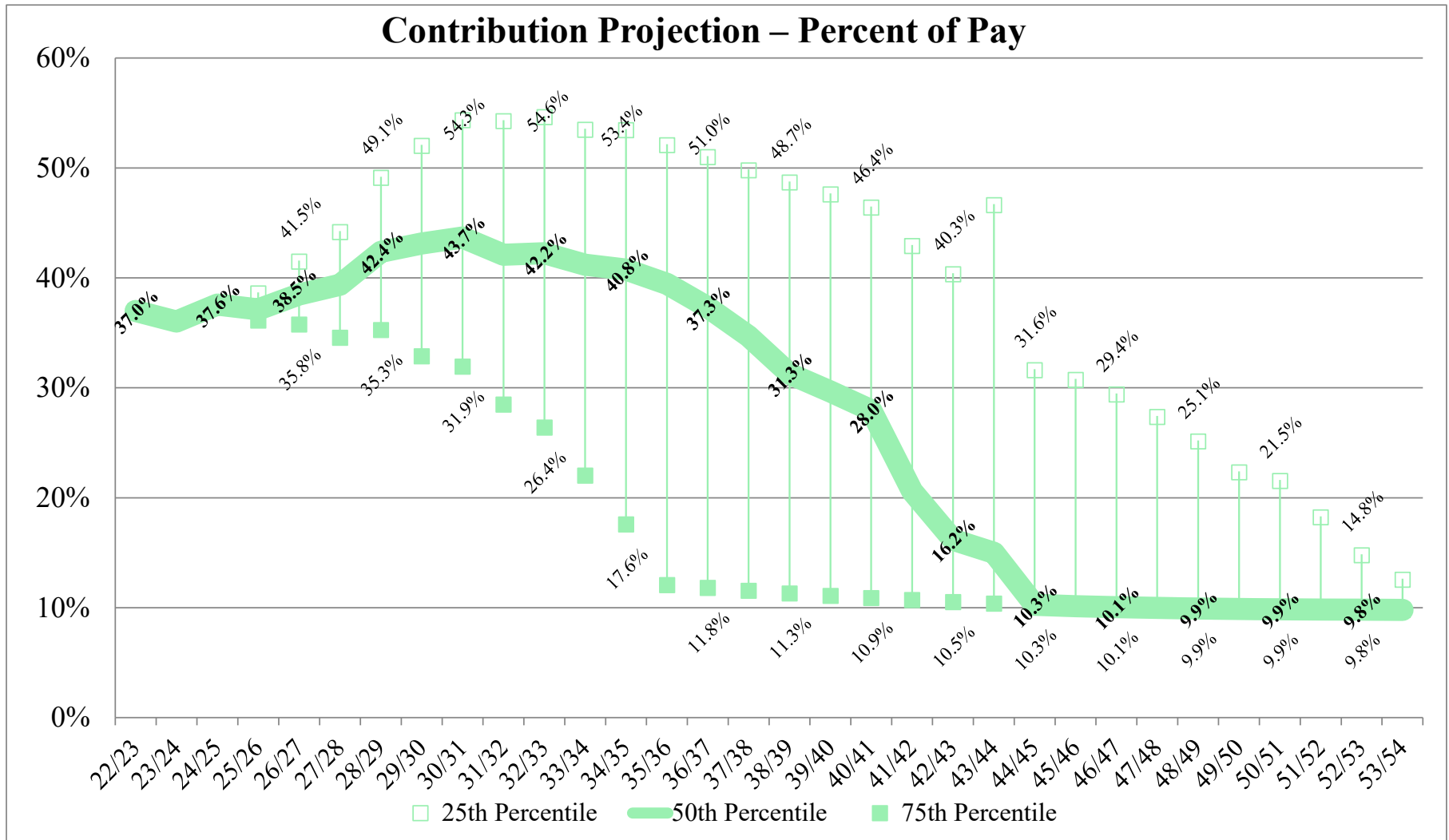
Number of Pension Members



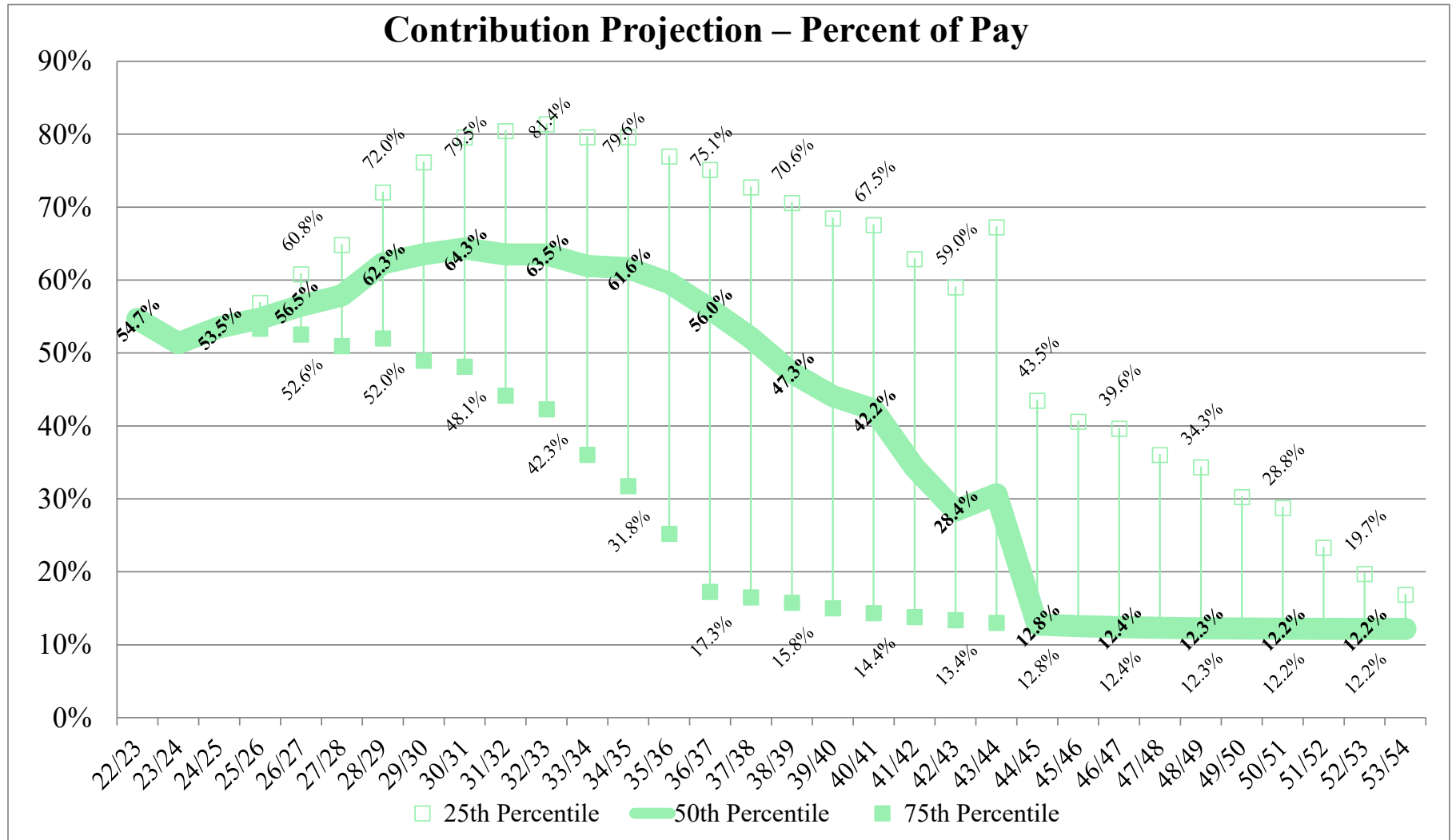
Pension Funded Status (Combined)



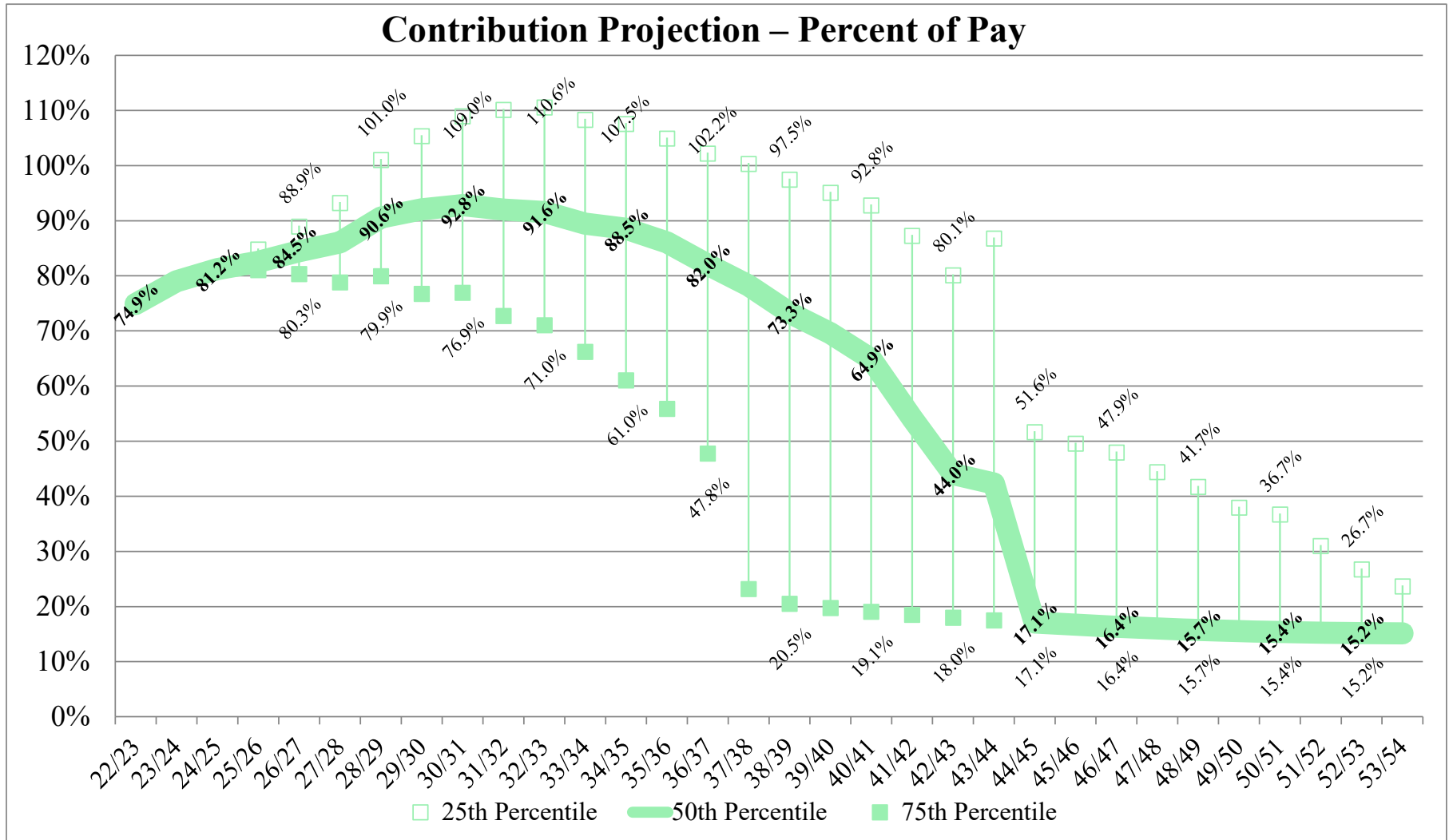
Miscellaneous–CalPERS Rates (% Payroll)



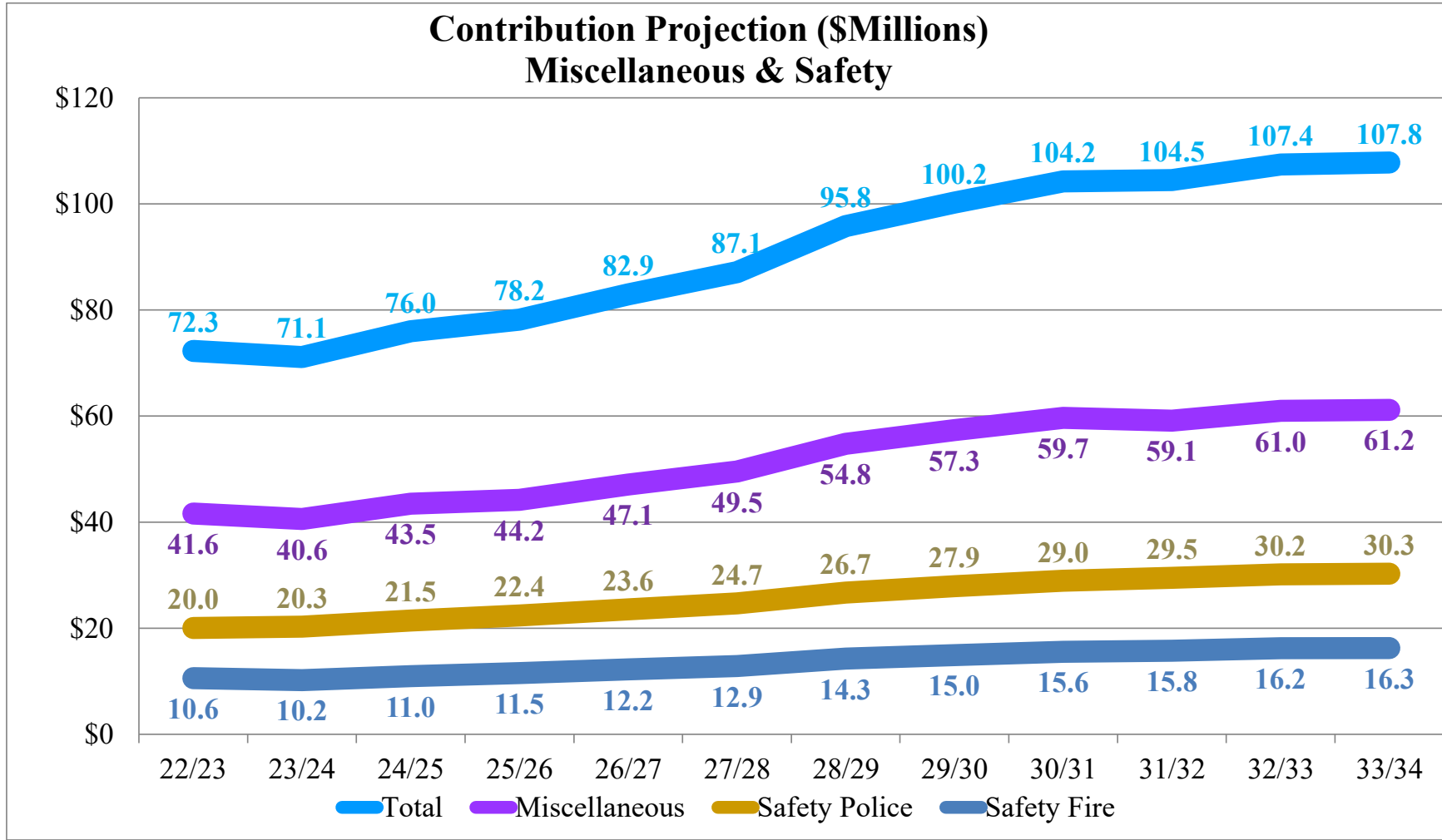
Fire-CalPERS Rates (\$millions)



Police–CalPERS Rates (% Payroll)



Total Projected CalPERS Contributions (\$Millions)



CalPERS Funding

Reduce/Eliminate Unfunded Liability

- The City is already paying the full actuarially determined contribution for its CalPERS plans
- The City's funded status is similar to other CalPERS public agencies
- Most ideas to pay down the unfunded liability ahead of schedule are not recommended
 - Pension Obligation Bond (POB) is interest arbitrage
 - Success not guaranteed
- Unlike OPEB, City cannot leave CalPERS
 - New hires must be in CalPERS
 - Current employees must retain current benefits
 - \$2.1 Billion payment needed to leave CalPERS



Irrevocable Supplemental (§115) Trust

- Can only be used to:
 - Reimburse City for CalPERS contributions
 - Make payments directly to CalPERS
- Investments significantly less restricted than City investment funds
- City's §115 Trust
 - Established in FY2018
 - Contributions up to \$5.2 Million per year
 - Current target contribution \$5.5 Million per year
 - Balance 6/30/2022 \$14.8 Million



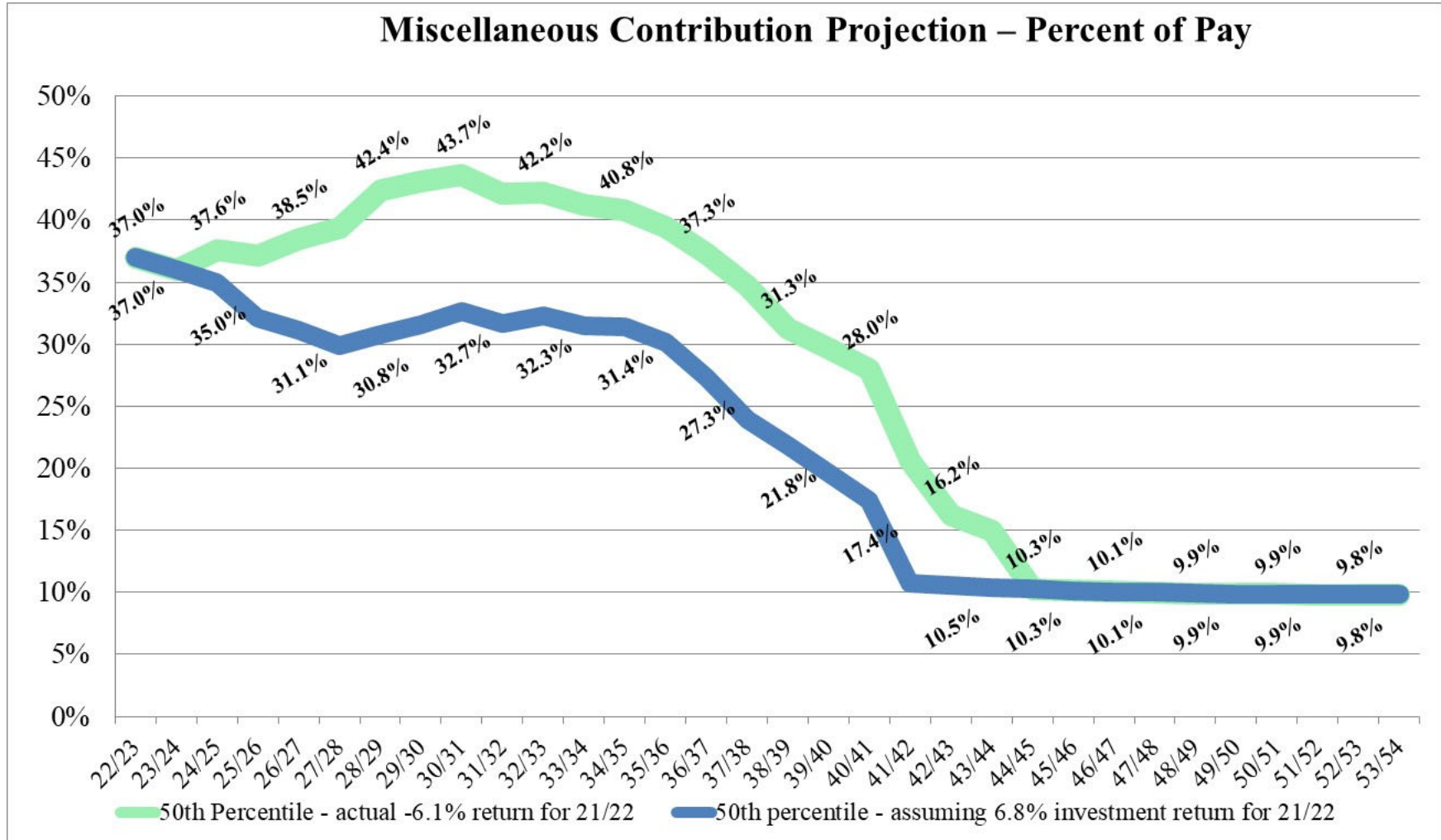
Irrevocable Supplemental (§115) Trust

- Best use: Rate Stabilization
 - Add to Trust when possible
 - Use Trust funds to help pay CalPERS contributions in highest years or if unexpected increases
- Accumulate funds to eventually pay down UAL
- Target:
 - Consider City's reserve policy?
 - Consider potential variability of projected contributions?
 - In 10 years, 50% chance of contributions \$25M larger or smaller than projected
 - Consider potential contribution impact of large investment loss?



Example: Impact of 1 Year Poor Returns

Difference in Contributions Due to Poor 2022 Investment Return



Example: Impact of 1 Year Poor Returns

**Difference in Contributions Due to Poor 2022 Investment Return
(Total City Plans)
(\$Millions)**

Payment Year	Increase Each Year	Cumulative Increase
● 2024/25	\$4.9	\$4.9
● 2025/26	9.7	14.6
● 2026/27	14.5	29.2
● 2027/28	19.3	48.5
● 2028/29	24.1	72.6



CalPERS Funding Recommendation

- Prioritize OPEB
- Continue funding CalPERS §115 Trust as possible
 - Current \$5.5M/year target is ideal
 - Recommend trust balance of \$25M to \$50M
 - Higher balance could be used to pay down UAL



Summary



Summary of Recommendations

- OPEB Funding (Misc, Police, Fire, “PERIP”)
 - Full pre-funding; will increase annual contribution
 - Total \$8.8 million additional per year
- CalPERS
 - Continue targeting \$5.5 million per year



Thank You



February 23, 2023

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CONSENT CALENDAR
February 28, 2023

To: Honorable Mayor and Members of the City Council
 From: Councilmember Rigel Robinson (Author) & Mayor Jesse Arreguin (Co-Author)
 Subject: Approval of the Public Bank East Bay Viability Study

RECOMMENDATION

Refer to the Budget & Finance Policy Subcommittee to review and discuss the Public Bank East Bay Viability Study and consider the following recommendations for the full Council:

- (1) Adopt a resolution formally adopting the viability study
- (2) Adopt a resolution of intention to form the Public Bank East Bay alongside Oakland & Richmond
- (3) Refer to the City Manager to coordinate with the Friends of the Public Bank of the East Bay and the staff of the cities of Oakland and Richmond on the development of a business plan for the Public Bank of the East Bay, or designate the appropriate staff to do so
- (4) Refer to the City Manager to engage an independent consultant with expertise in banking operations and financing to advise city staff as they coordinate with the Friends of the Public Bank East Bay in the production of a business plan for a public bank

BACKGROUND

Public Bank East Bay seeks to establish a publicly operated bank—the Public Bank East Bay (PBEB)—serving the East Bay and prioritizing social equity and environmental stewardship above mere profits.¹ PBEB would operate as an alternative to—and alongside—the private banking system. It would allow individuals, businesses, and other entities to access standard banking services. Importantly, PBEB would prioritize access for individuals, economic sectors, and municipalities that have been traditionally underserved or exploited by the financial industry.

¹ “Vision & Values — Public Bank East Bay.” n.d. Public Bank East Bay. Accessed January 19, 2023. <https://publicbankeastbay.org/vision>.

In 2019, Governor Gavin Newsom signed AB 857, providing guidelines for establishing public banks in California.² AB 857 makes California the first state in the nation to legalize public sector banks.

PBEB advocates prepared a Viability Study in 2022 that meets the requirements set forth in AB 857. These include proving the purpose of the bank, analyzing costs, identifying the amount of initial capital required to establish the bank, financial projections for the first five years of operation, proving the PBEB complies with the California State Constitution, and how regulations would be implemented to prevent corruption.³ The Viability Study has already been approved by the Richmond City Council⁴ and the Oakland City Council.⁵

FINANCIAL IMPLICATIONS

Adoption of these recommendations has no general fund impact.

The development of the public bank, however, will be a significant financial endeavor. It is the objective of the Business Plan to fully assess the financial benefits and risks of forming the Public Bank East Bay.

This resolution does not appropriate or commit any City of Berkeley funds to the establishment of the PBEB, or to any organization. If a consultant is engaged, Finance has indicated that these costs, estimated at \$50,000, can be accounted for in the existing Finance department budget.

ENVIRONMENTAL SUSTAINABILITY

None.

CONTACT PERSON

Councilmember Rigel Robinson, (510) 981-7170
Sam Greenberg, Legislative Assistant

Attachments:

- 1: Resolution
- 2: Resolution

² Sgourous, Tom. 2022. "Public Bank East Bay Viability Study." Public Bank East Bay. <https://static1.squarespace.com/static/5ee14314979f2e18b9b6ed03/t/622a351f48637e3569cc3fcd/1646933281581/PBEB+Viability+Study+March+2022.pdf>.

³ "Public Bank East Bay Viability Study." Page 34

⁴ "Richmond Approves Viability Study." 2022. Public Bank East Bay.

<https://publicbankeastbay.org/news/0vitc9jw0cyug7jqkvub64mbaky3qb-6axls-mm2f3-twI3l>.

⁵ "Meeting Minutes: Concurrent Meeting of the Oakland Redevelopment Successor Agency and the City Council." 2022. City of Oakland.

<https://oakland.legistar.com/View.ashx?M=M&ID=1001259&GUID=57EC77BF-AC2B-4E18-837E-6427F9DC88AC>. Page 20

3: Public Bank East Bay Viability Study

RESOLUTION NO. ##,###-N.S.

RESOLUTION OF INTENTION TO FORM THE PUBLIC BANK EAST BAY WITH THE CITY OF BERKELEY AS A FOUNDING MEMBER ALONG WITH THE CITIES OF OAKLAND AND RICHMOND

WHEREAS, public banks are financial institutions that are owned by public agencies such as cities and counties and can serve as a tool to invest, lend, and provide banking services to local communities that are often left out of financial opportunities from larger firms; and

WHEREAS, the City of Berkeley began formally assessing the feasibility of establishing a public bank with a \$25,000 allocation made in 2017 to support the development of a feasibility study for the Public Bank of the East Bay; and

WHEREAS, a public bank can serve the residents of Berkeley through investment and lending activities that support small local businesses, affordable housing production, climate resilience, infrastructure projects and more; and

WHEREAS, the City of Berkeley intends to be one of the founding owners of the Public Bank East Bay; and

WHEREAS, the other proposed founding owners of the Public Bank East Bay are the cities of Oakland and Richmond; and

WHEREAS, the County of Alameda is proposed to be a non-founding owner of the Public Bank East Bay that will take an ownership stake shortly after the Public Bank East Bay's licensing by the State; and

WHEREAS, the Public Bank East Bay's proposed governance plan requires that each member city designate one councilmember to sit on the Public Bank East Bay's Board of Directors; and

WHEREAS, the California Public Banking Act further mandates that "a motion to move forward with an application for a public banking charter shall be approved by a majority vote of the governing body at a public meeting";

now, therefore, be it RESOLVED: That the City of Berkeley intends to be a founding member of the Public Bank East Bay as part of the application for a public banking charter;

and be it FURTHER RESOLVED: That the Berkeley City Council requests that the Alameda County Supervisors commit to joining the Public Bank East Bay as a full voting member immediately upon California state approval of the Public Bank East Bay's charter application;

and be it FURTHER RESOLVED: That the City Manager or designee is authorized to direct City staff to provide the necessary financial and other details to assist the Friends of the Public Bank East Bay in the production of a business plan for the ongoing operation of a public bank and return to the City Council with a report outlining anticipated capital contributions and any necessary budgetary amendments along with a final draft public bank business plan for approval;

and be it FURTHER RESOLVED: That the City Manager or designee is authorized to review and propose the probable terms of any articles of incorporation, operating agreements, and other nonprofit public benefit corporation documents or nonprofit mutual benefit corporation documents that may be required by California Government Code Section 57600 et seq., which may be finally negotiated and executed upon the City Council's adoption of the business plan;

and be it FURTHER RESOLVED: That the Berkeley City Council designates Councilmember Rigel Robinson as a representative to the Friends of the Public Bank East Bay to help guide the Public Bank East Bay's opening process and to serve as Berkeley's initial representative on the Public Bank East Bay's Board of Directors;

and be it FURTHER RESOLVED: That all the aforementioned charter(s), agreements, and articles shall be approved as to form and legality by the Office of the City Attorney and placed on file in the Office of the City Clerk;

and be it FURTHER RESOLVED: That this Resolution be conveyed immediately to the City Councils of Oakland and Richmond and to the Alameda County Board of Supervisors.

RESOLUTION NO. ##,###-N.S.

RESOLUTION ACCEPTING THE PUBLIC BANK EAST BAY VIABILITY STUDY

WHEREAS, public banks are financial institutions that are owned by public agencies such as cities and counties and can serve as a tool to invest, lend, and provide banking services to local communities that are often left out of financial opportunities from larger firms; and

WHEREAS, a public bank can serve the residents of Berkeley through investment and lending activities that support small local businesses, affordable housing production, climate resilience, infrastructure projects, and more; and

WHEREAS, the City of Berkeley intends to be one of the founding owners of the Public Bank East Bay; and

WHEREAS, the other proposed founding owners of the Public Bank East Bay are the cities of Oakland and Richmond; and

WHEREAS, the County of Alameda is proposed to be a non-founding owner of the Public Bank East Bay that will take an ownership stake shortly after the Public Bank East Bay's licensing by the State; and

WHEREAS, the California Public Banking Act mandates that "a local agency shall conduct a study to assess the viability of the proposed public bank," hereafter referred to as the Viability Study; and

WHEREAS, the California Public Banking Act mandates that "The study required shall be presented to and approved by the governing body of the local agency;" and

WHEREAS, the City of Richmond approved the Viability Study on April 5, 2022; and

WHEREAS, the City of Oakland approved the Viability Study on December 20, 2022; and

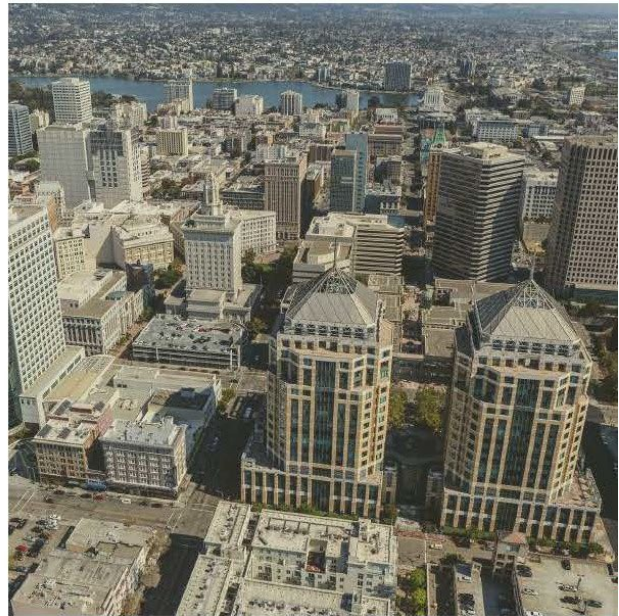
WHEREAS, the 2022 Public Bank East Bay Viability Study proposes lending in four main areas: affordable housing, small businesses, electrification/greening, and refinancing municipal bonds, and concludes that the Public Bank East Bay will be fiscally viable;

now, therefore, be it RESOLVED: That the Berkeley City Council approves the Public Bank East Bay Viability Study;

and be it FURTHER RESOLVED: That this Resolution be conveyed immediately to the City Councils of Oakland and Richmond and to the Alameda County Board of Supervisors.



Public Bank East Bay Viability Study



Prepared by Tom Sgouros
Commissioned by Friends of the Public Bank East Bay
March 2022



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Executive Summary

This Viability Study demonstrates that the Public Bank East Bay (“PBEB”), a cooperative venture among the cities of Oakland, Berkeley, and Richmond and Alameda County, is a viable entity which can:

- achieve fiscal stability within the first three years;
- provide loan support to underserved sectors of the local economy;
- address local infrastructure needs;
- reduce local government dependency on Wall Street banks;
- decrease local fossil fuel and other harmful investments;
- partner with local financial institutions to the economic and social benefit of all;
- mitigate economic inequity in the region;
- serve as a model for public banks around the state and the country.

This Study and the accompanying financial projections show that the PBEB can achieve these goals while operating in a conservative and secure way, minimizing the financial risk to its sponsor governments.

The PBEB will be a low-overhead enterprise, with a small staff to run lending programs in partnership with existing local financial institutions. The lending programs will include:

- making loans to local small businesses, in cooperation with local community development financial institutions (CDFIs) and local banks;
- providing nimble capital to non-profit affordable housing developers for property acquisition, bridge financing, or foreclosure prevention, as well as financing for rehabilitation projects;
- extending credit to help the East Bay do its part to ameliorate the climate emergency, financing building electrification as well as small-scale renewable energy installations;
- supporting municipal finance, by providing modest credit to the member governments for small projects.

As the Bank grows and adds capacity, it will also be able to provide an alternative to Wall Street banks for cash handling for the member governments. Through careful management of these programs, the PBEB can deliver benefits worth many times the initial investment, and provide a vibrant institution that is a vital part of the East Bay economy for decades to come.

Introduction

Why The East Bay Needs a Public Bank

The current national, California, and East Bay financial systems are not meeting the needs of the East Bay. The urgent issues we face include:

- The ongoing climate crisis is inescapable. Localities cannot wait for a paralyzed federal government to deliver, and must find ways to increase local funding for initiatives that will dramatically reduce greenhouse gas emissions and increase availability and affordability of green energy solutions.
- The Bay Area is experiencing a housing crisis of extreme scale, visible along so many major thoroughfares. Quality affordable housing that does not accelerate displacement is desperately needed, and solutions cannot take ten years to ramp up. New local funding, along with streamlining availability of existing funds, is badly needed.
- BIPOC small businesses lack funding. Nationally the unmet credit needs among entrepreneurs of color are 15-25% higher than those of white entrepreneurs.¹
- Worker cooperatives, employee-owned firms, community land trusts, and other community-based models of ownership are poised to grow in scope and scale, but they are often unable to access traditional bank funding.

Financing alone cannot solve these problems. However, access to inexpensive capital will inevitably play an essential role in all solutions. A public bank—that directs public assets to solve public problems—*can and will* be part of a solution that helps participating cities and counties tackle these issues, and more, by adding a component of financial infrastructure to the existing mix.

Responsible and responsive banking of public funds will be an invaluable tool in transforming the current system to one that works for the people who need it. This Study demonstrates that the East Bay region of Northern California can be the home of a stable, productive, and transparent public bank—the Public Bank East Bay—which can help its region address essential structural problems.

Wall Street banks which handle the vast majority of public funds in the East Bay and around the country have consistently placed profits and shareholders over the needs of everyone else. Self-admitted felonies by banks resulted in nearly \$2 billion dollars² paid in fines and fees over the past 20 years. Additionally, bank policies such as subprime mortgages and financialization led directly to the housing bubble and financial crisis of 2008 that devastated families and communities. People of color disproportionately lost wealth during this crisis. Banks were held accountable trivially if at all in the recovery from the crisis, and continued to play fast and loose with customers' money. The phantom account scandals at Wells Fargo (where the bank created millions of accounts for customers without their knowledge or consent) demonstrate how bank customers are often at risk from the banks themselves. Wall Street takes people's money, uses it to gamble in their high-stakes casino, and leaves customers holding the pieces

¹ Small Business Survey 2019.

² <https://bettermarkets.org/newsroom/new-report-details-first-time-20-plus-year-crime-spree-six-largest-wall-street-banks/>

when they lose. Sad experience shows that states and municipalities are equally at risk as customers of private banks.³

Just as online commerce and big-box wholesale stores have decimated local businesses, including hardware, stationery, and book stores, small banks have been driven out of the market by Wall Street banks, or have been bought out or merged into larger banks. This has left banking deserts around the state, including in the East Bay. In 1994, the state had 500 community banks, but by 2017 it had only 124⁴. While this corporate concentration may have brought convenience for some customers, it has caused pain to many others, in the form of less accessibility, fewer options, higher fees, and greater disconnection of banks from community priorities and control. Moreover, banks do not merely *hold* money, they *do* things with it.

The major role of Wall Street banks in funding the fossil-fuel industry underscores the profound mismatch of these banks with the values of our region. Many jurisdictions, including Alameda County, Oakland, Berkeley, and Richmond have voted to divest public funds from fossil fuels, but have been unable to do so, due to their inescapable relationships with Wall Street banks. For example, Alameda County, which has voted to divest, currently has 30% of its funds in banks with heavy fossil fuel investments, including \$300 million in JP Morgan Chase alone.

As easy as it is to enumerate the active ways in which the money-center banks harm our lives and our communities, it is just as important to examine what they fail to do. Over the past few decades, more and more bank revenue has been generated by fee income, i.e., direct charges made to bank customers for the service of handling money. This income has increased in importance, because interest income entails risk to the banks in a way that fee income does not. Consequently, bank management has emphasized fees over loans. In practice this has caused the big banks to cut back underwriting all but the most standard loans, eliminating much if not all of their lending risk. Plenty of mortgage credit is available; however, this market is highly controlled, subsidized, and insured by the federal government. Business credit is plentiful for big corporations, especially those large enough to access the bond market. But other market demand—including extending credit to BIPOC- and women-owned small businesses, worker cooperatives and land trusts, innovative green energy initiatives, and climate resilience measures—goes unmet. Even affordable housing, for which oceans of capital are theoretically available from federal, state, and private sources, suffers from a tragic lack of nimble capital that does not take years to approve.⁵ The consequences to the nation’s economy have been severe, with bank credit to small businesses shriveling, and rising prices for mundane and low-risk municipal investments.

Transformative financial programs are essential to comprehensive solutions to these problems. By keeping overhead low, partnering with local financial institutions, reinvesting revenue to the business, using inexpensive public monies, and not being bound to reap high profits, public banks can make credit more available and more equitable, underwrite new initiatives, and serve as clearinghouses and

³ Sgouros, T, “Predatory Public Finance”, *The Journal of Law and Society*, 17:1 (2016), pp 91-102. <https://law.wayne.edu/academics/co-curricular/journal-law-society>

⁴ <https://www.bankingstrategist.com/community-banks-number-by-state-and-asset-size>

⁵ Vitaly important in a state where approximately 160,000 people are experiencing homelessness on any given day. See ⁵<https://www.usich.gov/homelessness-statistics/ca/>

conduits for more efficient and restorative uses of public money. Public banks cannot fully address these crises on their own, but public banks are an essential component of addressing them.

In countries around the world, including Germany, Costa Rica, India, Vietnam, and many more, publicly owned banks have helped create and direct new financial tools to serve public needs. The Bank of North Dakota is the only major publicly owned bank in the United States. In its century of existence, it has maintained and strengthened community banks, reduced student loan debt, compensated for the 2008 financial crisis, and equitably distributed federal pandemic relief—and shown substantial financial success while doing so.

The public banking movement is growing around the country. California has led the way with the California Public Banking Act (AB 857), which authorizes the formation of public banks to engage in the lending of public monies under public ownership. This legislation sets out the path for PBEB to open its doors.

Mission Statement

PBEB will invest public monies from participating governmental agencies to meet the needs of local communities. PBEB will seek to return a reasonable, but not excessive, profit to its stakeholders by making economically sustainable loans and providing a high level of service to its partners and stakeholders. It will adhere to the principles of the United Nations Declaration on the Rights of Indigenous People, and will prioritize environmentally regenerative, culturally equitable and participatory practices that reverse discrimination against members of economically and socially marginalized communities.

The Bank's decisions will be based on five key values:

- **Equity:** We are committed to a public bank that acknowledges and attempts to relieve the contemporary and historical burdens carried by disenfranchised communities, including low-income communities of color and other marginalized groups.
- **Social Responsibility:** Decisions regarding loan recipients, sponsored projects, and who benefits from PBEB policies will all prioritize investing our money into the wealth and health of local communities and the environment.
- **Fiscal Responsibility:** As a steward of public money collected by depositing agencies from individuals and businesses in the East Bay, the Bank is committed to compliance with the directives and policies of state and federal regulators. It is equally committed to active and constant attention to managing risk and making fiscally responsible decisions so as to maintain PBEB in a safe and sound condition.
- **Accountability:** The Bank is accountable to the residents of the East Bay, who have a right to fully transparent explanations of PBEB's actions and choices.
- **Democracy:** The Bank will be governed using inclusive and participatory processes which consciously and intentionally adhere to the values/principles listed above.

What Will PBEB Do?

PBEB's primary function is to employ public funds to meet public needs. This will entail working with member government agencies (initially the cities of Berkeley, Oakland and Richmond, and the County of Alameda) to gradually redirect tax and fee assets and locally generated funds to:

- *increase available capital to the local economy* with a focus on affordable and community-controlled housing, small-business and worker ownership lending, green infrastructure projects, and cost-saving funding of municipal bonds.
- *support equitable economic development* in the region. By prioritizing the least served businesses and by attending to local infrastructure needs, the Bank can provide money to various enterprises and initiatives that are currently neglected, jump-starting needed changes with increased resources.
- *manage and invest municipal funds safely and cost-effectively*. Safeguards, regulatory oversight and conservative loss reserves will make the Bank a reliable guardian of public funds.
- *enable local governments to redirect public funds from Wall Street banks*. The nation's big banks invest our money in places that are not only irrelevant to our communities but are actively harmful to them. Those practices cannot change without adequate alternative institutions to manage those dollars.
- *harness public funds to invest in public goals*. Traditional banking models incentivize decision-makers to prioritize profits above all else. PBEB will remain committed to financial viability, safety and solidity, balancing the essential need to be profitable with its commitment to our region's social needs and the Bank's social mandates.
- *nimbly, transparently, and democratically modify these goals as local priorities change*.

To meet these goals, PBEB will partner with and complement local financial institutions, such as Community Development Financial Institutions (CDFIs), credit unions, and local community banks⁶. PBEB will be managed by professionals experienced in banking and community finance, independent of the member county and cities. It will have a strong democratic and multi-stakeholder operational and governance structure, including a Board of Directors, with community members and representatives of the governmental agencies filling a majority of seats. The mission, operations, and decision-making of PBEB will ensure financial viability, as demonstrated in this Study, while prioritizing community value above maximized profit.

A democratically organized Bank with strong community oversight, PBEB will be governed by a Board of 15 people who bring banking and financial expertise along with social and political experience. The Board members will have a varied knowledge base and a shared commitment to representing and meeting the needs of systemically underserved communities – and all East Bay residents. Meetings will be public except for discussion of private customer information, personnel matters and appropriate regulatory issues, and the Bank will hold a highly publicized annual meeting to share results with the community and get feedback on future priorities. The Bank and the Board will also adhere to the highest standards with regards to records accessibility and transparency.

A discussion of governance issues is on p. 35 and a detailed governance plan is included in Appendix A.

⁶ A strong positive for PBEB which is also required by AB 857

Programs

The purpose of the PBEB is to redirect a portion of the cash and investments of its member governments from bonds and CDs issued by Wall Street banks⁷ to local lending. This study lays out four initial target programs: housing, climate, business lending, and municipal finance. The credit market needs—and the outline of a plan for fulfilling them—are described in the following sections, and referenced in the financial projections.

A rough market analysis was done for each of the four target lines. For housing, climate, and business lending, the analysis included interviews with market participants and review of various reports and studies made on the subject. The review of municipal borrowing added an analysis of public bond documents as filed on the EMMA website of the Municipal Securities Regulation Board.⁸

Housing

The lack of affordable housing in our country has reached crisis level. According to Alameda County's 2021 Affordable Housing Needs report,⁹ 52,254 low-income renters do not have access to an affordable home and 71% of extremely low-income households are paying more than half of their income in housing costs. Renters in Alameda County need 2.9 times the minimum wage to afford the average asking rent. The housing crisis has been growing over time as housing construction has slowed¹⁰ and has been exacerbated by the Covid-19 pandemic. Over the course of the pandemic, nationally, rents have increased 11.4% in 2021 compared to about a 3% annual increase pre-pandemic.¹¹

The homeownership rate for Black and Hispanic residents stands at 45.1% and 49.3% respectively. For whites, the rate is 73.8%. Moreover, this gap has not changed significantly over the 50 years since the Fair Housing Act. Similar inequities are also found in home ownership by income level.

As is evident in places like the Bay Area, the high cost of housing in many areas—especially those experiencing significant levels of real estate speculation—forces many lower-income families out of established, often better-resourced communities and into concentrated pockets of poverty within the city or in a neighboring jurisdiction.

Lastly, there is evidence of significant generational inequality, with younger Americans unable to access homeownership at the same rates as previous generations. This is particularly true for the "millennial generation" (roughly born between 1981 and 1996), which has significantly lower median

⁷ Over \$300M (4.5%) of Alameda County's portfolio is invested in JP Morgan alone according to its annual reports.

⁸ <https://emma.msrb.com>

⁹ <https://chpc.net/resources/alameda-county-housing-need-report-2021/>

¹⁰ <https://www.nytimes.com/2021/08/10/opinion/housing-crisis-eviction.html>

¹¹ Research for this section included interviews with directors and staff at ten of the largest non-profit developers of affordable housing in the service area. This is a \$500M per year market, and the demand is still growing.

wealth than previous generations did at the same age and high levels of student loan debt. Many millennials are disproportionately burdened by housing costs, and fewer are able to purchase homes.¹²

Short-term financing for housing development and preservation

The goal of increasing the region's stock of affordable housing will not be reached merely by increasing the amount of available credit. A great deal of credit is available for affordable housing development, but the credit that is available does not always match the credit that is needed. In addition, securing the credit and managing all the other logistical aspects of building an affordable housing development is an arduous and complex process that can take three to five years from the time a property is identified to when the units are move-in ready. A single affordable housing development might rely on over 20 sources of funding.

Unfortunately, though both government and private credit is available in theory, it is difficult or expensive to find credit that can be deployed quickly, which can allow a non-profit developer to act on a property that comes up for sale suddenly, or to participate in the foreclosure or tax sale markets to preserve affordability of properties that come up for sale. Perhaps more important, a housing agency with a flexible and readily-deployed source of capital would also be better equipped to prevent those foreclosures or tax sales, and the cascade of negative impacts that result for the people who lose their homes. Foreclosures can also cause harm to neighborhoods and financial institutions by lowering neighborhood home values. During the pandemic, a moratorium was placed on foreclosure actions, however, that moratorium has been lifted and foreclosures are beginning again.

Housing agencies also frequently require bridge finance, to get a project underway while the longer-term financing is worked out. This tends to be expensive. Offering non-profit housing developers a flexible line of credit will help them obtain the cash they need efficiently, and will allow agencies the flexibility to deploy credit quickly. PBEB will coordinate this program with other financing agencies. Many of the developers interviewed for this study identified permitting and grants as a major obstacle to building more affordable housing and expressed hopes that as a public bank, PBEB would be in a better position to reach out to local agencies and governments, to help navigate public permits and grants and ensure ongoing municipal support for housing projects, saving money for projects overall.

The credit line will work as credit lines do for individuals, with a credit limit and a repayment schedule for each drawdown of credit based on a 3-5-year amortization of the balance. Many non-profit developers have equity in past developments which can be used to help secure such a credit line, and the acquisitions made with it can also be pledged as security. Participating in the housing market, and the security pledged for this housing credit could allow the PBEB to access the resources of the Federal Home Loan Bank, a potentially valuable source of collateral. This form of credit is a departure for this market, so it can be expected to take a bit longer to build out this component of the Bank's portfolio.

Affordable housing rehabilitation and other housing finance options

Affordable housing rehabilitation is another largely unmet need in the East Bay.¹³ Many affordable units were built decades ago and are overdue for repairs to their roofs, cabinets, plumbing, electric service,

¹² <https://thenextsystem.org/learn/stories/revisiting-community-control-land-and-housing-wake-covid-19>

¹³ <https://baysfuture.org/time-to-fill-a-crucial-gap-in-affordable-housing-financing/>

and more. This kind of lending is smaller than new construction or home purchase finance, typically in the tens of thousands per unit, and the terms also tend to be much shorter: in the 5-10 year range, or perhaps 15 for a roof. This is compatible with the strategy of focusing on shorter term loans in the formation stage of the PBEB. Some of the same agencies who might be line-of-credit clients could be partners to take on the underwriting overhead.

Financing Accessory Dwelling Units (ADUs) is another area where traditional housing finance is largely unavailable to meet current and future needs.¹⁴ Given the state of the housing market, this demand could be quite substantial and an important component to addressing affordable housing in the East Bay. The referenced study identified over 15,000 parcels where an ADU would be possible, so this has potential to add a substantial amount of housing.

Providing this credit, however, will require substantial underwriting effort, as well as navigating some legal issues, especially concerning the value of existing mortgages on properties where an ADU is proposed. From a policy perspective this is an important area to address, but providing this credit will require an investment in time and expertise beyond what is envisioned at the early stage of the PBEB. Without an obvious partner to absorb that overhead, this is not covered in this Study and the financials. It is mentioned here as a fruitful early place to expand PBEB business as the Bank Board and management deem feasible.

Climate

At this late date in the progress of the climate crisis, there is not nearly enough credit available to reduce the carbon footprint of our society. The PBEB can help by focusing funds on important climate goals, like reducing the carbon footprint of our buildings and adding renewable energy production capacity.

Electrification of residential buildings

Buildings generate an estimated 40% of annual global climate emissions, with building operations being responsible for most of those emissions. Though addressing the carbon contribution of individual buildings may seem unimportant, this is not only a vital step towards a low-carbon economy, it is also among the lowest-hanging fruit.¹⁵ Multiple plans have been developed in the Bay Area to decarbonize existing buildings. Electrification of new and existing buildings is a critical aspect of these plans. The City of Berkeley's Existing Building Electrification Strategy recognizes that:

"Beneficial electrification takes this idea further and ensures that electrification results in reduced GHG emissions, more grid resiliency, and lower energy costs for residents. With the availability of renewable electricity associated with Senate Bill (SB) 100 and EBCE, this switch to electrification, if done equitably, opens up the potential for significant benefits including reductions in GHG emissions, improved health and safety, cost savings, and more."¹⁶

¹⁴ https://communityinnovation.berkeley.edu/sites/default/files/a_solution_on_the_ground_report_9-27.pdf

¹⁵ <https://www.rewiringamerica.org/policy/rewiring-communities>

¹⁶ https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/Draft_Berkeley_Existing_Bldg_Electrification_Strategy_20210415.pdf

Over 42 cities in California have banned fossil fuel infrastructure such as natural gas heating systems in new construction, however electrifying existing buildings remains a challenge. Retrofitting existing buildings is more costly and complicated than electrifying new buildings. From a fiscal perspective, there is plenty of evidence for long-term savings associated with building electrification. Unfortunately, available and affordable financing of upfront costs is difficult to obtain. PBEB will provide low-cost credit to address this community need.

Providing low-cost electrification loans to residential properties owners will also strengthen local economies by creating an economic boom for local businesses and tradespeople. Electricians, plumbers, and carpenters are just some of the professions that will benefit from the increase in demand for residential home conversions.

Estimates from across the region give a glimpse of the size of the need for financing electrification loans. In a recent report, the City of Berkeley estimated the average cost of transitioning a residential building to be \$30K, with an estimated 32,500 existing residential buildings. The 2020 census for Alameda County counted approximately 625,000 residential housing units (not buildings) which would put the cost of electrification somewhere over \$10B.

Compared to many other kinds of credit, retrofit loans are relatively small with terms of five to ten years. Many will be only a few thousand dollars, though some will reach the tens of thousands. To keep the cost of underwriting as low as possible, the assessment of eligibility and approval can be partially automated, with much of the paperwork effort delegated to software run by the plumbers, electricians, and HVAC contractors who will be the customer's point of contact.

For security, customers can be offered a choice between an unsecured personal loan, repaid via an additional charge on their utility bill¹⁷ and a property lien, which might merit a lower rate. An on-bill tariff will also make the lending more responsive to the cost-effectiveness of the proposed improvements instead of the economic resources of the bill payer.

Costa Rica's BPDC serves as an example of the successful public financing of energy transition.¹⁸ There, the public bank financed a large-scale conversion to LED lighting by analyzing the potential cost-savings of the switch and then granting low-interest loans based on those savings. The switch to LED allowed the project sponsor to receive a carbon neutral certification and continues to provide additional cost reductions.

With a substantial push for building electrification, the potential size of loan demand for electrification will be much greater than the PBEB as proposed can accommodate. This can be addressed by carving out some subset of demand for intensive attention, either by geographic area, or perhaps by the type of

¹⁷ We are assuming the cooperation of the utility over issues like cash flow and the locus of default risk. These issues have been overcome in several other states and territories, e.g. <https://www.myrec.coop/bill-tariff-energy-efficiency-program>. California's AB 841 contains incentives for in-state electric utilities to adopt measures like these, and directs them to obey PUC directives to establish them.

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB841

¹⁸ <https://www.tni.org/en/publication/how-public-banks-can-help-finance-a-green-and-just-energy-transformation>

appliance (e.g. loans for batteries, or for heat exchangers). The financial projections indicate the prospective PBEB capacity, and assume that the main problem facing policymakers will be to contain the demand for electrification loans rather than to find borrowers.¹⁹ Cooperation from local utilities with either incentives or obligations to improve energy efficiency, in the form of grants and/or paying for some of the work, is not calculated into these projections because it requires substantial negotiation. If this were to be successfully arranged, the scope of this project could grow significantly.

Other green energy finance

Finance is needed, both to increase the green energy supply, and for load-balancing features, like in-house backup batteries, that will allow the existing electrical grid to accommodate that increase in supply without burning fossil fuels. Large solar and other energy projects take time to come online, while smaller projects can be built and installed relatively quickly.

According to the consulting firm Wood Mackenzie, a national goal of 50% renewable energy will require more than a trillion dollars in finance capital.²⁰ California represents 6-7% of the national electricity market,²¹ and the state's own goal is even more aggressive, seeking to achieve 60% renewables by 2030 and 100% by 2045.²² The state's financing needs are thus in the several tens of billions for the next decade, and the East Bay's share of that is in the range of \$3-7B. Obviously not all of that financing falls within the PBEB service area or initial target projects, but any appreciable fraction represents several hundred million in demand for financing, providing a substantial opportunity for the low-cost capital the PBEB can provide.

We recognize the current controversy around home solar policy costs proposed by the California Public Utilities Commission (CPUC). If approved, that will discourage the construction of small renewable installations in the near term,²³ however, the larger goal may be expected to prevail over the next 2-4 years unless the state also disavows its renewable energy targets. The financial projections are based on providing credit to small-scale renewable installations with the expectation that, though the details may change substantially based on possible state action, the demand will remain substantial.

Another benefit to focusing on renewable energy installation in partnership with local lending institutions is the potential for funding to be included in upcoming infrastructure legislation and

¹⁹ Alternatively, one might use the bond market to supply the lion's share of lendable funds, and use funding through the public bank as a liquidity reserve for that lending program and to augment the loanable funds. This would allow the PBEB to meet much more of this demand than is envisioned in this proposal, and reduce the risk to the bondholders, which would result in a lower cost of funds. This would be a substantially different institution than is proposed in this document.

²⁰ Presentation to the American Clean Power Association, December 2020. <https://cleanpower.org/wp-content/uploads/2021/02/american-clean-power-renewable-energy-and-infrastucture-policy-analysis.pdf>

²¹ https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_es.html&sid=US

²² <https://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx>

²³ <https://kesq.com/news/local-news/2021/12/17/residents-heated-over-california-legislators-proposal-to-rollback-solar-incentives/> (accessed 1/26/21)

regulation to benefit “green banks.”²⁴ Designating PBEB as a green bank may open up other funding opportunities as state and federal energy policies evolve.

Business lending

The severe lack of access to capital for small businesses, in particular for very small and woman- and BIPOC- owned businesses, is well documented nationwide and in the Bay Area.²⁵ In 2019, the Federal Reserve Bank of Atlanta published a report showing that Hispanic- and Black-owned businesses are less likely to be approved for bank loans and receive less money when they do.²⁶ It estimates that nationally the unmet credit needs among entrepreneurs of color is 15-25% higher than those of white entrepreneurs. These findings were confirmed in a more recent study by the Federal Reserve in 2021.²⁷ In an academic study from 2021 researchers showed that Black-owned businesses received loans that were 50% lower than observationally similar white-owned businesses.²⁸ The racial disparity in small business lending worsened during the pandemic, where Black-owned businesses were more likely to shut down²⁹ and less likely to receive government support through the Paycheck Protection program (PPP).³⁰ An SBA report has shown that in 2020 Black-owned businesses received only 2% of PPP loans while white-owned businesses received 83%.³¹

This racial disparity in small business lending is structural. A perceived higher risk-level for the part of the population that has been historically excluded from the formal banking sector, the generational impacts of poverty (e.g. entrepreneurs of color often have few assets to pledge as collateral for loans, and less wealthy family networks to tap into for starting a business) as well as a general lack of trust in banking institutions among people of color are some of the factors resulting in the lending discrepancy.

Typically, the loans needed by BIPOC-owned small businesses are too small for commercial banks to earn a profit. The cost to originate and service an individual loan is almost the same for a \$25K loan as it is for a multi-million-dollar loan, so Wall Street banks as well as community oriented local banks and credit unions, more often than not choose the larger loan, as they are structurally mandated to fulfill their private shareholders’ expectation for competitive profit rates. Out of \$1.1B of commercial loans

²⁴ [Clean Energy Finance: Green Banking Strategies for Local Governments \(epa.gov\)](https://www.epa.gov/clean-energy/clean-energy-finance-green-banking-strategies-for-local-governments)

²⁵ See <https://cameonetwork.org/microenterprise-research-policy/> for a rich collection of reports on this topic.

²⁶ Federal Reserve Bank of Atlanta (2019): Small Business Credit Survey.

<https://www.fedsmallbusiness.org/medialibrary/fedsmallbusiness/files/2019/20191211-ced-minority-owned-firms-report.pdf>

²⁷ Federal Reserve (2021): Small Business Credit Survey. Report on firms owned by people of color.

<https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/sbcs-report-on-firms-owned-by-people-of-color>

²⁸ Atkins, Cook, Seamans (2021): Discrimination in lending? Evidence from the Paycheck Protection Program. In Small Bus Econ, July 2021, <https://link.springer.com/content/pdf/10.1007/s11187-021-00533-1.pdf>

²⁹ [National Geographic Article](#)

³⁰ [Brookings Article](#)

³¹ See Wilmuth (2020): “The Effects of the COVID-19 Pandemic on Small Businesses.” SBA Office of Advocacy. See also the report by NCRC (2002): [“Lending Discrimination within the Paycheck Protection Program”](#)

lent among the six community banks headquartered in Alameda County, only \$93M (7%) was issued in amounts of \$100K or less.³²

In a recent report created by the Bay Area Association of Black-Owned Businesses for the Friends of the Public Bank East Bay, these general observations have been confirmed through surveys of the borrowing needs of Black-owned businesses in the East Bay region.³³ The majority of surveyed businesses operate with revenues less than \$75K, implying needed loan amounts of well below \$50K. Many Black business owners reported a lack of trust in banking and government institutions, including fear of being rejected and reluctance to carry debt in general. These concerns often keep business owners from applying for the credit that might be necessary to grow. Trustworthy institutions rooted in the community, low-interest loans, ease of access, flexible repayment terms, and more situational evaluation of the risk created by borrowers with lower-than-typical credit scores can all help address these concerns.

One type of lending institution is currently providing such loans: CDFIs are organizations, frequently nonprofit, with the federally assigned mission to provide loans to people and businesses underserved by the traditional banking system. The Bay Area has one of the highest densities of CDFIs in the country with more than ten CDFIs headquartered, and many more actively lending, in the area (Appendix D). These institutions have a strong track record of distributing a majority of their funds to BIPOC- and women-owned businesses, originating loans with amounts as small as \$5K, and providing technical assistance to help borrowers succeed. This includes determining the right type and amount of financing and writing a sound business plan. The goal is simply to help borrowers grow and succeed in their businesses—and repay their loan.³⁴

Providing loans and assistance with this level of engagement is costly. As they are committed to providing low rates, most CDFIs finance their operations primarily through grants and donations. Loan funds generally come from banks who are comfortable issuing loans to CDFIs at low rates (currently as low as 2-3%) in order to satisfy their Community Reinvestment Act (CRA) requirements. All CDFI executives we talked to confirmed that there is currently no lack of bank loans at low rates. In some cases, CDFIs commit to pay back 100% of the principal to the banks, even if the underlying borrowers fail, relying on grant money to cover any losses. This dependence on grants and donations to provide their loans often makes it challenging for CDFIs to grow, as they need to raise additional capital to enable additional debt financing for a growing portfolio.³⁵

³² This is based on an analysis of the latest published annual reports for these six banks (Fremont Bank, Summit Bank, Community Bank of the Bay, Beneficial State Bank, Gateway Bank, Metropolitan Bank.

³³ “Borrowing Needs of Black Owned Businesses” A report by the Bay Area Organization of Black Owned Businesses (BAOBOB), commissioned by the Friends of the Public Bank East Bay. See Appendix C for more information.

³⁴ Many representatives of CDFIs who we talked to during our research (see Appendix D) were proud of not letting any of their customers fail or rejecting them for their loan applications, instead they are doing everything in their capacities to help them succeed.

³⁵ See Simmons, Bereton and Klein (2021): [“Addressing the Capitalization and Financial Constraints of CDFI Microlenders”](#)

This situation is structurally unsustainable. Private banks satisfy their federally regulated requirements to lend to low-to-moderate income businesses without incurring the cost of issuing these loans themselves and without taking on any significant risk, while still returning profits to their private shareholders.³⁶ The CDFIs, on the other hand, do all the work necessary to issue these loans and additional services, operating with lower resources, distributing no profits, and financing their operations and loan losses through grant money.³⁷

When lenders complain they cannot find enough qualified borrowers, it means either that they have too few applications, or they do not feel comfortable with the level of risk implied by the applications they see. The PBEB can help with both aspects of this problem, primarily by providing an additional stable source of funding for CDFIs in the region at low interest rates (3% or less), in the form of a revolving line of credit. In the short term, this will provide additional financing sources for CDFIs eager to grow their portfolios. In the longer term this would guarantee the availability of low-cost funds in times when commercial banks might not be willing to lend at similarly low rates, thereby creating an interest rate ceiling that is crucial for ensuring the access to low interest rate loans for small businesses in the future.

Another way the PBEB can assist is to buttress the management of loan guarantees, to allow local lenders to be comfortable with applicants further out on the risk spectrum. One successful program for helping financial institutions occupy space further out on the risk spectrum has been the California Capital Access Program (CalCAP). Though the program has been a success for years, recent changes in both federal and state rules have made the program less attractive in some different ways.³⁸ The PBEB can address some of these issues, partly by providing a locus for joint management of guarantee funds for multiple local lenders, and partly by foregoing some interest rate revenue to offset the loss of state subsidy on participation loans. For example, a borrower might have loaned \$50K to an entrepreneur. Under CalCAP, both would contribute 2-3% to a guarantee fund, or about \$1250 each. With a participation loan, the originating bank would contribute half that amount, with PBEB making up the other half. To make up for the absent state subsidy, PBEB can offer half its revenue from that loan for the first two years. Unlike the state subsidy, this can be sustainable indefinitely, so long as PBEB can keep its underwriting and administrative expenses down.

The CalCAP program works best when the volume of lending is high enough for the statistics of a guarantee fund to work well. A 5% loss ratio for some category of a hundred loans held by multiple banks can still be devastating for a single bank that only made a few of those loans if they are unlucky enough to hold more than one default. PBEB can aggregate activity from a variety of small banks and CDFIs, thus spreading the risk across multiple banks.

³⁶ Default rates for CDFI loans are generally not higher than for typical bank loans. For 2019, the delinquency rate of all reported CDFI loans was 1.08%. See the report by the Opportunity Finance Network (2019): "[Opportunity Finance Institutions Side by Side](#)", p. 5

³⁷ The Financial Times recently summarized this unsustainable situation well. Financial Times, 12/13/2021: "[Race and Finance: America's Segregated Finance Sector](#)".

³⁸

https://www.urban.org/sites/default/files/publication/98051/capital_access_programs_cdfi_case_study_on_the_california_capital_access_programs.pdf

In addition, PBEB could improve the climate for local small businesses in other ways, not currently reflected by this Study's financial model.

- PBEB could purchase loans from CDFIs, securitize them and sell them on the secondary markets to banks and other lenders, thereby freeing up the balance sheets of CDFIs that will allow them to make more loans. Centralizing the purchase, securitization and sale of these small assets at a public bank could reduce costs for participating community banks and CDFIs that are already doing these types of transactions.³⁹ Given that these credits would mostly be CRA eligible, a high demand on the secondary market for these loans is almost guaranteed.
- PBEB could help smaller CDFIs or other non-profit lenders with technical loan infrastructure. These lenders create great value in the time-intensive customer-centric interactions with the customers focusing on their actual needs; the training provided in understanding their borrowing needs, business plan, accounting, growth, and much more. The technical infrastructure for distributing and servicing loans on the other hand could probably be standardized and centralized, thereby reducing the cost of lending for CDFIs.
- PBEB could act as a referral agency supporting the growth of CDFIs. Every single CDFI representative we talked to mentioned a lack of awareness among small business owners in the Bay Area of the existence of alternative and mission-oriented lenders like themselves. Public agencies, such as cities' economic development offices, are much more known to small business owners. By developing a trusted public brand and cross-subsidizing significant marketing and platform building, PBEB could take on the role of referring incoming loan inquiries to the most relevant CDFI or community bank in the area.⁴⁰

Approximately [ten CDFIs](#) headquartered in the Bay Area focus on small businesses (primarily low-income, BIPOC-owned). They (very roughly) have originated approximately \$50M in such loans over the last year. The East Bay makes up about 1/3 of the Bay Area by population, so the CDFI loan volume in the East Bay can be estimated at about \$17M. Beyond the CDFIs, the six community banks located in Alameda County have around \$90M in small business loans (loan amounts below \$100K) on their books. Assuming 10-year terms, this is about \$9M in business each year. Adding credit unions and other lenders implies as much as \$30M in small business lending in the PBEB service area each year.

If partnerships with the PBEB could expand the range of businesses to which these CDFIs could lend, either by lowering the interest rate, or providing access to a guarantee fund, this sum could increase substantially, and the PBEB might be able to grow into a share of that expansion. This is incorporated into the financial projections.

³⁹ Michael Herne from LISC made the case for creating a secondary market for CDFI loans. Herne (2021): [“A Quantum Leap” for CDFI Funding: The Potential of Securitization](#).”

⁴⁰ Darien Louie's report for Alameda County in 2019 came to a similar conclusion. While there are plenty of resources in the East Bay providing loans and assistance to small businesses, few of them are widely known. Darien Louie (2020): “Community Investment and Local Banking Initiative Study.”

Municipal finance

Most municipal borrowing is served by the nation's investment banks and the market for municipal bonds they have developed, and yet there is value in including municipal lending in the services provided by the PBEB, both to the Bank and to its member municipalities. In 2020 alone, the four initial member governments issued more than \$350M in bonds, not counting short-term tax anticipation notes. These bonds had a wide range of terms, ranging from 1 to 20 years, with a few even longer than that. The mid-to-longer term bonds have rates ranging from 2% to 3%. Some of these bonds are for taxable purposes, and those are for slightly higher rates, up to 4%. The nation may be entering a climate of somewhat higher rates than has been the case for several years.

From a government's perspective, bond debt is slow and relatively inflexible. A program must be thoroughly described in bond documents prepared months in advance, and once a bond is sold, there is no negotiation if the agency's programmatic needs or economic circumstances change. The bond market can be a huge resource to the government of a wealthy community, which can access seemingly endless quantities of money at low rates. Less affluent communities, however, can struggle to access affordable interest rates, even though the actual difference in risk to the bondholder is barely detectable. PBEB can relieve some of these burdens, providing a valuable asset to the member governments.

Though it will take time to grow into an institution that can address these needs at large scale, the Bank can help in a small way simply by being one additional buyer for members' municipal debt. This is especially true because it is not driven by maximizing profit and thus may be able to consider lending at a lower cost and set a ceiling on bond rates secured by the member governments.

Beyond that, with sufficient expertise and personnel, the Bank could actually underwrite some small bond issues. Apart from the basics of filing regulatory documents, the fundamentals of underwriting are twofold: finding buyers and making a market, which simply means promising to buy bonds in the future if some bondholder wishes to sell. (The price is not predetermined.) Collateral requirements mean the Bank will usually have the liquidity necessary to make a market for a modest issue because the state-required collateral can be repurposed to purchase these securities, which also count as collateral.

Finding buyers for these bonds is related to other prospective components of PBEB business. For example, the PBEB might choose to securitize and sell packages of small business loans or green energy loans, and presumably the buyers of those securities might also be buyers of the municipal bonds.

Being able to underwrite some bonds could potentially save on issuance costs for the member government and provide revenue to PBEB. It could also help the member governments in future negotiations with potential underwriters to have additional options for underwriting, especially an option that provides a degree of transparency about what it earns. Finally—and this gets to the original point of a public bank—it makes sense to be able to deploy public assets in service of important public policy goals. If a PBEB can make some of its member governments' own capital available for their needs, that is all to the good.

From the Bank's perspective, municipal debt is valuable not only for its security, but also for its predictability. Because of the bond market's inflexibility, bond issues are generally planned far in advance. This allows the PBEB to have a high degree of confidence in certain components of its business,

especially important during the opening phase of the Bank, where the guarantee of some income can allow the PBEB to show incoming revenue much sooner than is usual for a startup.⁴¹ In fact, recent years have seen a substantial amount of project finance move from the open bond market to private placements with banks for exactly these reasons, especially for smaller projects.⁴² These are attractive lending opportunities for any bank, not just a public bank.

The PBEB will not start at a scale that could accommodate hundreds of millions in loans per year, but setting a precedent that it will lend to its members may be useful, both to the member governments and to the Bank itself. However, if at its inception, the Bank were to buy a substantial amount of upcoming bond issues, it would have a fair amount of interest income available from the start, that could be liquidated as it builds out other components of its lending portfolio. It could buy this either by participating in a standard bond sale, or underwriting the bond and keeping some fraction of the issue.

Financing

The basics of a bank are the money invested in it and the money it invests. The first constitutes the bank's capital, the foundation of its financial stability, and the second, its funding, the deposits and invested funds with which the bank makes its loans. We describe these in turn.

Capitalization

Any bank must account for the capital with which it is begun. This is the original money invested in creating the bank, and that continues through its life to be the difference between the bank's assets and the deposits and investments that it must eventually return to others. The PBEB is to be a mutual institution, where ownership is by the members who invest "pledged" deposits that count as capital. These are deposits that are meant to be permanent.⁴³ Pledged deposit accounts do not bear interest, though the ownership share they represent can acquire additional value through retained earnings. Because of this, it is likely not within the purview of investment administrators alone to make such an investment, and will require an explicit appropriation by the relevant legislative body. These pledged deposits are to be fully collateralized.

The financial projections accompanying this report assume that the Bank begins with a commitment of \$40M in pledged deposits from the initial four member governments: Oakland, Berkeley, Richmond, and Alameda County. They show that running the Bank in a conservative and careful fashion can result in an institution worth over \$250M within a decade. Much of the activity of a bank—the number of loans issued, the amounts, the deposits and investments behind them—can be scaled arbitrarily. Some of the important costs, however, do not scale as conveniently. These components of the Bank's overhead

⁴¹ A more mature and financially stronger bank can offer more flexibility, but this will not be true at the beginning, at least not at the scale at which most bonds are issued. At smaller scale, it will certainly be true, and pieces of the original bond issue can be liquidated to fund such loans.

⁴² See Ivanov and Zimmerman, "[The Privatization of Municipal Debt](https://www.brookings.edu/wp-content/uploads/2018/08/WP45.pdf)" Brookings, 2018. The privatization is not all to the good, and can have the effect of impeding access to the bond market for financially weaker governments. <https://www.brookings.edu/wp-content/uploads/2018/08/WP45.pdf>

⁴³ The pledge contracts can conceivably be drawn to allow for gradual withdrawal as the Bank is able to replace the pledged monies with capital accumulated through operations, or through other contributions.

include the costs of staff, as well as the costs of the necessary data processing infrastructure, legal expenses, and regulatory compliance. The smaller the bank, the more difficult it is to amortize these costs and the more expensive the services it provides become. In effect, a policy goal of low-cost capital sets a minimum size for the institution. We have tried here to specify the minimum size necessary to carry these overhead costs and still achieve the policy goals of low interest rates and security.

Funding

This study does not address the question of municipal budgeting to identify how the initial investment might be appropriated by each member government.⁴⁴ As identified in the financial projections, the total amount constitutes less than half a percent of the collective value of the cash and investments of the four founding member governments, or about 0.75% of their collective annual budgets. The money could be appropriated from those investment balances as a one-time expense invested in the PBEB.

In addition to the bank capital, any bank plan must also account for the money to be loaned. For the PBEB, this will include liabilities in the form of tradable bonds, or notes of the Bank, as well as more traditional deposits. These bank bonds are specifically permitted by California code 53601(r), and are not required to be collateralized.

Large institutions widely use bonds and large denomination CDs as a store of value. These investments are secure and easily cashed in to provide necessary liquidity. The PBEB founding agencies are no different from thousands of other institutions. Alameda County has over 30% of its portfolio in money market funds and commercial paper, including over \$300M at JP Morgan. PBEB bonds will be another option available to the cash managers for storing their money and keeping it safe.

Investments like these are made for security and liquidity, not yield. The average rate of return for Alameda County is 1.12% (July 2020-June 2021) and the rate for the three cities is even lower; the rates PBEB investment returns will mirror the rest of the market. The agencies investing their money in PBEB notes will not have to sacrifice yield to do so. The use of these funds and their relation to the budgets and assets of the sponsoring agencies is explored further in the financial projections.

In addition to the member governments, the Bank can accept deposits, or note purchases, from area non-profits and foundations. These have considerable cash resources. According to publicly available tax disclosure forms and annual reports, the assets of twenty of the largest non-profits and foundations in the local area include more than \$1.3B in cash and equivalents, and billions more in equities and longer-term bonds. Moreover, institutions such as these (especially in health and education) are increasingly adopting the “anchor mission” approach to their relationship with local communities, and a significant part of this includes re-directing a portion of their financial assets to locally beneficial strategies (such as affordable housing, environmental sustainability, and economic development). Attracting only a percent or two of that cash alone could amount to tens of millions potentially available to the Bank. There are also many smaller non-profits and foundations in the area, from which PBEB might receive investable funds. These funds would provide valuable flexibility and be an important component to the liquidity

⁴⁴ All numbers referencing the cities’ and County’s finances in this section are based on an analysis of the last five years of the four agencies’ monthly treasurer’s/cash management reports published on their websites.

risk management strategy (see Risk analysis, p. 29). The financial projections reference deposits and investments made from these cash balances amounting to a bit more than one percent of the available cash.

The bank deposits from the member governments, including the pledged deposits, are required by California state law to be collateralized. This will provide a substantial amount of available liquidity that can be used for the management of the municipal lending operation, such as the market-making suggested there.

Finally, according to the state Treasurer's investment guidelines, doing business with the PBEB will require adjustments to the investment policies of its member governments. The City of Oakland has already made this change, approving the option to invest in public banks.⁴⁵

Expenses

The goal of the PBEB is to provide credit as safely and inexpensively as possible. To achieve this goal, lending programs are designed to capitalize on existing networks and partner banks, and to eschew expensive underwriting operations wherever possible. In similar fashion, the day-to-day operations are intended to take advantage of existing infrastructure and avoid expensive expenditure for buildings and real estate. Thus, the financial projections include minimal funds for facilities; the assumption is that most if not all of the Bank operations can be housed in facilities already owned by the member governments.

Similarly, the staffing projections beyond the C-suite employees use salary numbers comparable to those appropriate for senior civil servants and employees of local CDFIs in the area. People should be paid fairly—with the cost of living in the East Bay taken into account and commensurate with their expertise and ability to contribute to the operation of PBEB—but not exorbitantly. Details of the staffing levels and salaries can be found on the assumptions sheet of the financial projections.

Expansion and growth

The Bank can become an integral component of the financial management and policy apparatus of the member governments. However, it will have to grow substantially from its inception in order to fill that role and some constraints on the growth of the PBEB must be considered. At the outset, PBEB does not anticipate providing demand accounts (checking services) to its member agencies. Governments are high-engagement customers for this service, which requires complex bookkeeping and instantly responsive customer service. The PBEB may grow into this role for its members over time, at the discretion of its Board.

At this juncture, we have focused on keeping costs low, to demonstrate that keeping costs low is viable. A future PBEB board might choose to stress capital growth to a greater degree by increasing rates for some business lines. A mutual bank can only grow as fast as its investors—or its business operations—build up its capital. Since part of the policy goal is to provide credit as cheaply as possible, there will always be tension between providing low costs and increasing capital.

⁴⁵ Oakland ordinance: <https://cao-94612.s3.amazonaws.com/documents/IPFY22.pdf>

One growth strategy for the PBEB is to ask its member governments to increase the amount of capital and funding they invest. Though there is considerable room between the initial investment level envisioned here and the limits prescribed by the concentration risk treasury policies of the member governments, there are obvious limits to growth by that strategy even beyond concentration risk.

Another growth strategy is to increase the PBEB's capital by including other agencies as members. Though Oakland and Berkeley are the two largest cities in Alameda County, a dozen others could also join, representing growth potential of another 20-25% of assets. Alameda school districts and other quasi-governmental agencies (not counting BART) would add another 20-25%. BART alone would add 10%. Beyond the borders of Alameda, other nearby county governments and their cities and agencies offer the possibility of perhaps four to five times more investments. There is, therefore, ample room for growth by expanding membership.

Financial Projections

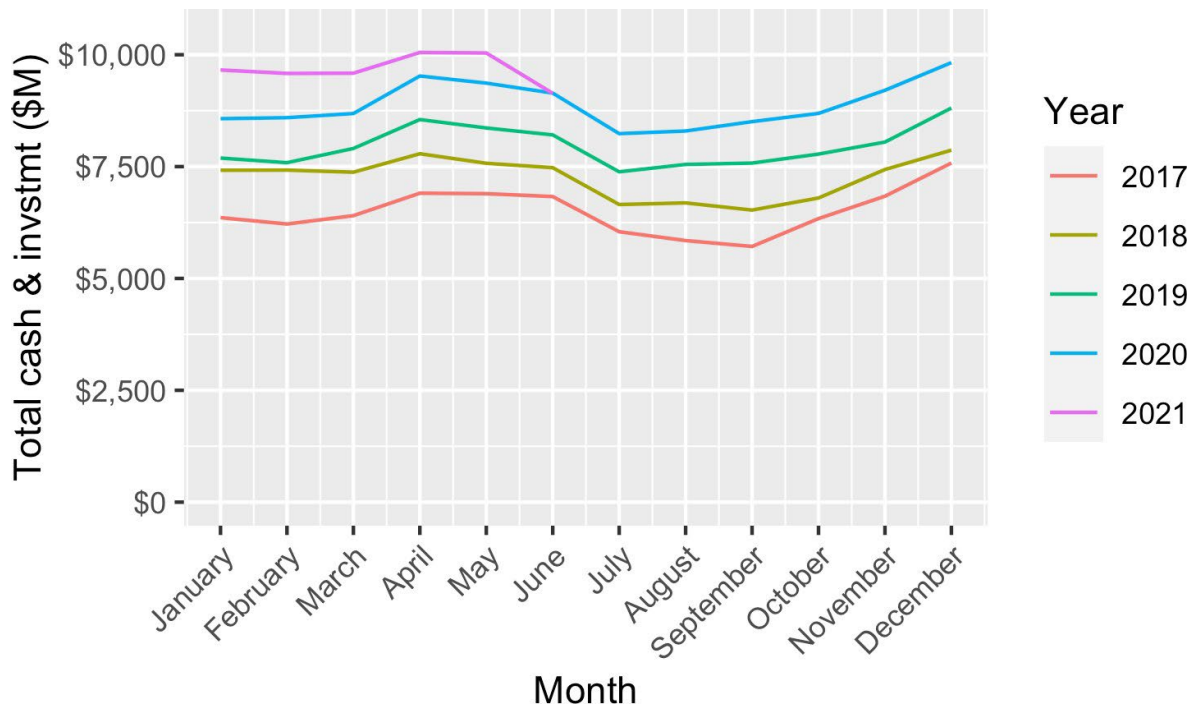
The following financial projections do not incorporate growth assumptions beyond increases in loan demand and modest increases in the amount of assets invested, such as increases in membership, or substantially higher investment levels. Given that we have projected that this small and conservative form of the Bank is viable, growth opportunities are likely to arise naturally.

The financial projections for the PBEB depend on an analysis of the available assets and estimates of the demand for credit in the various lines of business anticipated. A bank run in a conservative, steady fashion will result in a tremendous benefit to the member governments and their citizens.

The projections show a bank with assets approximately six times the size of its capital—substantially more conservative than the 10-to-1 or more that is typical of private banks—while still doubling in size over the course of its first few years, as it fills out its loan portfolio. Because these projections are conservative, the Bank may grow more quickly than these projections suggest.

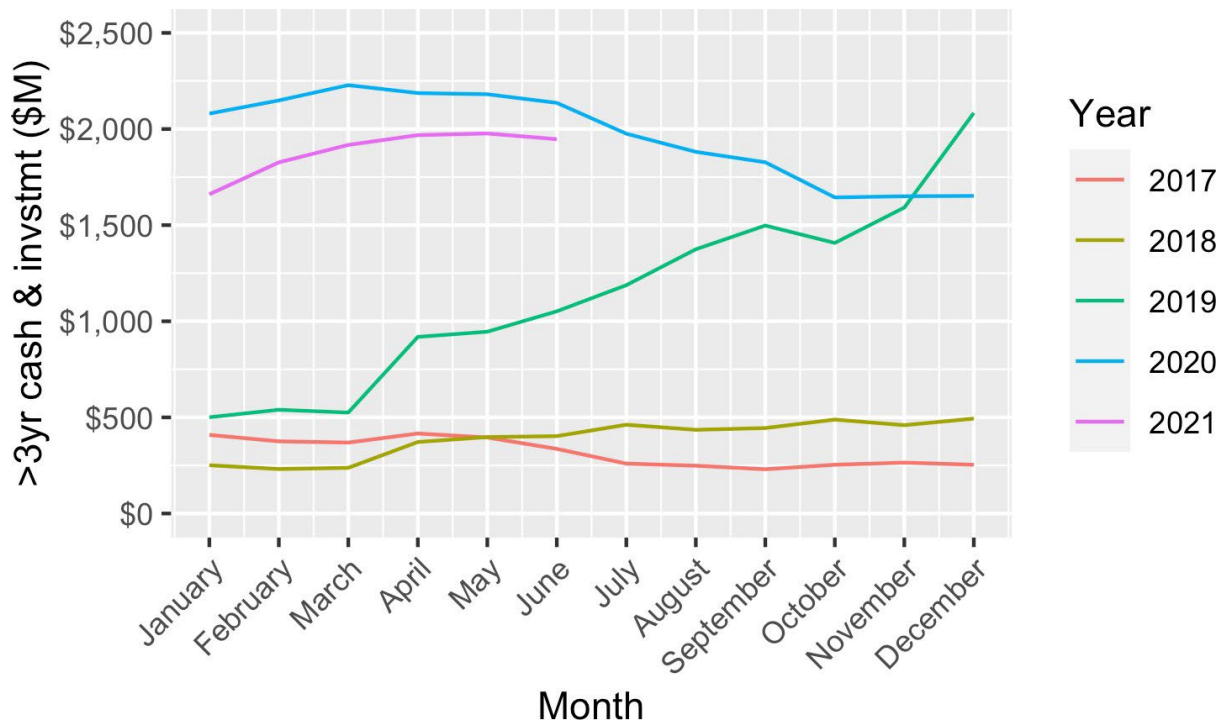
For clarity, the PBEB’s pledged deposits and accrued earnings are presented separately in the financial projections. How the earnings accrue to the Bank’s original investors and how much is reinvested is a matter to be determined by the member governments and Bank management.

The design of the PBEB assumes that some portion of the cash and investments of each of the member governments will be made available for investment by the Bank. In making estimates of how much might be available, it is important to consider not only the economic cycle of boom years and busts, but also the annual cycle of tax payments. Municipal governments in California tend to be flush with tax revenue in April and May of each year, and at a low ebb a few months later, as fall approaches.



The above graph shows the annual cycle of collective cash and investments for all four prospective member governments. At the low ebb in 2017, the treasuries of those governments still held more than \$5 billion. For the sake of financial projections, we assume that only a little more than 1% of the funds available for investment at the low ebb of August and September of that year might be invested in the PBEB in 2022. Except for the initial capital investment, these would be time deposits or notes, available for liquidation at the end of the investment term, though we assume that most or all are normally reinvested when their term is complete.

The sponsoring agencies already make longer-term investments with these funds. The graph below shows the levels of investments for terms longer than three years. Again, looking back to the low ebb of these funds in 2017 and 2018, there were more than \$250 million invested at these terms by the member governments. There is considerably more today, almost \$2 billion according to annual treasury reports, as the second graph indicates.



The financial projections envision these notes to be issued in 1, 3, and 5-year terms, currently estimated at 0.5, 1.0, and 1.5% interest. The projections assume that the member governments invest in the Bank proportionally to the relative size of their portfolios.

The projections show that with a \$40 million investment, the member governments will create a bank able to invest many times that number in their local economy. Assuming moderate growth and making conservative assumptions about investments, the PBEB will have loaned over \$120 million by year 3. By the end of a decade, the original investment will result in over \$250 million in assets, and almost \$400 million in loans made.

Basic financial projections are on the next three pages. The full spreadsheet of the financials is available on request; please email publicbankeastbay@gmail.com.

Balance Sheet

(dollar figures in thousands)

AssetsTerm Loans and Lines of Credit

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Municipal Bonds	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Electrification Loans	11,760	27,440	43,120	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Other Green Energy	1,323	3,087	4,851	6,651	8,451	10,251	12,051	13,851	15,651	17,451
Small business participation lending	2,026	4,637	7,248	9,968	12,688	15,408	18,128	20,848	23,568	26,288
Affordable Housing Loans	1,386	2,178	2,970	3,770	4,570	5,370	6,170	6,970	7,770	8,570
Pre-development Housing LOC	6,831	13,891	20,880	28,080	35,280	42,480	49,680	50,000	50,000	50,000
CDFI Small Business Lending LOC	1,584	2,360	3,129	3,929	4,729	5,529	6,329	7,129	7,929	8,729
Loan Loss Allowance	-113	-144	-30	-117	-158	-199	-240	-268	-294	-321
Total Loans and LOCs	74,797	103,449	132,168	152,281	165,559	178,838	192,117	198,530	204,623	210,716

Other Investments

Government Securities	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Mission-aligned short-term investments	32,491	12,849	12,104	3,388	2,216	1,842	174	1,557	3,502	5,697
Total Other Investments	72,491	52,849	52,104	43,388	42,216	41,842	40,174	41,557	43,502	45,697
<u>Clearance Account / Cash</u>	800	800	800	800	800	800	800	800	800	800

Total Assets	148,088	157,097	185,072	196,469	208,575	221,480	233,091	240,887	248,925	257,214
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Equity

Capital founding agencies	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Retained Earnings	-642	-518	-82	301	350	452	526	476	434	388
Total Equity	39,358	38,839	38,757	39,058	39,408	39,860	40,386	40,863	41,296	41,684

LiabilitiesAgency Loans

1 year loans	61,898	67,322	73,081	79,193	85,678	92,554	98,647	102,593	106,697	110,965
3 year loans	22,925	24,934	27,067	29,331	31,732	34,279	36,536	37,998	39,517	41,098
5 year loans	23,908	26,003	28,227	30,588	33,092	35,748	38,102	39,626	41,211	42,859
Total Agency Loans	108,730	118,258	128,375	139,112	150,502	162,581	173,285	180,217	187,426	194,923

Non-profit deposits

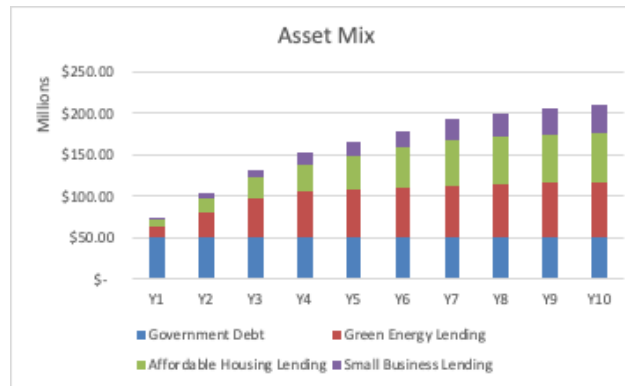
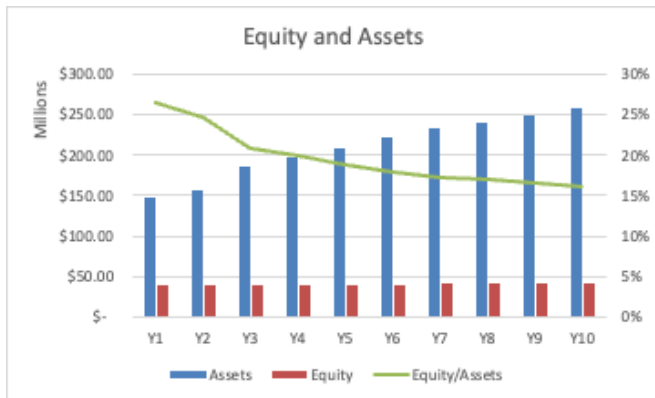
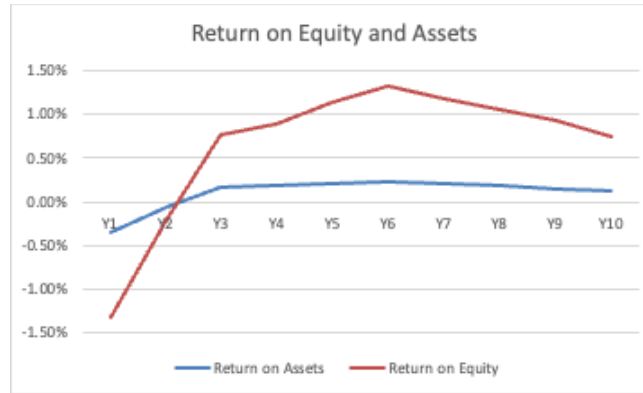
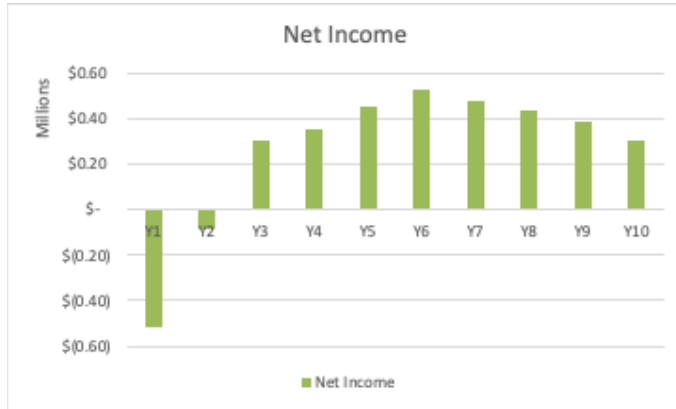
	0	0	17,940	18,299	18,665	19,038	19,419	19,807	20,203	20,607
Total Equity and Liabilities	148,088	157,097	185,072	196,469	208,575	221,480	233,091	240,887	248,925	257,214

Profit and Loss

(dollar figures in thousands)

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Income										
<u>Asset Income</u>										
Municipal Bonds	1,375	1,375	1,375	1,375	1,375	1,375	1,375	1,375	1,375	1,375
Electrification Loans	240	870	1,498	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Other Green Energy	27	98	168	266	338	410	482	554	626	698
Small business participation lending	54	186	317	498	634	770	906	1,042	1,178	1,314
Affordable Housing Loans	36	75	107	151	183	215	247	279	311	343
Pre-development Housing LOC	137	368	598	913	1,147	1,381	1,615	1,625	1,625	1,625
CDFI Small Business Lending LOC	36	57	79	108	130	152	174	196	218	240
Default Losses	0	-117	-262	-403	-490	-531	-572	-614	-641	-668
Total Loan and LOC interest income	1,904	2,914	3,879	4,908	5,317	5,772	6,226	6,458	6,692	6,928
<u>Other Investment Income</u>										
Government Securities	300	300	300	300	300	300	300	300	300	300
Mission-aligned short-term investments	1,059	526	369	85	55	46	4	39	88	142
Total Other Investment Income	1,359	826	669	385	355	346	304	339	388	442
Total Income	3,264	3,740	4,548	5,293	5,672	6,118	6,531	6,797	7,080	7,370
Expenses										
<u>Debt service expenses</u>										
Interest paid on non-profit deposits	0	0	56	91	93	95	97	99	101	103
Interest paid on agency loans	889	956	1,051	1,148	1,242	1,342	1,430	1,487	1,547	1,609
Total debt service cost	889	956	1,107	1,240	1,335	1,437	1,527	1,586	1,648	1,712
<u>Operations</u>										
Total Operations Expenses	862	964	997	1,031	1,066	1,102	1,140	1,178	1,217	1,258
<u>Staff</u>										
Total personnel cost	2,156	2,338	2,527	2,721	2,920	3,126	3,338	3,556	3,781	4,013
Total Number of staff	11	12	13	14	15	16	17	18	19	20
Total Expenses	3,906	4,258	4,630	4,991	5,322	5,665	6,005	6,321	6,646	6,982
Net Income	-642	-518	-82	301	350	452	526	476	434	388

Key Ratios



Staffing

The PBEB is designed to be as lean as possible. Programs are to be run in partnership with existing institutions and overhead is to be kept as low as feasible. Salaries are projected to be in line with comparable jobs in the government and non-profit sectors.

Following are short, high-level descriptions of the work involved in each of the envisioned programs.

Housing

Most of the labor involved in supporting the housing program will involve negotiating arrangements with the nonprofit affordable housing developers who want to take advantage of the line of credit program. We anticipate working with one to two dozen of these agencies over the course of the first three years. Much of the time involved will be in the original negotiation of agreements, including reviewing proposed collateral.

In addition, the housing program will involve establishing partnership agreements with lenders who wish to support the proposed rehabilitation lending. Some of these may be the agencies getting a line of credit, and some may be different lenders. We anticipate a relatively small number of lenders relative to the line-of-credit agencies, so not a tremendous additional burden.

Climate

The climate lending, including both electrification and renewable construction, will involve making arrangements with a small number of partner underwriters and seeking ways to delegate the paperwork to the customer points of contact—plumbers and electricians for the electrification work and installation contractors for the renewable energy lending. This will involve working with a small number of partner lenders, along with software vendors that might produce applications for doing the paperwork, as well as associations of contractors to get the word out.

Small business lending

Developing relationships with the co-operative businesses, CDFIs and local banks that are to be the backbone of the operation will make this likely the most labor-intensive program included. The underwriting judgments are to be carried out by the partners, but considerable work will be involved in reviewing the terms and outcomes of the partnerships.

Municipal finance

Municipal finance operations are important to the vision laid out here, but the actual transactions will be relatively few and large compared to the lending programs described above. Managing these transactions, and any potential subsequent repurchases and sales related to the market-making operation, requiring relatively small contributions of time from the CEO, CFO, and treasury management.

Treasury operations

The treasury operations for the PBEB include managing the sales of the notes that fund the operation, managing collateral, and investing excess funds that are not currently invested in a core lending program. Eventually this will also include deposits from non-profits and foundations.

The treasury will also be involved in the repurchase and resale of municipal securities for which the PBEB is providing market-making service. This must be done daily, and as a consequence requires adequate backup plans, but the number of transactions per day is probably small and can be handled by one person in a morning's work.

Data processing/IT

A certain amount of baseline IT overhead accrues to every office operation: maintaining the local area network, wi-fi, a computer on each desk, and so on. It is plausible that this can be addressed by colocation of the PBEB in space maintained by one or the other of the founding agencies and participating in their IT system.

Beyond that basic level of support, the PBEB will require financial software in order to support organic growth of future business. Most data processing overhead will be focused on the development and maintenance of that platform. Because this is supplied by an outside vendor, most development and maintenance will happen there, but the PBEB must provide adequate oversight of that outside vendor, as well as local expertise to assist in development and addressing unforeseen situations.

In addition to the backbone software, some lending programs may require specialized software to assist in the underwriting process. For example, we envision a tablet application that plumbers and electricians can use to initiate the underwriting process on behalf of their electrification customers. Because financial software requires a high degree of security, much of this development will probably not be done in-house, with local expertise available to consult and direct. Some development may be done with grants or donations prior to startup.

We project that these tasks can be serviced by a "hands-on" CTO, along with a relatively technical assistant, who will serve as the local point of contact for the networking and other local technology concerns.

Compliance officer

The PBEB has budgeted a staff member to oversee the Bank's compliance with all the relevant state and federal regulations. In addition, the officer has a budget to employ outside accountants and auditors as required by management and regulatory law.

Pre-Opening Budget

Some budgeted funds will need to be spent before the start of the financial projections. These funds are being raised separately, via foundation grants and donations and some contributions from member governments. The rough numbers below were generated through conversations with experienced bankers and banking attorneys in California.

Developing business plan in collaboration with government agencies	\$ 250,000
Vetting and compensating founding board members	380,000
Hiring and retaining executive staff	650,000
Additional legal and consulting fees	250,000
Technology & Fixed Assets	725,000
Misc. Fees	<u>90,000</u>
Total	\$ 2,345,000

Risk analysis

Banking is all about how to manage the risk of taking in money at one set of terms and lending at another. While history has shown that these risks exist, it has also shown how to manage an institution to be resilient against inevitable economic fluctuations. Many banks failed during the Great Depression, for example, but there were also many that did not. Many banks became overextended and collapsed during the bank crisis of 2007-2008, but again, many, including the public Bank of North Dakota, did not. The secrets of resilience are not obscure, but they are routinely ignored in the stampede for greater profit and the quick buck. The PBEB will manage its risk in many small ways: demanding adequate security for its lending, healthy loan-loss reserves (the financial projections assume loan default rates between 1-4%, depending on the program and in line with industry standard), sharing its risk with local bank partners, transparency and auditing, regulatory oversight, governance controls on self-dealing, and more. It will also manage it in a global sense by simply limiting its leverage.

Leverage is the ratio between the bank's equity (what it owns) and what it lends out (its assets). The more a bank lends, the more interest payments it receives and the more profitable it can be. However, the more a bank lends, the more it relies on all its borrowers to repay their loans. A bank with \$50M in capital and \$500M in loans will be rendered insolvent with a 10% default rate, while a bank with the same capital and only \$250M in loans will obviously be hurt, but will survive.

Following the urge to extract every penny possible from their investments, commercial bank management typically pushes leverage up to the regulatory limits. Asset-to-capital ratios approaching 10-to-1 (often written as 10%) are not uncommon. The PBEB is to be run conservatively and carefully to make it resilient, and the financial projections show that this can be done successfully at 6-to-1 (or 16%). Apart from small-scale provisions like loan-loss reserves, this level of capital provides a substantial cushion for when hard times inevitably hit.

Obviously, there is default risk to any loan, but concentration restrictions and other internal controls can address those. Systemic risk must be considered as well. The important risks are a change in interest rates that squeezes the spread between the rates the bank pays and the rates the bank receives, and a recession where default rates go up and borrowing goes down.

The financial projections contain a crude stress test where, in year 4, the default rates double and the growth rate in borrowing drops 90%. As a result, the losses from some lines of business triple and the bank loses money that year. But even so, the losses are much smaller than the cushion available and

though the bank has a negative cash flow, it does not require more cash. The growth of subsequent years quickly makes up for them, though note that those years assume the same conditions as before the recession, and not the typical above-average growth that is usual in the years immediately after such an event.

Following is a discussion of the individual lines of business, their risk, and how they would be impacted by a change in interest rates or a recession.

Housing

Bridge finance for housing agencies carries some risk because not all complex deals work out in the end. However, the structure of these loans is lines of credit secured by equity the agency already owns, which will limit the risk to the Bank. Importantly, these loans do not depend on the success of any particular deal to be secure.

The sum of the debt of each participating agency is indefinite, though subject to an overall limit, but the terms of each drawdown of that credit is a 3- to 5-year term, which will limit the interest rate risk to the Bank. These lines of credit could also be structured with a floating rate, which would eliminate the interest-rate risk, though it might also make the program less attractive to the housing agencies. The financial projections assume a fixed rate for this line of business.

Loans for affordable housing rehabilitation have longer terms, so the interest rate risk exposure opened by this line of lending is more substantial. Because the PBEB is young and its equity new, it would be best to make this kind of longer-term lending as floating-rate loans. This might reduce the appeal of these loans, but the market is unserved at present, and with low overhead, the PBEB should be able to hold that floating rate down even so. Since many of the debts that built these properties are already fully amortized, these loans can be secured with the property to be rehabilitated, in part or in whole.

Electrification lending

The loans involved in the electrification program are small and the terms limited to 5-10 years at the outside. Because the terms are relatively short, the risk of rising interest rates is low. The relatively high turnover means that rates to borrowers can be adjusted relatively easily if rising rates produce pressure on the cost of funds.

Automating the underwriting paperwork and delegating some of it to the plumbers and contractors will reduce the administrative burden, but will necessarily increase the borrowing risk somewhat. Adequate loss reserves are thus necessary to make the program successful. If the repayment can be done through the utility bill, this will dramatically lower the risk of default.

Business

The business lending proposed at the outset is largely in the form of relatively short-term lending to small businesses: loans averaging \$40,000, with terms of 5-7 years. These might be in the form of lines of credit for buying goods or business expansions/construction. This lending will be conducted jointly with other underwriters, who will share some of the risk. The interest rates may float, depending on the risk appetite of the participating bank or CDFI. The relatively short terms will help insulate against interest rate risk.

Other business lending envisioned in this proposal is essentially the maintenance of a guarantee fund, where the risk involved is essentially limited to misapprehension of the default risk for these kinds of loans. The CalCAP program has 20 years of history to draw on, which means that there is good data available for making risk estimates in different economic conditions.

The interest rate risk involved in these loans is no more than the partner bank wishes to take on. Much business lending uses a floating rate, so the risk of rising interest rates will be borne by the borrower. Again, the PBEB's low overhead can offset the disadvantage of the floating rate.

Municipal lending

The default risk for municipal bonds is very low. A small number of California cities have gone bankrupt in recent history, so the risk is not negligible. But the ledger has two sides: the PBEB will possess not only the debt of its member governments, but some of their assets as well, which will serve as a certain amount of insulation against default risk.

Interest rate risk for municipal obligations is more of a concern, since the likely terms can be substantially longer. The PBEB can address this by limiting its purchase of any particular issue, but also by committing to making a market for that issue. To see how this could work, imagine one of the member governments is planning to issue a \$30M bond for some purpose. The PBEB can buy a third of it at a yield of 2.5%, and use some of its liquid holdings to guarantee a purchaser for the other two-thirds of it. Because the Bank will be required to hold collateral against its deposits, it will always have an ample store of liquidity, and this can be put to use by promising to buy back bonds, which can also serve as collateral. If interest rates rise, the Bank can buy bonds back from bondholders who wish to divest, and resell them. This is the traditional role of the underwriter, but with low enough overhead, the PBEB can afford to support a good price for the bonds, keeping them a good investment for other bondholders.

Alternatively, of course, the issuing government could make the bonds a floating rate, in which case a private placement would not entail interest rate risk. However, it is valuable to develop the risk-management capacity of the PBEB, so this might perhaps be a strategy kept in abeyance as a way to address problems that might occur in the future.

Liquidity risk

Any bank must address the risk that its investors or depositors will seek to put their money elsewhere. The three scenarios to contemplate are the short-term, and temporary, embarrassment of one of the member governments; some member government wishing to withdraw from the PBEB; and a widespread economic downturn that limits member liquidity.

First, consider the possibility that a member government experiences a budget catastrophe that forces it to withdraw its liquid assets from the PBEB and makes it unable to roll over its investments. In this case, the PBEB would seek to make up the difference from the other members. One member is much larger than the others, but by limiting the amount of investment from each, it should still be feasible for the other members to make up the difference. The projections here envision only 1-2% of all cash and short-term investments going to the Bank, so the difference will be small. If the cities had to make up the difference from losing Alameda County, their contribution might rise from 1% of their investments to 4%.

This is a comparable risk to having some member withdraw from the Bank. Presumably the written agreement of the initial investment will preclude sudden large withdrawals from the Bank's capital. In the event that the obstacles to withdrawal are overcome, the mitigation strategy is roughly the same: to have the other governments step in to make up the difference.

Insulation against these risks is another reason to cultivate a certain level of investments from local non-profits. While few of these organizations could be considered counter-cyclical, their finances are affected in different ways from the member governments. Like the governments, there are social and political reasons for them to support the PBEB, and if stepping in to help alleviate a potential liquidity crisis only involves moving investments from some other bank to the PBEB, this is a small ask to make in a time of crisis.

Finally, consider the effect of a recession. Obviously, a recession reduces the amount of cash and investments available to each of the member governments, and increases their demand for liquidity, too. Here, there are two lines of defense for the PBEB. The first is simply the small demand on the member governments. Again, the financial projections here assume only a small percentage of the available funds are invested in the Bank. Presumably these can be among the last to be liquidated by a government in distress. In the event of a liquidity crisis caused by these events, the PBEB can turn to its non-profit depositors, its correspondent bank, or even the Federal Reserve, for help. Recent recessions have seen the Fed flooding the zone with very cheap or free liquidity to help financial institutions through these kinds of events. Because those efforts have been largely successful, there is ample reason to suspect the same will be true in future recessions.

In addition to these risks, there is liquidity risk involved in the similarity of the PBEB customers. Unlike many other banks, the primary funders of the PBEB are a small and homogeneous group. Their finances are roughly synchronous with each other, with the annual ebbs and flows of their funds occurring in the same months of the year. For this reason, the financial projections depend on allocations derived from the annual minimum balance of cash and investments for the member governments. The PBEB can absorb a certain amount of these ebbs and flows through adjusting investments in a managed investment fund rather than trying to adjust its loan balances.

It is certainly possible—indeed it is to be hoped—that the PBEB will eventually ask for a higher level of investment from its member governments.⁴⁶ The flip side of the uniformity of customers is that the finances of the PBEB member governments are highly predictable. Each of the governments makes a budget with short- and long-term financial projections. As the PBEB grows and becomes more successful, these member projections can be made available to the PBEB for liquidity planning purposes.

Governance

The governance design of the PBEB is a critical component to committing to its community objectives while also ensuring financial viability and compliance with banking regulations. Democratic, local

⁴⁶ Though not too much. California law limits the percentage of its investments a county or city can make in a single entity to 10%, though exceptions may apply. There is a considerable distance between 1-2% and 10%, but expansion of the bank ultimately will depend on accumulating equity or on expanding membership.

control of the PBEB places community members in control of local finance decisions. Community members serving as Directors are more likely to make decisions that will benefit the communities they live in when compared to the traditional private banks that are solely focused on maximizing profits. Additionally, incorporating community priorities and values into the charter of the Public Bank, further ensures that the Bank's decisions will balance those important public interests with the fiscal and regulatory considerations.

The PBEB's Governance Plan, attached as Appendix A, calls for a majority of community representatives on the Bank's Board. Specifically, the Board will provide seats for five governmental agencies (one from each of the three cities and two from the County), two bankers or financial experts, five representatives of grassroots community organizations, and three community representatives who are also financial experts, making a majority of eight community representatives out of a total of 15 Directors. All Board members will be fully vetted and approved by state and federal regulators as part of the process of approving the business plan and the Bank's charter.

PBEB's draft Governance Plan also recognizes that it is critical for all Directors to have a solid foundation in "board member responsibilities, fiduciary responsibility, financial and banking principles, and decision-making processes." The Board of Directors will have responsibilities similar to the directors of community banks and corporate boards, with a much greater emphasis on mission alignment, community participation, and transparency. To accomplish this goal, PBEB will establish an "Academy" to train new Directors and administer a test to Directors before they are seated on the Board. The Academy ensures that Directors all have the requisite banking and financial knowledge to competently serve on the Board and makes Board service available to people who may not have formal knowledge or experience in the financial sector. The existence of the Academy makes Board service accessible to anyone who is interested in serving. Furthermore, the Academy ensures that all Directors will be full participants in Board activity and decision-making.

The PBEB's draft Governance Plan establishes that the Bank will approve a Conflict of Interest Policy to protect against unlawful insider transactions and conflicts of interests. The Academy will also train Directors as to their roles and responsibilities which will include the necessary education to identify and avoid insider transactions and conflicts of interest. The California Department of Financial Protection and Innovation will supervise the Bank closely for its first three years, as will the Federal Deposit Insurance Corporation. The Board policies, Director training, and regulatory agencies provide multiple layers of protection from double-dealing.

PBEB's draft Governance Plan embeds community priorities into PBEB's decision-making process. The Bank has a robust mission statement with five stated values: equity, social responsibility, fiscal responsibility, accountability, democracy. Furthermore, the draft Governance Plan establishes broad loan policies that require Directors to consider the Bank's external policy goals, including "projects that benefit the economic, environmental, and social health of the entire community." Traditional banks have charters that generally focus only on the fiscal health of the bank at the cost of all other considerations. Regulatory agencies focus on consumer protection and the fiscal health of the bank. The PBEB's unique loan policy framework will allow the Bank to make lending decisions that balance the advancement of community benefits, fiscal responsibility, and regulatory expectations.

The PBEB's governance structure, including the structure of the Board of Directors and the loan policy framework, will ensure that the Bank leverages its role in the financial ecosystem to advance projects with just, equitable, and democratic principles in mind. Furthermore, Board training, and the appropriate regulatory oversight will protect against unlawful insider transactions and conflicts of interests.

Compliance with AB 857 Requirements

Before submitting an application to organize and establish a public bank pursuant to Section 1020 of the Financial Code, a local agency shall conduct a study to assess the viability of the proposed public bank. The study shall include, but is not limited to, all of the following elements:

(1) A discussion of the purposes of the bank including, but not limited to, achieving cost savings, strengthening local economies, supporting community economic development, and addressing infrastructure and housing needs for localities. (p. 3 and throughout)

(2) A fiscal analysis of costs associated with starting the proposed public bank. (p. 22-30)

(3) An estimate of the initial amount of capital to be provided by the local agency to the proposed public bank. (pp. 18-27)

(4) Financial projections, including a pro forma balance sheet and income statement, of the proposed public bank for at least the first five years of operation. The financial projections shall include an estimate of the time period for when expected revenues meet or exceed expected costs and an estimate of the total operating subsidy that the local agency may be required to provide until the proposed public bank generates sufficient revenue to cover its costs. In addition to projections that assume favorable economic conditions, the analysis shall also include a downside scenario that considers the effect of an economic recession on the financial results of the proposed public bank. The projections may include the downside scenario of continuing to do business with the local government's current banker or bankers. (pp. 25-27)

(5) A legal analysis of whether the proposed structure and operations of the public bank would likely comply with Section 6 of Article XVI of the California Constitution, but nothing herein shall compel the waiver of any attorney-client privilege attaching to that legal analysis. (Appendix B)

(6) An analysis of how the proposed governance structure of the public bank would protect the bank from unlawful insider transactions and apparent conflicts of interest. (pp. 34-36)

(b) The study may include any of the following elements:

(1) A fiscal analysis of benefits associated with starting the proposed public bank, including, but not limited to, cost savings, jobs created, jobs retained, economic activity generated, and private capital leveraged. (Not included because of methodology concerns.)

(2) A qualitative assessment of social or environmental benefits of the proposed public bank. (This is included throughout and specifically discussed in Introduction [p. 4] and Programs [beginning on p. 8].)

(3) An estimate of the fees paid to the local agency's current banker or bankers. (Not included in this draft.)

(4) A fiscal analysis of the costs, including social and environmental, of continuing to do business with the local agency's current banker or bankers. (Not included.)

Appendix A

Governance Plan

I. Mission Statement

The mission and values of Public Bank East Bay are set forth on pp. 6 of the Viability Study to which this document is attached.

II. Board of Directors

PBEB will be a 501(c)(6) mutual benefit corporation under California law, and regulations regarding directors of a mutual benefit corporation will govern. The Board of Directors of any bank, including this one, sets general policy for the Bank, ensures continuing integrity and alignment with the Bank's mission, and is responsible to the stakeholders, in this case the founding depositors and all residents of the East Bay for the Bank's decisions and policies. The Board is also subject to additional scrutiny from the various regulatory agencies that will oversee the safety and soundness of the Bank. The initial Board members will be chosen based on their ability to make sound banking decisions, their adherence to PBEB values, and the understanding that people closest to the problems being addressed are the people with the most robust, innovative, and productive solutions.

Board Composition

The Board will be composed of people with banking and financial expertise, including the CEO of the Bank, and people who can represent and convey the needs of the various East Bay communities, with an emphasis on financial experience along with representatives of systemically underserved and under-represented communities. In addition, the Board will also oversee the safe and sound operation of the Bank. Directors will be chosen from a substantial pool of applicants identified and initially vetted by the experts creating the bank charter application for Friends of the Public Bank East Bay, and then further vetted and examined by state and federal regulators, specifically including California's Department of Financial Protection and Innovation (DFPI), the Federal Deposit Insurance Corporation (FDIC) and representatives of depositing agencies. All Directors will be accountable to the mission and values of the Bank.

In addition, the treasurers of member agencies, if they are not their agency's appointed representative, will be ex officio non-voting members of the Board of Directors.

In our research, we determined that a Board of at least 15 members, all committed to the same mission and values, is key to keeping the representation diverse and ensuring that the Bank is connected to the needs and concerns of the people it serves.

When we posed the question of recruiting and selecting Directors to several community leaders and all of our supporter organizations at the time, geographic representation was one of the most supported criteria for community representation, along with race/ethnicity, issue representation (such as experts in environmental concerns or affordable housing), and gender.

All potential Directors are required to fill out an application and go through an initial organizers' interview process, as well as undergo formal vetting by an appropriate professional third party. By California law and DFPI process, all Directors will be subject to a rigorous state-run vetting including a conflict-of-interest evaluation and also background checks and fingerprinting. Also per California law, no one will be permitted to serve on the Board if they cannot resolve any issues which arise in the vetting process to the satisfaction of the DFPI and other regulators. The Board will also be subject to a Code of Conduct related to their continued service on the Board.

Applicants will be asked to commit to serving for up to a three-year time period. One-third of the initial Board members will be appointed for a one-year term, one-third for a two-year term, and one-third for a three-year term.

Once a complete operating Board is chosen, preliminary vetting of future Directors will be turned over to a committee of the Board. After three financially sound years of operation, we expect the regulators to leave Director screening entirely in the hands of the Bank Board.

Creating a Board of Directors with as much community representation as possible is worth the challenge and will result in a Bank that meets the needs of the residents. Because many community representatives may not have had previous financial experience, providing educational resources to such Directors is essential. In the future, the advocates plan to create a public-bank focused Academy to educate Bank Directors; in the interim, the start-up costs will pay for educational resources for Directors, such as the programs at [Bank Director](#) and the [FDIC](#). Existing manuals for bank directors will also be used as reference material.

All Directors will be required to participate in trainings and to demonstrate sufficient familiarity with banking theory and practices.

Terms and Removal of Directors

Most Directors will serve a three-year term; however, the initial Board appointees will serve staggered terms (as discussed above) so that one-third of the Board Members' terms end each year. Once the initial Directors have served their three years, the financial and community Directors' terms will become staggered, so that five people's terms will expire at the end of the third year and five at the end of the fourth year. Initial Directors will opt for one of these term lengths, with a fallback of a lottery if the opting does not work out appropriately.

In addition, the initial Board will be tasked with creating a process, in compliance with California law, for removing Directors if legal or reputational disqualifications are uncovered after their appointment, or for inactivity. This process can be defined by the initial Board, or in the business plan for the Bank.

Relationship to Bank management, staff, and city and county governments

The initial Chief Executive Officer (CEO) of the Bank and other key senior management personnel must be chosen before the DFPI application is submitted, and will have initial three-year contracts. After that, the Board will be responsible for renewing the CEO's contract or selecting a new CEO. If the Board is fully operational prior to launch, the Board will have the right to review and approve appointment of senior management other than the CEO. Otherwise, while the application is in progress, the Board

candidates will review and recommend the appointment of additional Bank management, some of whom will then have to be confirmed by state and federal regulators.

Directors will have access to confidential customer financial information and will be subject to confidentiality and privacy constraints as required by law and by the Bank's own regulations. Directors will not participate in Bank management's decisions with respect to extending or denying credit to any individual or entity where such Director has any conflict of interest. Directors will be responsible for ensuring that the Bank has a robust and reliable policy specifically drafted to prevent unlawful insider transactions and Board Member conflicts of interest while also ensuring that partnerships, loans, lines of credit, and other Bank services are scrutinized for potential conflicts both before they are initiated and while they are active.

The Bank charter will include a provision for non-liability of Directors, and the initial budget includes professional errors & omissions insurance. The CEO and the Chair of the Board will report to the sponsoring agencies and other government stakeholders every six months for the first three years and at least annually after that. The ex officio members of the Board will present ongoing reports to their agencies. Internal and external audits will be conducted at least annually to ensure that bank assets are being reported honestly and used constructively.

The Bank will incentivize managers and loan officers with long-term benefits like job stability and community recognition, not with exorbitant salaries, short-term performance metrics, or bonuses. In addition, the Board should establish a maximum executive compensation ratio; for example, the Bank's lowest-paid worker should earn no less than 1/5 of what the CEO earns, with a Bay Area living wage as the baseline for lowest-paid workers. The Bank's charter or other governance instruments should also establish a mechanism, such as an annual performance audit by an independent third party, by which the Board can evaluate management performance and take appropriate steps if the Bank incurs consistent losses.

Compensation

Directors will be paid a modest annual stipend for serving on the Board to make the position more accessible to all community members. They may refuse the stipends if they so choose. The feedback we received through interviewing activists and organizational leaders supported the need for these stipends.

Frequency of Meetings

The Board should, at minimum, meet quarterly, and more frequently at the discretion of the Directors. We anticipate that the initial Board meetings will need to be more frequent, until procedures are in place and the Bank is running smoothly.

Public Access

Modeling city councils and county boards of supervisors, community college districts, and many other public bodies, we propose that meetings be open to the public as much as possible, with closed-door sessions as needed. We also recommend an annual public meeting, widely publicized, followed by food

and celebration of the arts, to encourage community awareness of, connection to, and appreciation of the Bank.

In especially sensitive situations, the Directors may desire to hold regular or special meetings at which no Bank senior management is present. At these meetings, Directors may frankly discuss any concerns they have with Bank management.

The Board is also strongly encouraged to undertake periodic formalized self-assessments of its processes and practices.

Appendix B

Legal Analysis

Friends of the Public Bank East Bay retained attorney Sylvia Chi to provide a legal analysis of whether the proposed structure and operations of PBEB would likely comply with the California Constitution as required by Cal. Gov. Code § 57606(a)(5). While the statute explicitly allows preservation of attorney-client privilege for such legal analyses, Friends of the Public Bank East Bay is making a copy of the memo available for viewing in the interest of transparency and full disclosure.

Attorney Chi found that under California Assembly Bill 857 the proposed structure and operations of public banks in general and more specifically, PBEB's proposal, would be in compliance with the California Constitution. Attorney Chi's memo follows:

To: Friends of Public Bank East Bay
From: Sylvia Chi
Re: Section 6, Article XVI of the California Constitution and the Proposed Public Bank of the East Bay
Date: October 21, 2021

Introduction

In 2019, Governor Gavin Newsom signed into law AB 857, establishing the nation's first framework for licensing and regulating city- and county-owned public banks. Under this law, California cities and counties can apply to the Department of Financial Protection and Innovation (DFPI) for a license to operate a public bank.

Prior to a local agency submitting a license application to DFPI, AB 857 requires local agencies to conduct a study to assess the viability of the proposed public bank and specifies mandatory elements of the study. Various elements of this study are specified in the law, including:

A legal analysis of whether the proposed structure and operations of the public bank would likely comply with Section 6 of Article XVI of the California Constitution, but nothing herein shall compel the waiver of any attorney-client privilege attaching to that legal analysis.

Gov. Code § 57606(a)(5).

This memorandum analyzes Section 6 of Article XVI of the California Constitution and its interpretation by the courts, its implications for AB 857 public banks in general, and provides a preliminary assessment of its application to the structure and operations of the proposed Public Bank East Bay. This memorandum is intended to provide a starting point for the legal analysis required in the Gov. Code § 57606(a)(5).

The proposed structure and operations of any AB 857 public bank, and the proposed public bank to serve the East Bay in particular, is likely to comply with Section 6 of Article XVI of the California

Constitution. The Legislature's findings in AB 857 establish that the extension of the state's credit for the creation of public banks qualify for the public purpose exception to the Constitution's prohibition on subscribing for stock. This prohibition would not apply to AB 857 public banks, since the law requires that such public banks take the form of nonprofit corporations which do not issue stock.

Section 6, Article XVI of the California Constitution

Section 6, Article XVI of the California Constitution prohibits the California State Legislature from making public gifts. Specifically, Section 6 imposes three types of restrictions on the Legislature:

1. No giving, lending, or authorizing giving/lending of credit of the State or any of its political subdivisions
2. No gifts, or authorizing making of any gifts, of public money or things of value
3. No authorizing the State, or any political subdivision thereof, to subscribe for stock or become a stockholder in any corporation

After these prohibitions were added to the Constitution, and because many contemporaneous activities of the Legislature appeared to violate them, the courts recognized a "public purpose exception" to resolve the apparent contradiction. This "public purpose exception" applies where an expenditure of public funds or extension of credit is made in furtherance of a public purpose, i.e. expenditures "which may tend to make that government subserve the general well-being of society...." *Veterans' Welfare Board v. Jordan*, 189 Cal. 124, 141 (1922). It is well settled that such expenditures for a public purpose "are not a gift within the meaning of [Section 6 of Article XVI]" because "an expenditure for a 'public purpose' is in the nature of consideration and the funds expended are therefore not a gift even though private persons are benefited therefrom." *County of Alameda v. Janssen*, 16 Cal.2d 276, 281 (1940).

In addition to direct expenditures made or authorized by the Legislature, the courts have applied the public purpose exception to the *lending* of public credit. For example, the California Supreme Court confirmed the constitutionality of the Veterans' Welfare Bond Act of 1921, which authorized the lending of public credit through the issuance and sale of state bonds to assist war veterans in acquiring property. *Jordan* at 140-1. Likewise, the California Supreme Court upheld the constitutionality of the Zenovich-Moscone-Chacon Housing and Home Finance Act (Health & Saf. Code § 51000 *et seq.*), which authorized the California Housing Finance Agency to issue revenue bonds, the proceeds of which would be made available to both public and private housing developers in the form of various types of loans to encourage the construction of housing, as well as the purchase of loans from mortgage lenders and refinancing of existing mortgages. *Cal. Hous. Fin. Agency v. Elliott*, 17 Cal.3d 575 (1976). In *Elliott*, the court found that the Act did not violate the constitutional prohibition against the extension of public credit, citing the close relationship between elements of the program and the broad public purposes supporting the program, as identified by the Legislature. *Id.* at 586.

In general, courts defer to the Legislature's discretion regarding what constitutes a public purpose, as long as that determination has a reasonable basis. *County of Alameda v. Janssen*, 16 Cal.2d 276, 282 (1940). Thus, courts have upheld against constitutional challenges a "wide variety of welfare and other social programs." *County of Alameda v. Carleson*, 5 Cal.3d 730, 746 (1971). The Court held in *Jordan* that an action is not made unconstitutional if, "incidental to the main [public] purpose there was an

advantage to the purchaser of the land ultimately derived from the credit of the state.” *Jordan* at 141. In *Carleson*, the California Supreme Court analyzed the challenged state action, disregarding a portion of a household’s earned income in determining eligibility for welfare, and found that “the Legislature could reasonably conclude... that employment incentives are essential to accomplish the goal of self-sufficiency, and that the income-disregard provision was a necessary and proper device for encouraging employment.” *Carleson* at 746.

The public purpose exception has not been recognized by courts as applicable to the third type of restriction in Section 6, Article XVI, regarding subscribing for stock in any corporation. The California Supreme Court has upheld state legislation creating city or county housing authorities, finding that this action did not constitute subscribing for stock or becoming a stockholder in a corporation, since the housing authorities “are public corporations and do not issue stock.” *The Housing Authority v. Dockweiler*, 14 Cal.2d 437 (1939). Although they are not binding, California’s Office of the Attorney General has issued several opinions interpreting this clause, finding that it “operated to prohibit public retirement funds from operating in common stock” and applied to “all public bodies and agencies in the state whose powers and functions are derived from the Legislature,” including hospital, transit, and water districts, but not charter cities. *See* Ops. Cal. Atty. Gen. No. 83-1002 (1984), 10 n.10.

Section 6, Article XVI of the California Constitution Likely Does Not Apply to AB 857 Public Banks in General

The legislative findings in Section 1 of AB 857 specify that the Legislature’s intent was to “authorize the lending of public credit to public banks and authorize public ownership of public banks for the purpose of achieving cost savings, strengthening local economies, supporting community economic development, and addressing infrastructure and housing needs for localities.” In enacting AB 857, the Legislature determined that the lending of public credit to public banks served the public purposes of achieving cost savings, strengthening local economies, supporting community economic development, and addressing localities’ infrastructure and housing needs. Although such legislative findings are not binding upon courts, courts give them great weight unless they are found to be unreasonable and arbitrary. In the case of public banks proposed under AB 857, courts are likely to find that the Legislature acted reasonably in concluding that establishing a public banking system is necessary and proper to accomplish the broad economic purposes identified in the findings, thus applying the public purpose exception to any public bank organized under AB 857.

As discussed in Part II, *supra*, the courts have found that a “public purpose” exception applies to the California Constitution’s Section 6, Article XVI prohibition on giving public money and credit, but have not found such an exception to the prohibition on subscribing for stock in corporations. However, as provided in AB 857, public banks must take the form of either a nonprofit mutual benefit corporation or nonprofit public benefit corporation. *See* Gov. Code § 57600(b)(1). Neither type of nonprofit corporation provides for the issuance of stock. Thus, consistent with both *Dockweiler* and the Attorney General’s opinion, it seems likely that courts would find that the constitutional prohibition on subscribing for stock does not apply to the creation of AB 857 public banks as nonprofit corporations.

Section 6, Article XVI of the California Constitution Likely Does Not Apply to the Proposed Public Bank East Bay's Structure and Operations

While local agency owners of a public bank may be described as “shareholders,” the Corporations Code describes nonprofit corporation “owners” as “members.” In the case of the proposed Public Bank East Bay, the members of the public bank have not been finalized, but may include cities such as Oakland, Berkeley, and Richmond, as well as Alameda County and potentially other cities and/or counties. As required by AB 857, the proposed Public Bank East Bay will be organized as either a nonprofit mutual benefit corporation or nonprofit public benefit corporation, and, as discussed in Part III, *supra*, neither type of corporation issues stock.

At this stage, the proposed public bank's potential activities include lending to government agencies, small businesses, minority-owned businesses, worker cooperatives, and affordable housing developers. If these lending activities are ultimately approved by the local agency owners and Board of Directors of the proposed Public Bank East Bay, it is likely that a court would find that the local agencies acted reasonably in authorizing such activities. Even if particular individuals or businesses, such as minority-owned businesses or private sector affordable housing developers, benefit from the public bank's lending activities, these benefits are incidental to the main public purpose of the lending activities. Because these activities are closely related with the broad public purposes expressed in AB 857 regarding supporting community economic development and meeting local needs for infrastructure, and housing, it is likely that a court would apply the public purpose exception to the lending of public credit for the proposed Public Bank East Bay.

While the details of the structure and operations of the proposed Public Bank East Bay have yet to be fully developed, the high-level plan does not appear to introduce any obstacles that would implicate the prohibitions in Section 6, Article XVI of the California Constitution.

Appendix C

About This Study

This study was directed and written by Tom Sgouros, with writing assistance from Dawn Euer.

Tom Sgouros has worked for over 33 years as a policy consultant specializing in public budgeting, finance, taxation, and other technical issues of public policy. He has consulted to campaigns and office-holders, to activists and media outlets, and has been invited to testify about public finance issues to legislatures in four states. He was Senior Policy Advisor to the Rhode Island General Treasurer, and is now a fellow at The Policy Lab at Brown University, where he is also a member of the research faculty in Computer Science, working on projects in data science, visualization, and information theory.

Dawn Euer owns the Law Office of Dawn Euer in Rhode Island where she works with nonprofits, social enterprises, and small businesses. She also serves as a State Senator in the Rhode Island Senate where she is Chair of the Environment & Agriculture Committee and a member of the Judiciary Committee and the Rules, Ethics & Oversight Committee.

Attorney **Sylvia Chi**, a co-author of AB 857, provided the legal analysis included as Appendix B.

We had extensive professional assistance from Gary Findley, principal banking attorney at The Findley Companies, and Graham Seel, Strategic advisor to community banks and community development nonprofits. Friends of the Public Bank East Bay conducted significant research and editing on the final document. Primary contributors include Susan Harman, Debbie Notkin, George Quaye, and Benjamin Streim. Additional help was provided by Alexis Frasz, Thomas Hanna, Margie Lewis, Valerie Myers, and George Syrop.

Friends of the Public Bank East Bay commissioned the Oakland-based organization Bay Area Organization of Black Owned Businesses to conduct a survey of the borrowing needs of Black-owned small businesses in the East Bay. The final report is published as "[Borrowing Needs of Black Owned Businesses](#)."

To inform the research on potential lending demand and programs, Friends of the Public Bank East Bay met and spoke with the following experts. For the purposes of clarity, the people on this list have not reviewed the final Study and are not necessarily endorsers or supporters of this effort.

- José Quiñones, CEO, Mission Asset Fund (small business lending)
- Sara Razavi, CEO, Working Solutions (small business lending)
- Scott Lewis, CFO, Main Street Launch (small business lending)
- Tom Duryea, CEO, Summit Bank (small business lending)

- Shanna McClearn, Director, Sales & Partnerships, Accion Opportunity Fund (small business lending)
- David Green, CEO, 1st NorCal Credit Union (small business lending)
- YaVette Holts, CEO, Bay Area Organization of Black Owned Businesses (BAOBOB) (small business lending)
- Dan Leibsohn, CEO, Community Development Finance (small business lending)
- Sally Smith, Community Development Underwriter, LISC Bay Area (affordable housing lending)
- Aubra Levine, Director of Real Estate Development, Unity Council (affordable housing lending)
- Eve Stewart, Director of Real Estate Development, Satellite Affordable Housing Associates (SAHA) (affordable housing lending)
- Louis Chicoine, CEO, Abode Services (affordable housing lending)
- Jim Lutz, local green energy consultant (electrification)
- Michael Theroux, California environmental project consultant (green project opportunities)
- Renee Roy Elias, recently at Center for Community Innovation (UC Berkeley) (small business landscape)

Appendix D

Local Community Banks and CDFIs

List of community banks and Community Development Financial Institutions (CDFIs) that are doing business in the East Bay and are potential partners for public bank lending programs

Community Banks	County Headquarters	Assets
Fremont Bank	Alameda County	\$5.1B
Beneficial State Bank	Alameda County	\$1.2B
Community Bank of the Bay	Alameda County	\$600M
Summit Bank	Alameda County	\$300M
Metropolitan Bank	Alameda County	\$180M
Gateway Bank F.S.B.	Alameda County	\$170M
United Business Bank	Contra Costa County	\$2.3B
California Bank of Commerce	Contra Costa County	\$1.9B
Amalgamated Bank	New York (strong presence in the Bay Area, recently acquired local New Resources Bank)	\$4.7B

CDFIs	Headquarters
Cooperative Center Federal Credit Union	Berkeley
Self-Help Federal Credit Union	Oakland
ICA Fund	Oakland
Main Street Launch	Oakland
Accion Opportunity Fund	San Jose
Pacific Community Ventures	Oakland
Community Vision	San Francisco
Low Income Investment Fund (LIIF)	San Francisco
SixUp Lending	San Francisco
Mission Economic Development Agency	San Francisco
Mission Asset Fund	San Francisco
Working Solutions	San Francisco
Capital Impact Partners	Arlington, VA
RSF Social Finance	San Francisco

Other local lending institutions that are mission aligned and potential partners for PBEB	Headquarters
C-Note	Oakland
The Runway Project	Oakland
CDC Small Business Finance	San Diego
Oakland Black Business Fund	Oakland
Kapor Capital	Oakland
Kiva	San Francisco
Local Initiatives Support Corporation (LISC)	Nationwide, Oakland
Cutting Edge Capital	Oakland
TMC Community Capital	Oakland
The Bay's Future	Oakland
REAL People's Fund	Oakland
Community Development Finance	Oakland

Appendix E

Next Steps

Finalize Viability Study	Determine initial estimates of capital, proposed loan priorities, and governance structure.
Pass Viability Study	Cities approve resolution and appoint representative to Friends. If needed, amend investment policy to include ability to invest in public banks. Appoint representative to be point person for each agency to help design business plan.
Form 501(c)(6) Mutual Benefit Corporation	This is the legal structure for initial members. As the County of Alameda cannot be a founding member without a county-wide referendum process, this corporation will begin with the founding charter cities with paperwork in place so that the County can join immediately after the application is approved.
Recruit and hire CEO	The CEO will work with the banking attorney in writing the business plan. By requirements of the regulators, this person must be in place when the application is submitted.
Develop Business Plan	Involves identifying capitalization sources and deposits to be moved into the PBEB. Requires a full financial model, detailed explanations/assumptions, corporate governance, and more. To be led by the Friends' banking consultant and the CEO.
Finalize Governance Structure	Finalize and approve Bank governance plan to be included in the charter application.
Finalize Bank Board Applicants	Confirm applicants for the initial Board of Directors for the Bank, who will be included and vetted in the charter application process. Banking consultant performs upfront/initial vetting. Agencies will select who will represent them on Board.
Host Pre-Filing Meeting	Pre-filing meeting with the California Department for Financial Protection and Innovation (DFPI), all proposed Board Directors, business plan consultant and CEO.

Approve Business Plan Locally	City Councils review and obtain formal authorization to apply for a public banking charter.
Submit Business Plan	Submit charter application to DFPI and Federal Deposit Insurance Corporation. Submitted by banking consultant on behalf of the agencies.
Bank Staffing & Setup	Infrastructure, technology, hiring, etc. (pending application approval), all led by the CEO.
Application Review	Business plan will undergo rounds of feedback and modification, led by the regulators and managed for all other parties by the banking consultant and CEO.
Federal Reserve Approval	Gain access to Federal Reserve services, including ACH and discount window.
Transfer Capital & Deposits	Place funds into the Bank.
Cut the Ribbon!	Loans and other initiatives begin.



Office of the City Manager

Date: June 23, 2022
To: Budget and Finance Policy Committee
From: Dee Williams-Ridley, City Manager
Submitted by: Henry Oyekanmi, Finance Director
Subject: Investment Policies of Other Jurisdictions

The City's investment policy is a formal document which provides the guidelines for investments and operational structure in the management of public funds and is confirmed annually by the City Council.

One of the components of the City's investment policy is the section for responsible investing. This provides a list of identified restrictions that were ratified by the City Council. It is extremely important that the investment officer regards these as requirements when making decisions for investment purchase.

Each year the City's investment policy is updated to add all the responsible investing policies passed by city council throughout the year. Throughout the many years, the City has accumulated seven policy restrictions for responsible investing.

Most cities' have the three main statutory objectives in managing the investment programs which are safety, liquidity and return. However, due to the restrictions in City of Berkeley's investment, the investment program considers responsible investing as an additional objective. Compliance to these restrictions is highly regarded as a requirement for its investments. These results in limiting the type of investment offering the investment officer can purchase. Restrictions has a direct impact on diversification of funds and the rate of returns on investments.

On January 27, 2022 while discussing the Fourth Quarter Investment report, the Budget and Finance Committee asked that Finance conduct a comparison study in investment restriction for other cities in California. The Finance Department researched and reviewed the investment policies of the various cities to identify the investment restrictions for their investment program. Finance took the cities that it currently uses to benchmark the rate of returns on the City's quarterly investment report and identified the restrictions on their cities' investment policies.

Below is a summary of the findings from the research:

VARIOUS CALIFORNIA CITIES INVESTMENT RESTRICTIONS											
City	Rates Earned	DIVESTMENT FROM COMPANIES/MANUFACTURERS								INTEGRATE	
		Tobacco Products	Firearms	Fossil Fuels	Nuclear Power	Private Prison and Immigration Detention	Weapons	Oppressive States	Companies for Mexico Border Wall	Environment, social and governance principle	Investing Community Well Being
Palo Alto	1.58%	X	X	X							
Los Angeles	1.09%										
San Jose	1.08%										X
Sacramento	0.99%										
Torrance	0.98%										
San Diego	0.83%										
Berkeley	0.80%	X	X	X	X	X	X	X	X	X	
Santa Monica	0.54%	X	X	X	X						
San Francisco	0.48%	X	X		X						
Oakland	0.19%	X	X	X							

Research Analysis:

The study shows that there is a direct correlation between the number of restrictions to the rate of returns for various jurisdictions. The cities that have no restrictions or encouraged restrictions without it being mandated are the cities that have higher rate of return on their investment. Cities with restrictions are the ones who have lower rate of return. The City of Berkeley rate of returns still remains fairly high amidst the restrictions in the investment policy.

As a result of the differences in the investment policies of different cities, including responsible investing policies, maturity restrictions, investment restrictions, etc., it is difficult for any City to come up with a reasonable performance measure for pooled cash investments. In order to provide some measure of the relative performance of the City’s investment returns, past City Councilmembers requested that information about the rates earned by other California cities be included in the quarterly investment reports for comparison purposes, despite the differences in the investment policies of the various cities.



Office of the City Manager

ACTION CALENDAR
April 26, 2022

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Henry Oyekanmi, Director, Finance

Subject: Accept the Risk Analysis for Long-Term Debt (Bonding Capacity) Report provided by Government Finance Officers Association

RECOMMENDATION

Accept the report titled 'Risk-Based Analysis and Stress Test of Long-Term Debt Affordability' as provided by the Government Finance Officers Association (GFOA). This report is based on their research and development of a risk-modeling tool to address issuing long-term debt related to City of Berkeley Vision 2050.

FISCAL IMPACTS OF RECOMMENDATION

There are no fiscal impacts of accepting the report

CURRENT SITUATION AND ITS EFFECTS

The Risk-Based Analysis and Stress Test of Long-Term Debt Affordability (Bonding Capacity) report is a Strategic Plan Priority Project, advancing our goal to:

- Provide an efficient and financially-healthy City government

The City engaged GFOA to conduct this analysis of the City's bonding capacity through their risk-modeling approach. This analysis will support the City's later development of a thirty-year borrowing plan, which will enable the City to replace its aging infrastructure assets, maintain its General Obligation Bond rating at AA+ at S & P Global and Aa1 at Moody's, and keep the bond property tax rate at an affordable level (which was .0540% at June 30, 2020). The GFOA's risk model and report look at a comprehensive financial analysis with particular focus on options to maintain the City's debt affordability within the framework of the City's huge unfunded pensions and other post-employment benefits (OPEB) and overall City operations.

The study and report are intended to help develop recommendations for a combination of infrastructure-focused revenue measures slated for November 2022 and beyond.

The context provided for GFOA to build the risk model and draft the subsequent report was framed through initially providing these items to GFOA:

1. Vision 2050
2. Unfunded Liabilities Report
3. Capital Improvement Plan in the most recent biennial budget and five-year planning horizon
4. Annual Comprehensive Financial Reports (ACFR)
5. GO Bonds, Revenue Bonds, and Certificates of Participation Debt Repayment Schedules
6. Current Bond Authority and Outstanding Amounts (GO Bonds for the past 20 years as of 7/12/21)
7. City's Debt Policy
8. S and P Global Ratings Letter Re: GO Bonds
9. S and P Global Ratings Letter Re: Lease Revenue Bonds
10. Analysis of City's Debt and Contingent Liability Profile
11. GO Rating Report – April 2021
12. GO Rating Report – February 2020

The GFOA report details these and additional factors that GFOA researched and incorporated into their construction of the risk model and their drafting of the final report.

BACKGROUND

The City has an extensive portfolio of capital assets and infrastructure, including 95 public buildings; 254 miles of public sanitary sewer mains and 130 miles of public sewer laterals; 52 parks, two pools; three camps; and 42 different facilities served by the City's IT systems. Maintaining these assets is costly and requires significant resources and constant attention. As an older city, 50% of Berkeley's \$837 million of capital assets have exceeded their useful life.

The City's FY 2021 Capital Plan called for spending of \$57 million/year on capital and maintenance needs. Even at this increased level of funding, Berkeley's infrastructure will deteriorate faster than it is being repaired and replaced, and construction cost escalation at four (4) percent/year will significantly increase replacement costs.

To modernize these old physical structures with resilient, durable, and climate-smart infrastructure will require substantial new investments. To adequately address the \$882 million in unfunded infrastructure liabilities, the City needs to double its annual capital spending over the next decade to \$80 million/year. Capital expenditures are typically funded through a combination of debt financing (pay-as-you-use) and cash (pay-as-you-go). Paying in cash avoids the cost of interest, but requires the City to accumulate sufficient cash to fund the project, while construction costs escalate. Using debt to finance capital projects incurs interest expense but allows the project to start earlier, thereby avoiding escalation costs.

The City has an infrastructure system that has allowed it to thrive for over 100 years. Now, the City wants to incorporate new technologies and be able to adapt to meet environmental trends so that the infrastructure systems can continue to support the City for another 100 years. The risk analysis report shows the potential impact of multiple factors on the City's capacity to issue debt during the next thirty years.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

There are no identifiable effects or opportunities associates with this item.

RATIONALE FOR RECOMMENDATION

The City administered Request for Proposals #21-11459-C for consulting services to determine the City's bonding capacity. The RFP was published twice with neither publication generating responses from the market. In the course of staff researching why no responses were received, staff met with GFOA. GFOA provided their relatively new risk-modeling approach to the bonding capacity topic. Thus, it was determined, since a traditional RFP was not generating market response, that it would be advantageous to contract with GFOA for their services to research and develop the risk-model for City of Berkeley to evaluate its capacity for issuance of long-term debt.

ALTERNATIVE ACTIONS CONSIDERED

Not conducting the study

CONTACT PERSON

Henry Oyekanmi, Director, Finance, 981-7326

Attachments:

1: Report: Risk-Based Analysis and Stress Test of Long-Term Debt Affordability (from GFOA, 2022)

A Risk-Based Analysis and Stress Test of Long-Term Debt Affordability for the City of Berkeley, California

April 2022

Produced by:

The Government Finance Officers Association



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Section 1 – Introduction

Long-term debt is an important tool for municipal governments to invest in long-term assets that serve their community. The City of Berkeley, California (City) is considering seeking authorization from its voters on a large amount of long-term debt, perhaps up to \$600 million, to support the City of Berkeley’s infrastructure needs included in its Vision 2050 plan. The debt would be used to fund assets like streets, public buildings, and more. This would be the largest amount of debt the City has sought to authorize in at least the last 20 years.¹ Therefore, the City has, prudently, decided to analyze the long-term affordability of this debt and has engaged the Government Finance Officers Association (GFOA) to perform this analysis.

GFOA is a non-profit association of more than 21,000 state and local government finance professionals and elected officials from across the United States and Canada. A key part of GFOA’s mission is to promote best practices in public finance, including analyzing important financial risks like the affordability of long-term debt. GFOA’s approach to risk analysis is distinctive because we use the same basic methods used by insurance companies and climate scientists to evaluate risk. We use computer simulation to build hundreds, if not thousands, of scenarios of how the City’s financial situation could play out over 30 years. Each scenario changes important variables that influence how affordable the City’s debt might be. For example, each scenario features a different interest rate environment. The variation in these variables is governed by parameters we set, where the parameters keep the variation within the realm of possibility. To continue our interest rate example, we gathered data on the rate of change in bond interest rates since 1970. This information was used to create the parameters for the interest rate environments generated for each scenario. We then see how often the City’s debt remains affordable over those thousands of scenarios. If the debt is shown to be affordable under a high proportion of those scenarios, then that suggests there is a good chance that the debt will ultimately be affordable in the real world. Conversely, if the debt is not affordable under a high portion of the scenarios that suggests the debt is unlikely to be affordable in the real world. This computer simulation is built in Microsoft Excel using open standards for the data.² We’ll refer to this computer simulation as the GFOA “Risk Model”. The Risk Model is completely available to the City to use as it sees fit, including the ability to adjust many of the assumptions utilized for the simulations.

The rest of this report is divided into the following sections:

- **Defining What is “Affordable” Debt.** This section describes our rationale for using a typical bond ratings analysis as the basis for determining what is “affordable” for the City government.
- **Key Financial Indicators and Assumptions.** This section examines the key indicators of debt affordability that are taken into consideration by bond ratings companies and our method of approximating how the indicators suggest debt affordability in our simulation of the City government’s future.

¹ History of the City’s bond issuances compiled with the help of the City Clerk.

² Visit probabilitymanagement.org for more information on the standards we use.

- **Results of the Analysis and Recommendations.** In this section, we will address the findings from our analysis, including recommendations to help the City retain its credit rating.

Section 2 – Defining What is “Affordable” Debt

The definition of what is “affordable” debt is at the foundation of this analysis.

The first step to defining what is affordable is defining the type of debt the City is considering. The City is considering “general obligation (GO) debt”. This debt is paid for by a dedicated property tax levy. Thus, the City **does not** have to pay for this debt out of its existing revenue streams. This means that taking on more general obligation debt **will not** have a **direct** impact on the City’s operating budget. There is **indirect** impact – for example, perhaps the higher tax bills faced by taxpayers would cause them to vote against future tax measures intended to support the operating budget. Or, maybe residents or businesses feel the impact of higher taxes in their businesses or personal finances and decide to move. These are important considerations, but are outside the scope of this analysis, which is focused on the **direct** impacts to City government. That said, the financial indicators we will examine do include measures of personal income and the size of the tax base relative to the size of the population, which do provide some insight into affordability to taxpayers. It is also worth remembering that, according to California law, debt like the City is considering must be approved by two-thirds of voters in an election. If approval is not obtained, the debt cannot be issued. Thus, taxpayers evaluate the affordability of the proposed debt themselves by choosing to approve it or not. However, affordability to the taxpayers might not be that simple. We’ll have more to say on this topic later in the report.

The impact of general obligation debt on the City government’s finances is to add to the City’s total debt burden. Generally, the more debt a City takes on the less attractive its debt becomes to investors, all else being equal.³ This is because, in theory, the more debt a City has, the less likely it is that it will be able to pay it all back. This is important because if the City’s debt becomes too unattractive, it will need to offer higher interest rates to investors. That would make it more expensive to borrow and, thus, more expensive for the City to make future investments in long-term assets. **Thus, we will define debt affordability as the extent to which issuing more debt in support of any City Council program might cause the City’s debt to cross a threshold point where the City has to offer a higher interest rate to attract investors.**

Threshold points where higher interest rates must be offered are known as bond ratings. There are three major agencies that issue bond ratings: Moody’s Investors Service, Standard and Poor’s, and Fitch Ratings. Each rating agency has its own approach, but there are broad similarities between all three. For purposes of this analysis, we will focus on Moody’s approach. This is because Moody’s method is: A) well documented; and B) makes use of quantitative financial information to help standardize the approach to issuing ratings. This means we can collect the same financial information Moody’s would collect and evaluate it in a similar, albeit much simplified, manner. By doing this, our Risk Model was able to essentially duplicate the City’s current rating, which is “Aa”, according to Moody’s. Aa is the second best rating on Moody’s scale (which is similar to the scales used by the other rating agencies). The complete scale is shown in the accompanying table. The reader should note that rating agencies also make finer grained distinctions within the rating tiers. For example, technically, the City’s rating is “Aa1”, which

³ Municipal governments might issue more debt, but their tax base and revenues might also continue to grow. In this case, all else has not remained equal so the debt of that municipality may not become less attractive.

indicates the City is a strong Aa or at the upper end of what is considered Aa. An Aa2 would be in the middle and Aa3 would be considered a weak Aa. For the majority of this report we will not refer to these finer grained distinctions. This is, first, in the interest of simplicity. Using just the ratings scale showing in our accompanying table, the reader will be required to track six different categories of ratings. Multiplying the number of categories by three might make this analysis much more difficult to follow. Second, we do not have access to reliable historical data on how big a difference these finer distinctions would make on the interest rate the City could obtain for its bonds. We have data back to 1970 for the differences between the tiers shown in our table. Therefore, most the analysis will take place at the level of these six tiers. Occasionally, though, we will refer to the finer distinctions (e.g., Aa1 vs. Aa2 vs. Aa3) to discuss how the City’s credit rating could change in response to different conditions.

If the City’s debt were to be downgraded to an “A” we would expect the City to have to pay a higher interest rate on future debt. How much more would depend on the interest rate environment at the time. Historically, the difference between the interest rate of Aa and A has ranged from 1.05 to 0.08 percentages points, with an average of 0.26 percentage points. If, for example, a \$100 million 30-year bond sold at 2.26% interest rather than 2.00% interest, this would translate to \$5 million more in total interest cost over the life of the bond.

Moody’s Rating Scale	
The best->	Aaa
	Aa
	A
	Baa
	Ba
The worst->	B or below

To evaluate the affordability of the City of Berkeley’s borrowing plan including its Vision 2050 debt issuance plan we can do the following:

1. Update the key financial indicators used within the Moody’s rating system to reflect what the indicators would look like with the additional debt over the 30-year analysis period covered by our Risk Model.
2. Use computer simulation to vary key variables that impact the financial indicators over the 30-year analysis period. We’ll describe what these variables are and the assumptions our analysis makes in the next section.

Section 3 – Key Financial Indicators and Assumptions

The purpose of this section is to summarize the key financial indicators used to help frame bond ratings and to describe key assumptions we have made with respect to future values of the important variables that go into the analysis. Our analysis considers the next 30 years, so we had to make assumptions about how key variables would behave. Before we delve into these topics, we’d like to bring five important points to the attention of the reader:

1. The amount of debt the City takes on is not the only, or even primary, factor that determines bond ratings. Bond ratings take into account a number of factors besides debt. Therefore, our analysis include other factors that impact bond ratings, such as pensions, fund balance and tax base, along with debt.
2. Bond ratings are intended, primarily, to help investors decide how risky it is to invest in a municipality’s debt. Though many of the factors bond ratings take into account are reflective of

the general financial health of a municipality, the ratings are not a perfect measure of financial health. This is because ratings are intended to judge the ability of the City to pay back its bondholders and nothing more. This is a limited perspective on financial health.⁴

3. Bond ratings method are not a purely mechanical exercise where a given value for the financial indicators leads to a perfectly predictable bond rating. For example, Moody's rating method includes "notching factors", which are essentially the wiggle room to adjust a municipality's rating up or down, based on local circumstances and the judgment of bond rating analysts. Nevertheless, given that our approximation of the financial indicators that Moody's uses did produce the City's current rating in our Risk Model, we can assume that the financial indicators will produce useful insights into what the City's rating might be under different circumstances.
4. Our analysis is based largely on the future looking a lot like the past in many important respects. For example, we will see that the size of the City's tax base is regarded as a big strength by the Moody's evaluation method. We will assume it will continue to be. Of course, it is plausible that that a large natural disaster, like an earthquake, could severely damage property stock in Berkeley to the point where the tax base is seriously impaired and is no longer the strength it once was. These kinds of extreme scenarios (e.g., natural catastrophes) are not within the scope of our analysis. This is not to say such scenarios are not important. In fact, GFOA analyzes the impact of catastrophic scenarios on municipal financial health on a regular basis. However, given the scope for this project we focused on the key financial indicators of the City's financial health that are described in the following pages and not on catastrophe events. The Risk Model is not intended as a perfect representation of reality. It has been said "all models are wrong, but some are useful". We would suggest that focusing on the trajectory of key financial indicators given the decisions that City makes is a useful perspective on the affordability of its debt plan.
5. Readers who are not interested in the details of the Moody's methods and the assumptions we made about the future of the City's finances are invited to skip the rest of this section and go directly to the next section for our findings and recommendations.

The rest of this section will delve into key financial indicators that are salient to bond ratings and which underlies how we are defining "debt affordability" for this study.

The key financial indicators Moody's considers are described by what Moody's calls its "scorecard". Moody's has four broad factors for its bond rating scorecard and a number of sub-factors, which are shown in Exhibit 3.1.⁵ We will summarize each immediately following. With respect to the overview provided by Exhibit 3.1, the reader should note the factor weightings. We see that measures of the City's debt constitute only 10% of the total scorecard. Thus, the City's plan to issue more debt, by itself, can only have a marginal impact on the score. The City's actions with respect to its financial position, in whole, will be what really matters for debt affordability.

⁴ A comprehensive approach can be found in GFOA's Financial Foundations for Thriving Communities.

⁵ Our primary source on Moody's methods is "US Local Government General Obligation Debt" dated January 26, 2021, published by Moody's Investors Service.

Exhibit 3.1 – Moody’s Scorecard Factors and Weights (for Local Governments)

Broad Scorecard Factors	Factor Weighting	Sub-factors	Sub-factor Weighting
Economy/Tax Base	30%	Tax Base Size (full value)	10%
		Full Value Per Capita	10%
		Wealth (median family income)	10%
Finances	30%	Fund Balance (% of revenues)	10%
		Fund Balance Trend (5-year change)	5%
		Cash Balance (% of revenues)	10%
		Cash Balance Trend (5-year change)	5%
Management	20%	Institutional Framework	10%
		Operating History	10%
Debt/Pensions	20%	Debt to Full Value	5%
		Debt to Revenue	5%
		Moody's-adjusted Net Pension Liability (3-year average) to Full Value	5%
		Moody's-adjusted Net Pension Liability (3-year average) to Revenue	5%

Source: Moody's Investor Service

Economy / Tax Base

The tax base ultimately determines if a city can pay back its debt. There are three sub-factors considered:

Tax-base size: The size of the property tax base is where a municipality draws its revenue from. Currently, full value of the property in the City’s tax base is almost double what is necessary to receive the highest possible score on Moody’s scorecard. We did not find a reason to think that a radical decline in the value of property in the tax base was a probable risk. Of course, events like the 2008 recession and bursting of the housing bubble can cause a temporary decline. These kinds of variations are captured in the Risk Model. The Risk Model assumes that tax base will grow (and occasionally shrink) at rate that is broadly consistent with historical patterns, but the Risk Model does not assume a constant rate of growth. For example, the Risk Model simulates market pullbacks like the Great Recession (and worse). However, we did not find a reason to think that a dramatic, long-term decline in the City’s property values was a high-probability risk. The Risk Model does provide the user with the ability to easily change growth rate assumptions in order to see the effect of more optimistic or pessimistic outlooks.

Full-value per capita: This indicator adds in population size to the size of the tax base. The per resident property wealth shows the availability of tax-generating resources relative to the users of public services. This measure is almost 1/3 above what is necessary to receive the highest score on Moody’s scorecard. We did not find reason to believe that the City’s population would outpace the growth in property values to the point where it would risk the City falling below the Moody’s threshold for the best score. In fact, a long-term forecast sourced from Association of Bay Area Governments (ABAG) shows the City’s population forecasted to grow just over 1% per year over the next 30 years. This growth does not seem to be so great that it puts a strain on City finances and, thus, pose a risk to the City’s bond ratings.

Median Family Income: A community with high-income taxpayers may have greater ability to cover the cost of debt. The City is almost exactly in the middle of the two threshold values that bound the second highest score on Moody's scale. Presumably, the large number of college students in Berkeley exert downward pressure on this measure. That said, we did not uncover a high probability risk that the City would fall out of the second-highest category over the next 30 years.

Finances

This factor considers a local government's cushion against the unexpected, the City's ability to meet existing financial obligations, and its flexibility to adjust to new ones. There are four sub-factors considered:

Fund Balance: Fund balance describes the net financial resources available to a municipality in the short term. It is essentially the "rainy day fund" or "self-insurance" to react to unplanned, unavoidable costs (like natural disasters). More fund balance would presumably reduce the risk of a local government failing to repay debt because of a natural disaster or other catastrophe. For the City, this measure is currently almost 2/3 above what is necessary to receive the highest score on Moody's scorecard (Aaa). That said, fund balance is not nearly as stable a quantity as the economic forces we reviewed above. For example, in the years 2007 to 2013 the City's annually available reserves were less than half of what they've been in the last few years. In fact, the City would have been in the Aa, rather than Aaa, equivalent tier for six of the last 15 years (though not too far below the Aaa tier, at least). This means that we shouldn't take for granted that the City will continue to maintain reserves high enough to receive Moody's highest scores for the entire 30-year analysis period. The Risk Model assumes the City has a chance of falling out of the Aaa equivalent tier for fund balance. That chance is determined by the City's historical experience. Over the last 15 years the City was below the Aaa threshold six times. So, the Risk Model assumes a six in 15 chance (or two in five chance) per year that the City falls below the Aaa tier.

Five-Year Dollar Change in Fund Balance as % of Revenues: The reason for this measure is much the same as stated above, except this takes longer-term perspective on fund balance. Fund balance can change fairly rapidly, year to year, compared to some of the other indicators in the Moody's scorecard. So, this measure checks to see if fund balance is growing or shrinking and by how much. Currently, the City is just above the threshold required for the highest score. However, this is an example of a measure that is highly relevant to the interest of bondholders, but not as well aligned with the interests of the people who live in Berkeley. From the perspective of bondholders, it would not be a bad thing if the City continued to build its fund balance indefinitely. That continues to reduce the risk of a default. However, from the citizens' perspective there is a clear upper limit on the amount of fund balance a local government should hold. At some point the opportunity cost (in terms of higher taxes or foregone services) is not worth the benefit the public receives from the City having a larger fund balance. Thus, given that the City already, by Moody's own standards, has a large fund balance, it is questionable whether the City would continue to grow the fund balance in the future at the same rate it has in the past. Thus, it seems unlikely the City would continue to achieve the highest score under the Moody's rating system. However, that said, Moody's documentation does imply that local governments with a strong fund balance might be given consideration for maintaining that fund balance rather than continuing to grow it - Moody's might adjust ratings upwards to reward maintaining stability of a high level of fund balance. This means that the City

may not enjoy the top-rated scores it had gotten in the past on this measure, but if it maintains a high level of fund balance, it might only drop to the second highest score. The Risk Model gives the user the option to choose the growth rate, from maintaining a rate of growth equivalent to Aaa to remaining flat (equivalent to an A rating). For the purposes of this report, we chose to make this indicator equivalent to an Aa rating. The rationale is that the City probably can't keep historic levels of growth indefinitely, but the high amount of fund balance the City usually carries would, hopefully, be enough to avoid falling down to an A rating.

Cash Balance: Cash is a similar measure to fund balance – but focuses on “money in the bank”, whereas fund balance can include some non-liquid resources. For the City, this measure is currently almost three times above what is necessary to receive the highest score on Moody's scorecard. At the City, cash balances and fund balance levels tend to mirror each other. So, just as the City did not have nearly the same level of fund balance in the past as it does today, it did not have the same level of cash either. Thus, like fund balance, this means that we shouldn't take for granted that the City will continue to maintain cash high enough to receive Moody's highest scores for the entire 30-year analysis period. That said, given that cash appears to be so far above what Moody's is looking for that it would take much more extraordinary circumstances for the City's cash to fall below Aaa equivalence. The Risk Model assumes that the City has a 2 in 15 chance of falling to the Aa tier, each year. This chance is smaller than fund balances falling to the Aa tier. The rationale is the City's cash amounts are very high above the Aaa threshold, so would have a long way to fall to reach Aa territory.

Five-Year Dollar Change in Cash Balance as % of Revenues: The rationale and issues related to this measure are much the same as discussed above. Cash is a more liquid resource for dealing with unplanned, unavoidable expenditures and this measure shows the rate and direction of growth. The City is currently well above the amount required for Moody's highest score, but, again, the same rate of growth probably cannot keep up indefinitely. Like fund balance, though, it seems possible that Moody's might not penalize the City for mere stability in its amounts of cash on hand, if the amounts on hand were kept high. The Risk Model uses identical assumptions for this measure as for the fund balance trend, described above.

Management

The legal structure of a local government and management under which it operates influence the government's ability to maintain a balanced budget, fund services, and continue to derive resources from the local economy. There are two measures in this category.

Institutional Framework: This factor measures the municipality's legal ability to match revenues with expenditures based on its constitutionally and legislatively conferred powers and responsibilities. For example, a local government with many mandated responsibilities, but with little ability to raise revenues would score poorly on this measure. Our examination of the City's prior Moody's bond ratings suggest that the City, for this measure, was rated consistently with its overall rating: Aa. In other words, the second best possible score. We found no high probability risk that the City's legal powers and responsibilities would change dramatically in the coming years, so we assume the City's score on this measure will remain constant throughout the analysis period.

Operating History: Operating history is essentially the extent to which the City runs annual surpluses or deficits. The City's current measure is well above what is required for Moody's highest score. However, because surpluses and deficits are determined annually, we shouldn't assume stability in this measure over a long-term period. We looked at the last 15 years of the City's history to see the size of surpluses (there were no deficits) and used those to simulate what surpluses will be in the future. This results in a more conservative assumption than simply continuing the most recent trends indefinitely into the future.

Debt / Pensions

Debt and pension burdens are measures of the financial leverage of a community. The more leveraged a tax base is, the more difficult it is to service existing debt and to afford additional debt, and the greater the likelihood there will be difficulties funding debt service. There are four measures in this category.

We gave this category the most analytical attention for a number of reasons. First, debt was the primary focus of the City in commissioning this study. The amount of debt the City is considering issuing will have a direct impact on some of the measures in this category. Second, as we will see, the City's current performance on debt indicators is already weak compared to the other indicators we have reviewed. Third, this section includes pensions, which, as we will see, are the weak spot in the City's performance on the Moody's scorecard.

We will first briefly overview the four measures in this category and then go into details on the assumptions made for future values of these indicators.

Debt to Full Value: This evaluates net direct debt relative to full value of the property in the City's tax base. This metric tells us how onerous future debt service payments could be to the tax base. Currently, the City is in the second best category for scoring on this measure.

Debt to Revenues: This compares debt to the City's regular revenue stream. Moody's does not subtract from the calculation any debt whose principal and interest is paid by taxes, even if those costs are external to the General Fund. Under this definition, the City gets a score on the Moody's scorecard equivalent to an "A" rating.

Three-year Average of Moody's-Adjusted Net Pension Liability to Full Value. This measures the magnitude of a local government's pension obligations relative to its tax base.⁶ Similar to the debt burden evaluation, the tax base serves as a proxy for future revenue-generating capacity to amortize accrued pension obligations. The City's score here is equivalent to a "Baa" bond rating.

Three-year Average of Moody's-Adjusted Net Pension Liability to Operating Revenues. This metric seeks to measure pension obligations relative to the size of the local government's budget. The metric attempts to reflect that amortization of accrued net pension obligations could divert revenues out of future budgets and lead to funding shortfalls. The City's score here is equivalent to a "Ba" bond rating (the second worst rating).

⁶ Note that Moody's adjusts the standard net pension liability measure found in government financial reports to include less favorable assumptions on the discount rate for pension investments. The details behind these calculations are available in the Risk Model supplied to the City by GFOA.

Assumptions for Future Indebtedness:

- The Risk Model includes all repayment schedules for the City’s existing debt and assumes debt will be repaid in the times and amounts currently scheduled.
- The Risk Model includes three categories of “new” debt. The detailed assumptions behind the new debt are described in more detail later, but the general categories of new debt are:
 - Debt that the voters have previously authorized, but which the City has not issued. This is in the amount of \$117 million in principal.
 - Debt issued to support Vision 2050 or other programs. The user defines the amount of principal in the Risk Model. The Risk Model assumes that the number entered by the user will be approved by the voters.
 - Debt issued in the far future. Given we are taking a long-term (30 years) perspective, we should not assume that future City Councils will not issue any more debt. The amounts and timings of these simulate future debt issues are described as part of the following bullets.
- For all new debt, the user can choose the length of the repayment schedule. For the purposes of this report, we assumed 30 years. This is consistent with the City’s past practices and current plans. We assume level repayment schedules (i.e., no front or back loading of repayment schedules). We assume no debt refunding, refinancing, etc.
- For all new debt, we simulate the interest rate, where historical rates are used as a model. Here are some key points:
 - We use forecasts of the yield on ten-year US Treasuries for the next two years to simulate the interest rate environment for the next two years. We do this so that the Risk Model does not generate short-term results that are divergent from short-term expectations.
 - After two years, the Risk Model randomly generates future interest rates, where the rate of change in the rates is entirely consistent with the rate of change in the interest rates for Aaa-rated GO bonds and US Treasuries since 1977. We used the historical rate of change to simulate downward, upward, and stable trajectories for long-term interest rates.
 - The Risk Model assumes bond interest rates will not go below zero. The user has the option to adjust this rate floor.
 - The Risk Model includes the City’s informal policy that the City will not borrow if rates are above 5%. If rates are simulated to go above 5% in any year any simulated, then borrowing is deferred until rates go back below 5%.
 - For the purpose of this report, the Risk Model assumes that rates are just as likely to go up in the future as they are to go down, with the exception of the first two years. As discussed above, the next first years are determined by the 10-year US Treasury forecasts produced by other organizations. For the years after that, the user is able to adjust how likely rates are to go up or down to explore assumptions other than what we assumed for this report. So, if the user wanted the Risk Model to simulate an interest environment where it is twice as likely rates would go up, then that assumption could be entered. In no case will the rates rise at a greater rate of change than has been observed historically.

- The Risk Model assumes that the City will issue new debt that has been previously authorized by voters, but which have not yet been issued. This amounts to \$117 million in additional principal that is added to the City's debt burden over the next five years. The debt is issued according to a user-defined schedule.
- For the debt to support more borrowing, including the City of Berkeley Vision 2050, in the Risk Model, the user can choose the amount of debt the City will issue. The Risk Model allows the user to choose between the options below. The options are completely user definable so the City can add, change, or delete options as it likes:
 - An option for \$300 million in debt, which represents the lower end of what the City Council has discussed. Note that the City Council has discussed supplementing this amount of debt with a parcel tax. The parcel tax would not impact the City government's performance on the key indicators in the Moody's scorecard other than requiring the City issue less debt. Hence, the parcel tax is not included in the Risk Model.
 - An option for \$600 million in debt, which represents the upper end of what the City Council has discussed.
 - An option for \$900 million in debt. This is included just for demonstration purposes, so the user can see what a larger amount of debt would do to the model results.
- Debt issued to support more borrowing for the 2050 Vision Plan are assumed to be issued in increments evenly throughout the 30-year analysis period. The user can change this assumption and make the debt issued on any schedule they would like.
- We should not assume that the debt issued to support the City of Berkeley Vision 2050 will be the last debt the City issues for 30 years. Since 2000, the City has tried to gain voters' approval to issue new debt in seven of ten election years. Thus, we must assume that future City Councils will have plans to issue debt to support future projects. The model simulates this under the following assumptions:
 - The City will not try to issue new debt again until 2028. This assumption can be easily changed by the user.
 - For any election year after 2028, there is a 70% chance that the City will try to gain approval to issue new debt. This is based on the fact the City has historically tried in 70% of election years, though this assumption can be adjusted by users.
 - The amount of debt the City attempts to issue in any given election year varies between \$13 million and \$150 million. This is based on the inflation adjusted amounts the City has tried to issue in the past. The Risk Model adjusts this amount upwards in future years to account for the effects of inflation.
 - The public approves proposed new issues at the same rate it has in the past, including partial approvals.

Assumptions for Future Pension Liabilities

For pension liabilities, we developed a single alternative pension assumption, based on the work of the City's CPA firm. This assumption assumes a negative 1 percentage point adjustment to the discount rate applied to pension investments. So, if the baseline, status quo assumption is 7.15%, then the alternative would be 6.15%. The user can activate or deactivate the alternative assumption on the Risk Model

dashboard. If activated, the alternative assumption is applied across all of the thousands of scenarios the risk model produces. If is not activated, it is not applied to any of the scenarios.

The Risk Model also includes an assumption for annual increase in pension liability and the current annual rate of 3.96%. GFOA would like to acknowledge the assistance of Dan Matusiewicz, Senior Finance Consultant, at GovInvest for providing assistance on formulating this assumption, which is based on a 6.8% discount rate and wage growth of 2.5%.

Section 4 – Results of the Analysis and Recommendations

In this section, we will address the finding from our analysis, including recommendations to help the City retain its credit rating.

Let's Put Debt in Context of the Financial Indicators Used to Estimate Debt Affordability

The City's level of debt only impacts the financial indicators that comprise a total of 10% of the Moody's scorecard. Put another way, 90% of the scorecard result is determined by factors other than the City's debt! That means that long-term affordability of the City's debt will be influenced by things like how the City manages its tax base, fund balance, its pensions, and its budget. Exhibit 3.1 provided details on the relative importance of the different factors in the Moody's scorecard. To recap some of the more notable items:

- Pensions are equal to 10% of the scorecard result, or the same as debt.
- Fund balance and cash are equal to 30% or are three times the importance of debt.
- A balanced budget is equal to 10% of the scorecard result.
- Economic factors, like full value and median family income, are equal to 30% of the scorecard result.

According to our re-creation of the Moody's scoring method, today, the City is just short of a score that would be consistent with an Aaa rating. The City's pension liabilities are the main culprit for keeping the City from that score. This conclusion seems consistent with what bond analysts have conveyed to the City: that the City would have an Aaa rating if not for its pension situation. This means that the City has some "distance to fall" in order to get down to an A rating, at least according to the quantified scoring system and the assumptions we described in this report.

All this means that the City's decision to issue debt must be done in the context of the other factors that impact affordability when trying to determine the chance that additional debt will reduce the City's bond rating.

So, to review, the City's strengths are:

- The City's economic base is firmly in Aaa territory and there does not seem to be a plausible risk of it falling out of that tier. The economic base accounts for almost 1/3 of the rating.
- The City's fund balance and cash are firmly in Aaa territory as well. Even though these measures are, by nature, more volatile than the measures of the economic base there seems to be low risk that they would fall completely out of Aaa territory much less all the way down to an A-rating territory (assuming the City maintains a strong reserve policy, as further described in our recommendations). Fund balance and cash measures also constitute almost one-third of the rating.
- The City has also consistently maintained a balanced budget.

And, the City's weaknesses are:

- The City’s pensions are in Baa territory currently. Some observers believe there is a case for a lower discount rate to estimate the City’s pension liability. A lower discount rate would make the liability to go up substantially. The City’s CPA firm produced the calculation for a 1 percentage point reduction and we included it in the Risk Model as an option for the user to activate, if they wish. If this scenario came to fruition, pensions would become an even greater drag on the City. In fact, the Risk Model shows a good chance that pensions reach B territory (the worst rating) well before the end of the 30-year analysis period. Finally, it is worth noting that the Risk Model shows that one of the pension measures in the scorecard (pension liabilities compared to revenues) is at risk of slipping down to a score equivalent to the next lower rating tier (Ba) within in the next five years. As we will discuss more later, a continued downward trajectory on pensions could influence bond ratings analysts to give the City a lower rating.
- Though the City’s current indebtedness is not nearly the problem that pensions are, it is not helping the City’s bond rating either. Currently, debt measures sit between Aa and A territory.

More debt reduces the City’s score on the indicators. We can illustrate with the table below. The table shows the City’s scores under different simulations, starting with the City’s current score and ending with the City’s simulated score at the end of 30 years. The simulation does not produce a single score for the end of 30 years, but rather produces a range of possible scores. For this reason, we show the average, optimistic, and pessimistic outcomes.⁷ The table uses assumptions identical to that described earlier in this report and assumes \$600 million of new debt in support of the City’s programs, including Vision 2050, plus debt issued by future City Councils, as described earlier. We can see that the score at the end of the 30 years is worse than the City’s current score under all three perspectives in the table (average, optimistic, pessimistic). The good news is that when we consider just debt, at least the scores do remain broadly consistent with an Aa rating. But, what about if we consider more than just debt? Other factors do enter into the final bond rating of course.

Exhibit 4.1 – Simulated Results on Moody’s Scorecard under the Assumptions Described Earlier in the Report

Rating	Score for Each Rating		City's Current Score	Average Score at end of 30 years	Optimistic Score at end of 30 years	Pessimistic Score at end of 30 years
	Min	Max				
Aaa	0.05	1.5				
Aa	1.5	2.5	1.65	2.14	2.00	2.30
A	2.5	3.5				
Baa	3.5	4.5				
Ba	4.5	5.5				
B or below	5.5	6.5				

⁷ Optimistic and pessimistic are defined as the points at which 5% of the outcomes produced by the model are above or below the point indicated on the table.

To examine the other considerations that go into a rating, Exhibit 4.2 changes the assumptions in the Risk Model to be less favorable for the City, including: a lower discount rate on pensions (1 percentage point) and performance equivalent to an Aa rating for fund balances, cash balances, and operating history (which would be less favorable than the City’s recent history would suggest). We can see that the City’s scores now deteriorate enough that the pessimistic outcome places the City in the “A” rating equivalent scoring tier. What the table does not show is how the scores change for periods less than 30 years. The Risk Model tells us that the risk of a downgrade is present in the near-term future, not just the long-term future. This is because the City is close enough to the next lower tier of scoring for its debt and pension measures that it is plausible that the City will reach these lower tiers in five to ten years. We’ll discuss this more detail in the next section. Over the long-term, the City’s strong property tax base (and growth in that base) can balance out some of the nearer-term challenges (assuming the challenges don’t also get worse).

Exhibit 4.2 – Simulated Results on Moody’s Scorecard under Less Favorable Assumptions

Rating	Score for Each Rating		City’s Current Score	Average Score at end of 30 years	Optimistic Score at end of 30 years	Pessimistic Score at end of 30 years
	Min	Max				
Aaa	0.05	1.5				
Aa	1.5	2.5	1.65	2.39	2.30	
A	2.5	3.5				2.50
Baa	3.5	4.5				
Ba	4.5	5.5				
B or below	5.5	6.5				

The reader will notice that even on this second table, the scores are certainly not disastrous, by any means: the average score is still within the Aa equivalent tier. That said, we must remember that the final bond rating a municipality receives is not a purely mechanical exercise, where the key financial indicators dictate the bond rating. According to Moody’s: “The scorecard is not a calculator. Its purpose is not to determine the final rating, but rather to provide a standard platform from which to begin viewing and comparing local government credits. It therefore acts as a starting point for a more thorough and individualistic analysis.” Put another way, the rest of the rating is subject to a human element: the rating analyst. In a real-life scenario characterized by unfavorable performance across the indicators that Moody’s looks at we can’t discount the possibility that the analyst might decide to “put a thumb on the scale” and raise the chance of a downgrade. For example, perhaps a significant amount of new debt along with further deterioration in the City’s pension situation dampens the rating analyst’s enthusiasm for the City of Berkeley’s debt even more than the Moody’s scorecard suggests. Finally, it could be possible that rating agencies could change the weightings of the indicators they consider. GFOA has observed that the measures favored by rating agencies and the relative weight placed on them has evolved over time. It seems unlikely that debt and pensions would come to occupy a less important place in rating considerations given that they currently constitute a relatively small consideration compared to fund balance / cash and tax base. Given that pensions and debt are biggest risk to future debt affordability, we’ll examine this risk more in the next subsection.

Finally, the model can address different interest rate environments and property markets. Some observers believe that sustained higher interest rates may result from efforts to combat inflation. This would result in economic stagnation and impact on the housing market. In fact, the Federal Reserve Bank of Dallas recently stated that the property market is showing "signs of a brewing U.S. housing bubble". The implication is that bubbles pop, with the types of consequences we saw in the 2008. To explore these concerns further, we adjusted the model assumptions to give more weight to a rising interest rate environment and to reduce, by half, the chances of growth in the City's revenue and property values. Note that the baseline assumptions in the Risk Model **did not** assume uninterrupted growth in property values, but did assume a good chance of a long-term upward trajectory. These new assumptions result in a good chance of long-term stagnation. Under these assumptions, unsurprisingly, the City's is at significantly greater risk of slipping below an Aa equivalent score. Interestingly, the City's informal policy of not borrowing at rates above 5% makes a noticeable difference in the high interest rate environment: the City stops borrowing at a certain point and pays back existing debt, which helps its score. The take-away is that unfavorable turns in the economic environment will have a noticeable impact on the financial indicators and increase the risk of a ratings downgrade.

Pension, Debt and the Risk Posed to the City's Bond Rating

Though pension and debt do not dominate the Moody's scorecard and are not the most important consideration in bond ratings, they still can influence bond ratings. For example, especially poor performance or notable deterioration from previous performance might capture the attention of the bond ratings analyst. To illustrate, the table below displays results from one of thousands of simulations the Risk Model produced, using the more unfavorable assumptions described in the previous section. We chose to illustrate using the more unfavorable assumptions because it helps make the point we wish to make more clearly. Also, keep in mind this is just one of the thousands of simulations we developed, so it's not intended to show generalizable results (unlike the tables in the last section which summarized results from across the thousands of simulations).

The top set of rows in the table shows the City's current values for the key financial indicators associated with debt and pension in the Moody's scorecard. The next set of rows shows the scores the indicators receive under the Moody's methodology. The scores can range from 1 to 6, where 1 is the best (Aaa equivalent) and 6 is the worst (equivalent to B or below). The final row is the average of all indicators in the Moody's scorecard, which includes indicators not shown in the rows above (e.g., tax base, fund balance, etc.). Remember that the average is weighted towards the indicators Moody's deems most important (see Exhibit 3.1).

We see that the City's current score across all indicators is a 1.65 (bottom left corner), consistent with a strong Aa rating. However, as we move to right and further into the future, we see City's score on debt and pensions deteriorate (the numbers on the 1 through 6 scale get higher). We can also see the average score move upwards. The movement upwards is not as dramatic because debt and pensions only account for 20% of the total score. The measures that account for the other 80% perform well, often in Aaa territory. Nevertheless, we see that although the City's score remains consistent with an Aa rating, it has become consistent with a weak Aa (or Aa3 in Moody's terminology). It should be noted that the cutoff

points used in the table to differentiate strong from weak come directly from Moody’s documentation.⁸ With this in mind, it becomes more understandable why an analyst might decide to downgrade the City to an A rating, if they observe the City’s scorecard result fall from a strong to a weak Aa. They might conclude that the possibility of continued decline, for example, merits a lower rating.

Exhibit 4.3 – Example Results from a Simulation the Risk Model Produced

	Now	Years into the Future									
		3	4	5	6	7	8	9	10	11	12
VALUES FOR INDICATORS											
Net Direct Debt / Full Value	1.3%	2.2%	2.3%	2.2%	3.0%	2.9%	2.7%	3.5%	3.8%	3.8%	3.8%
Net Direct Debt / Operating revenues (x)	0.76	1.29	1.34	1.86	1.78	1.69	2.08	2.28	2.20	2.10	2.01
Adjusted Net Pension Liability (3-Year Average) to Full Value (%)	8.7%	13.7%	13.7%	13.8%	14.0%	14.1%	14.7%	15.2%	16.4%	17.7%	18.8%
Adjusted Net Pension Liability (3-Year Average) to Revenues (x)	5.24	7.73	8.26	8.49	8.72	8.90	8.80	9.17	9.44	9.67	9.93
SCORE FOR DEBT & PENSION INDICATORS (1 THRU 6 SCALE)											
Net Direct Debt / Full Value	2	3	3	3	3	3	3	3	3	3	3
Net Direct Debt / Operating revenues (x)	3	3	3	3	3	3	3	3	3	3	3
Adjusted Net Pension Liability (3-Year Average) to Full Value (%)	4	5	5	5	5	5	5	5	5	5	6
Adjusted Net Pension Liability (3-Year Average) to Revenues (x)	4	5	5	6	6	6	6	6	6	6	6
SCORE FOR TOTAL OF ALL INDICATORS (1 THRU 6 SCALE)											
	1.65	2.2	2.2	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.3
	^	^	^	^	^	^	^	^	^	^	^
	Strong	Weak	Weak	Weak	Weak	Weak	Weak	Weak	Weak	Weak	Weak
	Aa	Aa	Aa	Aa	Aa	Aa	Aa	Aa	Aa	Aa	Aa

Finally, the Risk Model can be used to explore different weightings on financial indicators. For instance, we could give greater weight to pensions and debt and less to cash and fund balances (perhaps because cash and fund balance measures are very similar, so weighting both heavily in the analysis could be seen as “double counting”). This feature of the Risk Model could be used to mimic how a ratings analyst might decide to weigh the indicators differently than Moody’s standard documentation suggests. Unsurprisingly, weighting debt and pensions more puts downward pressure on the City’s scores.

Develop and Maintain Strong Financial Policies

Financial policies can help the City maintain its good bond rating. An example is the City’s General Fund Reserve Policy. GFOA’s review of the City’s policy finds that it includes all the critical features of a good policy and calls for a reserve equal to Moody’s Aaa equivalent threshold. That said, it is important to recall that Moody’s looks across all “operating funds”, which includes more than the General Fund. **Hence, there could be an argument for defining reserve policies for other critical operating funds.**

The City also has a debt policy. The policy has many of the features of a good policy, but there may be some opportunities for improvement. Particularly salient to our discussion of bond ratings is debt affordability. The City’s debt policy notes that “the City is subject to debt capacity limit for its general obligation bonds: 15% of assessed value.” This amount of debt would be equivalent to the second lowest rating, Ba, under Moody’s scoring. **Hence, there may be a case for defining a more locally appropriate debt affordability policy.** For example, even under the most aggressive assumptions of how much debt the City might issue, the Risk Model did not show that there was a high chance that debt issued in support of the Vison 2050 would bring the City’s scorecard result below an “A” equivalent score on the measure

⁸ Note that Moody’s doesn’t use the terms “strong” and “weak”, but rather a numeric code. We elected to use the more descriptive terms of “strong” and “weak” in order to make the table more understandable.

comparing debt to property value of the tax base. The A rating is defined as debt equal to between 1.75% and 4% of property value. This might be a good starting point for defining a locally affordable limit. The City could “stress test” affordability by simulating larger issues to see how much pressure is placed on the scorecard result by increasing the amount of debt. It could be that the City’s strong tax base and fund balance / cash practices would make it practical to incur debt beyond 4% of property value without putting the score at too much risk, but perhaps 15% is still too much. Of course, we must remind ourselves that bond ratings consider only the interest of the City’s creditors. Just because creditors are willing to lend does not mean the City should borrow. More debt also places more of a burden on taxpayers. Taxpayer burden should be analyzed as part of developing a debt affordability policy. We’ll discuss this more in one of our other recommendations, later in this report.

Another opportunity for improvement of the City’s debt policy might be to define interest rate ceilings for issuing debt. GFOA understands that the City has an informal policy that considers “5%” the interest rate ceiling beyond which the City will not issue debt. Formalizing this policy, or something like it, could help make a positive impression on rating analysts. The GFOA Risk Model can be used to help the City stress test different policy choices because the user can customize the interest rate ceiling the Risk Model uses and adjust assumed behavior of the interest rate environment.

Finally, **a structurally balanced budget policy could be helpful.** The City has a good history of running budget surpluses. A municipal government is subject to legislative requirements to pass a balanced budget. However, the definition of a balanced budget is just that inflows equal outflows for the year and says nothing about the long-term sustainability of how the budget is balanced. For example, according to the law, an asset could be sold to pay for the compensation of permanent City staff positions. An asset is a one-time revenue while staff compensation is a recurring expenditure, so this strategy would not be advisable even if it is legal. A structurally balanced budget policy commits a local government to adopting a budget that is balanced using sustainable strategies. GFOA is happy to provide the City with templates for such a policy, if the City is interested in pursuing it. This kind of policy would support both a strong score in the “operating history” and, perhaps, the “institutional framework” measures in the Moody’s system. For example, Moody’s recognizes “unusually strong budget management and planning” as a “notching factor” that could justify a higher score for a municipality than the ratios in the scorecard might suggest. A structurally balanced budget policy could be an illustration strong budget management and planning.

Manage the Risk Posed by Pensions

As we've discussed, pensions are the Achilles' heel of the City's bond rating. The City has been considering strategies to manage its pension risk and has established an irrevocable supplemental (Section 115) pension trust. This could help support a good bond rating. This is supported by conversations the City's Finance Director has had with bond rating agencies: the City's current pension challenges has kept it from achieving an Aaa rating and continued deterioration in pension position could even lead to the City slipping to an A or a lower rating.

Support a Strong Tax Base

If pensions are the City's Achilles heel, then its aegis is its tax base. Not only is the tax base directly responsible for 30% of the City's score on the Moody's scorecard, it directly impacts other measures as well. For example, the Moody's scorecard method compares debt and pensions to the full value of taxable property in the City. Of course, the tax base also determines how much revenue the City can raise, which influences fund balances and the City's ability to balance its budget. Therefore, the City should take active steps to preserve and to enhance its tax base. GFOA has found that there are unrealized opportunities for municipal governments to better reflect the financial interests of municipal government in land use planning. After all, land use planning will have an important influence on how the tax base develops and how the tax base develops will have an important impact on the quality of life in Berkeley (like the City's ability to invest in infrastructure!). The City can learn more about GFOA's findings and recommendations for how to make the connection between land use planning and city finances in [this report \[Note to reader: as of the date the City of Berkeley's report was posted the GFOA report on the intersection between land use planning and municipal finances has not be released to the public. It will be available soon\]](#).

Develop and Maintain Measures of Tax Burden

General Obligation (GO) debt is paid for by a special tax levy. Therefore, more GO debt does not place a direct pressure on the City's budget. It does, however, place burden on the City's taxpayers. Voters approve the City's ability to authorize debt. In that way, voters are speaking as to whether debt is affordable to them or not. However, voters are unlikely to have a perfect understanding of the long-term implications of debt for their tax burden. In the past, the City has developed measures that show the average tax burden for a City of Berkeley homeowner. It may be wise to develop the ongoing capacity to monitor and project tax burden, especially if the City plans to continue making use of GO bonds and tax measures. The scope of the GFOA Risk Model covers only City government finances, but the Risk Model does provide much of the information that the City would need to examine the tax burden placed on residents and businesses by future debt. For example, it gives the full range of principal and interest that would need to be covered by taxes every year of the 30-year analysis period. It also provides range of the potential size of the tax base.

Be Strategic about Debt Issuance

The City already has \$117 million in previously authorized debt that it plans to issue in the next few years. This is included in the Risk Model and in the information we've presented in this report. What the risk model doesn't capture is the City staff's capacity to manage the debt issuance and, critically, to manage

the projects that the debt is intended to finance. Prioritizing projects to make sure the City doesn't take on more than it can handle will not only make the best use of limited staff capacity it will help limit the total amount of debt the City takes on. The City has old debt that will gradually be paid down in the coming years. There is some opportunity to moderate the increase in the City's total debt burden by timing the issuance of new debt with expiration of old debt. That said, we must recognize that the amounts of new debt being contemplated do significantly exceed the amount by which old debt will decrease in the next number of years. So, a total increase in the City's debt burden would be inevitable under the assumption that there \$117 million would be issued along with some significant additional amount to support other projects including the Vision 2050 project.

Section 5 – Conclusion and Summary

In conclusion, the City's performance on the key financial indicators used in the Moody's scorecard appears to be robust under a variety of circumstances. That said, the final bond rating the City receives is not purely a function of these indicators. Human judgment, applied by bond ratings analysts, determine the final score. Their judgment could be swayed, negatively, by the risks posed by debt and pensions, which we described earlier in this report. We have outlined a number of opportunities for the City to take proactive measures to preserve and protect its bond rating and, thus, its capacity to borrow at favorable interest rates.

To conclude, let's recap the key take-aways from this report.

- The City has important strengths that bolster its ability to borrow, including a strong tax base, fund balances, and a history of balanced budgets. That said, the City's current policy identifies a limit on borrowing equal to 15% of assessed value. Borrowing this much would place the City at the equivalent of a Ba score or the second lowest score for the key financial indicator of debt compared to the value of property in the City. That would, of course, exert strong downward pressure on the City's bond rating. The City should develop a more locally appropriate debt limit, rather than relying on statutory limits (which are set without regard to local context). For example, debt equal to 4% of property value would still provide room for the City to issue more debt (the City is currently at less than 2%), while keeping that measure with the scoring tier equivalent to an A rating. The GFOA Risk Model can be used to "stress test" different policies.
- An unfavorable turn in the economic environment could impact the City's bond rating. The Risk Model can be used to simulate high interest rate environments and stagnant (or even declining) housing markets. Unsurprisingly, these conditions increase the chances that the key financial indicators we analyzed will slip into territory associated with a lower bond rating. This is important because some observers believe that a higher interest rate environment and stagnant or declining property market are real possibilities.
- Growth in the City's tax base supports borrowing and repayment of debt. Hence, the City should consider how it can use the City's land use planning capabilities to support the financial capacity of City government. Land use planning could be used to improve the revenue productivity of the land uses in the City's jurisdiction.
- The City's pension liabilities are a drag on the City and its capacity to borrow. Pensions are clearly the weak spot in the City's bond rating given how the pensions stand today. Some observers believe that the current discount rates assumed for the pensions' investments may be too optimistic. Lower discount rates would increase the size of the liability even further. This emphasizes the need for the City to find ways to manage its pension debt.
- The City can adopt certain financial policies to maintain good management practices. This will help make a positive impression on bond rating analysts. It is important to remember that even though our Risk Models shows the City is likely to perform consistently with an Aa rating in most scenarios: A) in many scenarios the City's position deteriorates from strong Aa to a weak Aa; and B) ratings are ultimately the product of the judgment of the bond ratings analyst. An analyst's

enthusiasm for the City's debt might dampened enough by this deterioration that the analyst decides on a ratings downgrade for the City.

- Though our analysis focused on the direct impact of debt on the finances of City government, the City should also be mindful of the burden on taxpayers. The Risk Model provides much of the information the City would need to estimate burdens on taxpayers under different scenarios.
- The City already has \$117 million in previously authorized debt that it plans to issue in the next few years. Given the City's interest in issuing more debt to support the Vision 2050 and other programs, the City should remain mindful of the City staff's capacity to manage new debt issuance and, critically, to manage the projects that the debt is intended to finance. Prioritizing projects to make sure the City doesn't take on more than it can handle will not only make the best use of limited staff capacity, it will help limit the total amount of debt the City takes on.
- By following a prudent borrowing strategy, managing pensions, and following other recommendations in this report the City should have a good chance of making a positive impression on bond ratings analysts and maintaining its ratings, all while preserving some additional capacity for the City to borrow.

Appendix 1 – Limitations of GFOA’s Analysis

This section highlights the most important limitations of our analysis.

Our analysis is not predictive. GFOA does not forecast bond ratings. Rather, our model generates hundreds or even thousands of different scenarios to show how the future could unfold. This helps the City think more broadly about risk so that it can be more prepared for whatever future event does eventually come to pass. Finally, it is important to note that low probability events are still possible events. Hence, even if our model says an event has a low probability, then that does not mean it won’t occur.

GFOA is not a risk management consultant. We worked with the City to find out which risks to bond ratings are most salient and then modeled those risks quantitatively to judge the potential impact. It is not our place to determine what the City’s attitude towards risk should be or to substitute GFOA’s attitude towards risk for the City’s. GFOA builds models to help you explore the questions, but ultimately you have to make the decisions.

Our analysis is based on historical records. Historical data is often a good way to model potential future outcomes. However, historical data will not be perfect.

Our analysis is not inclusive of every risk the City could possibly face. We examined the City’s past history and worked with City staff to identify the risks that posed the most clear and present danger to the City’s bond rating. However, it is possible that the City could experience a shock that no one was expecting or that the City could be impacted by a low probability, but high consequence event.

The calculation of the key indicators is subject to some interpretation. Though Moody’s does produce detailed documentation of their methods, there is still some interpretation required. For example, the measure of fund balance is supposed to include all “operating funds”. It is ultimately up to the analyst to decide which funds are operating funds and which aren’t. It could be that GFOA would have a different interpretation than Moody’s. That said, given that our Risk Model did duplicate the City’s current score, our interpretation should at least be close.

Good decisions do not always lead to good outcomes. Excel simulation tools can enhance one’s perception and understanding of uncertainty and risk.⁹ However, when dealing with uncertainty, even the best decision may not lead to a good outcome, if luck goes against you.¹⁰

⁹ “To survive in an increasingly unpredictable world, we need to train our brains to embrace uncertainty,” Emre Soyer, Quartz Magazine, January 9, 2017 <https://qz.com/879162/to-survive-in-an-increasingly-unpredictable-world-we-need-to-train-our-brains-to-embrace-uncertainty/>.

¹⁰ This is one of the primary lessons in: Annie Duke. *Thinking in Bets: Making Smarter Decisions When You Don’t Have All the Facts*. Portfolio. 2019.

CONSENT CALENDAR

August 3, 2022

To: Honorable Mayor and Members of the City Council
 From: Councilmember Ben Bartlett (Author), Councilmember Susan Wengraf and
 Councilmember Rashi Kesarwani (Co-Sponsors)
 Subject: Additional Allocation of Measure P Funding to “Step Up Housing” Project

RECOMMENDATION

Adopt a resolution allocating an additional \$114,660 per year for 10 years, from Measure P transfer tax receipts to support the increased costs for the lease and operation of a new permanent supportive housing project for the unhoused at the Step-Up Housing Project at 1367 University Avenue. In addition, refer to the next meeting of the Budget and Finance Policy Committee to confirm the availability of requested funding.

BACKGROUND

California has the highest real world poverty rate of any state, 17.2% over the previous three years and much higher than the national rate.¹ A major contributing factor to the state’s high poverty indices is that many California residents spend much of their income on housing due to high construction costs.² Throughout the state, many affordable housing development projects are stalled, burdened, and have incurred higher than the median costs for development.

For example, in Alameda, CA, Everett Commons, which is a low-income development that provides housing for only 20 families, costs \$947,000 per unit.³ The notoriously high price of land and the rising cost of construction materials are contributing factors. On the other hand, the Step-Up Housing Initiative uses an efficient and cost-effective modular construction model that provides 39 individuals with not only stable housing, but a safe and supportive environment where they can access critical employment, health, substance abuse, and community resources and services. Berkeley can help address the shortage of homes and effectively alleviate the City’s homelessness crisis through this innovative and practical project.

CURRENT SITUATION

On October 13, 2020 the Council unanimously passed Resolution # 69,586-N.S. to authorize use of \$900,000 a year to fund a new 39-unit Step Up Supportive Housing project at 1367 University Ave. (See attachment.) BOSS is the operator of the facility, and Panoramic Interests/Swinerton Builders would construct and furnish it.

Since then, dramatic increases in construction prices and materials, supply chain complications and dramatic increases in interest fees have caused the project construction costs to rise more than 50%. At current rents of \$1,400 per unit per month, the project is infeasible and cannot be financed. If, however, rents can be raised to \$1,645 per month, the project can proceed. The higher rents would justify a larger construction loan to finance the additional costs.

To cover these increased rents, additional Measure P funds of \$114,660 per year are needed, beyond the \$900,000 already allocated. This is an increase of 12.7%.

A RECAP OF THE PROJECT -

The project will include 39 fully furnished studio apartments, private bathrooms for each studio, a 400-square-foot community room, a community kitchen, two offices for support staff and services, permanent on-site property management, and 24/7 security. The building will be constructed with modular units built around an approximately 615-square foot private central courtyard.

BOSS will provide services for Step-Up Supportive Housing including connecting residents to mental health resources, substance abuse recovery services, employment, education, and legal services and will accompany them to service providers when appropriate. The program will ensure participants obtain health insurance coverage and connect them to primary care providers. Opportunities for socialization and peer support will be provided through the organization of on-site support groups, learning workshops, social activities, community meals, and service visits by outside providers. BOSS will also manage an on-site food pantry in collaboration with Alameda County Community Food Bank. These services will help residents maintain stable housing, improve mental and physical health, and decrease social isolation. On-site service hours will be provided Monday-Friday, 9 am-5 pm, but the case manager or designated staff will be on-call as needed at all times.

The program will be staffed by several employees, including a program manager, housing manager, property manager, cook, maintenance worker, and overnight monitor.

REVIEW OF EXISTING POLICIES AND PLANS

Berkeley voters overwhelmingly passed Measure P in November 2018 with 72% of the vote. The Measure raised the transfer tax on property sales over \$1.5 million from 1.5% to 2%, which is expected to generate approximately \$6-8 million annually. These funds were intended to be allocated towards various homeless services, including permanent housing, supportive services, and navigation centers.

Measure P also created an independent commission, the Homeless Services Panel of Experts, to provide recommendations on funding allocations to the City Council. In December 2019, the Homeless Services Panel of Experts published its first set of recommendations for initial investments from the General Fund to address homelessness in Berkeley. The Panel's recommendations prioritized certain categories of activities and set forth a percentage of funding for each category. Permanent housing was listed as the top priority, with 30% of the funds recommended to be allocated towards such projects. The remainder was recommended to be allocated towards shelter and temporary accommodations, immediate street conditions and hygiene, supportive services, flexible housing subsidies, and infrastructure. The City Council approved on June 30, 2020, Measure P allocations for FY 2020-21 that included \$2.5 million for permanent housing subsidy.

In 2017, the City Council also referred staff to create a 1000 Person Plan, which seeks to end homelessness for 1000 people in Berkeley. In 2019, City staff responded to this referral and concluded that the Council needed to provide up-front investments in targeted homelessness prevention, light-touching housing problem-solving, rapid rehousing, and permanent subsidies. This proposal to lease and operate the StepUp Housing initiative at 1367 University would help move forward the 1000 Person Plan and accomplish the Homeless Services Panel's top priority of providing stable and permanent supportive housing for individuals experiencing homelessness.

In addition, this project also fulfills the goals of the original StepUp Housing initiative, which passed unanimously on February 14, 2017.

CONSULTATION/OUTREACH OVERVIEW

Councilmember Bartlett's office collaborated with BOSS and Panoramic Interests to ensure the long-term success of this new permanent supportive housing project, the StepUp Housing initiative. By bringing together BOSS's expertise in the field of supportive services and Panoramic's efficient modular construction model, this project can be operational and begin providing stable housing to 39 individuals within twelve months of receiving this funding commitment, resulting in dramatic savings in costs and delivery time.

BOSS was founded in Berkeley in 1971 to serve severe and persistent mentally ill homeless individuals and their families, and has since expanded to serve over 3,000 families and individuals per year across Alameda County, including persons experiencing homelessness, mental illness, former incarceration/justice system involvement, domestic or community violence, unemployment, and other crises. BOSS has 49 years of experience serving the target population, and 45 years of experience operating emergency, transitional, and permanent housing programs. Panoramic Interests has been building high density infill development projects in the Bay Area since 1990. Its work in downtown Berkeley and San Francisco includes 15 projects, adding more than 1,000 new units of housing, and 100,000 square feet of commercial space. From 1998-2004, Panoramic built seven new mixed-use apartment buildings in downtown Berkeley. During this time, Panoramic housed more than 80 Section 8 tenants, making it the largest private provider of Section 8 housing in the city.

This collaborative effort between the city, the service provider, and the developer can serve as a regional model for future permanent supportive housing projects in Berkeley and throughout the Bay Area.

RATIONALE FOR RECOMMENDATION

The City committed to funding a Step-Up Supportive Housing facility in October of 2020. The project was expected to be completed sometime in 2021-2022 but saw escalating prices, supply chain complications and rising interest rates as the final budgets were established.

The additional project costs rose by more than 50% making the project infeasible, at the original rents of \$1,400 per unit per month. (See attached documents.)

The City's additional funding commitment will enable the project to be completed as planned. It will help the homelessness crisis by allowing for the long-term and stable housing of 39 individuals experiencing homelessness as well as the provision of on-site services to help those individuals retain housing, improve their mental and physical health, connect with employment and education opportunities, and decrease social isolation. In addition, this project will serve as a regional model for other jurisdictions to consider when dealing with the homelessness crisis in their cities.

FISCAL IMPACTS

The new permanent supportive housing project, known as the Step-Up Housing at 1367 University

is requesting an additional \$114,660 per year for 10 years to cover an increase in the rental rate from \$1,400 per unit per month to \$1,645 per unit per month. The \$114,660 allocation represents a 12.74% increase from the original allocation of \$900,000 per year.

ENVIRONMENTAL SUSTAINABILITY

The project itself was determined by the Planning Department to be categorically exempt from the provisions of the California Environmental Quality Act pursuant to Section 15332 (In-Fill Development Projects) of the CEQA Guidelines.

CONTACT PERSON

Councilmember Ben Bartlett

510-981-7130

James Chang

jchang@cityofberkeley.info

ATTACHMENTS AND MATERIALS

1. Proposed Resolution
2. Letter from Donald Frazier, Exec. Dir. BOSS to Mayor Arreguin, 6-6-22
3. Budget from Swinerton Builders, June 3, 2002 showing cost increases of \$3M+.
4. Past Resolution NO. 69,586-N.S. October 13, 2020
5. Articles: “Soaring material prices, supply chain delays spook owners and developer.” Construction Dive, 4-12-21. “Mortgage rates spike to their highest level in nearly 13 years.” Washington Post, 5-5-22. Step Up Housing Council Item from February 14, 2017:
6. Additional Links
 - a. <https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-272.pdf>
 - b. <https://www.sacbee.com/article245815115.html>
 - c. <https://www.latimes.com/homeless-housing/story/2020-04-09/california-low-income-housing-expensive-apartment-coronavirus>
 - d. <https://drive.google.com/file/d/1sUgEAKJfpRaNMBAzSFdd9ajV9CA06HOe/view?usp=sharing>

RESOLUTION NO. ##,###-N.S.

ALLOCATING AN ADDITIONAL \$114,660 ANNUALLY FOR 10 YEARS OF MEASURE P FUNDS TO LEASE AND OPERATE THE NEW PERMANENT SUPPORTIVE HOUSING PROJECT FOR THE HOMELESS AT 1367 UNIVERSITY AVE.

WHEREAS, the City Council passed unanimously the original Step Up Housing Initiative introduced by Councilmember Bartlett, Councilmember Wengraf, Councilmember Kesarwani, and Mayor Arreguin on October 13, 2020; and

WHEREAS, Measure P was passed by Berkeley voters in November 2018 to raise the transfer tax on roughly the top-third of properties from 1.5% to 2% and allocate those funds towards various homeless services, including permanent housing, supportive services, and navigation centers; and

WHEREAS, Measure P designated the Homeless Services Panel of Experts to advise the Council on expenditures for homeless services; and

WHEREAS, in December 2019 the Homeless Services Panel of Experts published their recommendations for initial allocations under Measure P, including highlighting permanent housing as the City's top priority and recommending 30% of Measure P funds be allocated to permanent housing; and

WHEREAS, the City Council approved on June 30, 2020 Measure P allocations for FY 2020-21 that included \$2.5 million for permanent housing subsidy; and

WHEREAS, the Berkeley Zoning Adjustments Board approved the permanent supportive housing development project at 1367 University on July 9, 2020.

WHEREAS, construction costs, materials costs, and interest rates have increased dramatically in the past 18 months, making the project infeasible at the current rent of \$1,400 per unit per month

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley that the following be approved for the StepUp Housing at 1367 University Ave:

- A reservation of approximately an additional \$114,660 year in ongoing funds annually for 10 years for the leasing and operation of the proposed project, with funding adjusted annually based on the Consumer Price Index for Oakland-Hayward-Berkeley, CA.
- In the event BOSS is unable to perform its function as the service provider, an alternative qualified service provider may operate the project with the review and approval of the City Manager, or her designee.
- Further, the City's commitment is contingent upon the funding of the balance of the project.

BE IT FURTHER RESOLVED that the City Manager, or her designee, is hereby authorized to execute all original or amended documents or agreements to effectuate this action; a signed copy of said documents, agreements, and any amendments will be kept on file in the Office of the City Clerk.



June 6, 2022

Mayor Jesse Arreguin
2180 Milvia St.
Berkeley, CA 94704

Re: Permanent supportive housing at 1367 University Avenue, Resolution No. 69,586-N.S.

Dear Mayor Arreguin,

I am writing to request an additional **\$245 per unit, per month**, for our permanent supportive housing project for the homeless at 1367 University Ave.

Since the Resolution was signed in October of 2020, construction costs have skyrocketed. Our development partner has experienced a 65% increase in construction costs since we signed our master lease with them 3 years ago. Additionally, interest rates for construction loans have almost doubled. In order to keep this housing project moving ahead, we are requesting that an additional \$245/unit/month be made available to BOSS as an amendment to Resolution No. 69,586-N.S.

1. \$245/unit/month: $\$245 \times 39 \text{ units} \times 12 \text{ months} = \$114,660/\text{year}$
2. Exhibit 1: Actual construction costs are on the following page (produced by Swinerton)
 - a. 2019: Construction costs = \$5,929,731
 - b. 2022: Construction costs = \$9,860,277
3. Exhibit 2: Resolution No. 69,586-N.S. is included for your reference
4. Exhibit 3: Recent news clippings about construction costs and interest rates

Please let me know what else you need from us to make this amendment to the Resolution.

Most Respectfully,

A handwritten signature in blue ink, appearing to read 'Donald Frazier', is written over a light blue circular stamp.

Donald Frazier
Executive Director

Cc: Colleen Chawla, Alameda County Health Care Service

Exhibit 2

RESOLUTION NO. 69,586-N.S.

ALLOCATING APPROXIMATELY \$900,000 ANNUALLY FOR 10 YEARS AND A ONE-TIME AMOUNT OF APPROXIMATELY \$32,975 OF MEASURE P FUNDS TO LEASE AND OPERATE THE NEW PERMANENT SUPPORTIVE HOUSING PROJECT FOR THE HOMELESS AT 1367 UNIVERSITY AVE.

WHEREAS, the City Council passed unanimously the original Step Up Housing Initiative introduced by Councilmember Bartlett on February 14, 2017; and

WHEREAS, Measure P was passed by Berkeley voters in November 2018 to raise the transfer tax on roughly the top-third of properties from 1.5% to 2% and allocate those funds towards various homeless services, including permanent housing, supportive services, and navigation centers; and

WHEREAS, Measure P designated the Homeless Services Panel of Experts to advise the Council on expenditures for homeless services; and

WHEREAS, in December 2019 the Homeless Services Panel of Experts published their recommendations for initial allocations under Measure P, including highlighting permanent housing as the City's top priority and recommending 30% of Measure P funds be allocated to permanent housing; and

WHEREAS, the City Council approved on June 30, 2020 Measure P allocations for FY 2020-21 that included \$2.5 million for permanent housing subsidy; and

WHEREAS, the Berkeley Zoning Adjustments Board approved the permanent supportive housing development project at 1367 University on July 9, 2020.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley that it approves the following for the project at 1367 University Ave:

- A reservation of approximately \$32,975 in Measure P funds for start-up costs associated with the project.
- A reservation of approximately \$900,000 in ongoing funds annually for 10 years for the leasing and operation of the proposed project, with funding adjusted annually based on the Consumer Price Index for Oakland-Hayward-Berkeley, CA.
- In the event BOSS is unable to perform its function as the service provider, an alternative qualified service provider may operate the project with the review and approval of the City Manager, or her designee.
- Further, the City's commitment is contingent upon the funding of the balance of the project.


BE IT FURTHER RESOLVED that the City Manager, or her designee, is hereby authorized to execute all original or amended documents or agreements to effectuate this action; a signed copy of said documents, agreements, and any amendments will be kept on file in the Office of the City Clerk.

The foregoing Resolution was adopted by the Berkeley City Council on October 13, 2020 by the following vote:

Ayes: Bartlett, Davila, Droste, Hahn, Harrison, Kesarwani, Robinson, Wengraf, and Arreguin.

Noes: None.

Absent: None.



Jesse Arreguin, Mayor

Attest: 

Mark Numainville, City Clerk

DEEP DIVE

Soaring material prices, supply chain delays spook owners and developers

The rising cost of many materials and increased sourcing headaches have project owners rethinking their return to normalcy and threaten to derail construction's expected resurgence.

Published April 12, 2021



Joe Bousquin
Senior Reporter



The Washington Post

Mortgage rates spike to their highest level in nearly 13 years

The 30-year fixed average hasn't been this high since August 2009



By Kathy Dismore

May 5, 2022 at 10:12 a.m. EDT





Energy Commission

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_Arrequin_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.

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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No Material
Available for
this Item

There is no material for this item.

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The City of Berkeley Budget and Finance Policy Committee Webpage:

<https://berkeleyca.gov/your-government/city-council/council-committees/policy-committee-budget-finance>

