



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

**Thursday, May 12, 2022
10:00 AM**

Committee Members:

Mayor Jesse Arreguin, Councilmembers Kate Harrison and Lori Droste
Alternate: Councilmember Rashi Kesarwani

**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://us02web.zoom.us/j/81934119590>. 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 **1-669-900-9128** or **1-877-853-5257 (Toll Free)** and Enter Meeting ID: **819 3411 9590**. If you wish to comment during the public comment portion of the agenda, press *9 and wait to be recognized by the Chair.

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 - April 14, 2022, April 19, 2022, April 27, 2022, April 28, 2022, and April 29, 2022**

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. **Berkeley's Financial Condition (FY 2012 – FY 2021): Pension Liabilities and Infrastructure Need Attention**
From: Auditor
Recommendation: We recommend City Council request that the City Manager report back by November 2022, and every six months thereafter, regarding the status of our audit recommendations until reported fully implemented by the City Manager and Finance Department. They have agreed to our findings and recommendations. Please see our report for their complete response.
Financial Implications: See report.
Contact: Jenny Wong, Auditor, (510) 981-6750
3. **Recommendation on Climate, Building Electrification, and Sustainable Transportation Budget Priorities for Fiscal Year 2023 and 2024**
From: Energy Commission
Referred: April 11, 2022
Due: September 26, 2022
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

Committee Action Items

4. **Presentation on FY 23 Proposed Fees**
From: City Manager
Contact: Sharon Friedrichsen, Budget Manager, (510) 981-7000
5. **Discussion on Proposed Biennial Budget & CIP Recommendations**
From: City Manager
Contact: Sharon Friedrichsen, Budget Manager, (510) 981-7000
6. **Review of Council's Fiscal Policies**
From: City Manager
Contact: Sharon Friedrichsen, Budget Manager, (510) 981-7000

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.

7. **Discussion and Development of Criteria and Timing for AAO Process**
From: Mayor Arreguin
Contact: Jesse Arreguin, Mayor, (510) 981-7100
8. **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: October 11, 2022
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

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. 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:

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.

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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 May 5, 2022.



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
SPECIAL MEETING MINUTES**

**Thursday, April 14, 2022
9:00 AM**

Committee Members:

Mayor Jesse Arreguin, Councilmembers Kate Harrison and Lori Droste
Alternate: Councilmember Rashi Kesarwani

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

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To join by phone: Dial **1-669-900-9128** or **1-877-853-5257 (Toll Free)** and Enter Meeting ID: **893 1477 5042**. If you wish to comment during the public comment portion of the agenda, press *9 and wait to be recognized by the Chair.

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: 9:03 a.m. All present.

Public Comment on Non-Agenda Matters – 3 speakers

Minutes for Approval

Draft minutes for the Committee's consideration and approval.

1. Minutes - March 10, 2022

Action: M/S/C (Droste/Harrison) to approve the minutes of March 10, 2022.

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.

2. Five-Year Capital Improvement Program and Proposed Projects

From: City Manager

Contact: Dee Williams-Ridley, City Manager, (510) 981-7000

Action: 5 speakers. Presentations made and discussion held.

3. General Fund Revenue and Expenditures: 5-Year Forecast

From: City Manager

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

Action: Items 3 & 4 were presented and discussed together. See action on item #4.

4. Overview of the FY 23 & 24 Preliminary Budget

From: City Manager

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

Action: 4 speakers. Presentations made and discussion held.

Committee Action Items

5. **Budget Referral: Street Maintenance Funding to Prevent Further Deterioration of Pavement Condition to Save Tax Dollars and Our Streets**
From: Councilmember Kesarwani (Author), Councilmember Taplin (Co-Sponsor), Councilmember Wengraf (Co-Sponsor), Councilmember Droste (Co-Sponsor)

Referred: February 8, 2022

Due: June 28, 2022

Recommendation: Refer to the FY 2022-23 budget process to establish a three-year plan (FY 2022-23 through FY 2024-25) to fully fund an adequate street paving budget that prevents further deterioration of the City's pavement condition. At the end of the three-year period, the fiscal plan should allocate a minimum total of \$8 million in additional ongoing annual General Fund—bringing the total street paving annual budget to at least \$15.1 million—the minimum amount needed to maintain pavement condition, as identified by our Public Works Department.

We recommend that the City slightly exceed the \$8 million General Fund need by contributing \$3 million in ongoing funds in FY 2022-23, an additional \$3 million of ongoing funds in FY 2023-24, and a final addition of \$3 million in ongoing funds in FY 2024-25. This total of \$9 million, in addition to the existing allocation of \$7.3 million for annual street maintenance, will provide the City with about \$1.2 million more than the minimum total of \$15.1 million to account for inflation.

A three-year plan is suggested to give the City time to gradually enhance street paving resources, and annual inflation adjustments are recommended in out-years in order to ensure that maintenance funds remain adequate over time as construction costs rise. A dollar of maintenance early in a street's life-cycle saves \$8 later in the street's life-cycle due to avoided rehabilitation and/or reconstruction costs associated with failing streets, making this budget request an urgent matter of fiscal oversight.

Financial Implications: See report

Contact: Rashi Kesarwani, Councilmember, District 1, (510) 981-7110

Action: 3 speakers. Item continued to special meeting on April 19, 2022.

Committee Action Items

6. **Referral to the Budget and Finance Policy Committee and Budget Referral to Consider General Fund Strategies and Related Fiscal Policies for Funding Capital Improvements, in Particular Street, Sidewalk, Micromobility and Transit Infrastructure**

From: Councilmember Harrison (Author)

Referred: March 7, 2022

Due: July 25, 2022

Recommendation: 1. Refer to the Council Budget and Finance Policy Committee to explore specific options for improving how and to what extent the City's Capital Improvement Program (CIP) is funded, to include but not limited to the following potential strategies:

a. investigate historic assumptions and policies regarding secured-property and transfer tax revenues; b. consider a one-time allocation of a certain percentage of salary savings accruing from historic vacancies that are not likely to be filled in the short-term; c. consider the sale of underutilized city-owned property; d. consider prospective Public Works plan to charge utilities for pavement impact.

2. Refer to the June 2022 Budget process \$[] to be transferred to the CIP and \$[] to the reserve based on Committee consideration and any conclusions.

Financial Implications: See report

Contact: Kate Harrison, Councilmember, District 4, (510) 981-7140

Action: 2 speakers. Item continued to special meeting on April 19, 2022.

7. **FY 22 AAO #2 Update**

From: City Manager

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

Item continued to special meeting on April 19, 2022.

8. **Discussion on Budget Engagement Strategies**

From: City Manager

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

Item continued to special meeting on April 19, 2022.

Unscheduled Items

9. **Proposal to Allocate Revenues Generated by the Transient Occupancy Tax in the Waterfront Area to the Marina Fund to Avoid Insolvency, Rebuild its Fund Balance and to Stabilize its Finances**
From: Parks and Waterfront Commission
Referred: November 16, 2021
Due: May 10, 2022
Recommendation: That Council adopt a Resolution adopting a policy that all Transient Occupancy Taxes (TOT hotel tax) generated at the Berkeley Waterfront be allocated to the City's Marina Enterprise Fund. All other property, sales, utility users, and parking taxes; as well as business license and franchise fees, would continue to be allocated to the City's General Fund.
Policy Committee Recommendation: Send the item to Council with a negative recommendation and additionally request a referral to the Budget & Finance Policy Committee to discuss and develop alternative revenue streams for the Marina Fund including a dedicated reserve.
On November 16, 2021, the City Council adopted the Policy Committee recommendation and the item was referred back to the Budget & Finance Committee.
Financial Implications: See report
Contact: Roger Miller, Commission Secretary, (510) 981-6700
10. **Discussion and Development of Criteria and Timing for AAO Process**
From: Mayor Arreguin
Contact: Jesse Arreguin, Mayor, (510) 981-7100
11. **Review of Council's Fiscal Policies**
From: City Manager
Contact: Sharon Friedrichsen, Budget Manager, (510) 981-7000

Items for Future Agendas

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

Adjournment

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

Vote: All Ayes.

Adjourned at 12:53 p.m.

I hereby certify that this is a true and correct record of the Budget & Finance Committee meeting held on April 14, 2022.

April Richardson, Assistant City Clerk

Communications

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

**Tuesday, April 19, 2022
9:00 AM**

Committee Members:

Mayor Jesse Arreguin, Councilmembers Kate Harrison and Lori Droste
Alternate: Councilmember Rashi Kesarwani

**PUBLIC ADVISORY: THIS MEETING WILL BE CONDUCTED EXCLUSIVELY THROUGH
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AGENDA

Roll Call: 9:03 a.m. All present.

Public Comment on Non-Agenda Matters – 5 speakers

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.

- 1. Budget Referral: Street Maintenance Funding to Prevent Further Deterioration of Pavement Condition to Save Tax Dollars and Our Streets**
From: Councilmember Kesarwani (Author), Councilmember Taplin (Co-Sponsor), Councilmember Wengraf (Co-Sponsor), Councilmember Droste (Co-Sponsor)

Referred: February 8, 2022

Due: June 28, 2022

Recommendation: Refer to the FY 2022-23 budget process to establish a three-year plan (FY 2022-23 through FY 2024-25) to fully fund an adequate street paving budget that prevents further deterioration of the City's pavement condition. At the end of the three-year period, the fiscal plan should allocate a minimum total of \$8 million in additional ongoing annual General Fund—bringing the total street paving annual budget to at least \$15.1 million—the minimum amount needed to maintain pavement condition, as identified by our Public Works Department.

We recommend that the City slightly exceed the \$8 million General Fund need by contributing \$3 million in ongoing funds in FY 2022-23, an additional \$3 million of ongoing funds in FY 2023-24, and a final addition of \$3 million in ongoing funds in FY 2024-25. This total of \$9 million, in addition to the existing allocation of \$7.3 million for annual street maintenance, will provide the City with about \$1.2 million more than the minimum total of \$15.1 million to account for inflation.

A three-year plan is suggested to give the City time to gradually enhance street paving resources, and annual inflation adjustments are recommended in out-years in order to ensure that maintenance funds remain adequate over time as construction costs rise. A dollar of maintenance early in a street's life-cycle saves \$8 later in the street's life-cycle due to avoided rehabilitation and/or reconstruction costs associated with failing streets, making this budget request an urgent matter of fiscal oversight.

Financial Implications: See report

Contact: Rashi Kesarwani, Councilmember, District 1, (510) 981-7110

Committee Action Items

Action: 12 speakers. Presentation made and discussion held. M/S/C (Arreguin/Harrison) to send the item to Council with a positive recommendation to: 1. Formally refer the item to FY 23-24 Biennial Budget Process; 2. State the Committee's recommendation that the City Council prioritize available General Fund revenues to supplement the street paving budget to prevent further deterioration; 3. To recommend that Council consider this proposed approach to develop an expenditure plan for street paving; 4. Set a goal of allocating an additional \$3-8 Million in ongoing General Fund revenues.

Vote: All Ayes.

2. Referral to the Budget and Finance Policy Committee and Budget Referral to Consider General Fund Strategies and Related Fiscal Policies for Funding Capital Improvements, in Particular Street, Sidewalk, Micromobility and Transit Infrastructure

From: Councilmember Harrison (Author)

Referred: March 7, 2022

Due: July 25, 2022

Recommendation: 1. Refer to the Council Budget and Finance Policy Committee to explore specific options for improving how and to what extent the City's Capital Improvement Program (CIP) is funded, to include but not limited to the following potential strategies:

a. investigate historic assumptions and policies regarding secured-property and transfer tax revenues; b. consider a one-time allocation of a certain percentage of salary savings accruing from historic vacancies that are not likely to be filled in the short-term; c. consider the sale of underutilized city-owned property; d. consider prospective Public Works plan to charge utilities for pavement impact.

2. Refer to the June 2022 Budget process \$[] to be transferred to the CIP and \$[] to the reserve based on Committee consideration and any conclusions.

Financial Implications: See report

Contact: Kate Harrison, Councilmember, District 4, (510) 981-7140

Action: 7 speakers. Presentation made and discussion held. M/S/C (Harrison/Arreguin) to move the item to Council with a qualified positive recommendation removing item 1. c (consider the sale of underutilized city-owned property).

Vote: Ayes – Harrison, Arreguin; Noes – None; Abstain – Droste; Absent – None.

3. FY 22 AAO #2 Update

From: City Manager

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

Action: 9 speakers. Presentation made and discussion held.

Committee Action Items

- 4. Discussion on Budget Engagement Strategies**
From: City Manager
Contact: Sharon Friedrichsen, Budget Manager, (510) 981-7000

Action: 4 speakers. Presentation made and discussion held.

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.

- 5. Proposal to Allocate Revenues Generated by the Transient Occupancy Tax in the Waterfront Area to the Marina Fund to Avoid Insolvency, Rebuild its Fund Balance and to Stabilize its Finances**
From: Parks and Waterfront Commission
Referred: November 16, 2021
Due: May 10, 2022
Recommendation: That Council adopt a Resolution adopting a policy that all Transient Occupancy Taxes (TOT hotel tax) generated at the Berkeley Waterfront be allocated to the City's Marina Enterprise Fund. All other property, sales, utility users, and parking taxes; as well as business license and franchise fees, would continue to be allocated to the City's General Fund.
Policy Committee Recommendation: Send the item to Council with a negative recommendation and additionally request a referral to the Budget & Finance Policy Committee to discuss and develop alternative revenue streams for the Marina Fund including a dedicated reserve.
On November 16, 2021, the City Council adopted the Policy Committee recommendation and the item was referred back to the Budget & Finance Committee.
Financial Implications: See report
Contact: Roger Miller, Commission Secretary, (510) 981-6700
- 6. Discussion and Development of Criteria and Timing for AAO Process**
From: Mayor Arreguin
Contact: Jesse Arreguin, Mayor, (510) 981-7100
- 7. Review of Council's Fiscal Policies**
From: City Manager
Contact: Sharon Friedrichsen, Budget Manager, (510) 981-7000

Items for Future Agendas

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

Adjournment

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

Vote: All Ayes.

Adjourned at 12:15 p.m.

I hereby certify that this is a true and correct record of the Budget & Finance Committee meeting held on April 19, 2022.

April Richardson, Assistant City Clerk

Communications

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

**Wednesday, April 27, 2022
12:00 PM**

Committee Members:

Mayor Jesse Arreguin, Councilmembers Kate Harrison and Lori Droste
Alternate: Councilmember Rashi Kesarwani

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AGENDA

Roll Call: 12:04 p.m. All present.

Committee Action Items

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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.

- 1. Department Budget Presentation: Office of the City Manager (including Economic Development)**
From: City Manager
Contact: Dee Williams-Ridley, City Manager, (510) 981-7000

Action: 2 speakers. Presentations made and discussion held.
- 2. Department Budget Presentation: Finance**
From: City Manager
Contact: Henry Oyekanmi, Finance, (510) 981-7300

Action: 1 speaker. Presentation made and discussion held.
- 3. Department Budget Presentation: Human Resources**
From: City Manager
Contact: Don Ellison, Human Resources, (510) 981-6800

Action: 3 speakers. Presentations made and discussion held.
- 4. Department Budget Presentation: Health, Housing & Community Services**
From: City Manager
Contact: Lisa Warhuus, Health, Housing, and Community Services, (510) 981-5400

Action: 2 speakers. Presentations made and discussion held.

Councilmember Harrison absent at 3:30 p.m.

- 5. Measure P Allocation and Proposed Initial Recommendations**
From: City Manager
Contact: Paul Buddenhagen, City Manager's Office, (510) 981-7000

Item continued to next meeting on April 28, 2022.

Adjournment

Action: M/S/C (Arreguin/Droste) to adjourn the meeting.

Vote: Ayes – Droste, Arreguin; Noes – None; Abstain – None; Absent – Harrison.

Adjourned at 3:36 p.m.

I hereby certify that this is a true and correct record of the Budget & Finance Committee meeting held on April 27, 2022.

April Richardson, Assistant City Clerk

Communications

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

**Thursday, April 28, 2022
9:00 AM**

Committee Members:

Mayor Jesse Arreguin, Councilmembers Kate Harrison and Lori Droste
Alternate: Councilmember Rashi Kesarwani

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AGENDA

Roll Call: 9:04 a.m. All present.

Committee Action Items

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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.

1. Department Budget Presentation: Planning and Development

From: City Manager

Contact: Alene Pearson, Planning and Development, (510) 981-7400

Action: 4 speakers. Presentation made and discussion held.

2. Department Budget Presentation: Public Works

From: City Manager

Contact: Liam Garland, Public Works, (510) 981-6300

Action: 8 speakers. Presentation made and discussion held.

Recess 11:19 a.m. – 11:32 a.m.

3. Department Budget Presentation: City Clerk

From: City Manager

Contact: Mark Numainville, City Clerk, (510) 981-6900

Action: 3 speakers. Presentation made and discussion held.

Recess 12:00 p.m. – 12:31 p.m.

4. Department Budget Presentation: Police

From: City Manager

Contact: Jennifer Louis, Police, (510) 981-5900

Action: 6 speakers. Presentation made and discussion held.

5. Department Budget Presentation: Parks, Recreation & Waterfront

From: City Manager

Contact: Scott Ferris, Parks, Recreation and Waterfront, (510) 981-6700

Action: 5 speakers. Presentation made and discussion held.

Committee Action Items

6. Proposal to Allocate Revenues Generated by the Transient Occupancy Tax in the Waterfront Area to the Marina Fund to Avoid Insolvency, Rebuild its Fund Balance and to Stabilize its Finances

From: Parks and Waterfront Commission

Referred: November 16, 2021

Due: May 10, 2022

Recommendation: That Council adopt a Resolution adopting a policy that all Transient Occupancy Taxes (TOT hotel tax) generated at the Berkeley Waterfront be allocated to the City's Marina Enterprise Fund. All other property, sales, utility users, and parking taxes; as well as business license and franchise fees, would continue to be allocated to the City's General Fund.

Policy Committee Recommendation: Send the item to Council with a negative recommendation and additionally request a referral to the Budget & Finance Policy Committee to discuss and develop alternative revenue streams for the Marina Fund including a dedicated reserve.

On November 16, 2021, the City Council adopted the Policy Committee recommendation and the item was referred back to the Budget & Finance Committee.

Financial Implications: See report

Contact: Roger Miller, Commission Secretary, (510) 981-6700

Action: 9 speakers. M/S/C (Harrison/Arreguin) to forward the item to Council with a qualified positive recommendation to consider as part of the budget process including the following amendments 1. that Public Works consider including trash pick-up at the Marina in the 218 process; 2. that the Marina Fund be excluded from road work repairs within the larger marina territory; and 3. that \$1.5M be allocated from the General Fund to the Marina Fund for operating expenses in 2024.

Vote: Ayes – Harrison, Arreguin; Noes – None; Abstain – None; Absent – Droste.

Councilmember Droste absent 2:35 p.m. – 4:04 p.m.

Adjournment

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

Vote: Ayes – Harrison, Arreguin; Noes – None; Abstain – None; Absent – Droste.

Adjourned at 4:04 p.m.

I hereby certify that this is a true and correct record of the Budget & Finance Committee meeting held on April 28, 2022.

April Richardson, Assistant 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
SPECIAL MEETING MINUTES**

**Friday, April 29, 2022
9:00 AM**

Committee Members:

Mayor Jesse Arreguin, Councilmembers Kate Harrison and Lori Droste
Alternate: Councilmember Rashi Kesarwani

**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://us02web.zoom.us/j/88256590559>. 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 **1-669-900-9128** or **1-877-853-5257 (Toll Free)** and Enter Meeting ID: **882 5659 0559**. If you wish to comment during the public comment portion of the agenda, press *9 and wait to be recognized by the Chair.

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: 9:03 a.m. All present.

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.

1. Department Budget Presentation: Office of the Director of Police Accountability

From: City Manager

Contact: Katherine Lee, Police Accountability, (510) 981-4950

Action: 7 speakers. Presentation made and discussion held.

2. Department Budget Presentation: City Auditor

From: City Manager

Contact: Jenny Wong, Auditor, (510) 981-6750

Action: 3 speakers. Presentation made and discussion held.

3. Department Budget Presentation: City Attorney

From: City Manager

Contact: Farimah Brown, City Attorney, (510) 981-6950

Action: 4 speakers. Presentation made and discussion held.

Recess 11:13 a.m. – 12:00 p.m.

4. Department Budget Presentation: Fire

From: City Manager

Contact: Abe Roman, Fire, (510) 981-3473

Action: 3 speakers. Presentation made and discussion held.

5. Department Budget Presentation: Information Technology

From: City Manager

Contact: Michael Sinor, Information Technology, (510) 981-6500

Action: 2 speakers. Presentation made and discussion held.

Committee Action Items

6. Responses to Questions from Prior Presentations and Discussion

From: City Manager

Contact: Dee Williams-Ridley, City Manager, (510) 981-7000

Action: 0 speakers. Questions from committee members will be forwarded to the City Manager and answers distributed at a later date.

7. Measure P Allocation and Proposed Initial Recommendations *(Continued from April 27, 2022)*

From: City Manager

Contact: Paul Buddenhagen, City Manager's Office, (510) 981-7000

Action: 3 speakers. Presentation made and discussion held.

Adjournment

Action: M/S/C (Arreguin/Droste) to adjourn the meeting.

Vote: All Ayes.

Adjourned at 2:12 p.m.

I hereby certify that this is a true and correct record of the Budget & Finance Committee meeting held on April 29, 2022.

April Richardson, Assistant 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.



To: Honorable Mayor and Members of the City Council

From: Jenny Wong, City Auditor *JW*

Subject: Berkeley's Financial Condition (FY 2012 – FY 2021): Pension Liabilities and Infrastructure Need Attention

RECOMMENDATION

We recommend City Council request that the City Manager report back by November 2022, and every six months thereafter, regarding the status of our audit recommendations until reported fully implemented by the City Manager and Finance Department. They have agreed to our findings and recommendations. Please see our report for their complete response.

FISCAL IMPACTS OF RECOMMENDATION

The audit recommendations are intended to build on the City's financial strengths and address the risks identified in the report. If the City does not implement the recommendations, unfunded pension liabilities and infrastructure needs will continue to grow and may put pressure on other spending priorities in the future. The City may also be less prepared for unforeseen economic challenges if it does not assess the risk of the reserves, and ensure that enterprise funds can balance and avoid recurring shortfalls. Additionally, the City may overlook important considerations in determining a manageable level of debt if it does not update its debt policy.

CURRENT SITUATION AND ITS EFFECTS

We used various financial indicators to analyze the City's financial condition between FY 2012 and FY 2021. While the City's near-term financial outlook was mostly positive, the financial indicators related to the City's long-term outlook revealed some challenges.

Near-Term

- **Revenues and Expenses:** The City's revenues have increased since FY 2012 and outpaced expenses most years. Governmental activities expenses exceeded revenues in FY 2020 due to the economic impacts of COVID-19, but the City took balancing measures to address the revenue shortfall in FY 2021.
- **Demographic and Economic Indicators:** Indicators related to the economic stability of the Berkeley community, including assessed value of property and personal income per capita, showed sustained strength over the audit period.
- **Net Position, Liquidity, and Reserves:** The City's net position has been negative due to unfunded pension and other post-employment benefit (OPEB) liabilities. The City maintained a strong liquidity ratio despite setting aside funds in the Stability and Catastrophic reserves. While the reserves helped address the shortfall caused by the pandemic, without a risk assessment of the reserves and plan for how to replenish them, the City may be less prepared for unforeseen economic challenges. Most enterprise funds have met the City's

requirement to balance since FY 2016, but the City does not have a policy outlining the target fund balance necessary for the funds to balance and avoid recurring annual shortfalls.

Long-Term

- **Long-Term Debt (excluding pension and OPEB):** Long-term liabilities have increased, but compared to benchmark cities, Berkeley's long-term liabilities per resident are in the middle range. General obligation bond debt has remained low compared to total taxable assessed property value, but general obligation debt per resident has increased and the City's debt policy does not have robust criteria to assess its debt capacity.
- **Pension and OPEB Liabilities:** Berkeley's unfunded liabilities for retiree benefits continue to pose a financial risk to the City. The City established a Section 115 Trust to pre-fund pension obligations, but has consistently fallen short of the annual contribution goal. Without a plan to ensure sufficient funding of the Section 115 Trust, the City may not be prepared to make its required CalPERS contributions.
- **Capital Assets:** The City is facing a reported \$1.2 billion unfunded capital and deferred maintenance need as of FY 2021. Without a funding plan to reduce these needs, the City cannot address the current problem or prevent future unfunded capital needs.

BACKGROUND

This audit provides Berkeley residents, businesses, city management, and public officials with a high-level overview of the City's financial condition over 10 fiscal years. By broadening the scope of financial reporting to incorporate long-term financial trends, financial condition analysis can introduce long-term considerations into the budgeting process, clarify the City's fiscal strengths and weaknesses, and help highlight financial risks that the City needs to address.

ENVIRONMENTAL SUSTAINABILITY

Our office manages and stores audit workpapers and other documents electronically to significantly reduce our use of paper and ink. Our audit recommendation to implement a funding plan to reduce the City's unfunded capital and deferred maintenance needs could also support more resilient and sustainable infrastructure and help advance the Vision 2050 effort.

RATIONALE FOR RECOMMENDATION

Implementing our recommendations will help the City address its unfunded capital and deferred maintenance needs and unfunded pension liabilities. Our recommendations will also help the City prepare for unforeseen economic challenges by assessing the risk of the reserves, and ensure that enterprise funds can balance and avoid recurring shortfalls. Additionally, our recommendation to update the City's debt policy will strengthen the City's ability to assess its general obligation debt capacity.

CONTACT PERSON

Jenny Wong, City Auditor, City Auditor's Office, 510-981-6750

Attachment: Audit Report: Berkeley's Financial Condition (FY 2012 – FY 2021): Pension Liabilities and Infrastructure Need Attention

Audit Report
May 5, 2022

Berkeley's Financial Condition (FY 2012-FY 2021): Pension Liabilities and Infrastructure Need Attention



BERKELEY CITY AUDITOR

Jenny Wong, City Auditor
Caitlin Palmer, Senior Auditor
Pauline Miller, Auditor I



Berkeley's Financial Condition (FY 2012-FY 2021): Pension Liabilities and Infrastructure Need Attention

Report Highlights

May 5, 2022



Themes & Findings

Overall, Berkeley's near-term financial position is strong. However, the financial indicators related to the City's long-term outlook reveal some challenges that need to be addressed.

Near-Term

Revenues and Expenses: Since Fiscal Year (FY) 2012, revenues have grown and exceeded expenses in eight of the last ten fiscal years. Although expenses exceeded revenues in FY 2020 due to the COVID-19 pandemic, the City took budgetary actions to address the revenue shortfall.

Demographic and Economic Indicators: The Berkeley community showed sustained economic health overall. The taxable assessed value of property and personal income of Berkeley residents increased since FY 2012.

Net Position, Liquidity, and Reserves: The City has maintained a strong liquidity ratio, though the City's net position has been negative due to unfunded pension and other post-employment benefit (OPEB) liabilities. The City established the Stability and Catastrophic Reserves, and used a portion of those reserves to cover the General Fund deficit caused by the COVID-19 pandemic. All of the City's enterprise funds have experienced at least one annual shortfall over the past five years.

Long-Term

Long-Term Debt and Liabilities: Berkeley's long-term liabilities have increased since FY 2012, but compared to benchmark cities, Berkeley's long-term liabilities per resident are in the middle range. General obligation bond debt per resident has increased. Berkeley's general obligation bond debt has remained low compared to total taxable assessed property value, but the City's debt policy does not have robust criteria to assess debt capacity.

Net Pension and Other Post-Employment Benefits Liabilities: Like other California cities, Berkeley's unfunded liabilities for retiree benefits continue to pose a financial risk to the City. The California State Auditor considers Berkeley's pension funding ratio to be high risk. The City started setting aside resources dedicated to prefunding pension obligations in a Section 115 Trust, but has not met its annual contribution goals.

Continued on next page.

Objective

Our objective was to assess Berkeley's financial condition using indicators for the following categories:

1. Revenues and Expenses
2. Demographic and Economic Indicators
3. Net Position, Liquidity, and Reserves
4. Long-Term Debt and Liabilities
5. Net Pension and Other Post-Employment Benefit (OPEB) Liabilities
6. Capital Assets

Why This Audit Is Important

Financial condition analysis simplifies complex financial information to make it more accessible. By incorporating long-term financial trends, financial condition analysis can introduce long-term considerations into the budgeting process, clarify the City's fiscal strengths and weaknesses, and help highlight financial risks that the City needs to address. This audit is especially relevant as the COVID-19 pandemic has underscored the importance of financial flexibility. During fiscal year 2021, the City faced a \$40 million General Fund deficit and made difficult decisions to balance the budget.



BERKELEY CITY AUDITOR

For the full report, visit:

<https://berkeleyca.gov/your-government/city-audits>

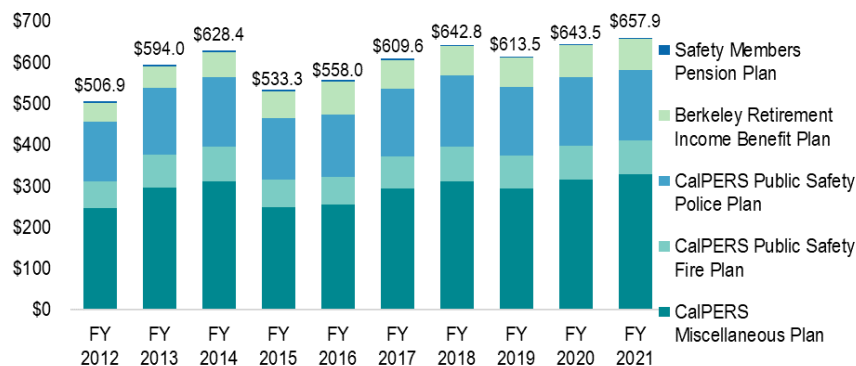
Report Highlights

May 5, 2022



Themes & Findings

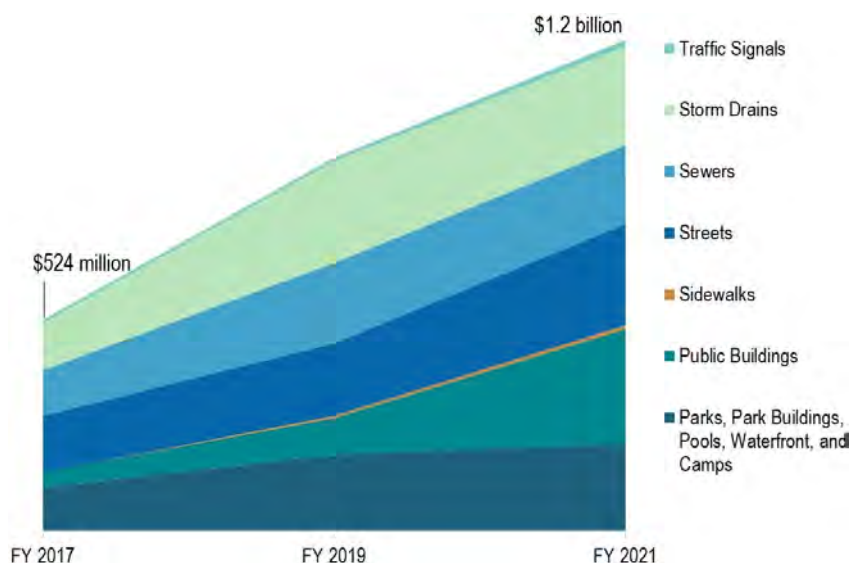
Net Pension Liability Per Plan (in millions, adjusted for inflation)



Source: Department of Finance data

Capital Assets: The City’s underinvestment in infrastructure has led to a reported \$1.2 billion unfunded capital and deferred maintenance need. Without sufficient investment now, these liabilities will continue to grow.

Unfunded Capital and Deferred Maintenance Needs FY 2017 to FY 2021 (adjusted for inflation)



Source: Berkeley’s unfunded liability reports

Recommendations

To better prepare the City for unforeseen economic challenges, we recommend that the City Manager complete the risk assessment required by the City’s reserves policy as scheduled and propose a plan to City Council to replenish the reserves.

To ensure the City’s enterprise funds can balance and avoid recurring annual shortfalls, we recommend the City Manager assess the appropriate fund balance for each of the City’s enterprise funds, report findings to the City Council, and explore financial policy options to manage enterprise fund balances.

To strengthen the City’s debt management, we recommend that the Finance Department update the Debt Management Policy.

To maximize the benefit of the Section 115 Trust for prefunding pension obligations, we recommend that the City Manager present a plan for adoption by the City Council to assure sufficient contributions to the Trust.

To address rising costs for unmet capital needs, we recommend that the City Manager collaborate with the Department of Public Works to implement a funding plan aimed at reducing the City’s unfunded capital and deferred maintenance needs and ensuring regular maintenance of city assets to prevent excessive deferred maintenance costs in the future.



BERKELEY CITY AUDITOR

For the full report, visit:

<https://berkeleyca.gov/your-government/city-audits>

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Introduction

This audit provides Berkeley residents, businesses, city management, and public officials with a high-level overview of the City's long-term financial condition over 10 fiscal years (FY), from FY 2012 to FY 2021. By broadening the scope of financial reporting to incorporate long-term financial trends, financial condition analysis can introduce long-term considerations into the budgeting process, clarify the City's fiscal strengths and weaknesses, and help highlight financial risks that the City needs to address. This report is designed to be easy to understand for readers without a background in finance.

Overall, Berkeley's near-term financial outlook is strong. However, in the long term, Berkeley faces difficult decisions related to future costs for employee pensions, other post-employment benefits (OPEB), and capital assets. Due to Berkeley's strong near-term financial condition, the City was able to address recent unexpected declines in revenues. In coming years, it will be important for the City to balance its near-term needs and long-term financial obligations.

Throughout the report, we compared some of Berkeley's financial indicators to other California cities with similar characteristics. Across almost all financial indicators that we benchmarked to peer cities, Berkeley is not an outlier and ranks at or near the middle of the range.

Objective, Scope, and Methodology

Our objective was to assess Berkeley's financial condition using financial indicators for the following categories:

1. Revenues and Expenses
2. Demographic and Economic Indicators
3. Net Position, Liquidity, and Reserves
4. Long-Term Debt and Liabilities
5. Unfunded Pension and Other Post-Employment Benefit (OPEB) Liabilities
6. Capital Assets

To meet our objective, we relied mainly on data from **Berkeley's Annual Comprehensive Financial Reports (ACFRs)**.¹ For some indicators, we also analyzed other sources of city financial data. Where appropriate, we adjusted financial indicators for inflation using the Bay Area Consumer Price Index calculated by the U.S. Bureau of Labor Statistics to express values in 2021 dollars. We note where our findings **are adjusted for inflation. We examined Berkeley's financial data for the past 10 fiscal years, from FY 2012 to FY 2021, except for a few indicators for which data was only available for limited years.**

We used financial indicators included in the **International City/County Management Association's (ICMA) *Evaluating Financial Condition*** handbook for local governments. Additionally, we used one **indicator developed by the California State Auditor's Office for their Fiscal Health of California Cities** dashboard² as well as indicators used by peer cities in their financial condition audits. We do not provide an in-depth analysis of causes and impact, but we point out areas of financial risk for the City to evaluate further.

To better understand how some of **Berkeley's financial indicators compared to peer cities, we benchmarked to California cities with some similar economic and social factors such as population, general fund expenditures per resident, services provided, and presence of a large university.** We selected Davis, Long Beach, Oakland, Pasadena, Santa Clara, and Santa Monica because these cities are **similar to Berkeley across one or more criteria. Due to variation in availability of comparison cities' FY 2021 ACFRs, we used FY 2020 data for the comparisons.**

For more information on our methodology and data reliability assessment, see page 39.

¹ **Berkeley's Annual Comprehensive Financial Reports** are available on the Department of Finance website: <https://berkeleyca.gov/your-government/financial-information/financial-reports-and-policies>

² Fiscal Health of California Cities: https://www.auditor.ca.gov/local_high_risk/dashboard-csa

Background

According to the ICMA, a government's financial condition broadly refers to its ability to finance its services on an ongoing basis. Financial condition also refers to a government's ability to maintain current service levels, withstand unexpected economic downturns, and meet the changing needs of residents.

This audit considers Berkeley's many unique characteristics. Berkeley has the highest population density of any city in the East Bay. Berkeley's economy is shaped by the presence of the University of California, Berkeley campus, the high assessed value of property, relatively high personal income per capita, and a diverse tax base. The City provides residents a full range of services beyond those offered by most similarly-sized cities in California. The City offers its own public safety services; sanitation, sewer, and waste management services; parks, recreation, and the Berkeley Marina; health, housing, and community services, including city-funded health clinics and mental health services; animal control; public improvements; planning and zoning; general and administrative services; and library services. Berkeley is also a relatively older city and faces inherent challenges with aging infrastructure.

Financial Reporting Terms

Governmental and Business-Type Activities. *Governmental activities* are government functions that are supported mostly by taxes and intergovernmental revenues. Governmental activities fund city operations serving all Berkeley residents, including general government, public safety, transportation, community development, and culture and leisure. *Business-type activities* are the programs that operate like businesses, and are intended to cover all or a significant portion of their costs with user fees and charges for service. Examples of business-type activities include the Berkeley Marina, Zero Waste services, and the Permit Service Center. These services are supported by enterprise funds established to finance and account for the operation and maintenance of business-type activities. This audit report discusses business-type activities but mainly focuses on governmental activities.

Governmental Funds. **For financial reporting purposes, most of the City's basic services are reported** in its various governmental funds. The *General Fund* is the largest of all governmental funds and is the **City's primary operating fund which pays for general services provided by the City. Other governmental funds include the General Grants Fund, the Library Fund, and the Capital Improvement Fund that are designated for specific purposes.**

Financial Policies

City Council has developed guidelines to inform the budgeting process, and the Department of Finance has developed citywide financial management policies. An **in-depth analysis of the City's compliance** with fiscal policies was outside of the scope of this audit.

Council Guidelines:

1. Focusing on the long-term fiscal health of the City by adopting a two-year budget and conducting multi-year planning;
2. Building a prudent reserve;
3. Developing long-term strategies to reduce unfunded liabilities;
4. Controlling labor costs while minimizing layoffs;
5. Allocating one-time revenue for one-time expenses;
6. Requiring enterprise and grant funds to balance and new programs to pay for themselves;
7. Requiring new revenue or expenditure reductions along with any new expenditure;
8. Using Transfer Tax in excess of \$12.5 million as one-time revenue for the City's capital infrastructure needs;
9. As the General Fund subsidy to the Safety Members Pension Fund declines over the next several years, using the amount of the annual decrease to help fund the new Police Employee Retiree Health Plan; and
10. Allocating short-term rental tax revenues exceeding the amount needed to pay for staffing to the Affordable Housing Trust Fund (66.7 percent) and the Civic Arts Grant Fund (33.3 percent).

Citywide Financial Management Policies:³

1. Investment Policy: Pooled Cash and Investment Policy
2. Investment Policy: Retiree Medical Plan Trust Funds
3. Debt Management and Disclosure Policy
4. General Fund Reserve Policy
5. **With regard to spending, the City's policy is to spend restricted fund balances before spending unrestricted fund balances.** This refers to expenditures incurred for which both restricted and unrestricted funds are available, and excludes cases in which a city ordinance or resolution specifies the fund balance.

³ The City's policies related to investment, Retiree Medical Plan Trust funds, reserves, and debt management are available on the Finance Department's webpage: <https://berkeleyca.gov/your-government/financial-information/financial-reports-and-policies>

Revenues and Expenses

Revenues

Revenues refer to money available for appropriation during the fiscal year, including the money the City receives over the course of the year (new revenues) and balances carried over from prior years.

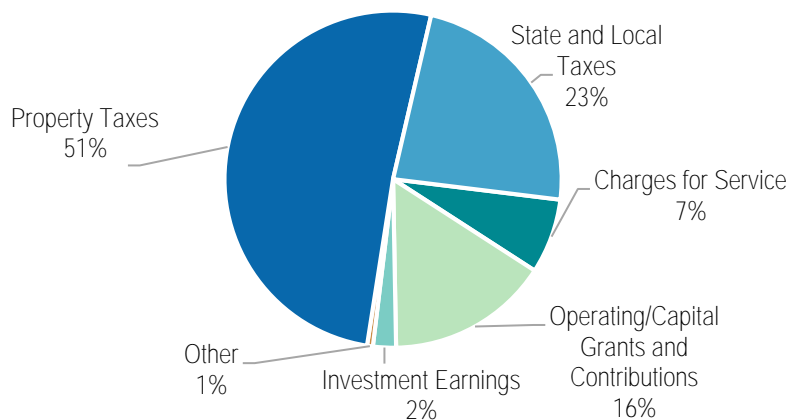
Revenues determine the City's capacity to provide services. Ideally, revenues should come from stable and diverse sources, and should grow at the same rate or faster than inflation and expenses.

Where do revenues for Berkeley's governmental activities come from?

Taxes make up the majority of revenues used to fund governmental activities. In FY 2021, the largest source of revenues was property taxes. State and local taxes were the second largest source (Figure 1).

Some of the City's tax revenues are set by other jurisdictions, which limits the City's ability to increase those taxes. For example, the City receives only 32.6 percent of Real Property Tax revenues collected by Alameda County. The rest is distributed between the county, schools, and special districts.

Figure 1. Revenues for Governmental Activities by Source, FY 2021

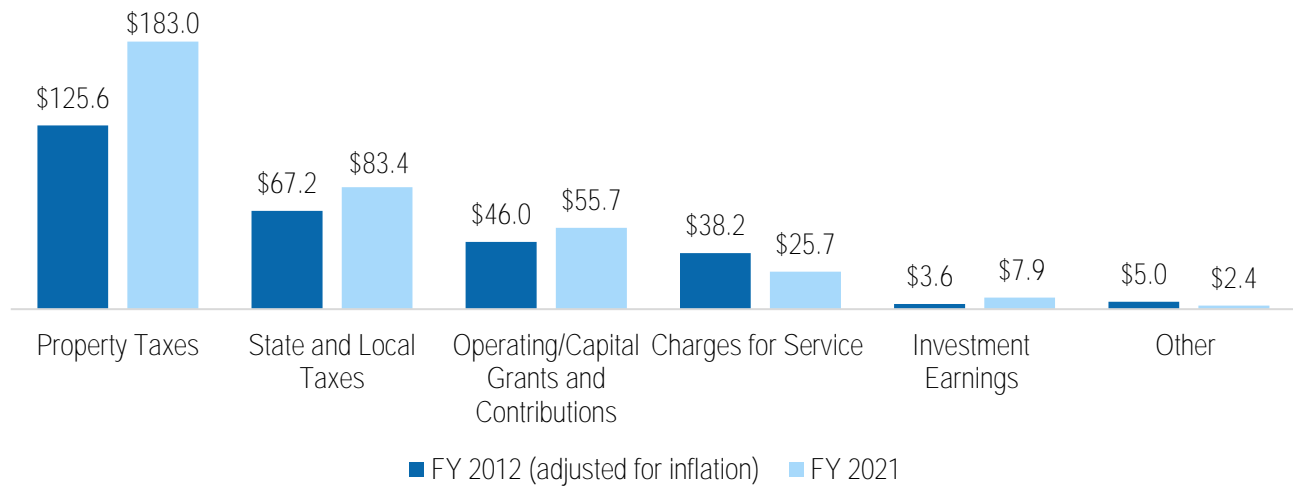


Note: "Other" includes revenues from contributions not restricted to specific programs, revenues (or losses) from the gain or loss on the sale of capital assets, miscellaneous revenues, and revenues from other unrestricted state subventions.

Source: Berkeley FY 2021 ACFR

Of all revenue streams, revenues from property taxes grew the most between FY 2012 and FY 2021, adjusted for inflation (Figure 2). Revenues from charges for services declined the most between FY 2012 and FY 2021.

Figure 2. Revenues for Governmental Activities by Source (in millions, adjusted for inflation)



Note: “Other” includes revenues from contributions not restricted to specific programs, revenues (or losses) from the gain or loss on the sale of capital assets, miscellaneous revenues, and revenues from other unrestricted state subventions.

Source: Berkeley ACFRs

For every dollar of property tax revenue the City received in FY 2021, a portion was designated to general purposes, library services, city parks, debt service for voter-approved bond measures,⁴ fire department services, and paramedic services (Figure 3).

Figure 3. Breakdown of Berkeley’s Property Tax Revenues, FY 2021



Note: Figure 3 represents the portion of property taxes the City received, and does not account for taxes allocated to other jurisdictions.

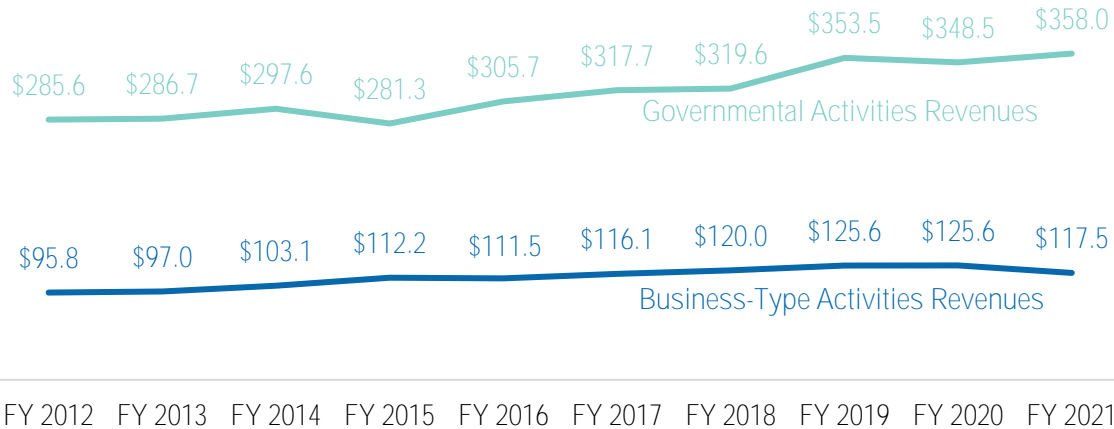
Source: Berkeley FY 2021 ACFR

⁴ Bond measures include Measure FF, Measure M, Measure T1, Measure O, and Refunding Bonds.

Governmental activities revenues increased by 25 percent.

When adjusted for inflation, governmental activities revenues increased by 25 percent, from \$285.6 million in FY 2012 to \$358.0 million in FY 2021. Business-type revenues increased by 23 percent, from \$95.8 million to \$117.5 million (Figure 4). The City's total revenues grew by 25 percent.

Figure 4. Revenues (in millions, adjusted for inflation)

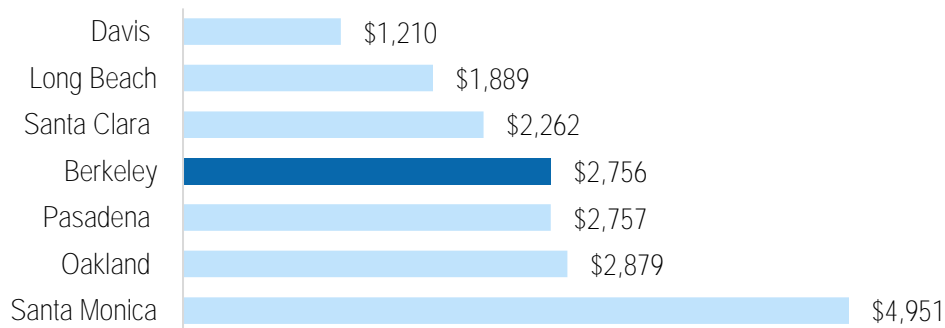


Source: Berkeley ACFRs

According to ICMA, as the population of a city increases, revenues should grow proportionately, resulting in near constant revenues per resident over time. A decline in revenues per resident would **suggest that the City is unable to maintain service levels using existing revenues, but Berkeley's** governmental activities revenues per resident have increased by 23 percent since FY 2012, adjusted for inflation.

Compared to benchmark cities, Berkeley's governmental activities revenues per resident were in the middle of the range at \$2,756 per resident (Figure 5).

Figure 5. Revenues for Governmental Activities per Resident, FY 2020



Source: Cities' FY 2020 ACFRs

UC Berkeley has provided economic stability and revenue.

Berkeley is home to the main campus of the University of California (UC Berkeley), which provides a high degree of economic stability for the City. During the audit period, UC Berkeley brought an average of about 40,000 students to Berkeley each year. It was also one of the City's largest employers, employing an average of about 14,000 people each year. UC Berkeley students, employees, and visitors contribute to the local economy, though the COVID-19 pandemic caused UC Berkeley to temporarily stop in-person classes. Additionally, UC Berkeley has spurred growth in the technology and biotechnology sectors, which contribute to the diversity of the City's economy and helped lessen the economic impacts of the pandemic. The university presence also generates expenses for the City of Berkeley. In 2021, UC Berkeley agreed to pay the City \$82.6 million over 16 years to support city expenses, including fire and other city services.

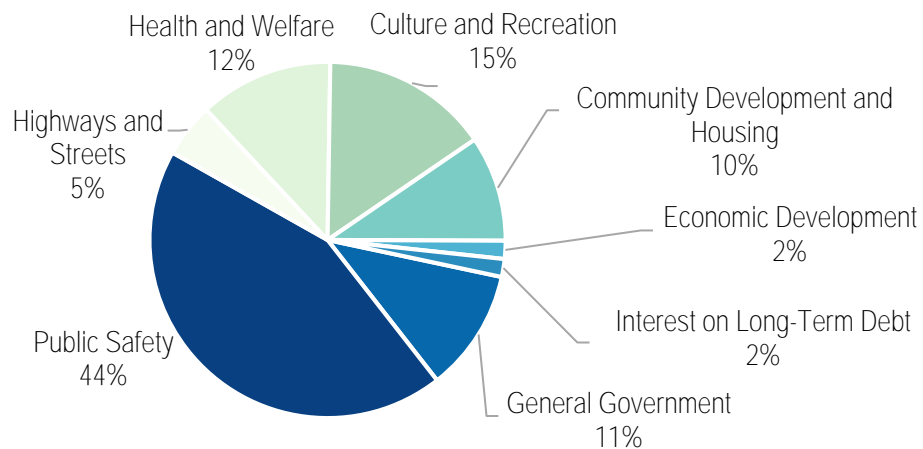
Expenses

Expenses refer to money the City records as spent each year. Expenses are a rough measure of the City's service output. Generally, the more services a city provides, the greater the city's expenses. Expense growth rates are a critical measurement of a city's ability to operate within its revenue constraints.

What does Berkeley spend on governmental activities?

In FY 2021, public safety, culture and recreation, and health and welfare represented the City's largest expenses by function (Figure 6).

Figure 6. Expenses for Governmental Activities by Function, FY 2021

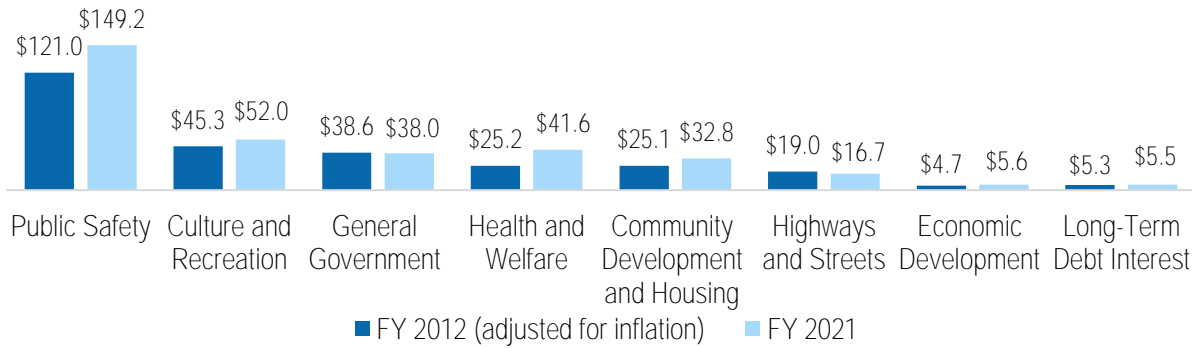


Source: Berkeley FY 2021 ACFR

The largest increase in spending for governmental activities was for public safety.

Between FY 2012 and FY 2021, the city functions with the largest increases in spending were public safety and health and welfare, when adjusted for inflation. Conversely, spending on highways and streets and general government decreased (Figure 7).

Figure 7. Expenses for Governmental Activities by Function (in millions, adjusted for inflation)

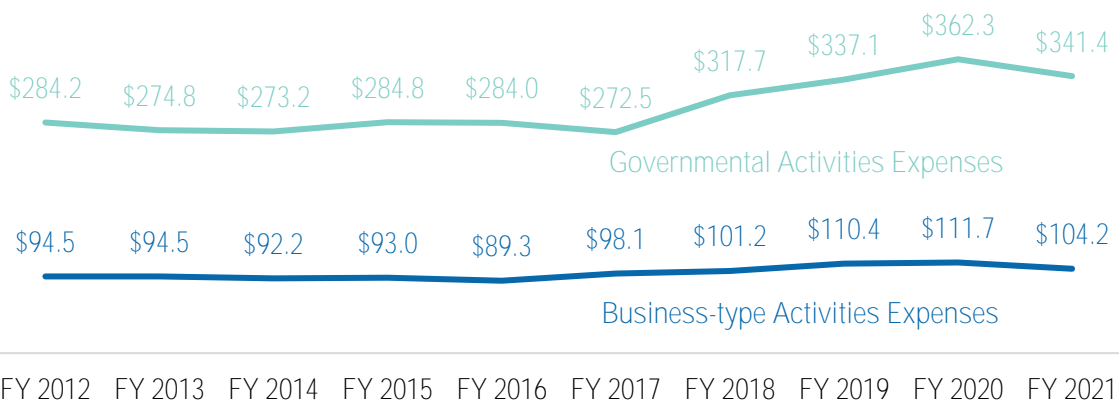


Source: Berkeley ACFRs

Governmental activities expenses increased by 20 percent.

Between FY 2012 and FY 2021, governmental activities expenses increased by 20 percent from \$284.2 million to \$341.4 million, adjusted for inflation. Expenses for business-type activities increased by 10 percent from \$94.5 million to \$104.2 million (Figure 8). The City's total expenses grew by 18 percent.

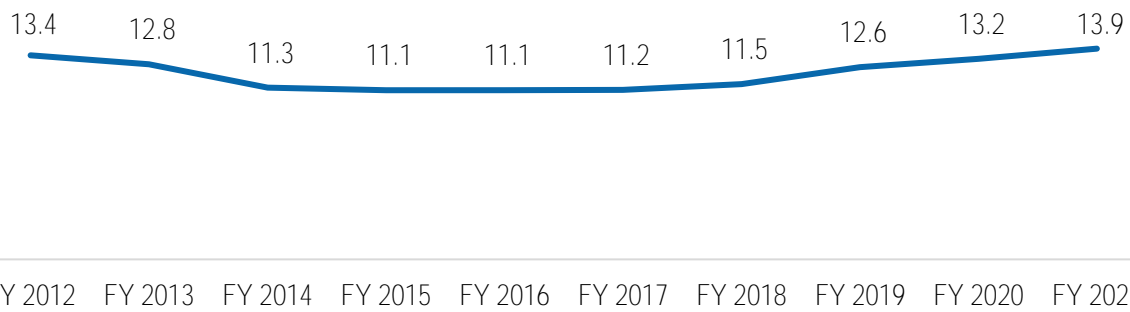
Figure 8. Expenses (in millions, adjusted for inflation)



Source: Berkeley ACFRs

According to ICMA, because personnel costs are a major portion of a local government's operating budget, tracking changes in the number of employees per capita is a good way to measure changes in costs. Between FY 2012 and FY 2021, the number of full-time equivalent employees per 1,000 residents increased slightly from 13.4 to 13.9, as shown in Figure 9.

Figure 9. Full-Time Equivalent City Employees per 1,000 Residents

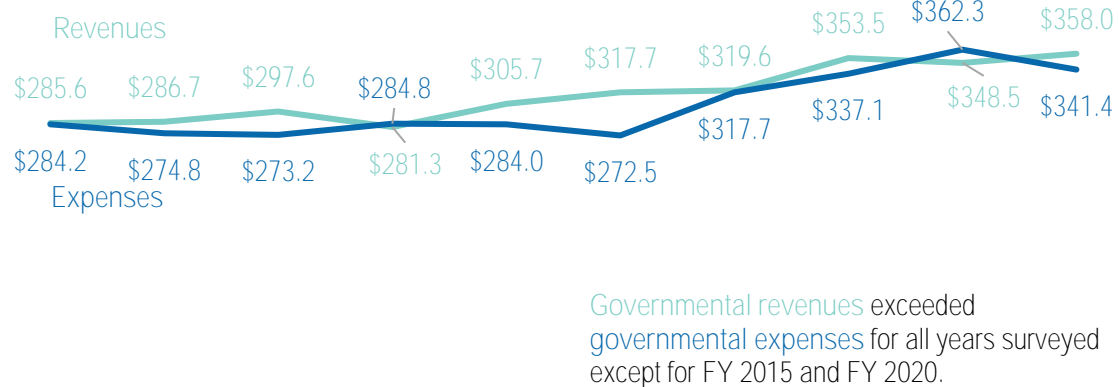


Source: Berkeley FY 2021 ACFR

The City's governmental activities revenues generally outpaced expenses.

According to ICMA, it is important to track whether governmental expenses grow faster than revenues to ensure that the City is able to fund all of its programs and services at the current level. Between FY 2012 and FY 2021, revenues for governmental activities exceeded expenses eight out of ten years (Figure 10).

Figure 10. Governmental Activities Revenues and Expenses (in millions, adjusted for inflation)



FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Source: Berkeley ACFRs

Governmental activities expenses exceeded revenues by the greatest amount in FY 2020, when the City issued the COVID-19 Risk Reduction Order. Expenses related to governmental activities exceeded diminished revenues by \$13.7 million, adjusted for inflation. To address the revenue shortfall in FY 2021, the City took a number of actions including a hiring freeze, delaying spending on capital, reducing non-personnel expenditures, drawing on emergency reserves, reducing transfers to internal service funds, and suspending the Council policy to allocate Property Transfer Tax revenues in excess of \$12.5 million to the Capital Improvement Fund.

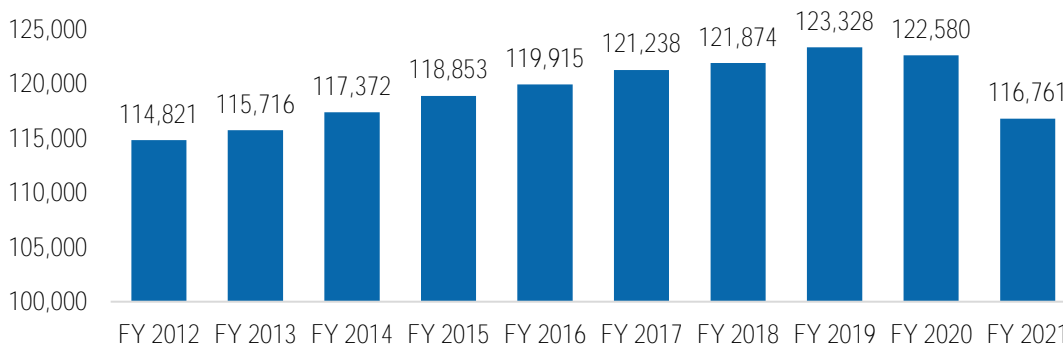
Demographic and Economic Indicators

Demographic and economic factors such as population, personal income, and taxable assessed property values reflect the strength of the City's tax base and residents' overall ability to contribute to city revenues through taxes. Similarly, the unemployment rate sheds light on the local economy and the strength of the City's revenue base. These factors also affect the types of city services the community needs.

Population

For the most part, Berkeley's population increased during the audit period. However, in fiscal years 2020 and 2021, the population declined (Figure 11). This decrease coincided with the COVID-19 pandemic and may be due to temporary relocation of students or other Berkeley residents.

Figure 11. Population



Source: Berkeley FY 2021 ACFR

The City's Unemployment rate improved in FY 2021.

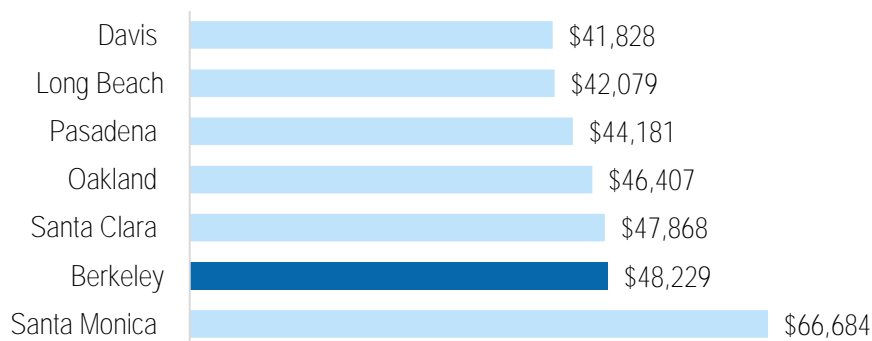
The City's unemployment rate reflects changes in personal income, which affect the community's ability to generate tax revenues. Berkeley's unemployment rate declined from 9.0 percent in FY 2012 following the 2007-2009 recession to 3.1 percent in FY 2019. By FY 2020, the City's unemployment rate increased to 13.5 percent. This spike in unemployment is due to the COVID-19 pandemic beginning in March 2020 and risk reduction orders that limited economic activity. Unemployment is expected to decrease as the economy recovers. According to the California Employment Development Department (EDD), Berkeley's unemployment rate in June 2021 was 5.5 percent, a sign of economic recovery. For comparison, the Oakland-Hayward-Berkeley metropolitan area unemployment rate as of June 2021 was 6.8 percent.

Personal income per resident has grown since FY 2012.

Personal income per resident is a key component of a City's financial condition because it is a measure of a community's ability to pay taxes. Between FY 2012 and FY 2021, the average personal income of Berkeley residents increased 11 percent from \$45,794 per resident to \$50,619 per resident, adjusted for inflation.

In FY 2020, Berkeley's personal income per resident was higher than all but one benchmark city (Figure 12).

Figure 12. Personal Income per Resident, FY 2020



Note: **Oakland's 2020 ACFR uses a personal income figure based on the San Francisco-Oakland-Hayward Metropolitan Statistical Area. We used the most recent census data available to estimate Oakland's personal income per resident.**

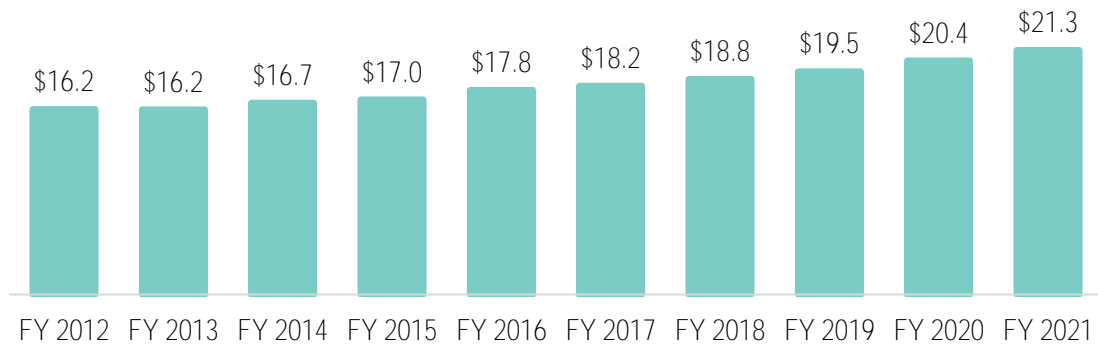
Source: **Cities' FY 2020 ACFRs, Santa Monica FY 2021 ACFR, U.S. Census Bureau**

Property values have been a strong and growing source of city revenues.

Property values are integral to Berkeley's overall financial health. Growth in taxable assessed property value corresponds to growth in property tax revenues because property taxes are based on a percentage of the assessed value of property.

Berkeley has benefited from growing taxable assessed property values. Between FY 2012 and FY 2021, the assessed value of taxable property in Berkeley increased by 32 percent, from \$16.2 billion to \$21.3 billion, adjusted for inflation (Figure 13).

Figure 13. Total Taxable Assessed Property Value (in billions, adjusted for inflation)



Source: Berkeley FY 2021 ACFR

Berkeley's taxable assessed property values did not decrease during the 2007-2009 recession nor the COVID-19 pandemic, which suggests that Berkeley's taxable assessed property values have been generally less affected by economic downturns than some other cities. Additionally, Berkeley has a high collection rate for property taxes. Between FY 2012 and FY 2021, the collection rate for taxes levied on property fluctuated between 97 percent and 99 percent.

Net Position, Liquidity, and Reserves

Net position measures the difference between the City's assets (what it owns) and its liabilities (what it owes). Net position reflects a government's financial condition at a point in time, and can be thought of as the City's remaining resources after its debts are accounted for.

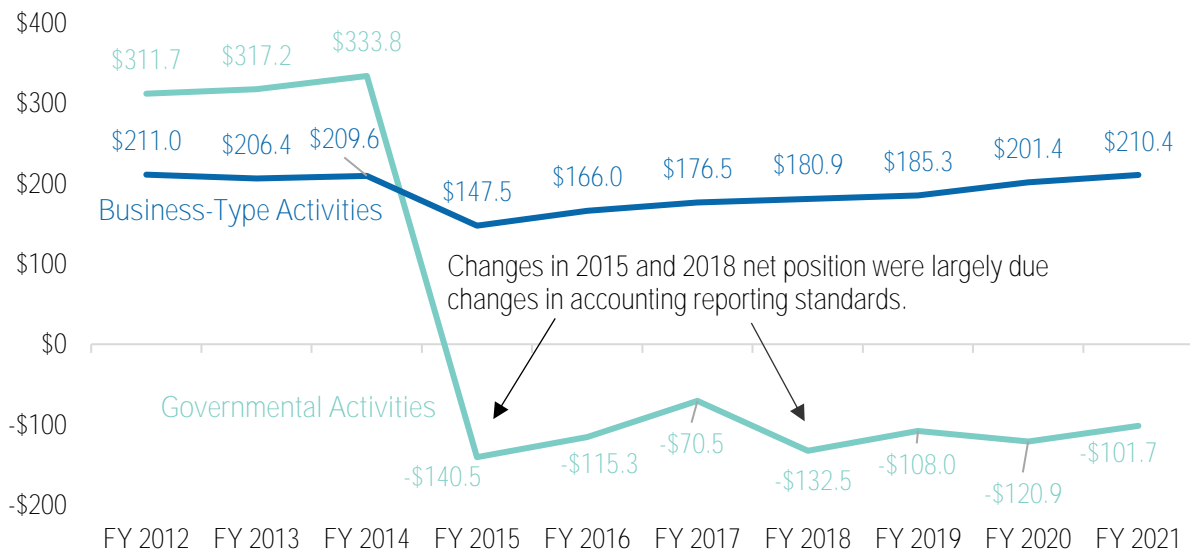
Liquidity measures a government's ability to balance its budget and pay its bills on time. It generally refers to the City's cash position, which includes cash on hand and in the bank, as well as other assets that can easily be converted into cash. Liquidity tells us about the City's ability to pay its short-term obligations, while net position represents a longer-term view of the City's financial condition because it includes assets not easily converted into cash. These concepts are connected because declining or low liquidity, or a cash shortage, may be the first sign that a government has overextended itself in the long run.

Reserves are funds set aside for future use and are built through the accumulation of operating surpluses. Strong reserves allow cities to weather economic downturns more effectively, manage the consequences of outside agency actions that may result in revenue reductions, and address unexpected emergencies like natural disasters and other catastrophic events such as pandemics.

The City's net position related to governmental activities has been negative due to unfunded liabilities.

Between FY 2012 and FY 2021, Berkeley's net position related to governmental activities changed from \$311.7 million to -\$101.7 million, adjusted for inflation (Figure 14). In FY 2015, a change in Governmental Accounting Standards Board (GASB) standards required government entities to report the total long-term cost of pension benefits as a liability in their annual financial reports. In FY 2018, another change in GASB accounting standards required government entities to also report the total long-term cost of other post-employment benefits (OPEB) as a liability in their annual financial reports. As a result of these changes in standards, Berkeley's reported net position declined significantly in those years.

Figure 14. Net Position (in millions, adjusted for inflation)



Source: Berkeley ACFRs

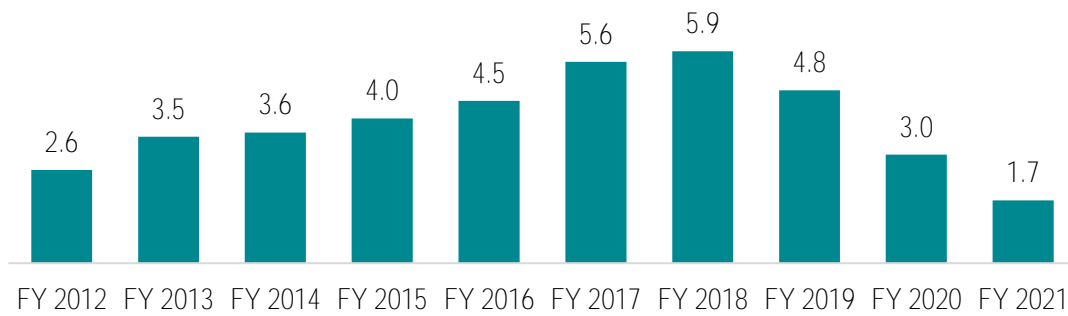
The accounting standards that changed in fiscal years 2015 and 2018 did not materially alter the City’s financial condition. Rather, the City started including its pension and OPEB liabilities in its net position calculations in the ACFR. The City’s net position will likely remain negative in coming years if the City’s unfunded pension and OPEB liabilities continue to grow. Pension and OPEB liabilities are covered in more depth starting on page 28.

Berkeley’s liquidity ratio is strong, but has declined since FY 2018.

The *liquidity ratio*, otherwise known as cash position, measures the City’s ability to pay its short-term obligations. According to ICMA, the ratio is calculated by dividing cash and short-term investments (assets that can be easily converted to cash) by current liabilities (short-term obligations). A liquidity ratio of greater than one would indicate that cash and short-term investments exceed current liabilities. A ratio of one or less than one would be considered a cause for concern, particularly if this trend persists for more than three years.

Overall, Berkeley’s liquidity ratio has remained positive from FY 2012 to FY 2021. Berkeley’s liquidity ratio more than doubled from FY 2012 to FY 2018, then began to decline, from 5.9 in FY 2018 to 1.7 in FY 2021 (Figure 15).

Figure 15. Liquidity Ratio of Current Assets to Current Liabilities



Source: Berkeley ACFRs

According to the Department of Finance, the recent decline in the liquidity ratio is partly due to setting aside funds for reserves and a recent influx of federal funding. The City established reserves in FY 2017, which restricted a portion of funds and reduced the amount of available cash. Additionally, in FY 2021, the City received \$33.3 million in federal aid through the American Rescue Plan, which was accounted for as an unearned revenue liability.

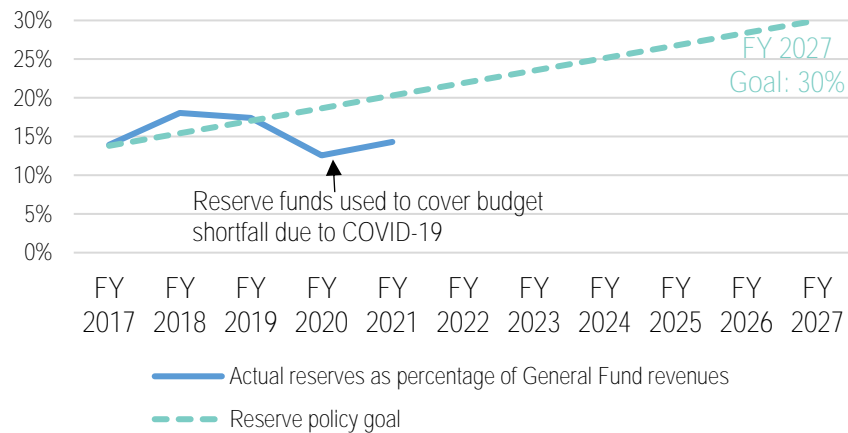
While the decrease in the liquidity ratio since FY 2017 suggests that Berkeley's capacity to pay its bills in the short-term has declined over time, the liquidity ratio does not capture all of the funds the City has to pay its bills.

The COVID-19 pandemic slowed the City's progress toward its 2027 reserve funding goal.

In FY 2017, the City created the Catastrophic Reserve and the Stability Reserve following a city audit of the General Fund reserve policy. The Catastrophic Reserve is intended to support General Fund operations in the event of a public emergency defined as extreme, one-time events, such as an earthquake, fire, flood, civil unrest, terrorist attack, public health emergencies, and pandemics. The Stability Reserve is intended to help the City maintain services and reduce financial risks associated with unexpected revenue shortfalls during a single fiscal year or prolonged period of recession.

Based on current trends, the City is not on track to meet the reserve balance goal of 30 percent of **General Fund revenues by FY 2027 as set by the City's reserve policy. As shown in Figure 16, the City was meeting its reserve goals in FY 2017 through FY 2019. However, the City fell off track in FY 2020 because it borrowed from both reserves to balance a General Fund deficit caused by the impact of COVID-19 on city revenues.**

Figure 16. Actual Reserves Compared to Reserve Goal



Note: The graph does not represent the policy's intermediate goal of 16.7 percent because the purpose is to show a possible path from the start of the reserves to the long-term goal.

Source: Year-End Results and First Quarter Budget Update Reports

To cover the General Fund deficit, the City borrowed \$6.9 million from the Stability Reserve and \$4.5 million from the Catastrophic Reserve. The City repaid \$3.3 million dollars in FY 2021. The City does not currently have a plan for how to meet its FY 2027 reserve goal.

The General Fund reserve policy states that City Council may consider increasing or lowering the level of reserves based on a risk assessment to be updated at least every five years. Since the reserves were established in FY 2017, the first risk assessment would be due in FY 2022.

All of the City's enterprise funds faced at least one annual shortfall between FY 2016 and FY 2021.

Business-type activities include the City's enterprise funds. Enterprise funds are funds that the City uses to account for the operation and maintenance of facilities and services, and are mainly supported by user charges.

The City's budgets provide summaries of fund balances for all enterprise funds except for Building Purchases and Management.⁵ The City Council's current policy states that enterprise funds are required to balance. Fund balances are the net of expenditures and revenues. For a fund to be considered balanced, revenues should be equal to or greater than expenditures.

⁵ Ending fund balances for fiscal years 2016 through 2020 reflect actuals, while the ending fund balance for FY 2021 reflects the adopted budget amount from the FY 2022 budget.

This section presents an overview of summaries from city budgets. A detailed analysis of individual enterprise funds was outside of the scope of this audit. For an overview of the City's enterprise funds, see Appendix I.

The Permit Service Center Fund has faced annual shortfalls in three of the most recent six years (Table 1). The fund's recovery will depend on economic recovery from the COVID-19 pandemic.

Table 1. Permit Service Center Fund Balance, FY 2016 - FY 2021

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Beginning Balance	\$12,617,224	\$11,233,859	\$11,516,323	\$12,777,977	\$12,643,651	\$15,398,407
Ending Balance	\$11,233,859	\$11,516,329	\$12,777,853	\$12,643,651	\$15,398,407	\$12,070,511
Surplus/(Shortfall)	(\$1,383,365)	\$282,470	\$1,261,530	(\$134,326)	\$2,754,756	(\$3,327,896)

Source: Berkeley's budgets

The Sanitary Sewer Fund has faced annual shortfalls in two of the most recent six years (Table 2). Factors that contribute to depressed revenues include drought conditions and water conservation efforts. Additionally, the upcoming Sanitary Sewer Master Plan will determine if future rate increases are needed.

Table 2. Sanitary Sewer Fund Balance, FY 2016 - FY 2021

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Beginning Balance	\$7,897,389	\$5,309,962	\$9,203,590	\$13,203,977	\$26,027,896	\$25,918,159
Ending Balance	\$5,309,962	\$9,203,575	\$13,203,975	\$26,027,896	\$25,918,159	\$29,898,141
Surplus/(Shortfall)	(\$2,587,427)	\$3,893,613	\$4,000,385	\$12,823,919	(\$109,737)	\$3,979,982

Source: Berkeley's budgets

The Zero Waste Fund faced one annual shortfall in FY 2021 (Table 3). A rate study is in progress to determine if increases are needed moving forward.

Table 3. Zero Waste Fund Balance, FY 2016 - FY 2021

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Beginning Balance	\$5,566,976	\$11,403,226	\$13,664,122	\$17,677,642	\$20,079,053	\$24,358,287
Ending Balance	\$11,403,226	\$13,677,397	\$17,677,654	\$20,079,053	\$24,358,287	\$22,996,702
Surplus/(Shortfall)	\$5,836,250	\$2,274,171	\$4,013,532	\$2,401,411	\$4,279,234	(\$1,361,585)

Source: Berkeley's budgets

The Parking Meter Fund has faced annual shortfalls in two of the most recent six years (Table 4). The pandemic had an immediate and severe impact on parking meter revenues. Fund recovery will depend on the length of the pandemic and economic recovery.

Table 4. Parking Meter Fund Balance, FY 2016 - FY 2021

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Beginning Balance	\$5,241,583	\$5,379,078	\$5,683,946	\$3,270,420	\$4,990,946	\$3,208,091
Ending Balance	\$5,379,078	\$5,683,942	\$3,270,432	\$4,990,946	\$3,208,091	\$4,629,330
Surplus/(Shortfall)	\$137,495	\$304,864	(\$2,413,514)	\$1,720,526	(\$1,782,855)	\$1,421,239

Source: Berkeley's budgets

The Marina Fund faced annual shortfalls in three of the most recent six years (Table 5). The COVID-19 pandemic significantly worsened the fund's revenue outlook, as lease revenues from hotel, restaurant, and commercial tenants greatly decreased.

Table 5. Marina Fund Balance, FY 2016 - FY 2021

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Beginning Balance	\$2,709,368	\$3,640,031	\$3,998,848	\$3,058,152	\$3,503,847	\$3,151,777
Ending Balance	\$3,640,031	\$3,999,406	\$3,058,161	\$3,503,847	\$3,151,777	\$2,597,486
Surplus/(Shortfall)	\$930,663	\$359,375	(\$940,687)	\$445,695	(\$352,070)	(\$554,291)

Source: Berkeley's budgets

The Off-Street Parking Fund faced annual shortfalls in two of the three most recent years (Table 6). The Center Street garage reopened in FY 2019 after two years of construction and was subsequently impacted by revenues losses associated with the pandemic. Fund recovery will depend on the length of the pandemic and economic recovery.

Table 6. Off-Street Parking Fund Balance, FY 2016 - FY 2021

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Beginning Balance	missing	missing	missing	\$9,342,477	\$2,235,776	(\$1,215,101)
Ending Balance	missing	missing	missing	\$2,235,776	(\$1,215,101)	(\$106,157)
Surplus/(Shortfall)	missing	missing	missing	(\$7,106,701)	(\$3,450,877)	\$1,108,944

Source: Berkeley's budgets

In fiscal years 2020 and 2021, the Off-Street Parking Fund was unable to balance, as reflected in the negative ending fund balance (Table 6). According to the Budget Office, if a shortfall exists, revenues can be supplemented with the existing fund balance, and if funds are unable to balance, they become a General Fund liability. The Budget Office stated that they work with departments that manage enterprise funds during the budget process and throughout the year to ensure the funds do not face recurring shortfalls. However, the City does not have a policy outlining the target fund balance necessary to balance enterprise funds and avoid recurring annual shortfalls. Without targets, it is difficult to assess the financial condition of each enterprise fund.

Recommendations

- 1.1 To better prepare the City for unforeseen economic challenges, we recommend that the City Manager complete the risk **assessment required by the City's reserve policy as scheduled** and propose to the City Council a plan to replenish the Stability and Catastrophic Reserves based on the results of the assessment. This may include revising the funding goal for 2027 to align **with the City's financial reality and projected risk level.**

- 1.2 **To ensure the City's enterprise funds can balance and avoid recurring annual shortfalls, we recommend the City Manager assess the appropriate fund balance for each of the City's** enterprise funds, report findings to the City Council and explore financial policy options to manage enterprise fund balances.

Long-Term Debt and Liabilities

Not Including Pension and Other Post-Employment Benefit Liabilities

Why do local governments take on long-term debt?

Debt financing can be a reasonable strategy for local governments, as it allows cities to borrow to pay for large infrastructure initiatives. Additionally, since infrastructure like streets and public buildings are used over multiple decades, borrowing spreads the cost burden over time so that taxpayers who will benefit from the asset now and in the future can help pay for it.

While financing projects through debt spreads costs over time, it commits the City to pay fixed debt service⁶ costs for many years. Decisions around debt also affect the Berkeley community. Debt impacts homeowners and businesses who pay the cost of debt through taxes on property and renters who may face higher rents passed down as a result of increased taxes on property. Like many financial decisions local governments make, issuing long-term debt requires a careful review of tradeoffs. For Berkeley, unfunded capital and deferred maintenance needs are an important consideration, as deferred investments in infrastructure assets can mean higher costs down the line.

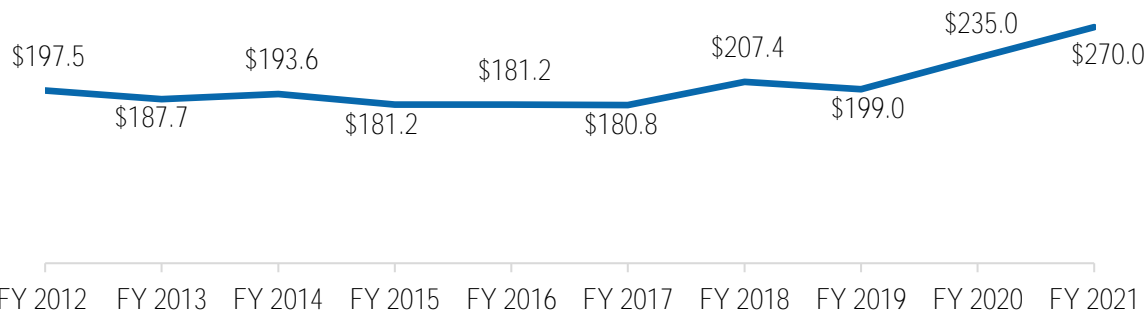
What are long-term liabilities?

An accounting *liability* is an obligation to make a payment in the future as a result of a past event. Long-term liabilities include debts, in addition to other long-term obligations like accrued vacation and **sick leave, accrued workers' compensation claims and judgments, and accrued public liability** claims and judgments. Long-term liabilities can include unfunded pension and other post-employment benefits (OPEB), but they are not included in this section and instead covered in depth on page 28.

Between FY 2012 and FY 2021, the City's total long-term liabilities (excluding pension and OPEB) increased from \$197.5 million to \$270.0 million, adjusted for inflation (Figure 17).

⁶ *Debt service* is the set of payments including principal and interest that is required to be made through the life of the debt.

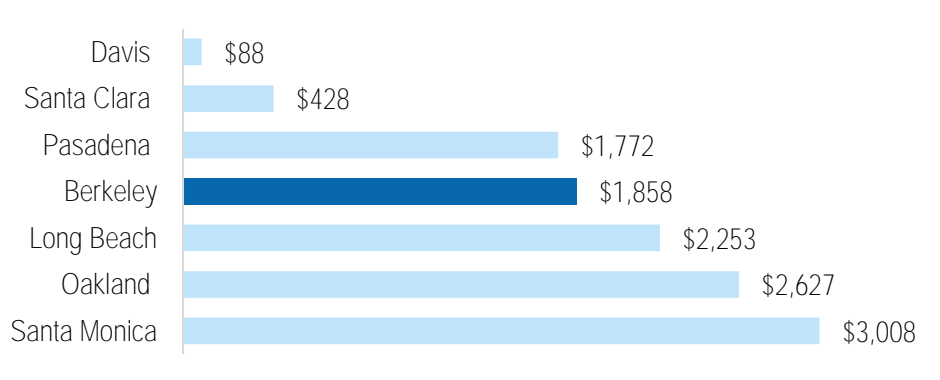
Figure 17. Governmental Activities Long-Term Liabilities (in millions, adjusted for inflation)



Source: Berkeley ACFRs

Compared to **benchmark cities**, **Berkeley is not an outlier**. **Cities' total long-term liabilities for governmental activities ranged from \$88 per resident to \$3,008 per resident in FY 2020**. Berkeley's long-term liabilities were in the middle of that range at \$1,858 per resident (Figure 18).

Figure 18. Governmental Activities Long-Term Liabilities per Resident, FY 2020

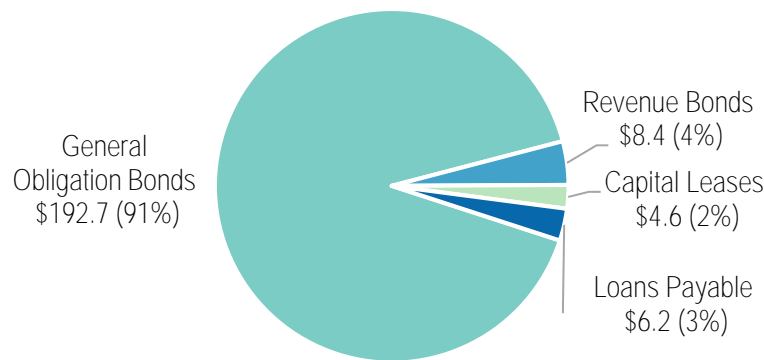


Source: Cities' FY 2020 ACFRs

Debt by Type

The City has a variety of debt instruments used primarily to finance acquisition and construction of capital facilities projects and equipment needs. **Ninety-one percent of Berkeley's debt comes from general obligation bonds** (Figure 19). These are bond measures that must have at least two-thirds voter **approval to pass**. **The City's current general obligation bonds include Measure T1, a loan to fund infrastructure and facilities; Measure M, a loan to fund street paving and greening infrastructure projects; and Measure O, a loan to fund low income housing**. **The remaining nine percent of Berkeley's debt comes from revenue bonds, capital leases, and loans payable** (Figure 19).

Figure 19. Governmental Activities Debt by Type, FY 2021



Source: Berkeley FY 2021 ACFR

Berkeley's general obligation bond ratings have been consistently favorable and improved in FY 2019.

The City's overall debt standing is reflected in its strong bond ratings. Bond ratings issued by credit agencies are a measure of the certainty that the City will pay all interest and principal owed to investors. The higher the bond rating, the lower the cost of borrowing; the lower the cost of borrowing, the more savings the City can pass on to taxpayers. The City's general obligation bond ratings from Standard and Poor's remained at its second highest rating of AA+ over the audit period. The City's general obligation bond ratings from Moody's were Aa2, the third highest bond rating offered by Moody's, before they increased to Aa1 in FY 2019 (Table 7).

Table 7. **Berkeley's General Obligation Bond Ratings**

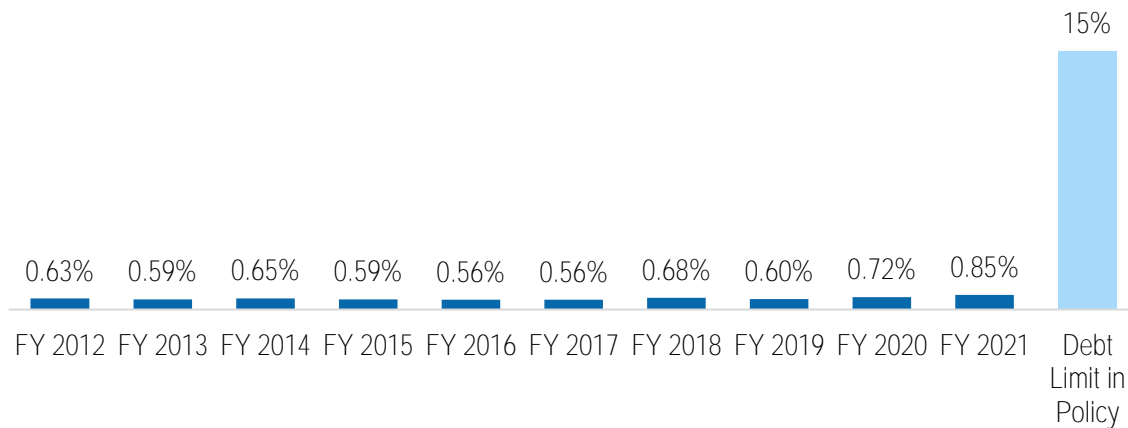
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
S&P's Rating	AA+	AA+	AA+	AA+	AA+	AA+	AA+	AA+	AA+	AA+
Moody's Rating	Aa2	Aa2	Aa2	Aa2	Aa2	Aa2	Aa2	Aa1	Aa1	Aa1

Source: Berkeley ACFRs

The City's general obligation bond debt remained under one percent of taxable assessed property value.

In 2017, Berkeley established a debt policy that sets a debt capacity limit for its general obligation bonds at 15 percent of taxable assessed value of property. Over the audit period, the City's general obligation bond debt has remained below one percent of taxable assessed property value (Figure 20), which is significantly lower than the City's current threshold of 15 percent.

Figure 20. General Obligation Bond Debt as a Proportion of Taxable Assessed Property Value



Source: Berkeley FY 2021 ACFR

General obligation bond debt per resident has grown but payments for existing debt will peak in FY 2024.

Another way to track the burden of a City's debt is through the change in debt per resident over time. Most of Berkeley's bonded debt comes from general obligation bonds. General obligation bond debt is repaid through taxes on property.

Since FY 2012, Berkeley voters have passed three general obligation bonds authorizing the City to borrow a total of \$265 million. Of that authorized \$265 million, the City currently has \$117 million in unissued debt for Measure T1 and Measure O that it plans to issue in the coming years, which will be added to the City's total debt.

Between FY 2012 and FY 2021, the City's general obligation bond debt per resident increased from \$893 to \$1,559 per resident, adjusted for inflation (Table 8).

Table 8. Outstanding General Obligation Debt per Resident (adjusted for inflation)

Fiscal Year	General Obligation Bonded Debt per Resident	Debt Issued	Bond Measure
2012	\$ 893		
2013	\$ 830		
2014	\$ 920	\$ 15,000,000	Measure M
2015	\$ 850		
2016	\$ 832	\$ 15,000,000	Measure M
2017	\$ 848	\$ 35,000,000	Measure T1
2018	\$ 1,043		
2019	\$ 951		
2020	\$ 1,203	\$ 38,000,000	Measure O
2021	\$ 1,559	\$ 45,000,000	Measure T1

Note: This figure does not include the \$117 million authorized by voters but not yet issued by the City.

Source: Berkeley FY 2021 ACFR, Department of Finance data

According to projections in the FY 2021 ACFR, the amount of debt service for existing debt will peak in 2024 and decline until it is paid off in 2052 (Table 9). Residents of Berkeley also face debt obligations from other jurisdictions not administered by the City, including three current general obligation bonds issued by the Berkeley Unified School District.

Table 9. Remaining Scheduled Debt Service on Outstanding General Obligation Debt (in millions)

Fiscal Year	Scheduled Debt Service	Fiscal Year	Scheduled Debt Service
2022	\$10.8	2038	\$9.2
2023	\$12.5	2039	\$8.8
2024	\$12.7	2040	\$8.8
2025	\$11.8	2041	\$7.4
2026	\$11.8	2042	\$7.4
2027	\$11.8	2043	\$7.5
2028	\$11.8	2044	\$7.5
2029	\$10.9	2045	\$6.6
2030	\$9.7	2046	\$6.6
2031	\$9.2	2047	\$6.6
2032	\$9.2	2048	\$5.7
2033	\$9.2	2049	\$4.0
2034	\$9.2	2050	\$4.0
2035	\$9.2	2051	\$4.0
2036	\$9.2	2052	\$2.0
2037	\$9.2		

Note: This table represents a snapshot of the City's debt service payments based on the amount of general obligation bond debt in FY 2021. This table does not include the \$117 million in authorized general obligation bonds that the City plans to issue by 2026.

Source: Berkeley FY 2021 ACFR

According to the Finance Director, the City is planning to issue an additional \$40 million in Measure O bonds in FY 2022. Once the City has issued this amount, the City will have a remaining balance of \$77 million in unissued bond funds from Measure O and Measure T1. The City plans to issue this remaining authorized amount between FY 2024 and FY 2026. This additional debt will affect the amount of general obligation bond debt per resident and the schedule of future debt service payments.

The City's limit for general obligation bond debt is set at 15 percent of total assessed property value.

As of FY 2021, the estimated total taxable assessed value of property in Berkeley was \$21.3 billion. Since the City sets its threshold for general obligation bond debt at 15 percent of assessed property value, the most recent general obligation bond debt limit was \$3.2 billion dollars. Based on the current policy, the City is permitted to borrow a remaining \$3.0 billion dollars in addition to its current debt.

According to the Government Finance Officers Association (GFOA), appropriate debt limits can have a positive impact on bond ratings, especially if they are adhered to over time. GFOA states that limits on debt can be set according to debt per capita, debt to personal income, debt to taxable property value, and debt service payments as a proportion of general fund revenues or expenditures. In its 2021 general obligation rating report, Standard and Poor's noted the City has a basic debt policy that includes some quantitative limits but does not include robust quantitative measures or benchmarks. While Berkeley's policy does consider the ratio of debt to taxable assessed value of property, it does not evaluate any additional factors used by some other cities to assess their debt capacity. For example, the City of Santa Monica's general obligation debt limit is based on two of GFOA's measures of affordability: debt per capita and debt as a percentage of assessed property value (Santa Monica sets this threshold at 10 percent). If Berkeley does not consider more robust quantitative metrics to assess its general obligation debt capacity, the City may overlook important considerations in determining a manageable level of debt.

Recommendations

- 2.1 To strengthen the City's debt management, we recommend that the Finance Department update the Debt Management Policy. The Finance Department may consider revising its current general obligation bond threshold of 15 percent of assessed property value or **building upon the City's existing general obligation bond debt limit by considering** additional debt capacity factors such as debt per capita, debt to personal income, and/or debt service payments as a proportion of General Fund revenues.

Net Pension and Other Post-Employment Benefit (OPEB) Liabilities

What is a net pension or OPEB liability?

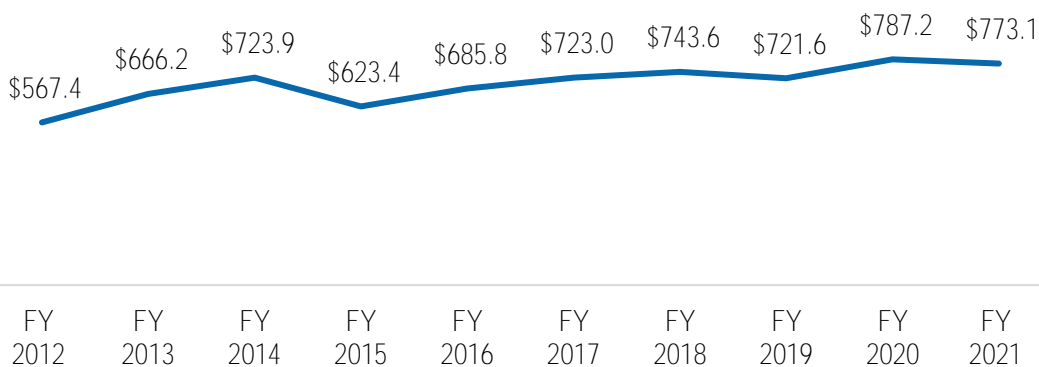
Berkeley contributes to various employee retirement benefit plans including the California Public Employees Retirement System (CalPERS). These benefits are earned by employees each year to be paid out after they retire. If the estimated cost of benefits exceeds the value of the assets that have been set aside to pay for those benefits, a net pension or net OPEB liability exists. The *net pension liability* or *net OPEB liability* as reported in the City's financial documents is the unfunded portion of the City's total pension or OPEB liability, also referred to as an unfunded liability.

Pension and OPEB contributions can place significant pressure on a city's budget. Additionally, some factors, such as yearly required contributions for CalPERS plans are set by CalPERS and are outside the City's control, posing a widespread challenge for California cities. Cities that do not have substantial funds set aside today will likely face impacts to their credit rating and have to make higher contributions to plans later, which could limit funding for other priorities.

The City's total unfunded liability for pension and OPEB commitments increased.

In total, the City's unfunded liability for pension benefits and OPEB grew by 36 percent, from \$567.4 million in FY 2012 to \$773.1 million in FY 2021, adjusted for inflation (Figure 21).

Figure 21. Combined Net Pension and OPEB Liabilities (in millions, adjusted for inflation)



Source: Department of Finance data

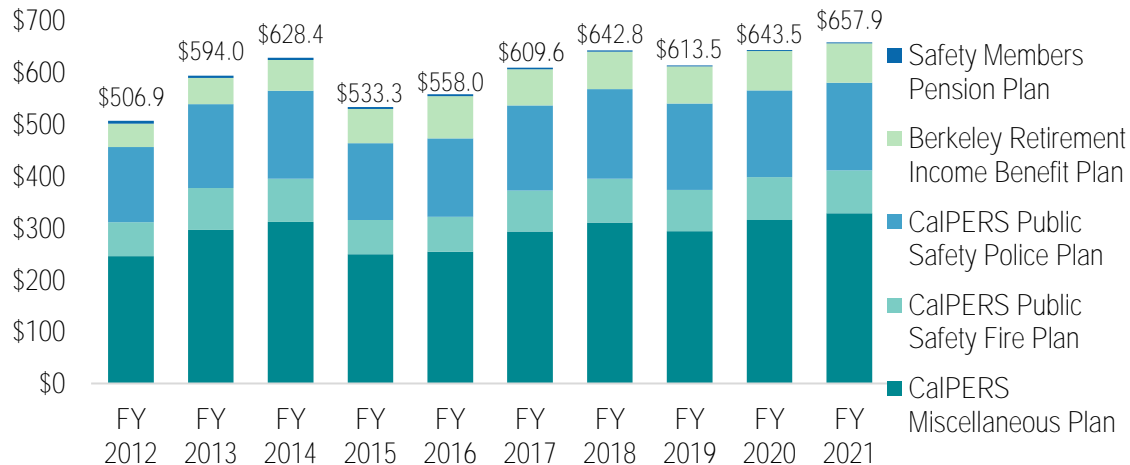
Further, the City's 2021 report on unfunded liability obligations and unfunded infrastructure needs (unfunded liability report) states that the City will face an estimated \$42 million increase in pension costs over the next ten years.

Net Pension Liability

Berkeley has five defined benefit retirement plans. *Defined benefit retirement plans* include funds set aside over time by employees and their employer, and employees are guaranteed a certain amount of income upon retirement. Berkeley's three plans administered through the CalPERS are the Miscellaneous Plan, the Public Safety Fire Plan, and the Public Safety Police Plan. Berkeley also has two older city-sponsored plans that are closed to new members and being phased out: the Berkeley Retirement Income Benefit Plan⁷ and Safety Members Pension Plan.⁸

Between FY 2012 and FY 2021, the City's total net pension liability grew by 30 percent, from \$506.9 million to \$657.9 million, adjusted for inflation (Figure 22).

Figure 22. Net Pension Liability per Plan (in millions, adjusted for inflation)



Source: Department of Finance data

Decisions made by the CalPERS Board between FY 2012 and FY 2021 increased the City's net pension liability and Berkeley's required pension contribution amount. These included CalPERS ramping up required pension funding rates to improve cities' chances of fully funding their plans within 30 years, as well as adopting new assumptions related to longer retiree lifespans and returns on investments.

⁷ The Berkeley Retirement Income Benefit Plan is a single-employer defined benefit pension plan offered to police employees with CalPERS pensions who retired with at least ten years of service on or after July 1, 1989 and before September 19, 2012. As of June 30, 2021, there were 147 remaining active employees covered by the plan.

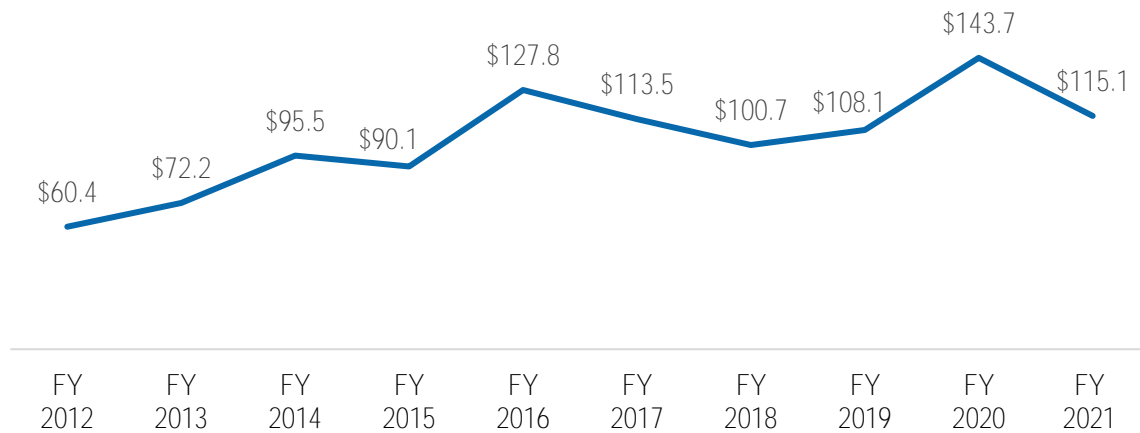
⁸ The Safety Members Pension Fund is a single-employer defined benefit pension plan for fire and police officers that retired before March 1973. As of June 30, 2020, there were eight remaining participants in the plan.

Net OPEB Liability

In addition to pensions, the City has unfunded liabilities related to *other post-employment benefits (OPEB)*, or earned compensation other than pensions provided to employees when they retire. In Berkeley, OPEB refers to retiree healthcare coverage.

Berkeley's net OPEB liability grew 91 percent between FY 2012 and FY 2021, from \$60.4 million to \$115.1 million, adjusted for inflation (Figure 23). According to the Director of Finance, Berkeley has paid less than its actuarially determined contributions for all of its OPEB plans since FY 2012.

Figure 23. Net OPEB Liability (in millions, adjusted for inflation)



Source: Department of Finance data

The California State Auditor considers Berkeley's pension funded ratio to be high risk.

The pension *funded ratio* compares the City's pension plan assets to its accrued pension liabilities. A funded ratio of 100 percent indicates that a city has set aside enough assets to pay for all pension benefits earned by its employees. If a city does not set aside adequate assets to fund its pension liability, its required contributions may become costlier in the future, which could impact its spending priorities down the line.

Based on the California State Auditor's assessment, Berkeley's pension funded ratio was considered high risk from FY 2017 to FY 2020, the years for which the California State Auditor has assessed this metric (Table 10).

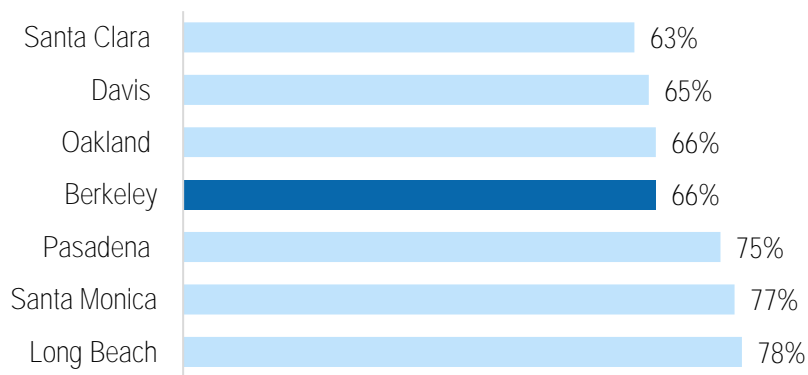
Table 10. **Berkeley's Funded Ratio Risk Level**, FY 2017 - FY 2020

Risk	Value of Pension Assets Compared to Accrued Pension Liabilities	FY 2017	FY 2018	FY 2019	FY 2020
High	0-70%	67%	67%	67%	66%
Moderate	71-80%				
Low	81-100%				

Source: California State Auditor's Financial Health Dashboard

The funded ratio of benchmark cities ranged from 63 percent to 78 percent in FY 2020. The funded ratio of Berkeley's pension plans fell in the middle of that range at 66 percent (Figure 24).

Figure 24. Funded Ratio of Pension Plans, FY 2020



Source: California State Auditor's Financial Health Dashboard

The City has taken steps to increase pension funding.

Following a city audit of unfunded liabilities,⁹ the City established an IRS Section 115 Trust Fund (Trust) in FY 2018 to help pre-fund its pension obligations. The Trust acts as a rainy-day fund that allows the City to set aside resources restricted for payment of pension obligations and is intended to prepare for and partially offset increases in contributions in the coming years.¹⁰

When the City established the Trust in 2018, the City already had some funds set aside for employee retirement benefits, so there was a starting balance of \$3.8 million. The City's actuary indicated that the City should be investing a minimum of \$4.0 million in the Trust annually. In FY 2018, the City's target contribution was \$4.0 million. In FY 2019, the target contribution increased to \$5.5 million. The City

⁹ Employee Benefits: Tough Decisions Ahead: https://berkeleyca.gov/sites/default/files/2022-01/2010-11-16_Item_13_Employee_Benefits_Tough_Decisions_Ahead-Auditor%281%29.pdf

¹⁰ According to the 2021 Unfunded Liabilities Report, employer contributions for the City's three CalPERS pension plans fluctuate from year to year based on an annual actuarial valuation performed by CalPERS. The rate CalPERS comes up with 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.

has made contributions to the Trust on a yearly basis since FY 2018, but has fallen short of its goals (Table 11).

Table 11. Contributions to the Section 115 Trust, FY 2018 - FY 2021

Fiscal Year	Actual Contribution	Target Contribution	Difference
2018	\$150,058	\$4,000,000	(\$3,849,942)
2019	\$5,246,508	\$5,500,000	(\$253,492)
2020	\$1,398,416	\$5,500,000	(\$4,101,584)
2021	\$1,470,134	\$5,500,000	(\$4,029,866)

Source: Office of Budget and Fiscal Management data, Department of Finance data

As of FY 2021, the Section 115 Trust balance was \$12.1 million. The City is currently evaluating opportunities to invest more into the Trust, including by raising the Property Transfer Tax baseline by \$2.5 million and allocating those funds to the Trust, and allocating savings generated by prefunding CalPERS plans to the Trust.

Recommendations

- 3.1 To maximize the benefit of the Section 115 Trust, we recommend that the City Manager present a plan for adoption by the City Council to assure sufficient contributions to the Trust. This may include taking the steps proposed by the Budget and Finance Committee to increase contributions to the trust. It may also include a strategy to ensure that the City is able to meet its yearly contribution goals, such as allocating contributions at the beginning of the budget cycle.

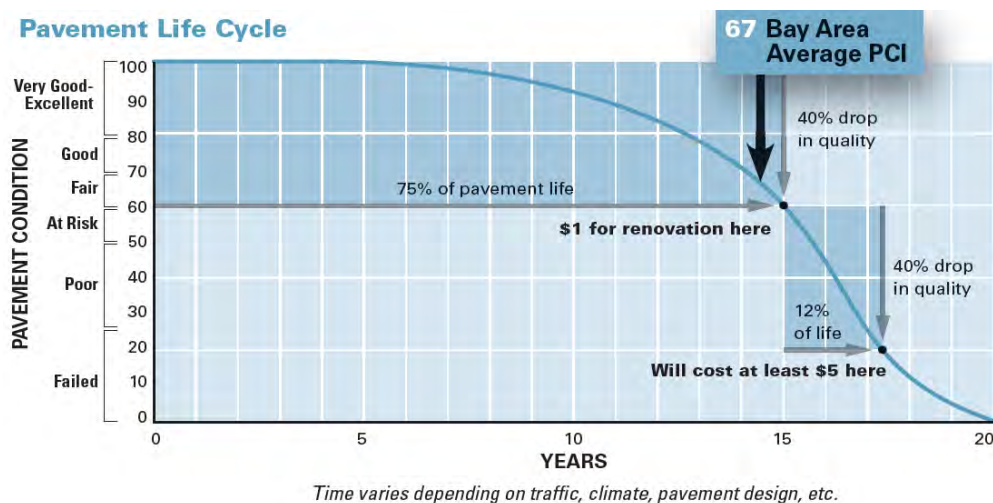
Capital Assets

How do the City's capital assets impact its financial condition?

Capital assets are assets that are used in city operations and have a life that extends beyond a single financial reporting period. Berkeley owns a wide range of capital assets, including public buildings, streets,¹¹ sidewalks, sewers and storm drains, traffic signals, and parking infrastructure. The City's responsibility for managing capital assets requires considerable resources and ongoing attention. As a relatively older city, Berkeley faces added challenges related to aging infrastructure. The City publishes a Capital Improvement Plan (CIP) that identifies anticipated financial needs over a five-year timeframe. However, the City's ability to fund the CIP is limited by its total available resources.¹²

If a city does not address regular maintenance on its capital assets, it can face deferred maintenance costs down the line. Addressing capital assets once their condition has severely deteriorated is often more expensive than regular preventative care or maintenance. According to the Metropolitan Transportation Commission, regular maintenance of roads is five to ten times cheaper than allowing roads to fail and then paying for the necessary rehabilitation (Figure 25).

Figure 25. Pavement Maintenance Costs



Source: Metropolitan Transportation Commission Pothole Report III 2018

¹¹ This includes streets and roads as defined in the City's FY 2017-FY 2021 reports on unfunded liability obligations and unfunded infrastructure needs.

¹² Funding sources for the Capital Improvement Plan include: the General Fund, special revenue funds, Measure T1, enterprise funds such as Zero Waste, the Marina, Sanitary/Sewer, Clean Storm Water, and Parking Meter; internal service funds such as the Equipment Replacement Fund; and federal, state and local funds and grants.

One way to track the status of capital assets is to examine growth in unfunded capital needs related to improving the condition of current assets and building or acquiring new assets. Similar to unfunded pension and OPEB liabilities, unfunded capital and deferred maintenance needs refer to the gap **between the funding needs and the funds available to address those needs. The City's level of unfunded capital and deferred maintenance needs reflect the adequacy of the City's investment in this area over time.** Without regular maintenance, the City accumulates large deferred maintenance costs required to improve the condition of its assets.

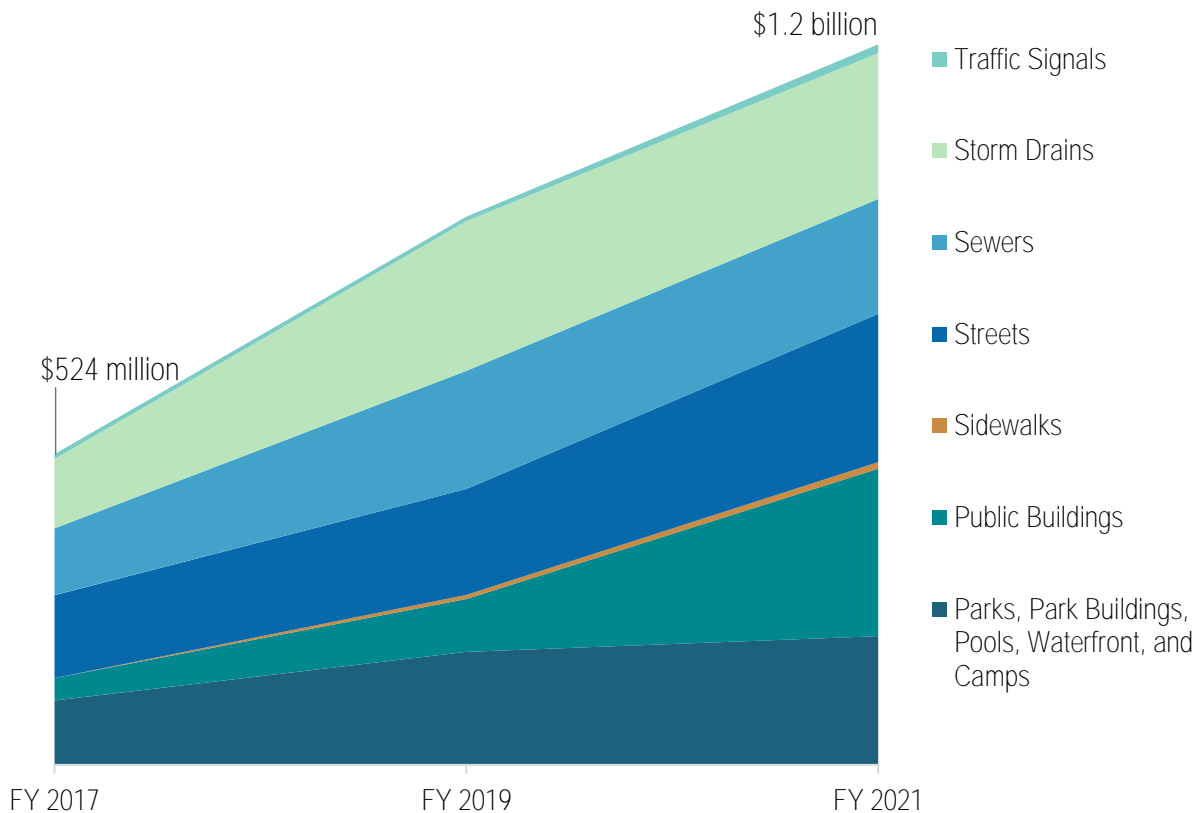
In FY 2012, the City Council adopted a resolution requiring the City Manager to develop and publish a biennial report of current liabilities and projections of future liabilities. The following section provides **an overview of the City's reporting on unfunded capital and deferred maintenance needs.**

The City reported \$1.2 billion in unfunded capital and deferred maintenance needs in FY 2021.

Berkeley's unfunded capital and deferred maintenance needs¹³ are growing. According to the City's unfunded liability reports, since FY 2017, these costs have grown from \$524 million to \$1.2 billion, adjusted for inflation (Figure 26). The Department of Public Works has stated that the estimated \$1.2 billion in current capital and deferred maintenance needs is an undercount, as many city priorities are not included in that figure. Since FY 2017, the greatest increase in capital and deferred maintenance needs has been for public buildings, which has increased by nearly 648 percent, from \$37.8 million to \$282.3 million when adjusted for inflation.

¹³ Capital and deferred maintenance needs refer to a broad range of necessary activities, including investment in new capital assets, improving existing capital assets, replacing existing capital assets, and repairing existing capital assets.

Figure 26. Unfunded Capital and Deferred Maintenance Needs, FY 2017 - FY 2021 (adjusted for inflation)



Note: The figure includes data from FY 2017 to FY 2021 because comprehensive data was not available prior to FY 2017. We did not include IT-related assets due to incomplete data, but these costs would not significantly change the capital and deferred maintenance needs outlook. Unfunded needs for sidewalks are included in the figure, but were only included as a separate asset category in the 2019 and 2021 reports. City staff update these estimates regularly.

Source: Berkeley's unfunded liability reports

According to the City's 2021 unfunded liability report, the key drivers of this growth in capital and deferred maintenance needs are aging infrastructure and limited resources allocated toward infrastructure. According to the Director of Public Works, other factors include new state mandates and **surging material costs during the pandemic, and the \$1.2 billion figure also reflects the City's efforts to more comprehensively assess all of its assets.** More recently, the City deferred some spending on capital to offset the FY 2021 budget shortfall due to COVID-19. Although Berkeley voters have passed a number of infrastructure bonds detailed in the long-term debt section, Measures M, T1, and O were steps in the right direction, yet insufficient to meet the growing risk. As noted in our 2020 streets audit, Measure M funding was lower than the unfunded need previously estimated by the City Auditor. As a result, the condition of Berkeley streets remained at risk, and the funds did not reverse the growing trend of unmet street infrastructure needs.

The rapid rise in Berkeley's unfunded capital asset needs suggests that the City has not allocated enough funding to adequately maintain key capital assets like public buildings, streets, and sidewalks. This trend presents a serious risk to the City's long-term financial health if these needs continue to grow. **The City's streets in particular are projected to deteriorate further without a significant investment, leading to higher costs later.**

In addition to rapid cost escalation, as capital and deferred maintenance needs grow, it may become more difficult for the City to balance providing services and paying for capital assets, especially if important infrastructure cannot function as intended. While a deeper analysis of the condition of the **City's capital assets and the factors that have contributed to the size of capital needs was outside of the scope of this audit, there is more detailed information about the current status, causes, and potential effects related to the City's streets in our 2020 streets audit.**¹⁴

The City is planning to take steps towards addressing the unfunded capital needs. One of the City's Vision 2050¹⁵ strategies to support more resilient and sustainable infrastructure will focus on addressing inadequate funding of infrastructure by introducing a new revenue source.¹⁶ In FY 2022, the City Council provided direction on the development of a significant revenue measure or measures focused on infrastructure, including streets and affordable housing. The Public Works Department is conducting community outreach to explore opportunities for revenue measures to offset the City's unfunded capital and maintenance needs.¹⁷

Recommendations

- 4.1** To address rising costs for unmet capital needs, we recommend that the City Manager collaborate with the Department of Public Works to implement a funding plan aimed at 1) **reducing the City's unfunded capital and deferred maintenance needs, and 2) ensuring** regular maintenance of city assets to prevent excessive deferred maintenance costs in the future. This may include prioritizing capital assets that generate the highest deferred maintenance costs.

¹⁴ Rocky Road: Berkeley Streets at Risk and Significantly Underfunded:

<https://berkeleyca.gov/sites/default/files/2022-01/Rocky-Road-Berkeley-Streets-at-Risk-and-Significantly-Underfunded.pdf>

¹⁵ According to the 2018 voter information guide, Vision 2050 is a 30-year plan to ensure that the City has a long-range plan to achieve a more resilient and sustainable infrastructure system.

¹⁶ See the staff report from January 2022: <https://berkeleyca.gov/sites/default/files/city-council-meetings/2022-01-20%20Worksession%20Agenda%20-%20Council.pdf>

¹⁷ The City is considering an infrastructure bond, a parcel tax, or a sales tax.

Recommendations and Management Response

- 1.1** To better prepare the City for unforeseen economic challenges, we recommend that the City **Manager complete the risk assessment required by the City's** reserve policy as scheduled and propose to the City Council a plan to replenish the Stability and Catastrophic Reserves based on the results of the assessment. This may include revising the funding goal for 2027 to align **with the City's financial reality** and projected risk level.

Management Response: Agree

Proposed Implementation Plan: The result of the assessment should drive the policy change if there is a need for it. Replenishing reserves should always be a top priority of both management and the City Council.

Proposed Implementation Date: January 1, 2023

- 1.2** To ensure the City's enterprise funds can balance and avoid recurring annual shortfalls, we recommend the City Manager assess the appropriate fund balance or reserve level for each of the **City's enterprise funds, report findings to the City Council and explore reserve policy** options for the enterprise funds.

Management Response: Agree

Proposed Implementation Plan: The City Manager, with collaboration with other departments including Public Works, PRW, Police, Planning, Finance, etc., will research and draft fund balance policies for department-managed enterprise funds. Departments will also look to operationalize the costing of the services so that the enterprises can recoup the cost of the services provided.

Proposed Implementation Date: September 30, 2022

- 2.1** To strengthen the City's debt management, we recommend that the Finance Department update the Debt Management Policy. The Finance Department may consider revising its current general obligation bond threshold of 15 percent of assessed property value or **building upon the City's existing general obligation bond debt limit by considering additional** debt capacity factors such as debt per capita, debt to personal income, and/or debt service payments as a proportion of General Fund revenues.

Management Response: Agree

Proposed Implementation Plan: The Finance Department will stress test the City's debt threshold and come up with a more appropriate yardstick for determining capacity. The City has hired GFOA to review its debt capacity. The result of that study will be instrumental in determining the appropriate debt threshold.

Proposed Implementation Date: September 30, 2022

3.1

To maximize the benefit of the Section 115 Trust, we recommend that the City Manager present a plan for adoption by the City Council to assure sufficient contributions to the Trust. This may include taking the steps proposed by the Budget and Finance Committee to increase contributions to the trust. It may also include a strategy to ensure that the City is able to meet its yearly contribution goals, such as allocating contributions at the beginning of the budget cycle.

Management Response: Agree

Proposed Implementation Plan: Complete a long-term funding plan that can be **integrated in the City's budgetary process on an annual basis.** The strategies should focus on sustainable funding mechanisms.

Proposed Implementation Date: August 31, 2022

4.1

To address rising costs for unmet capital needs, we recommend that the City Manager collaborate with the Department of Public Works to implement a funding plan aimed at 1) **reducing the City's unfunded capital and deferred maintenance needs, and 2) ensuring** regular maintenance of city assets to prevent excessive deferred maintenance costs in the future. This may include prioritizing capital assets that generate the highest deferred maintenance costs.

Management Response: Agree

Proposed Implementation Plan: Pursue/pass Vision 2050 revenue measures, commit existing funding resources towards priority capital maintenance needs, request in annual budgets an increase in baseline allocations to capital and deferred maintenance needs from the General Fund.

Proposed Implementation Date: Whether voters get the opportunity, and then approve, a November 2022 ballot measure or measures focused on infrastructure will drive future CIP development. Annual Capital Budgets would be adjusted in the mid-biennial budget adjustment – adopted by June 30, 2023.

Methodology and Statement of Compliance

Methodology

We used financial indicators included in the International City/County Management Association's (ICMA) *Evaluating Financial Condition* handbook designed for local governments. Additionally, we used indicators developed by the California State Auditor's Office for their Fiscal Health of California Cities dashboard¹⁸ as well as indicators used by peer cities in their financial condition audits.

We compared Berkeley's financial data to other California cities that are similar across economic and social factors including population, general fund expenditures per resident, services provided, and presence of a large university. We selected Davis, Long Beach, Oakland, Pasadena, Santa Clara, and Santa Monica because these cities are most similar to Berkeley across these criteria. Where appropriate, we adjusted financial indicators for inflation using the Bay Area Consumer Price Index calculated by the U.S. Bureau of Labor Statistics to express values in 2021 dollars.

To meet our objective, we reviewed the following:

- **Berkeley's Annual Comprehensive Financial Reports (ACFRs)**
- Budget Office reports (Unfunded Liability Obligations and Unfunded Infrastructure Needs reports, city budgets, and Year-End Results and First Quarter Budget Update reports)
- City Auditor reports on General Fund reserves, COVID-19, employee benefits, and streets
- City policies on reserves and debt management
- **Santa Monica's policy on general obligation bond debt**
- **Council reports and presentations related to the City's finances and financial reporting**
- **Standard and Poor's 2021 General Obligation bond rating report**
- **Moody's 2021 Annual Comment Report**

¹⁸ Fiscal Health of California Cities: https://www.auditor.ca.gov/local_high_risk/dashboard-csa

We also conducted interviews with:

- The Director of Finance
- Staff from the Office of Budget and Fiscal Management responsible for overseeing the City's budget and spending
- Public Works staff responsible for overseeing city spending on capital assets and financial management of Enterprise funds
- The City of Oakland Auditor's Office
- The California State Auditor's Office
- Staff at Standard & Poor's and Moody's credit rating agencies that prepared recent rating reports for Berkeley
- Staff at the City's external financial auditing firm Badawi and Associates

We analyzed financial data from the sources below. For all indicators we adjusted for inflation, we used the inflation factor as of June 2021 from the Consumer Price Index: San Francisco-Oakland-Hayward Table, 2011-2021, U.S. Department of Labor, Bureau of Labor Statistics.

Report Sections and Indicators	Sources
<p>Revenues and Expenses</p> <ul style="list-style-type: none"> • Revenue by Source • Property Tax Revenues • Revenues (trends) • Revenues per Resident • UC Berkeley Revenues • Revenues per Resident (Benchmark) • Expenses by Function • Expenses (trends) • Full-Time Equivalent Employees per 1,000 residents • Revenues and Expenses (trends) 	<p>Revenue by Source</p> <ul style="list-style-type: none"> • City of Berkeley FY 2012 and FY 2021 ACFRs, Government-wide Financial Statements, Statement of Activities <p>Property Tax Revenues</p> <ul style="list-style-type: none"> • City of Berkeley FY 2021 ACFR, Government-wide Financial Statements, Statement of Activities <p>Revenues (trends)</p> <ul style="list-style-type: none"> • City of Berkeley FY 2012 – FY 2021 ACFRs, Government-wide Financial Statements, Statement of Activities <p>Revenue per Resident</p> <ul style="list-style-type: none"> • City of Berkeley FY 2012 – FY 2021 ACFRs, Government-wide Financial Statements, Statement of Activities; City of Berkeley 2021 ACFR, Statistical Section: Demographic and Economic Statistics <p>UC Berkeley Revenues</p> <ul style="list-style-type: none"> • University of California website; University of California Berkeley: Office of the Vice Chancellor website <p>Revenue per Resident (benchmark)</p> <ul style="list-style-type: none"> • City of Berkeley, Davis, Long Beach, Pasadena, Santa Clara, and Santa Monica FY 2020 ACFRs, Management's Discussion and Analysis – Statement of Activities Summary; Statistical Section: Demographic and Economic Statistics <p>Expenses by Function</p> <ul style="list-style-type: none"> • City of Berkeley FY 2012 and FY 2021 ACFRs, Government-wide Financial Statements, Statement of Activities <p>Expenses (trends)</p> <ul style="list-style-type: none"> • City of Berkeley FY 2012 – FY 2021 ACFRs, Government-wide Financial Statements, Statement of Activities

Report Sections and Indicators	Sources
	<p>Full-Time Equivalent Employees per 1,000 residents</p> <ul style="list-style-type: none"> City of Berkeley FY 2021 ACFR, Statistical Section: Demographic and Economic Statistic; Statistical Section: Full-time Equivalent City Governmental Employees by Function/Program <p>Revenues and Expenses (trends)</p> <ul style="list-style-type: none"> City of Berkeley FY 2012 – FY 2021 ACFRs, Government-Wide Financial Statements, Statement of Activities
<p>Demographics</p> <ul style="list-style-type: none"> Population Unemployment Personal Income per Resident Personal Income per Resident (Benchmark) Assessed Property Value 	<p>Population</p> <ul style="list-style-type: none"> City of Berkeley FY 2021 ACFR, Statistical Section: Demographic and Economic Statistics <p>Unemployment</p> <ul style="list-style-type: none"> City of Berkeley FY 2020 ACFR, Statistical Section: Demographic and Economic Statistics State of California Employment Development Department – Local Area Unemployment Statistics <p>Personal Income per Resident</p> <ul style="list-style-type: none"> City of Berkeley FY 2016, FY 2020, and FY 2021 ACFRs, Statistical Section: Demographic and Economic Statistics <p>Personal Income per Resident (Benchmark)</p> <ul style="list-style-type: none"> City of Berkeley, Davis, Long Beach, Pasadena, and Santa Clara FY 2020 ACFRs, City of Santa Monica FY 2021 ACFR, Statistical Section: Demographic and Economic Statistics U.S. Census Bureau population estimates, July 1, 2019, City of Oakland <p>Assessed Property Value</p> <ul style="list-style-type: none"> City of Berkeley FY 2021 ACFR, Statistical Section: Assessed Value and Estimated Values of Taxable Property
<p>Financial and Operating Position</p> <ul style="list-style-type: none"> Net Position Liquidity Ratio General Fund Reserves Enterprise Fund Balance 	<p>Net Position</p> <ul style="list-style-type: none"> City of Berkeley FY 2012 - FY 2021 ACFRs, Government-Wide Financial Statements: Statement of Net Position <p>Liquidity Ratio</p> <ul style="list-style-type: none"> City of Berkeley FY 2012 - FY 2021 ACFRs Government-Wide Financial Statements: Statement of Net Position <p>General Fund Reserves</p> <ul style="list-style-type: none"> City of Berkeley, Office of Budget and Fiscal Management, Year-End Results and First Quarter Budget Update Reports, FY 2017- FY 2021 <p>Enterprise Fund Balances</p> <ul style="list-style-type: none"> City of Berkeley budgets: FY 2018 and FY 2019, FY 2020 and FY 2021, and proposed FY 2022 budgets
<p>Long-Term Debt</p> <ul style="list-style-type: none"> Governmental Activities Long-term Liabilities Governmental Activities Long-term Liabilities per Resident (Benchmark) Debt by Type Bond Ratings General Obligation Bond debt 	<p>Governmental Activities Long-Term Liabilities</p> <ul style="list-style-type: none"> City of Berkeley FY 2012 – FY 2021 ACFRs, Notes to Basic Financial Statements: Governmental Activities Long-Term Liabilities Summary <p>Governmental Activities Long-Term Liabilities per Resident (benchmark)</p> <ul style="list-style-type: none"> City of Berkeley, Davis, Long Beach, Pasadena, Santa Clara, and Santa Monica FY 2020 ACFRs, Government-Wide Financial Statements: Statement of Net Position

Report Sections and Indicators	Sources
<p>as a Proportion of Assessed Property Value</p> <ul style="list-style-type: none"> • General Obligation Bond Debt per Resident • General Obligation Debt Service 	<p>Debt by Type</p> <ul style="list-style-type: none"> • City of Berkeley FY 2021 ACFR, Notes to Basic Financial Statements: Governmental Activities Long-Term Liabilities Summary <p>Bond Ratings</p> <ul style="list-style-type: none"> • City of Berkeley FY 2012 - FY 2021 ACFRs, Introductory Section • Standard and Poor's Ratings Guide; Moody's Rating Definitions <p>General Obligation Bond Debt as a Proportion of Assessed Property Value</p> <ul style="list-style-type: none"> • City of Berkeley FY 2021 ACFR, Statistical Section, Ratios of General Bonded Debt Outstanding; Statistical Section: Assessed Value and Estimated Values of Taxable Property • City of Berkeley Debt Management and Disclosure Policy <p>General Obligation Bond Debt per Resident</p> <ul style="list-style-type: none"> • City of Berkeley FY 2021 ACFR, Statistical Section, Ratios of General Bonded Debt Outstanding; Statistical Section: Demographic and Economic Statistics • Department of Finance data on General Obligation bond issuance <p>General Obligation Debt Service</p> <ul style="list-style-type: none"> • City of Berkeley FY 2021 ACFR, City of Berkeley General Obligation and General Fund Obligations Continuing Disclosure Annual Report Information
<p>Unfunded Pension and OPEB Liabilities</p> <ul style="list-style-type: none"> • Combined Unfunded Pension and OPEB Liability • Net Pension Liability • Net OPEB Liability • Funded Ratio Risk Level • Funded Ratio Risk Level (Benchmark) • Section 115 Trust Fund 	<p>Combined Unfunded Pension and OPEB Liability</p> <ul style="list-style-type: none"> • Department of Finance data <p>Net Pension Liability</p> <ul style="list-style-type: none"> • Department of Finance Data <p>Net OPEB Liability</p> <ul style="list-style-type: none"> • Department of Finance data <p>Funded Ratio Risk Level</p> <ul style="list-style-type: none"> • California State Auditor Financial Health Dashboard and risk level methodology <p>Funded Ratio Risk Level (Benchmark)</p> <ul style="list-style-type: none"> • California State Auditor Financial Health Dashboard <p>Section 115 Trust Fund</p> <ul style="list-style-type: none"> • City of Berkeley, Office of Budget and Fiscal Management documentation of Section 115 goals; City of Berkeley, Department of Finance data on Section 115 contributions
<p>Capital Assets</p> <ul style="list-style-type: none"> • Pavement Maintenance Costs • Unfunded Capital and Maintenance Need 	<p>Pavement Maintenance Costs</p> <ul style="list-style-type: none"> • Metropolitan Transportation Commission, The Pothole Report: Bay Area Roads at Risk, September 2018 <p>Unfunded Capital and Deferred Maintenance Needs</p> <ul style="list-style-type: none"> • City of Berkeley Unfunded Liability Reports (2017, 2019, 2021)

Throughout the report, we use the terms *expenses* and *expenditures*. Government-wide financial statements (including governmental and business-type activities) use the accrual basis of accounting and refer to expenses. The accrual basis of accounting reports revenues and expenses in the period in which the underlying event occurs, regardless of the timing of cash flows. This means that revenues are recorded when earned and expenses are recorded when the liability is incurred, instead of when cash is actually received or disbursed. Governmental fund financial statements (including the General Fund) use the modified accrual basis of accounting and refer to expenditures. Under the modified accrual basis of accounting, revenues are recorded when measurable and available, and expenditures are recorded when the liability is incurred, except for interest on long-term debt, judgments and claims, **workers' compensation, and compensated absences, which are recorded when paid.**

Risk Assessment and Internal Controls

We reviewed information for reasonableness and consistency, and we researched data that needed additional explanation. We did not, however, audit the accuracy of all source documents or the reliability of the data in computer-based systems. As nearly all financial information presented is from **the City's ACFRs, we relied on the work performed by the City's external financial auditors.**

We specifically assessed internal controls significant to the audit objectives. This included a review of selected policies and procedures, interviews with staff in the Department of Finance and the Budget Office, and reports on city finances and budget. In performing our work, we identified concerns that the City does not currently have a plan for how to meet its FY 2027 reserve funding goal, the debt **management policy does not have sufficient criteria to assess the City's debt capacity**, the City has not been meeting its Section 115 contribution goals, and the City does not yet have a plan to address its unfunded capital needs.

We performed a risk assessment of the City's financial condition within the context of our audit objectives. This included a review of selected policies and procedures, as well as interviews with subject matter experts and Department of Finance and the Budget Office staff.

Statement of Compliance

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix I. Enterprise Funds

Most of the City's Enterprise funds and activities are housed within the Department of Public Works, except for the Marina Fund which falls under the Parks, Recreation and Waterfront Department, and the Permit Service Center, which falls primarily under the Planning Department.

1. The Zero Waste Fund **uses fees for disposal of waste at the City's** transfer station and refuse fees charged to Berkeley property owners to provide commercial refuse, recycling and compost collection services, and residential refuse and compost collection services to Berkeley residents.
2. The Marina Fund uses fees generated from vessels that berth at the Marina, commercial building and ground leases, and special events to fund operations at the Berkeley Waterfront.
3. The Sanitary Sewer Fund **uses fees charged to the users of the City's sanitary system to fund the operation, maintenance, rehabilitation, and improvement of the City's sanitary sewer** collection system and comply with Environmental Protection Agency requirements.
4. The Clean Storm Water Fund uses fees from property taxes to fund the maintenance and **improvement of the City's storm water drainage system and reduce pollutants in storm water** from entering local creeks and the Bay.
5. The Permit Service Center Fund uses zoning fees, building fees, and plan check fees to fund the processing and issuance of building, electrical, mechanical, plumbing, fire, zoning, and Public Works permits.
6. The Off-Street Parking Fund uses parking fees to support capital, operation, and maintenance of three off-street parking facilities owned by the City: the Center Street Garage, the Oxford Garage, and the Telegraph Channing Garage.
7. The Parking Meter Fund uses payments made by hourly parkers to fund the maintenance, collection, capital, and enforcement of city parking meters.
8. The Building Purchases and Management Fund accounts for the purchase and management of the building at 1947 Center Street. According to the Department of Public Works, although the Building Purchases and Management fund is considered an enterprise fund **for the purposes of the City's financial reporting**, it functions more as an internal service fund **because most of the fund's customers are internal city departments.**

Mission Statement

Promoting transparency and accountability in Berkeley government.

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BERKELEY CITY AUDITOR



Energy Commission

CONSENT CALENDAR
April 26, 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.

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 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

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

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

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).

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

- 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 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

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_Doc/Documents/2019-12-03_Supp_2_Reports_Item_24_Supp_Arreguin_pdf.aspx

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.

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:

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

“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 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

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

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

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

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

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 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.

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 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**

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>

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 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

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

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 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.

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-map12s1tb/>

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

³² Berkeley Electric Mobility Roadmap, p. 43.

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 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

³³ Berkeley Existing Building Electrification Strategy, p. 42.

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

Billi Romain, Energy Commission Secretary, 510-981-7432




No Material
Available for
this Item

There is no material for this item.

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The City of Berkeley Budget & Finance Policy Committee Webpage:
<https://berkeleyca.gov/your-government/city-council/council-committees/policy-committee-budget-finance>




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There is no material for this item.

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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 percentage 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	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.