

## PROCLAMATION CALLING A SPECIAL MEETING OF THE BERKELEY CITY COUNCIL

In accordance with the authority in me vested, I do hereby call the Berkeley City Council in special session as follows:

**Tuesday, March 16, 2021  
6:00 PM**

JESSE ARREGUIN, MAYOR

Councilmembers:

DISTRICT 1 – RASHI KESARWANI  
DISTRICT 2 – TERRY TAPLIN  
DISTRICT 3 – BEN BARTLETT  
DISTRICT 4 – KATE HARRISON

DISTRICT 5 – SOPHIE HAHN  
DISTRICT 6 – SUSAN WENGRAF  
DISTRICT 7 – RIGEL ROBINSON  
DISTRICT 8 – LORI DROSTE

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

*Pursuant to Section 3 of Executive Order N-29-20, issued by Governor Newsom on March 17, 2020, this meeting of the City Council will be conducted exclusively through teleconference and Zoom videoconference. Please be advised that pursuant to the Executive Order and the Shelter-in-Place Order, and to ensure the health and safety of the public by limiting human contact that could spread the COVID-19 virus, there will not be a physical meeting location available.*

*Live audio is available on KPFB Radio 89.3. Live captioned broadcasts of Council Meetings are available on Cable B-TV (Channel 33) and via internet accessible video stream at <http://www.cityofberkeley.info/CalendarEventWebcastMain.aspx>.*

*To access the meeting remotely: Join from a PC, Mac, iPad, iPhone, or Android device: Please use this URL <https://us02web.zoom.us/j/82970056646>. 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 by rolling over the bottom of the screen.*

*To join by phone: Dial **1-669-900-9128** or **1-877-853-5257 (Toll Free)** and enter Meeting ID: **829 7005 6646**. If you wish to comment during the public comment portion of the agenda, Press \*9 and wait to be recognized by the Chair.*

*To submit an e-mail comment during the meeting to be read aloud during public comment, email [clerk@cityofberkeley.info](mailto:clerk@cityofberkeley.info) with the Subject Line in this format: "PUBLIC COMMENT ITEM ##." Please observe a 150 word limit. Time limits on public comments will apply. Written comments will be entered into the public record.*

*Please be mindful that the teleconference will be recorded as any Council meeting is recorded, and all other rules of procedure and decorum will apply for Council meetings conducted by teleconference or videoconference.*

*This meeting will be conducted in accordance with the Brown Act, Government Code Section 54953. Any member of the public may attend this meeting. Questions regarding this matter may be addressed to Mark Numainville, City Clerk, (510) 981-6900. The City Council may take action related to any subject listed on the Agenda. Meetings will adjourn at 11:00 p.m. - any items outstanding at that time will be carried over to a date/time to be specified.*

## Preliminary Matters

Roll Call:

## Worksession

1. **Digital Strategic Plan (DSP), FUND\$ Replacement Program and Website Redesign Project Update**  
**From: City Manager**  
Contact: Savita Chaudhary, Information Technology, (510) 981-6500
- 2a. **Unfunded Liability Obligations and Unfunded Infrastructure Needs**  
**From: City Manager**  
Contact: Rama Murty, Budget Office, (510) 981-7000
- 2b. **FY 2021 Mid-Year Budget Update**  
**From: City Manager**  
Contact: Rama Murty, Budget Office, (510) 981-7000
- 3a. **Parks, Recreation & Waterfront Department Capital Improvement Projects (CIP) Update**  
**From: City Manager**  
Contact: Scott Ferris, Parks, Recreation and Waterfront, (510) 981-6700
- 3b. **Turning Vision 2050 into Reality: Public Works Capital Improvement Plan for Fiscal Year 2022**  
**From: City Manager**  
Contact: Liam Garland, Public Works, (510) 981-6300

## Public Comment - Items on this agenda only

## Adjournment

I hereby request that the City Clerk of the City of Berkeley cause personal notice to be given to each member of the Berkeley City Council on the time and place of said meeting, forthwith.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the official seal of the City of Berkeley to be affixed on this 11<sup>th</sup> day of March, 2021.



Jesse Arreguin, Mayor

Public Notice – this Proclamation serves as the official agenda for this meeting.

ATTEST:



Date: March 11, 2021

Mark Numainville, City Clerk

**NOTICE CONCERNING YOUR LEGAL RIGHTS:** *If you object to a decision by the City Council to approve or deny an appeal, the following requirements and restrictions apply: 1) Pursuant to Code of Civil Procedure Section 1094.6 and Government Code Section 65009(c)(1)(E), no lawsuit challenging a City decision to deny or approve a Zoning Adjustments Board decision may be filed and served on the City more than 90 days after the date the Notice of Decision of the action of the City Council is mailed. Any lawsuit not filed within that 90-day period will be barred. 2) In any lawsuit that may be filed against a City Council decision to approve or deny a Zoning Adjustments Board decision, the issues and evidence will be limited to those raised by you or someone else, orally or in writing, at a public hearing or prior to the close of the last public hearing on the project.*

Live captioned broadcasts of Council Meetings are available on Cable B-TV (Channel 33), via internet accessible video stream at <http://www.cityofberkeley.info/CalendarEventWebcastMain.aspx> and KPFB Radio 89.3.

Archived indexed video streams are available at <http://www.cityofberkeley.info/citycouncil>. Channel 33 rebroadcasts the following Wednesday at 9:00 a.m. and Sunday at 9:00 a.m.

Communications to the City Council are public record and will become part of the City's electronic records, which are accessible through the City's website. **Please note: e-mail addresses, names, addresses, and other contact information are not required, but if included in any communication to the City Council, will become part of the public record.** If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service to the City Clerk Department at 2180 Milvia Street. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the City Clerk Department for further information.

Any writings or documents provided to a majority of the City Council regarding any item on this agenda will be posted on the City's website at <http://www.cityofberkeley.info>.

Agendas and agenda reports may be accessed via the Internet at <http://www.cityofberkeley.info/citycouncil>

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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.



Captioning services are provided at the meeting, on B-TV, and on the Internet.





Office of the City Manager

WORKSESSION  
March 16, 2021

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Savita Chaudhary, Director, Information Technology

Subject: Digital Strategic Plan (DSP), FUND\$ Replacement Program and Website Redesign Project Update

### INTRODUCTION

The purpose of the City of Berkeley's Digital Strategic Plan & Roadmap (DSP) post implementation assessment is to take measure of the progress made since the launch of the DSP in November 2016. Both volumes of the original DSP can be found on the City's website (<https://online.flippingbook.com/view/1044070> and <https://online.flippingbook.com/view/1048383/>).

The Digital Strategic plan was developed to fit the City of Berkeley's current and anticipated future technology needs and prioritize the initiatives based on City needs and goals. The DSP published in November 2016 identified a series of strategic business technology initiatives to be executed over a five year timeline. The original plan identified a total of 101 Information Technology initiatives and projects, including strategic initiatives, infrastructure hardware, software, professional consulting services, and internal IT operational projects. The plan included five (5) annual technology refresh replacement Programs, six (6) annual reporting and compliance programs, two(2) short term council referrals, and twenty-nine (29) existing non-DSP initiatives for FY17. The details can be found in the council presentation dated November 15, 2016, ([http://www.cityofberkeley.info/Clerk/City\\_Council/2016/11\\_Nov/Documents/2016-11-15\\_WS\\_Item\\_01\\_Digital\\_Strategic\\_Plan.aspx](http://www.cityofberkeley.info/Clerk/City_Council/2016/11_Nov/Documents/2016-11-15_WS_Item_01_Digital_Strategic_Plan.aspx)).

In parallel, the City conducted a rigorous Request for Proposal (RFP) process and selected Tyler Munis as the software to replace the Core Financial, Human Resources, and Payroll functions currently residing in FUND\$. The City also initiated the RFP process for a needs assessment to replace the remaining modules currently residing in the FUND\$ system and is currently in negotiation or contract with several of the module replacement vendors.

The DSP helps staff make informed decisions about where to best guide resources, as well as outline department goals and how to measure progress towards accomplishing them. The plan serves as a crucial tool to not only measure performance, but to push us

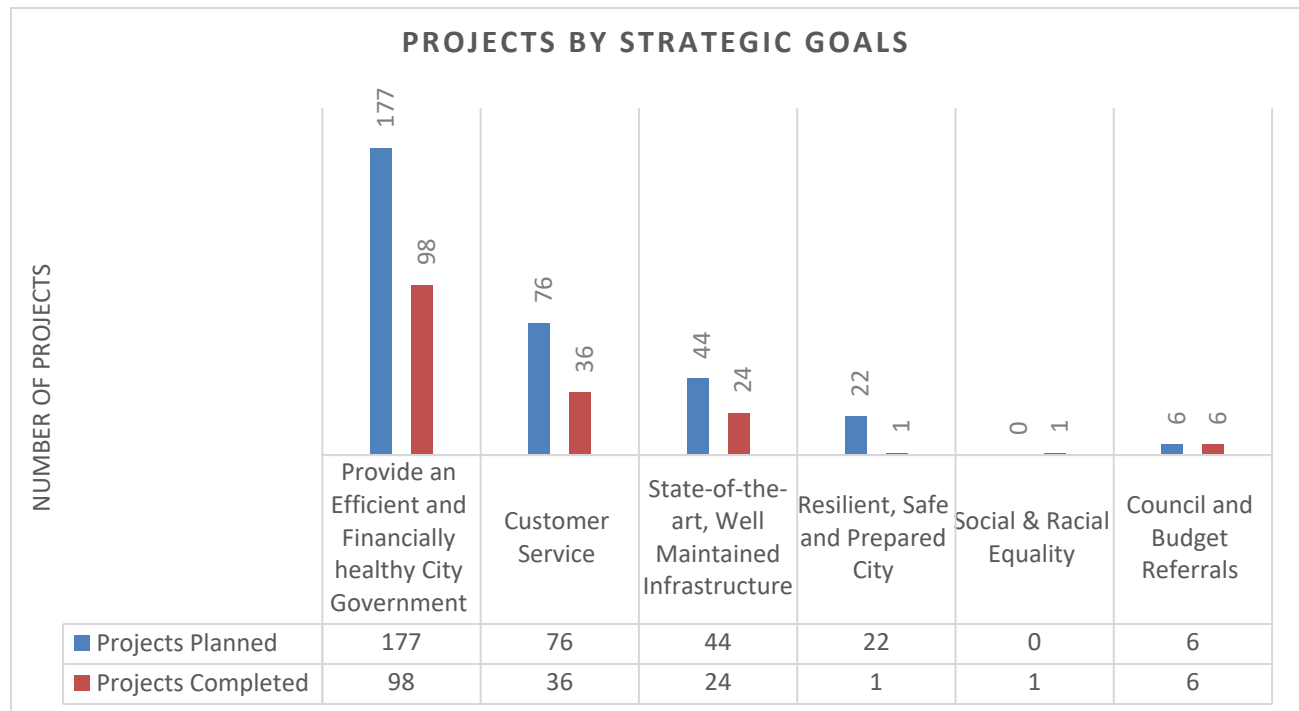
to look at the possibilities of what we can and should be doing to continue innovating as we deliver projects and services to the City of Berkeley community.

The Department of Information Technology (DoIT) is in year four of five of the original DSP, and have completed **166 initiatives, versus the 97 (ninety-seven) planned in the first four years**. An additional 50% more projects have been carried out than planned, an extraordinary achievement.

DSP initiatives are tied to the City of Berkeley's Strategic Goals and encompassing the following:

<b>Efficient:</b>	Provide an efficient and financially-healthy City government
<b>Customer Service:</b>	Be a customer-focused organization that provides excellent, timely, easily-accessible service and information to the community
<b>State-of-the-art:</b>	Provide state-of-the-art, well-maintained infrastructure, amenities, and facilities
<b>Resilient:</b>	Create a resilient, safe, connected, and prepared city
<b>Social &amp; Racial Equality:</b>	Champion and demonstrate social and racial equity

The figure below illustrates completed IT initiatives tied to key strategic City goals. The leading strategic areas are organizational efficiencies and customer service, followed by and state-of-the-art technologies and resiliency. Over the last 4 years many projects were added to the list of projects and timelines were readjusted and realigned to accommodate for any regulatory, compliance or COVID related projects. Some projects are multiyear projects and are listed as In-Progress at various stages of completion rate. Given the current and anticipated economic challenges of the pandemic, the IT Department has played, and will continue to play, a key role in the City's cost containment posture. (Some projects applied to more than one City Goal).



The details on the projects progress are explained in the in the Section 5 and Section 8 of the Attachment 1: “Digital Strategic Plan (DSP) Assessment: Provides the Post Implementation Assessment for DSP”

**CURRENT SITUATION AND ITS EFFECTS**

The DSP development and planning process provides a five-year roadmap, which include phased and prioritized Information Technology initiatives. The DSP development process considered various paths that might be helpful for the City of Berkeley such as Online Services, 24x7x365 Services, Cloud Computing, Open Data/Transparency, Mobile Devices and Gov 2.0 Social Media. The DSP is a living document facilitating the effective planning, procurement, implementation and management of information systems at the City of Berkeley.

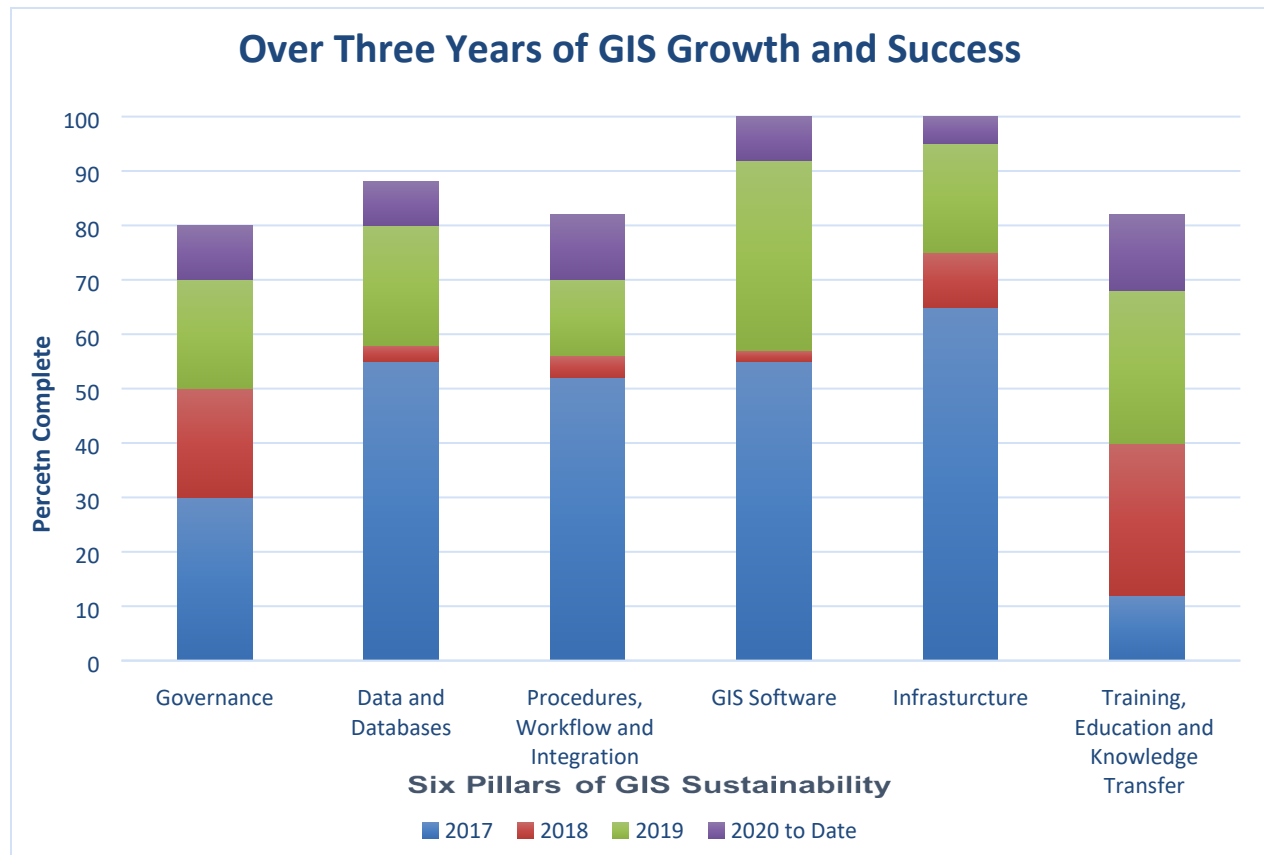
Many initiatives were listed as a single project in the original DSP and upon completion of assessments they resulted in list of projects spread over multiple years. Some of the highlights of key initiatives is listed below:

1. **Disaster Recovery (DR)** – At the beginning of the DSP implementation the City had **no** Disaster Recovery in place. Over the four years DoIT has implemented various DR measures such as:
  - a. Datacenter upgrade to include onsite and offsite redundancy
  - b. VoIP upgrade to upgrade hardware and software including onsite redundancy
  - c. Replacement of backup system to include both onsite and offsite backups

The details are identified in section 8.4, 8.5 and 8.6 of the Attachment 1.

2. **Infrastructure Replacement** – Many projects related to Infrastructure replacements were listed as Annual replacement programs. The details are identified in section 3.3 of the Attachment 1. Some of the key achievements of the infrastructure replacement programs are:
  - a. **50% reduction of rack space** - In FY 2019, the IT department upgraded the server and storage backend infrastructure to support the City's Cyber Resilience efforts and to provide operational and offsite DR including business continuity to our critical applications. The City now has operational backup between the two data centers for business continuity and a remote offsite for DR. The overall hardware footprint was reduced by 50% reduction of rack space resulting in energy efficiencies and reduced staff time in support.
  - b. **40% reduction in network equipment** - In FY 2019, the network routers and switches were consolidated at remote sites to advanced layer 3 switches resulting in 40% reduction in network equipment thus resulting in energy efficiencies and reduced staff time in support.
3. **Cyber Resilience Plan** – The project was identified in DSP as single project and the plan was developed and resulted in a roadmap of action items to address the cyber security risks and develop mitigation plans including incident response plans. The roadmap identifies implementation of technology, policies and procedures and developing training plan for staff. The details are identified in section 8.3 of the Attachment 1.
4. **GIS Master Plan** – The project was identified in DSP as single project and the plan was developed and resulted in a 5-year roadmap of GIS data assessment and data layers, to support services provided by these City of Berkeley Programs. The details are identified in section 8.7 of the Attachment 1.





5. **COVID-19 Response** – The COVID-19 pandemic resulted in the immediate implementation of remote work and technologies. IT was also flooded with a myriad of requests for software solutions to assist with remote work. In addition to implementation of technical solutions, the 311 team was inundated with an increased demand to support the EOC, Community support, implementation and managing of COVID-19 email box, and Nurse Triage phone line for Communicable Diseases. The details are identified in section 4 of the attachment 1.

6. **FUND\$ Replacement** - One of the major and largest initiatives for the DSP is the replacement of our existing AS400 financial database, FUND\$. The City conducted a rigorous RFP process and selected Tyler Technologies’ Munis ERP software (referred to as erma within the City) to replace the Core Financial, Human Resources, and Payroll functions currently residing in FUND\$.

To date, the City has transitioned core financial components of the general ledger, accounts payable, payroll, and HR functionalities into Munis. We are working on implementing time card replacement software, Employee Self Service, Budget builder, and the remaining component or core financials in Calendar year 2021 and early 2022. The new system replaced the limited functionality and lack of integration between existing systems that requires that staff utilize many shadow systems to support key business processes. With this project, the City aims to improve business processes,

gain efficiencies, simplify and standardize use of systems, reduce the use of paper, streamline redundant processes into a singular path, and install core public sector ERP functionality. The City purchased the following Tyler Munis modules:

**Implemented:**

- Accounting
- Human Resources & Talent Management
- Payroll
- CAFR Statement Builder
- Capital Assets
- Contract Management
- IVR Gateway
- Munis Analytics & Reporting
- Project & Grant Accounting
- Purchasing
- Tyler Content Manager

**In Progress:**

- Tyler Forms Processing
- Accounts Receivable
- Cash Management
- Executime Time and Attendance
- General Billing
- Employee Self Service
- Tyler Cashiering

**ON Hold:**

- eProcurement

The City has timelines in place for all In Progress modules. Additionally, to replace the FUNDS system we needed to replace multiple other modules:

**Phase 2 Projects:**

- **Zero Waste System** (including Billing) – contracted with vendor and in kick off phase of Project
- **Work Order System including Facilities Management** – in contract with vendor, launch planned Winter 2021
- **Fleet Management** – contract executed, launch planned Fall 2022
- **Onboarding / Performance Management / Learning Management System** - contract executed, launch planned Fall 2022

**Phase 3 Projects (Unfunded)**

- Business License System Replacement – TBD ending completion of core financial projects
- Property Tax Assessment System / Land Management Module - TBD

The details for the project status are identified in section 8.1 of the attachment 1.

7. **Website Redesign Upgrade:** A new City website was identified as a priority project in the DSP and the City's 2018-2019 Strategic Plan. This project represents a complete overhaul of aspects of the City's website, including:

- replacement of outdated software with a modern content management system
- complete visual redesign
- streamlined and simplified web content
- improved online 311 reporting
- improved search functionality
- restructuring of internal web governance practices to incorporate clear standards, workflows, and ownership for the creation and maintenance of web content

Work on the new website was suspended for much of 2020 due to project staff being redeployed to COVID-19 emergency response. System development has continued with the vendor at a reduced pace. A secure off-site hosting platform has been provisioned and core software development has been completed, with custom application build, technical integrations, and cybersecurity testing remaining to be completed. Launch of the new website is projected for late 2021.

**The details for the project status are identified in section 8.2 of the attachment 1.**

The City's DSP identified and recommended a number of Information Technology initiatives over 5 years. The DSP also identifies that a strategic plan is just that – a plan, and it is not cast in concrete. Therefore, it is understood that the strategic plan has flexibility baked into it, and is subject to change as the needs of the business change and/or the financial position of the City changes. The City's Digital Strategy ensures investments and strategic business technologies are sound and deliver the greatest possible value to the City and its constituents, in alignment with the City's Strategic and Resilience Goals. The City has enacted a governance process to ensure that those decisions are made in line with the city's strategic goals, have available funds to cover the cost and appropriate resources are diverted from alternate projects. The DSP structure provides a mechanism for the city to articulate the impact of a new project on currently scheduled projects.

## BACKGROUND

The City's Department of Information Technology has experienced significant changes over the last few years in terms of technology changes, staffing, and budget resources. Over the past few years, we have seen a remarkable increase in community demand for web, mobile, and cloud technology. The new DSP specified ways in which recommended technology solutions will improve the City of Berkeley's operations and overall service delivery, streamline operations to achieve cost efficiencies, and increased productivity,

and support open and transparent governance. To be successful on a long-term basis, the Digital Strategic Plan acknowledges current and expected trends in order to position the City to take advantage of new and emerging technologies in a timely manner.

The goals of the Digital Strategic Plan and Roadmap are to:

- Develop high performance/reliable IT infrastructure.
- Align IT initiatives with overall City strategic goals and City's Resilience Strategy.
- Invest in IT systems based on a rational and impartial assessment of tangible and intangible benefits - and a realistic assessment of project costs, benefits and risks.
- Reduce operational costs, while improving the quality of services delivered to customers
- Deliver IT services in a cost-efficient manner.

Since 1991, the City has used the SunGard Public Sector (formerly HTE) solution for financials, budgeting, payroll, community development, work orders, refuse billing, and land management functions.

In May 2015, the City contracted with the Government Finance Officers Association (GFOA) for a review of its current financial processes, and for identification of areas of improvement, and recommended business process changes. Discussions with GFOA included organizational and functional scope, as well as the development of functional requirements the City should seek in an ERP system. From the resultant project planning activities, the City has made many strategic future business process decisions based on best practices that are to be included in a system's implementation. This assessment led to the determination that a new enterprise system will improve integration, reporting and roll-up capabilities, and organizational processes, and allow for the implementation of business process best practices. Accordingly, the City intends to incorporate and implement the requisite high-level processes into its new enterprise system.

In parallel, staff have also been working with GFOA on the vendor selection process for Enterprise Resource Planning (ERP) project for FUND\$ replacement.

On January 26, 2016, Council authorized staff to release an RFP to solicit proposals to replace FUND\$ and the City has designated a dedicated team to lead the process from procurement of a new ERP through implementation. The City conducted an assessment of its systems and processes and determined that a new enterprise system will improve integration, reporting and roll-up capabilities, organizational processes, and allow for the implementation of business process best practices.

The DSP will continue to be updated annually to accommodate and be in compliance with the changing laws and regulations, budget requirements, and organizational priorities which are in line with our Department's vision, mission, and values.

### ENVIRONMENTAL SUSTAINABILITY

The adoption and implementation of the Digital Strategic Plan, although not directly related, will map out more mobile and web-based services for our community, which will reduce travel associated with on-site visits to City offices, and reduce the amount of paper used in place of online applications, payments, etc.

### POSSIBLE FUTURE ACTION

Staff will continue to provide annual updates for the Digital Strategic Plan (DSP) projects including the Enterprise Resource Planning (ERP) project progress to the Council. The DSP will be adjusted to align with the City Council prioritization process as a result of strategic realignment in FY22. In order to accommodate for the current financial situation due to pandemic the Department of Information Technology has decided to not develop a 5-year plan at this time. DoIT will develop a 2-year plan to align with future budgeting process and continue to provide annual updates.

### FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

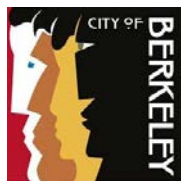
The Digital strategic plan will help City Council and staff throughout the organization to prioritize the projects scope, time, and resources to the City's Strategic Plan and the Resilience Strategy. The projects listed in DSP are aligned with the City's Strategic Plan, the Resilience Strategy, and the Budgeting process. The procurement process for the initiatives identified will need to follow the procedures as identified by the City Policy.

### CONTACT PERSON

Savita Chaudhary, Director, Information Technology, 510-981-6541

### Attachments:

1: Digital Strategic Plan (DSP) Assessment: Provides the Post Implementation Assessment for DSP



Department of Information Technology  
**Performance and Service Level Metrics**  
Digital Strategic Plan Update

March 16, 2021



# Innovation

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# 1. Executive Summary



## 1.1 DSP Vision

The City of Berkeley’s Department of Information Technology vision is to provide excellent customer service through innovative and intuitive solutions with a diverse workforce to enable City operations, and to connect and deliver quality solutions for the community.

## 1.2 DSP Project Performance Summary

### 1.2.1 Planned to Actual Projects

The original 5-Year Digital Strategic Plan (DSP), completed in October of 2016, identified **101** Information Technology initiatives and projects, including infrastructure hardware, software, professional consulting services, and internal IT projects. The IT Department is in year four of five of the original DSP, and have completed **166 initiatives, versus the 97 (ninety-seven) planned in the first four years**. An additional 50% more projects have been carried out than planned, an extraordinary achievement.

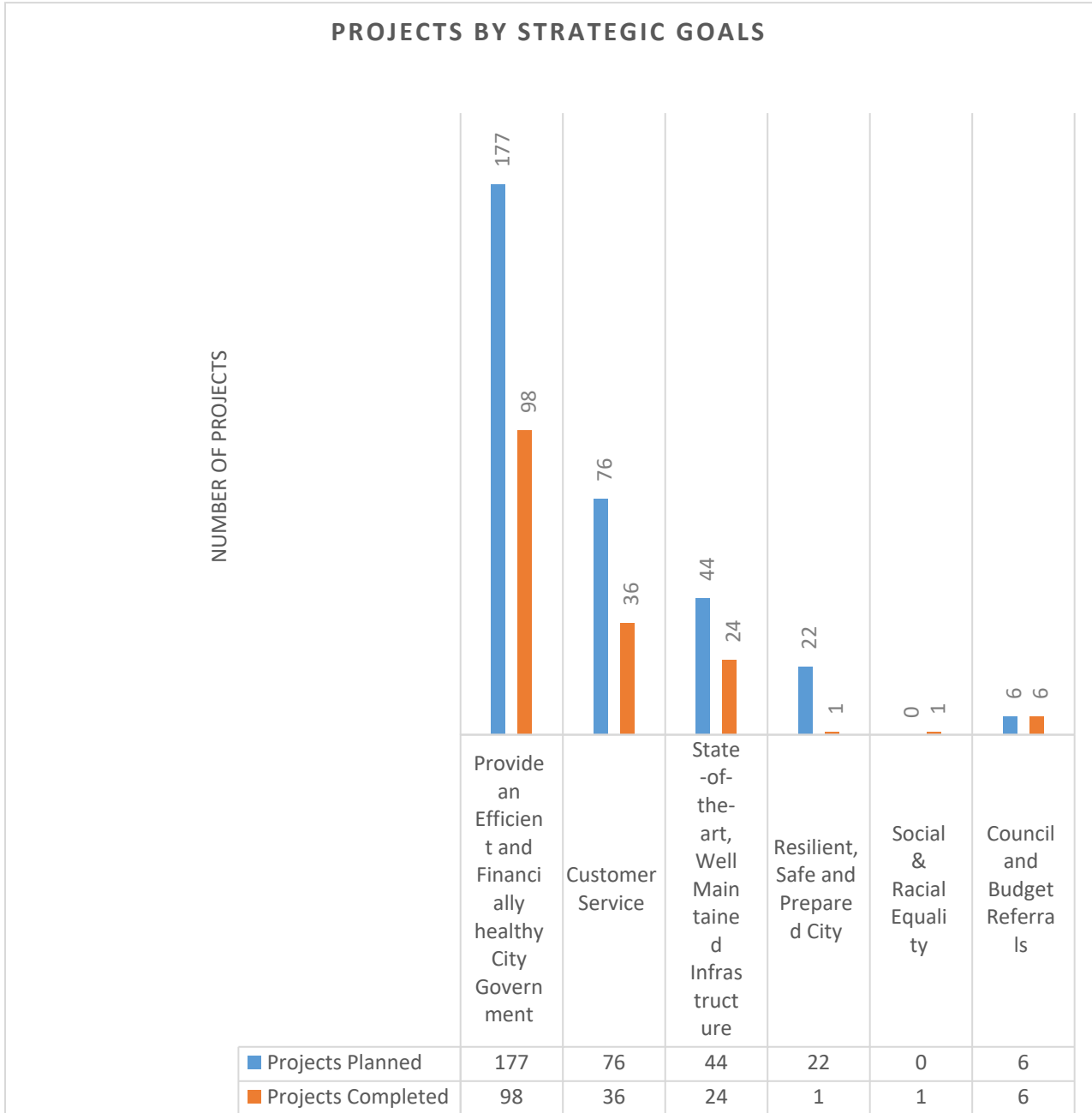
**150%**  
Completed  
projects in 4 years

### 1.2.3 Projects Tied to Strategic City Goals

DSP initiatives are tied to the City of Berkeley’s Strategic Plan Goals and encompassing the following:

<b>Efficient:</b>	Provide an efficient and financially-healthy City government
<b>Customer Service:</b>	Be a customer-focused organization that provides excellent, timely, easily-accessible service and information to the community
<b>State-of-the-art:</b>	Provide state-of-the-art, well-maintained infrastructure, amenities, and facilities
<b>Resilient:</b>	Create a resilient, safe, connected, and prepared city
<b>Social &amp; Racial Equality:</b>	Champion and demonstrate social and racial equity

The figure below illustrates completed IT initiatives tied to key strategic City goals. The leading strategic areas are organizational efficiencies and customer services, followed by state-of-the-art technologies, and resiliency. Given the current and anticipated economic challenges of the pandemic, the IT Department has played, and will continue to play, a key role in the City’s cost containment posture. (Some projects applied to more than one City Goal)



## 2. Department of Information Technology Business Model



### 2.1 About Us

The Department of Information Technology serves our community by exploring, developing, implementing, and supporting effective and innovative use of technology through teamwork, collaboration, innovation, and accountability to our department partners.

The IT Department strives to provide the highest level of service to its customers through innovation and teamwork. Responsibilities include the planning, development, implementation, and support of the City's technology infrastructure, while addressing the challenge of improving performance at various levels, as well as implementing next generation technologies to benefit our end users and providing excellent service to our community.

### 2.2 Goals

- Develop high performance/reliable IT infrastructure.
- Align technology initiatives with overall City's Strategic Plan goals and City's Resilience Strategy.
- Invest in technology systems based on a rational and impartial analysis of tangible and intangible benefits, as well as a realistic assessment of project costs, benefits and risks.
- Reduce operational costs while improving the quality of services delivered to customers.
- Deliver IT services in a cost-efficient and secure manner.

### 2.3 Mission, Vision and Values

#### Mission

We provide cost-effective smart technology solutions to our business partners and community with integrity and commitment to excellence.

#### Vision

Provide excellent customer service through innovative and intuitive solutions with a diverse workforce to enable City operations to connect and deliver quality solutions for the community.

## Values

<p><b>Leadership in Technology</b> We use an enterprise approach to provide innovative technology solutions to facilitate delivery of services to the community.</p>	<p><b>Be a Model of Customer Service</b> We are committed to anticipate and exceed customer service needs and be flexible to address and resolve competing priorities.</p>
<p><b>Integrity</b> We are committed to transparency and respectful communication in our relationships.</p>	<p><b>Collaboration</b> We work together as a team to be a collaborative and inclusive partner with our clients and each other.</p>
<p><b>Responsiveness</b> We are responsible and accountable for our actions. We follow up and follow through.</p>	<p><b>Effectiveness and Efficiency</b> We use best practices to deliver projects on time and within budget.</p>

## 2.4 Guiding Principles

1. **Leadership:** City management technology as a strategic enabler and utilize IT to improve the way City staff perform their jobs and deliver services to residents and businesses.
2. **Communications:** foster effective communications between the City and constituents to keep all parties involved and informed on the progress of IT initiatives via its website, Open Data/ Citizen Engagement and other appropriate means.
3. **IT Governance:** adopt a formal management process to ensure that IT initiatives are properly vetted for consistency with the DSP Roadmap, IT industry trends, are fiscally sound, are effective in improving operating efficiencies and customer service prior to proceeding with IT initiatives.
4. **Enterprise Approach:** when procuring, implementing and managing the City's information technologies utilize state-of-the-practice technology ensuring investments are effectively leveraged across departments, employing economies of scale wherever possible. Information technologies will foster cost containment and/or the highest return on investments possible.
5. **Accountability:** create an environment that encourages accountability through service level agreements, performance measures and individual responsibility, including the City contracted service providers.
6. **Proven Technology:** contemporary, proven technologies that maximize future options by emphasizing open standards, use Commercial Off-the-Shelf software wherever possible, and be web based, wireless ready, employing a Service Oriented Architecture, and geographic information system (GIS) enabled, where appropriate.
7. **Efficiencies:** decisions regarding funding for technology initiatives based on a Business Process Improvement assessment producing a comprehensive business case.
8. **Strategic Investments:** IT assets, systems, skills and support operations will be viewed as strategic investments critical in attaining City business objectives.
9. **Partnerships:** with outside organizations to undertake collaborative efforts in the provision of information/services, and obtain expert advice and knowledge of IT trends.
10. **Accessibility:** Implement technology that provides internal/external customers easy and timely access to information and services.

## 3. Performance Metrics



### 3. Performance Metrics

- 3.1 [Technology Administration and Customer Service 311 Call Center](#)
- 3.2 [Infrastructure, Operations and Security Measures](#)
- 3.3 [Annual Infrastructure Replacement Programs Update](#)
- 3.4 [Project Management and Analytics Measures](#)
- 3.5 [Open Data Portal Measures](#)

### 3.1 Technology Administration and Customer Service 311 Call Center Measures



#### Baseline Services: Administrative Measures

- Completed 125 technology contracts including annual contracts, renewals and amendments
- Developed the roadmap for the Cyber Resilience Plan (CRP) and continued Business Impact Assessment for applications
- Negotiated multiple new contracts, Business Associate Agreements for COVID-19 Response to support departments
- Procurement and technology setup to enable City staff to telework
- Consolidated IT Infrastructure Asset Tracking including Software Licensing Enterprise Agreement Renewals
- Developed budget projections to achieve 18% reductions in General Fund portion of IT Cost allocation fund due to COVID-19
- Executed DSP initiatives including CRP and GIS Master Plan initiatives to achieve efficiencies by collaborating with executive leadership and City staff across all departments to ensure its integration with the City's Strategic Plan Goals, City's Resilience Plan and Council Priorities

- Established policies and procedures to ensure optimum and uninterrupted service delivery by deploying IT Service Management and Project Portfolio Management Software
- Developed an IT "people strategy" in collaboration with Human Resources that aligns with the business and IT strategy. Both teams work together to continually look for leading-edge and innovative solutions to the recruitment, development and retention of the IT workforce
- Assisted City Auditor's office with various Audits

#### **RFP Examples:**

1. Replacement of City's Server/Storage Infrastructure
2. Replacement of Backup System and Hosted Cloud Storage
3. Voice Over IP Upgrades and Support
4. Zero Waste Billing Software
5. Work Order, Asset Management including Facilities Management Software
6. Fleet Management Software
7. Street Level Imagery (GIS Asset Extraction for Work Order System)
8. Public Records Request Software
9. Human Resources Case Management
10. Cybersecurity Event Monitoring and Security Information and Event Management (SIEM)

#### **Baseline Services: Customer Service 311 Call Center Measures**

##### **311 Mission:**

311 provides community members, businesses and visitors with a centralized Customer Service Center to resolve inquiries and concerns. We empower the community to easily connect with City government to obtain accurate quality information and services.

##### **311 Vision:**

We strive to build a culture of "first call resolution" to resolve customer inquiries at the first point of contact through the use of advanced technology and robust municipal knowledge. We serve the community politely, accurately and comprehensively by collaborating with City departments and outside agencies to provide excellent city services.

##### **311 Values:**

1. We are customer Service professionals; we conduct ourselves with integrity, and a true commitment to provide satisfaction to our community members.
2. We take responsibility for being attentive and creating a respectful interaction with our customers, and accept the other person's ideas as true to them.
3. We do not ignore problems or mistakes; we work together to identify and solve them.

4. We help develop and support citywide policies, operational processes, and technology systems to promote value-added city services.
5. We get the job done!

### **311 Performance Report**

311 provides a first point of contact for City of Berkeley services and information, and was established to provide those who live, work and visit Berkeley easy City access to government service, report problems and ask general questions. Customer Service Specialists are trained across City wide services to provide answers to routine and non-routine questions, process payments and provide critical community services associated with refuse, sewer, traffic hazard incidents, environmental and much more. The 311 team has extensive knowledge of City Services, City Policy, Ordinances, Amendments, Resolutions and General Services. 311 provides excellent customer service that connects Community members with the City in a helpful and cost effective manner by using call center best practices and leading technology tools. Berkeley's 311 center is focused on maximizing productivity, managing costs, and ensuring service levels and other industry standards are met.

**Fiscal Year (FY) 2020** was a challenging year due to many unusual events that affected our community. Total Community contacts with 311 were 117,840.<sup>1</sup>

Residential Parking Permit (RPP) season started in July 19' on the new Parking Management Software, Passport. During renewal season July - September the Community had many questions about the new online RPP process and virtual permits. July – September represented 30% or 25,759 calls of our total answered calls for FY20.

In October 2019, 311 assisted the Emergency Operations Center (EOC) with the PG&E PSPS. Calls were directed to 311 to gather information on those individuals who needed assistance. 311 staffed the call center the last weekend in October providing timely weekend updates to the community. October was the third highest month for community contacts of FY2020. (10,606 contacts)

February 2020, the 311 Customer Service call center joined the EOC activation for the COVID-19 pandemic. Acting in an Essential Service role, the 311 team remained fully staffed. With the Shelter in Place (SIP) Order of March 16, along with the need to social distance in the COB office, the team reduced staff by 50% and rotated staff working in the office.

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<sup>1</sup> 311 total call volume for FY2020 was reduced in April – June for City Clerk and City Attorney lines, and May – June for Human Resource's main line. (Approximate reduction of 1,500 calls)



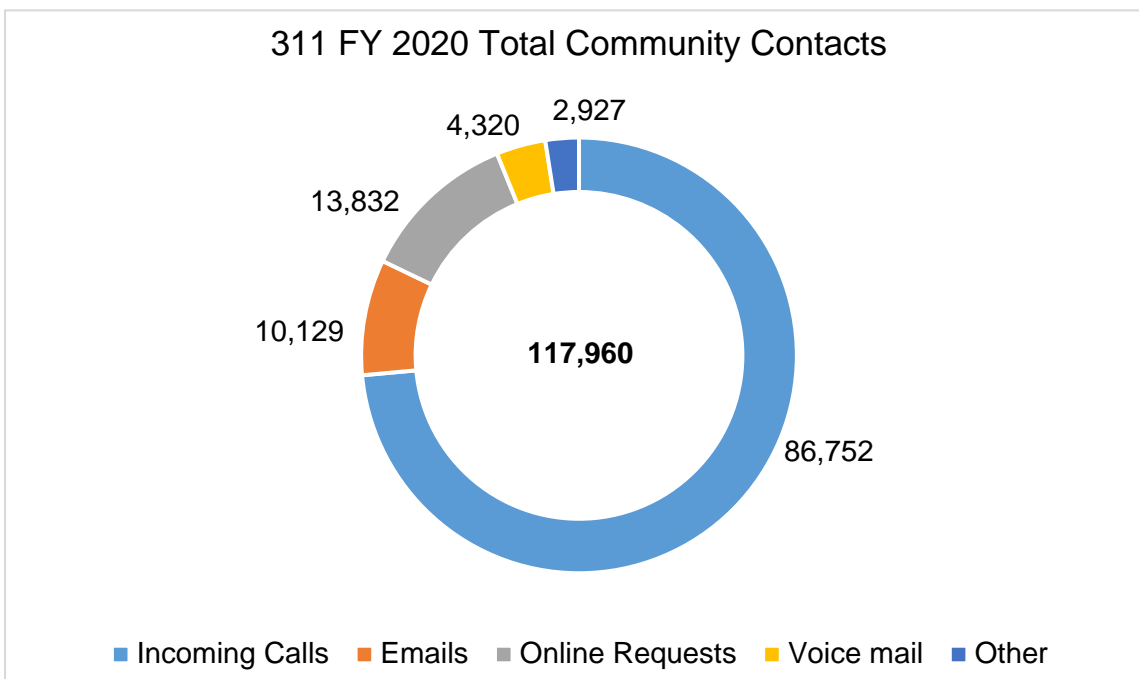
In March and April 2020, 311 managed commercial businesses 525 requests for reduction and temporary stop of Refuse Services and 311 continues to adjust refuse services, as needed.

**Table 1: Total Incoming interactions and abandonment rate (calls that are dropped due to long wait times ir busy phone lines)**

	Total Incoming Interactions	Staff Positions	% Abandonment Rate
2009	66,227	9	7%
2010	79,280	10	8%
2011	84,702	9.5	7%
2012	98,840	8	8%
2013	101,815	8	9%
2014	102,870	8	7%
2015	102,916	8	9%
2016	110,974	8	13%
2017	112,668	8	14%
2018	115,299	8	15%
2019	120,299	9	15%
2020	117,960	9	15%
Est. 2021	116,969	9	18%
Est. 2022	124,600	9	15%

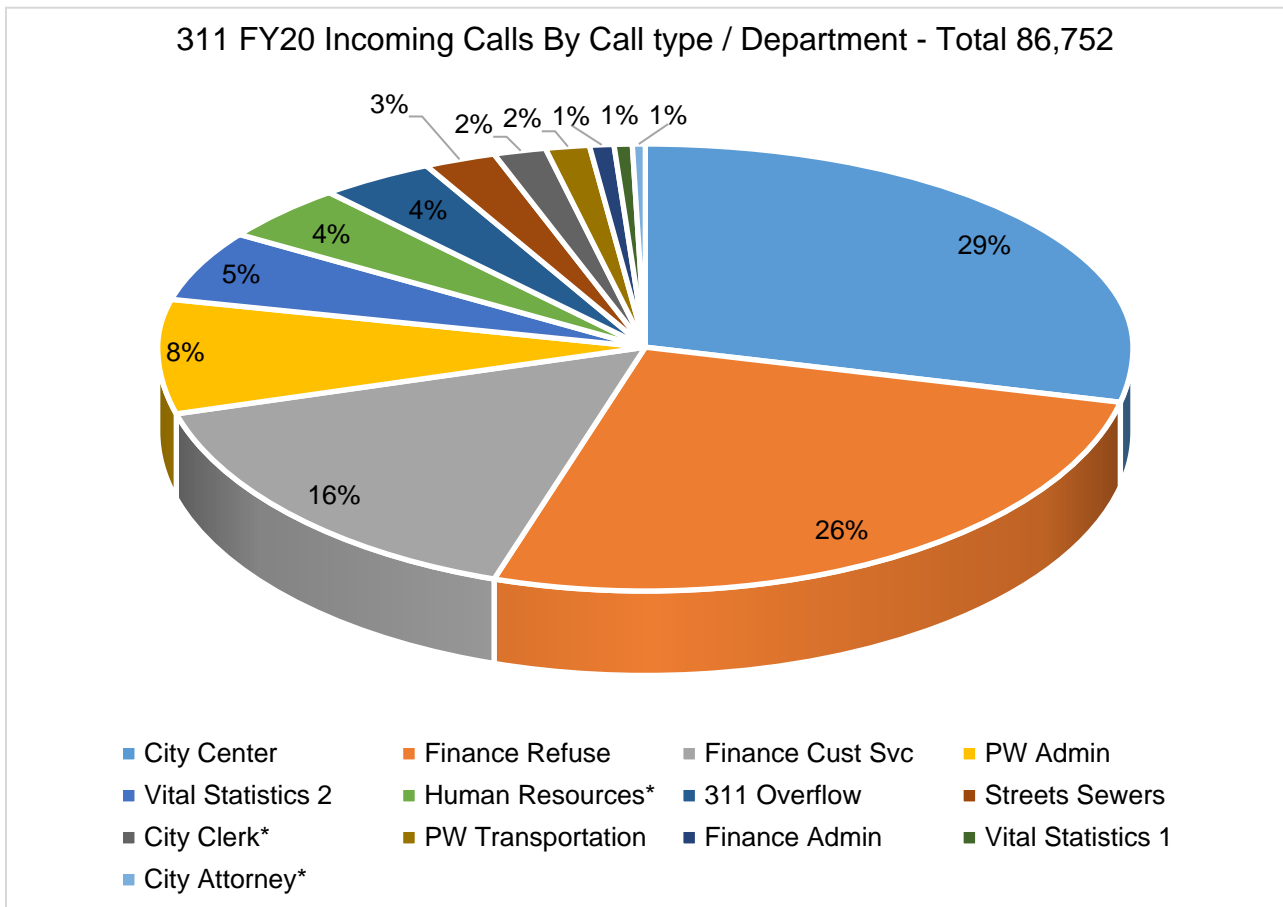
\*\*Note: Calls not answered will opt for voicemail or will abandon and call back at another time.

### 311 FY 2020 Dashboard



Estimated 2021 – Total contacts 116,969

Estimated 2022 – Total contacts 124,600



***\*City Attorney, City Clerk calls answered July – March. Human Resources calls answered July – April, call routing directory implemented for HR in May.***

Estimated Calls 2021 - 81,600

Estimated Calls 2022 – 87,000

**311 Challenges:**

Responding to incoming service calls remains 311 main focus. On average, 311 receives 400 calls each day. During Business License season and Residential Parking Permit (RPP) season, or after a holiday, 311 calls increase to 500 day. The average call length is approx. 4 – 7 minutes due to staff working in multiple systems and complexity of refuse and recycling calls. The average time to answer is 1:45 minutes, average time for customers to abandon is 1:25 minutes. Currently 311 answers 85% of all calls presented to the call center. Calls not answered will opt for voicemail or will abandon and call back at another time.

- Due to lack of system integration, 311 works in nine different computer software systems to research, log and process service requests
- City online 311 portal does not provide the Community with status of their service requests which requires them to call into the City for status
- **2020/2021** – With the COVID-19 SIP order, 311 has implemented rotating schedules. Staff working at home, are managing side work office duties. (311 Online Service Center Service (OLSC) requests, Customer Service email, 311 voice mail, SeeClickFix mobile cases and responding to Direct Line answering service calls for service. 311 is acting as the main Customer Service Center for the City as most service center counters are closed to the public. On average our five person in-office team receives 1,500 calls a week, and the in-home staff responds to a weekly average of 300 on-line cases, 290 emails, and 100 plus voicemails.

**Risks:**

- Increased frustration from community members and business as call wait times increase; calls are typically abandoned at about 1:10 – 1:25 minute mark when waiting. Community members often get busy and do not call back, resulting in missed City services such as free garbage pick-up for missed pick-ups called in within two days of scheduled service day
- 311 is challenged with balancing a growing workload, service needs, and timely response with current staffing levels, lack of system integration and COVID19 SIP Order
- With our current Customer Relationship Management software CRM (Lagan) Community, Council and some City Staff cannot view service request status on-line and must call 311 and wait in call queue or email Customer Service for service status
- **Due to COVID-19 and budget reductions, the request-for-proposal (RFP) for a new CRM system is currently unfunded and was put on hold as part of proposed budget reductions**
- City relies on the SeeClickFix software for a mobile application which is not the most efficient mobile application, with a new CRM the City could replace SeeClifkFix as our Cities mobile application

**Opportunities:**

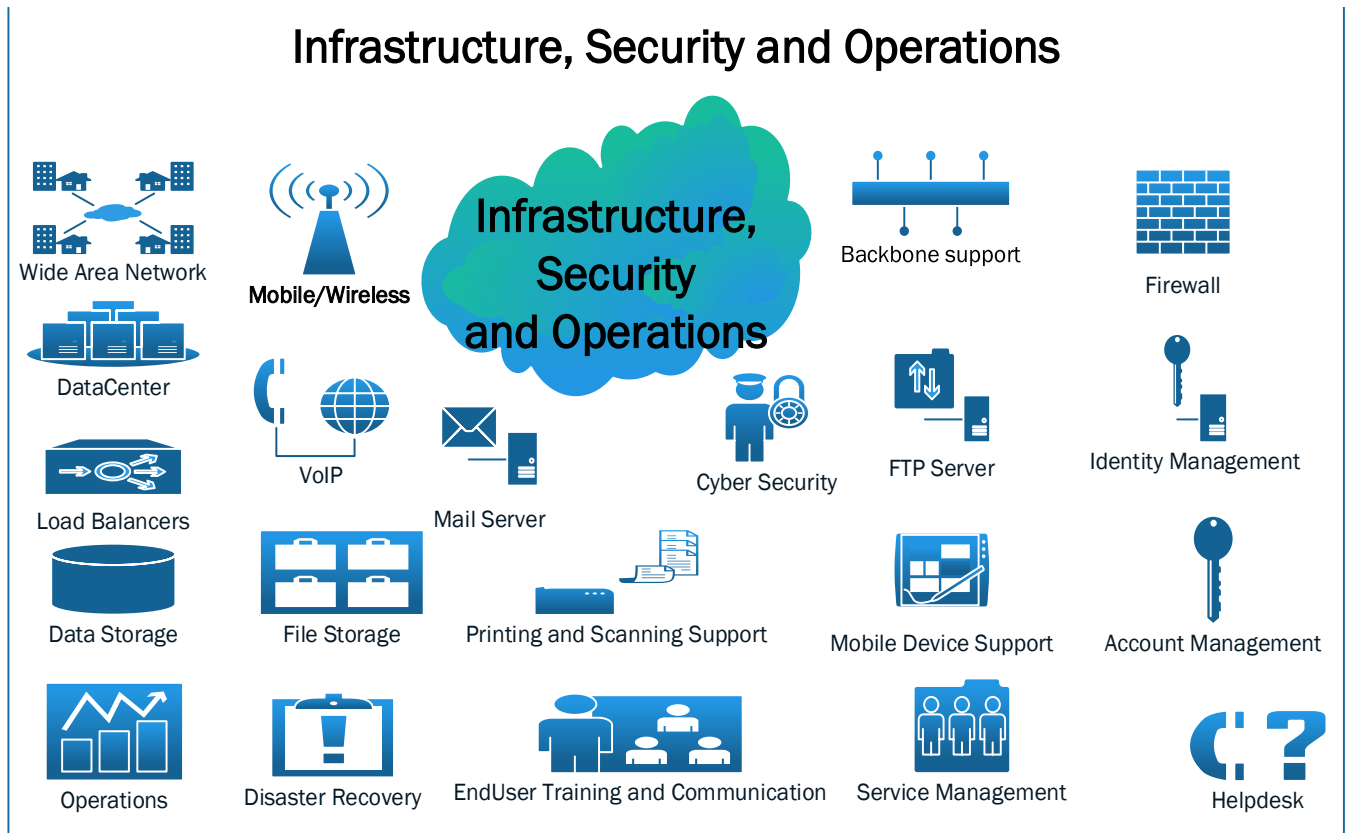
311 upgraded the Lagan CRM system in January 2019, and gained many logistical efficiencies for case management for 311 and back office departments such as Public Works, Parks, etc. 311 is working with Information Technology and Public Works on the implementation of a new Work Order

system, NexGen, to implement case notes integration between Lagan and NexGen. System integration will streamline information and reduce multiple call handling when community members call for status or updates.

311 will publish a RFP for a new CRM system in late FY2022 pending budget approval. The CRM project is delayed due to the COVID budget reductions. Requirements for the new CRM will include:

- City of Berkeley branded Mobile device application
- Public facing portal for community and businesses to log service request via self-service portal and review status of tickets on-line
- Case integration with NexGen and Refuse billing system to increase visibility of action taken by Public Works
- Include future technology for option to communicate with community on-line, chat, and text if 311 is staffed accordingly
- On-line access for City Management and Council to view CRM cases and work order status
- Embedded knowledge link for customer self-service and CSSIII case logging

## 3.2 Infrastructure, Operations and Security Measures



### Baseline Measures Infrastructure, Operation and Security:

**Baseline** services are included in the IT Cost Allocation Plan, and reflect work to maintain the City's general technology infrastructure. Staff members in this unit are responsible for:

- Infrastructure
  - a. Help Desk for 200+ Applications
  - b. 4,000+ Workstations & Telephones
  - c. 1,100+ Mobile Devices (Laptops, iPhones, iPads, etc.)
  - d. 300+ Servers, Routers, & Switches
  - e. 400+ Printers/Scanners/Copiers
  - f. Network infrastructures and Enterprise Solutions
- Security
  - a. Active Directory (AD) Identity and Access Management (IAM)
  - b. Teleworker/Remote Access and Security
  - c. Computers and Network Security & Protection
  - d. Cyber Incident Response (IR), including: data breach, phishing, ransomware, account takeovers, hacking attempts and attacks, financial and payroll account scams, etc.
  - e. Phishing and Ransomware Awareness Training
  - f. Field Services at 42 City locations
  - g. 24-hour Police & Fire Support

- h. Technical support and documentation for Annual Reporting and Compliance
- i. Backups & Records Retention
- j. Disaster Recovery and Off-Site Datacenter (with instantaneous failover and failback)
- Operations
  - a. Implemented Change Advisory Board (CAB) to review and monitor system changes that impact servers
  - b. Move/Add/Change of office moves for divisions, departments, buildings and individuals
  - c. PRA Request Assistance (searching for emails and files based on keywords)
  - d. eDiscovery requests (for both PRA and internal investigations)
  - e. 24/7 on-call support for City operations that run in the evenings and weekends
  - f. City Council and Commission Meeting online webcast support
  - g. Database Management
  - h. Data Management
  - i. FUNDS\$ hardware upgrade (improved nightly backups, faster processing)

The DoIT Service Request and network systems provide real-time data regarding incoming requests, requestors and resolutions. See Table 3 below.

#### **Non-Baseline Measures Infrastructure, Operation and Security:**

Non-baseline work includes cyber-resilience, infrastructure and enterprise solutions work in support of Business Applications projects as well as data and database management, constructing infrastructure and enterprise solutions, and developing enterprise-compatible innovative solutions for projects and vendors that are adapted.

Non-baseline projects require new funding and aim to improve a specific business process; costs are funded by the sponsoring department. Once non-baseline projects are complete, associated maintenance usually becomes part of IT baseline services.

#### **Performance Measures**

The Department of Information Technology uses the following performance measures to manage operations:

- **Baseline Service Metrics:** The Department of Information Technology (DoIT) uses ServiceNow and Customer Relationship Management (CRM) tool to provide real-time data on the type of service request, how the service request was relayed, who submitted the service request, and length of resolution. See Table 3 below.
- **Server Uptime: Metrics** collected using network management tools indicates the total “uptime” of the City’s server farm. See Table 3 below.
- **Lost Time:** Lost time is defined as unplanned absences, including sick leave.
- **Project Milestones:** The Department of Information Technology aims for a 90% rate of on-time project milestones.

- **Customer Service Surveys:** Reinstated in 2015, the Customer Service Surveys are automatically issued to clients whose DoIT Service Requests are completed and closed.

**TABLE 3:** Baseline Services: Network Operations & Help Desk

Performance Measure	FY18	FY19	FY20	FY21 Projection	FY22 Projection
<b>Calls Answered</b>	13,117	11,321	<b>10,026</b>	11,000	11,000
<b>Call Abandon Rate<sup>1</sup></b>	6.38%	9.86%	<b>20.91%</b>	15%	10%
<b>Incoming Help Desk Tickets</b>	12,160	11,930	<b>10,920</b>	11,000	11,000
<b>Closed Help Desk Tickets</b>	11,389	11,311	<b>9,805</b>	10,000	10,000
<b>1st Call/Same Day Resolution</b>	44%	49%	<b>45%</b>	50%	50%
<b>Help Desk Emails Service Now Deployed FY19</b>	n/a	15,622	<b>23,098</b>	22,000	21,000
<b>Help Desk Voicemails</b>	n/a	n/a	<b>892</b>	900	900
<b>Customer Service Surveys<sup>2</sup></b>	627	1422	<b>634</b>	700	800
<b>Data Server Uptime</b>	99.886%	99.886%	<b>99.888%</b>	99.999% <sup>3</sup>	99.999% <sup>3</sup>
<b>Phone Server Uptime</b>	99.999%	99.999%	<b>99.850%</b>	99.999% <sup>3</sup>	99.999% <sup>3</sup>

<sup>1</sup> A 20% vacancy rate, combined with the shelter in place order March-June, contributed to the increased abandoned call rate in FY20.

<sup>2</sup> Changed customer service survey delivery in January 2018, which has led to an increase in survey responses.

<sup>3</sup> Industry benchmark

### 3.3 Annual Infrastructure Replacement Programs Update

Annual Infrastructure Replacement Programs		
1	Computer Replacement	The PC's are replaced on a 5-year replacement cycle and each year 1/5 <sup>th</sup> of the inventory is replaced on annual basis
2	Server / Storage Replacement Program	The Servers/Storage Infrastructure is on a 5-year replacement cycle and is evaluated each year for current computing needs
3	UPS Upgrade / Replacement	The UPS's are replaced on a 6-year device replacement cycle and the batteries are replaced every 3 years
4	Wireless Equipment Upgrade / Replacement	The Wireless devices are replaced on a 5-year replacement cycle and each year 1/5 <sup>th</sup> of the inventory is replaced including any new installations are completed
5	Network Devices Upgrade / Replacement	The Network Devices are replaced on a 7- year replacement cycle and each year 1/7 <sup>th</sup> of the inventory is replaced on annual basis

\*All Non-Baseline Projects are listed under Projects Performance

\*\* All Laptops and Police/Fire mobile computers are replaced outside of the Computer replacement program and departments are responsible for funding these equipment on as needed basis

#### Efficiencies achieved by Annual Replacement Programs:

In FY 2019, the IT Department developed a Technology Internal Service Fund, which accounted for IT infrastructure costs. Now, PCs, servers, storage, wireless, uninterrupted power supplies (UPS'), and network devices are fully funded. Cyber Security initiatives remain partially unfunded at this time.

**50% reduction of rack space** - In FY 2019, the IT department upgraded the server and storage backend infrastructure to support the City's Cyber Resilience efforts and to provide operational and offsite Disaster recovery (DR) including business continuity to our critical applications. The City now has operational backup between the two data centers for business continuity and a remote offsite for DR. The overall hardware footprint was reduced by 50% reduction of rack space resulting in energy efficiencies and reduced staff time in support.

**40% reduction in network equipment** - In FY 2019, the network routers and switches were consolidated at remote sites to advanced layer 3 switches resulting in 40% reduction in network equipment thus resulting in energy efficiencies and reduced staff time in support.

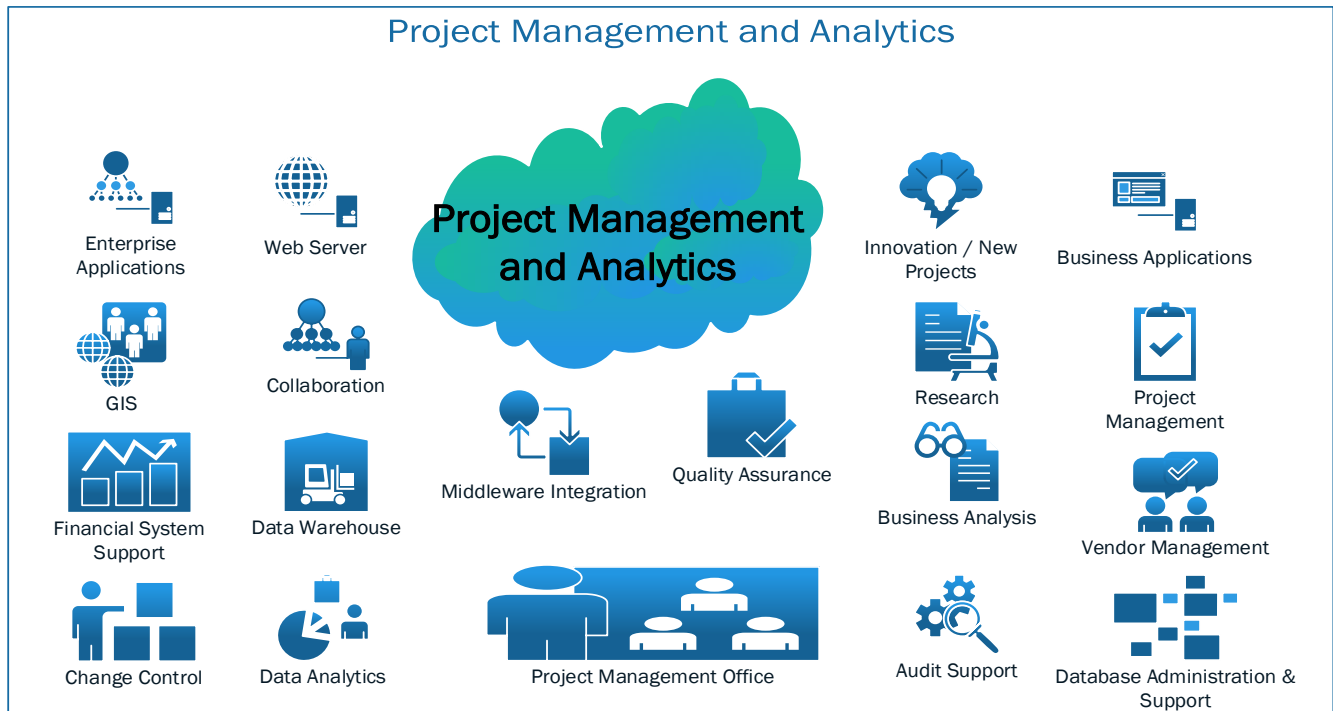
**Voice Over IP (VOIP) / Backup System Upgrades** - In FY 2020, the IT Department began the RFP process for the VoIP phone system upgrade and backup replacement solutions, both of which



will be implemented in FY 2021. The VoIP Phone system will provide a redundant onsite system for DR needs. The offsite redundancy is still unfunded. The backup replacement solution will provide both onsite and offsite backup and redundancy.

In FY 2021, the IT Department will also replace the legacy core network switches located in City Hall and the Public Safety Building, as well as the network switches on each floor that serve our largest City facilities; City Hall, the Public Safety Building, and 1947 Center Street.

### 3.4 Project Management and Analytics Measures



#### Annual Reporting and Compliance Projects Update

- Property Tax Reporting to Alameda County
- Support and Coordination for Finance Business License Renewal Cycle
- Network Testing & Documentation for Berkeley Police Department's (BPD) Department of Justice (DOJ) Assessments
- Testing & Documentation for the City's audit
- Testing & Documentation for the annual Credit Card/Payment Card Industry (PCI DSS) assessment
- Conducts HIPAA Security Risk Assessment Audits
- TCM Program Cost Report Data and Audit Files
- Annual reporting for SB272 (Enterprise Catalogue) page on Website
- Spearheads California Code (CC 1798.29) Breach Notification Protections and Reporting
- Annual ServiceNow (helpdesk software) Upgrade
- Weekly Patch management to maintain infrastructure
- Track ticket SLAs, project tasks for IT projects and project overall status for all City Strategic Plan projects and DSP projects

**\*\*All Non-Baseline Projects are listed under Projects Performance**

### 3.5 Open Data Portal Measures

Open Data Portal serves the community need for analytics with 120 Data Sets. In 2020, the open data portal has over 2 million views and the most viewed and downloaded datasets are from the COVID-19, Berkeley Police Department and Business Licenses. Most datasets are updated yearly or as needed. These datasets are update nightly:

- Berkeley PD - Calls for Service
- Berkeley PD Log – Arrests
- Berkeley PD Log – Jail Bookings
- 311 Cases
- Business Licenses

The Top 9 Datasets are:

- COVID-19 Confirmed Cases
- Berkeley PD Log – Arrests
- Berkeley PD - Calls for Service
- Business Licenses
- BESO Time of Sale Property Status
- COVID-19 Confirmed All Test Resulted Daily
- COVID-19 Confirmed All Test Resulted Weekly
- Berkeley PD - Calls for Service Heat Map

Top searches are related to COVID-19, Permits, Parcels, Police, and Census Portal usage analytics are available publicly via the Open Data Portal at <https://data.cityofberkeley.info/analytics>.

See screenshots from analytics on the next page.

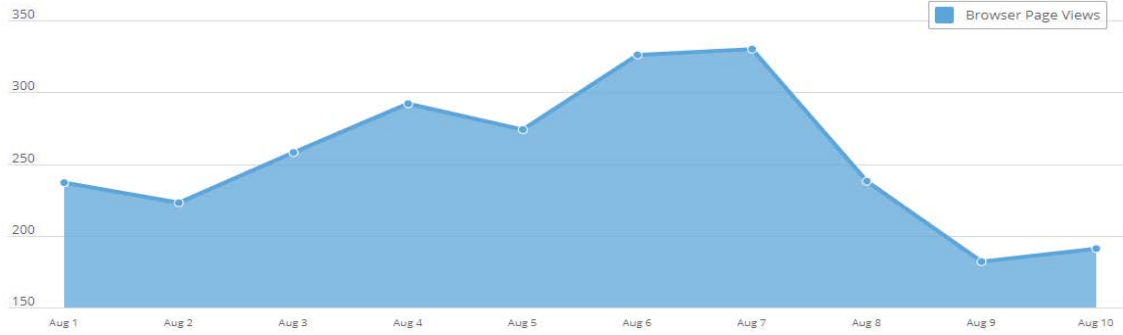


Analytics

Aug 1, 2020 - Aug 10, 2020

Browser Page Views <b>2,399,872</b> <span style="color: green;">+ 2,551</span>	Total Datasets <b>120</b>	Total Stories <b>0</b>	Total Rows <b>323,083,531</b>
Embeds <b>10,511</b> <span style="color: green;">+ 129</span>			

View: **Browser Page Views** View Granularity: Daily Browser Page Views



Downloadable Files <b>1</b>	Charts <b>24</b> <span style="color: green;">+ 1</span>	Filters <b>89</b> <span style="color: green;">+ 1</span>	External Datasets <b>1</b>
Maps <b>52</b>	Snapshots <b>0</b>		

Top Datasets

Name	Count
COVID-19 Confirmed Cases	791
Berkeley PD Log - Arrests	292
Berkeley PD - Calls for Service	178
Berkeley PD Log - Jail Bookings	139
Business Licenses	76

Show More

Top Datasets Referrers

Name	Referrals
https://www.berkeleyside.com	602
https://www.cityofberkeley.info	473
https://www.google.com	426
http://baidu.com	5
https://patch.com	4

Show More

Top Stories

No data for this time period

Top Story Referrers

No data for this time period

Top Search Terms

Name	Count
covid	10
28193	4
building permit	4
addresses	4
2020-00034384	3

Show More

Top Embeds

Name	Embeds
https://www.berkeleyside.com	64
https://www.google.com	51
https://www.cityofberkeley.info	14



## 4. COVID-19 Response



### 4.1 Established Telecommuting for Employees

IT assisted with setting up close to **700 City staff to be able to securely work remotely from home**. This work included:

- Setting up close to **700 Fortitokens** to all VPN users for 2-factor authentication to improve security.
- Setting up close to **700 staff with Skype for Business dial-in numbers for conference calls**
- Increasing the number of remote **terminal servers from 1 to 7**.
- Implementing login limits per server and load balancing across all servers to improve stability and performance
- Address any unique remote software needs on a case by case basis, by installing additional software on all 7 terminal servers. **Exceptions to this rule:**
  - Software that is too resource intensive for the terminal servers (ex: AutoCAD, ARCGIS)
  - Software that is only used by a handful of City staff (ex: EnvisionConnect, Chameleon)
  - In these cases we provided remote access to personal computers for access to this software
- Implemented the **Citrix Storefront** as an alternative solution to remote access to City software and resources

### 4.2 Hardware for Telecommuting

- Configured and deployed **close to 70 laptops** for remote work
- Setup and distributed **over 200 iPhones (and counting)** for remote work

### 4.3 Policy / End User Documentation for Telecommuting

- **Worked with HR and City Attorney's Office to draft telecommuting policy**
- **Published over 25 knowledgebase articles** related to remote work

#### 4.4 In-Person and Remote Support Efforts

- Brought in Library IT staff to assist with the high volume of Help Desk calls, and to allow some members of Help Desk staff to assist with hardware deployments vs phone support
  - **Help Desk call volume increased by 45%** between February and March 2020 (when the Shelter in Place was announced)
  - **Help Desk ticket volume increased by 50%** between February and March 2020 (when the Shelter in Place was announced)
- Implemented a **Walk-in Appointment Calendar** at the Help Desk to reduce crowds at the Help Desk and improve social distancing efforts.

#### 4.5 New Technology Implementation and Software Support during COVID-19

- IT was also flooded with a myriad of requests for software solutions to assist with remote work. Examples include:
  - a. Remote building inspection solution for Planning
  - b. Assisted HHCS with multiple technology solutions and business associate agreements:
    - i. Tele-health solution
    - ii. Tele Texting
    - iii. Forms / survey solutions
    - iv. Contact Tracing contract coordination
  - c. A video conferencing solution for City Council Meetings
  - d. Video Conferencing / Teleconferencing tools for Staff

#### 4.6 311 COVID-19 RESPONSE

As a result of the increased demand related to COVID-19, Direct Line answering service assists 311 two hours a day while staff meet each morning for daily updates, lunch coverage, and at the end of the day while 311 processes credit card edits for the Finance Department's Treasury division. The 311 Division is the only full service Customer Service Center available to the Community during the Shelter-In-Place (SIP) closure of City buildings.

##### Implementation & Managing of COVID19 Email box

The COVID-19 email box was established May 1, 2020, and is managed and maintained by the 311 Manager and staff from library. To date over 12,000 emails have been generated. This volume includes emails received, responded to and internal emails with Public Health, City Attorney's Office, Office of Economic Development and EOC to ensure accurate responses.

## [Implementation & Managing scripting of COVID-19 Nurse Triage phone line for Communicable Disease](#)

311 and Help Desk set up and managed scripting of the Communicable Disease Nurse Triage line for community members to initially set up COVID-19 testing appointments and get their sensitive questions answered. As the requirements of the Nurse Triage line changed over the 12 mos., the phone scripts and programming to call lines were updated as the program adapts to the changing COVID-19 situation.

## [Service Level increase and impacts](#)

Throughout our SIP closure, the 311 team took the challenge of supporting the community by revising staff duties and operating with resilience and pride. 311 has remained open for service Monday-Friday. The team focuses their efforts on each day's service needs and activities (general City services and COVID19 questions) and have maintained 83% answer rate on incoming calls, and are responding to email, voice mail and online internet cases within 48 hours.

## [OPEN DATA – Most downloaded dataset was for COVID-19 related search and datasets](#)

The screenshot displays the City of Berkeley Open Data portal. The header includes the City of Berkeley logo, the text "City of Berkeley Open Data", and navigation links for "Catalog", "Developers", a search icon, and a "Sign In" button. Below the header is a search bar with the text "Search".

The main content area shows search results for "34 Results filtered by View Types > Datasets x Clear All". The results are sorted by "Recently Added". Three datasets are visible:

Dataset Title	Category	Created	Views
COVID-19 All Tests Resulted Weekly	Health	June 23, 2020	215
COVID-19 All Tests Resulted Daily	Health	June 23, 2020	420
Berkeley PD - Stop Data (NEW)	Public Safety	May 4, 2020	420

The left sidebar contains navigation menus for "Categories" (311, Budget, Business, City Government, Demographics, Show All...) and "View Types" (Calendars, Charts, Data Lens pages, Datasets).

## 5. Project Performance



### 5.1 Projects Completion Status FY 2016 Thru FY 2020

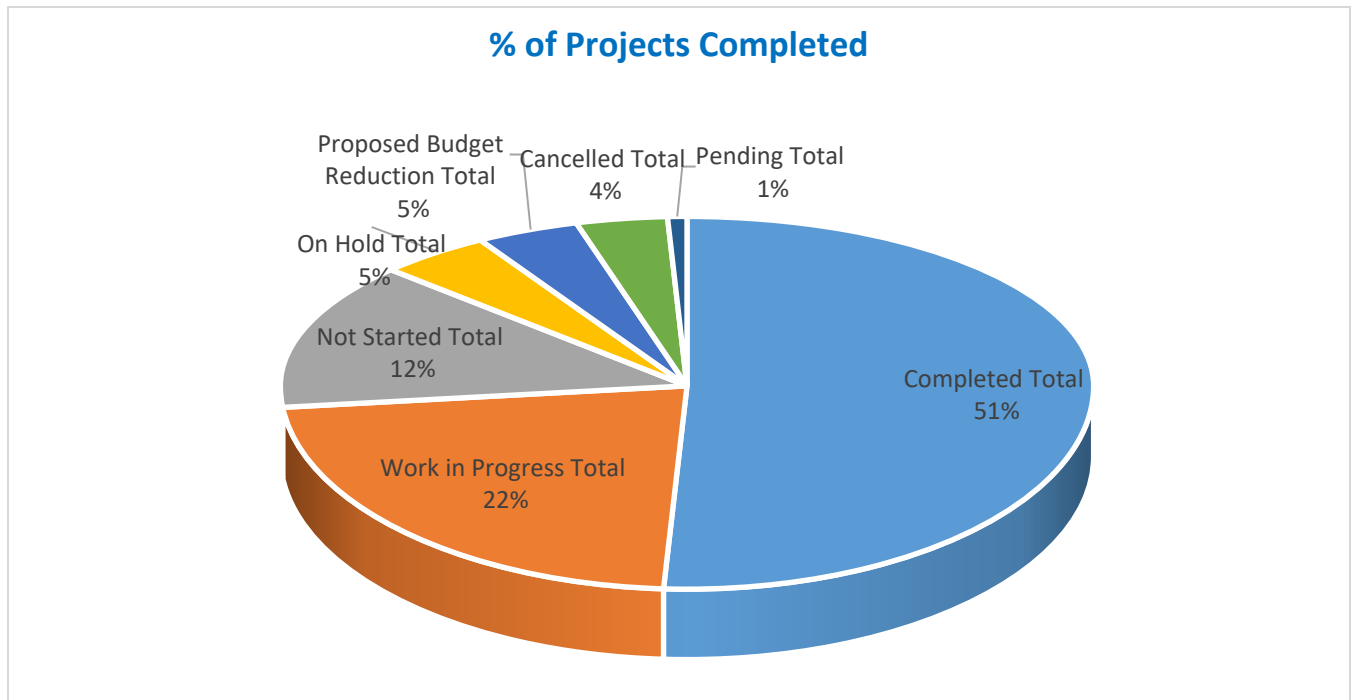
The original DSP identified 101 projects and 40 types of potential benefits such as Efficiency, Time and Cost Savings, Resiliency, State of the Art technology infrastructure, annual compliance, enhanced operational effectiveness and improved staff efficiencies were a few of them if the 5-year was implemented. Since the adoption of original DSP in NOV 2016 the plan was revised on an annual basis and projects were added including operational projects, compliance projects as regulations changed, department business need changes and technology changes to keep in alignment with City's Strategic goals.

The unexpected advent of the COVID-19 pandemic challenged the resilience of the City of Berkeley, and none were more tested than the IT Department. A number of the following initiatives were already part of the DSP, as resilience was one of the performance parameters in the initial DSP project. Others were initiated in response to the public health catastrophe.

The table below provides an overall status of projects completion status over the 4-year period NOV 2016 through FEB 2021.



Status	Program	Project Count	Percentage of Count
Completed	Citywide Infrastructure Improvements	6	3.61%
	Digital Strategic Plan & Roadmap	99	59.64%
	GIS Master Plan	4	2.41%
	IT Annual Infrastructure Equipment Replacements	18	10.84%
	IT Annual Reporting Compliance Projects	22	13.25%
	IT Operational Projects	11	6.63%
	Long-Term Referrals	1	0.60%
	Short-Term Referrals	5	3.01%
Work in Progress	(empty)	1	1.37%
	Citywide Infrastructure Improvements	8	10.96%
	Cyber Resilience Program	12	16.44%
	Digital Strategic Plan & Roadmap	34	46.58%
	IT Annual Infrastructure Equipment Replacements	2	2.74%
	IT Operational Projects	16	21.92%
Not Started	(empty)	3	7.50%
	Citywide Infrastructure Improvements	2	5%
	Cyber Resilience Program	2	5%
	Digital Strategic Plan & Roadmap	15	37.50%
	IT Annual Infrastructure Equipment Replacements	1	2.50%
	IT Annual Reporting Compliance Projects	2	5%
On Hold	IT Operational Projects	15	37.50%
	Cyber Resilience Program	2	13.33%
	Digital Strategic Plan & Roadmap	11	73.33%
	IT Annual Infrastructure Equipment Replacements	1	6.67%
Proposed Budget Reduction	IT Operational Projects	1	6.67%
	Citywide Infrastructure Improvements	2	13.33%
	Cyber Resilience Program	5	33.33%
	Digital Strategic Plan & Roadmap	4	26.67%
Cancelled	IT Operational Projects	4	26.67%
	(empty)	2	14.29%
	Citywide Infrastructure Improvements	2	14.29%
	Digital Strategic Plan & Roadmap	8	57.14%
	IT Annual Infrastructure Equipment Replacements	1	7.14%
Pending	IT Operational Projects	1	7.14%
	Citywide Infrastructure Improvements	1	33.33%
Total	Digital Strategic Plan & Roadmap	2	66.67%
		<b>326</b>	<b>100%</b>



## 5.2 Completed Projects Highlights

One of the cornerstones of the DSP is a focus on providing exceptional service delivery and fostering a strong sense of community and community wellbeing. Other main goal is to enhance operational effectiveness and foster improved efficiencies

The following are a sampling of representative technology initiatives completed reflecting the efficiencies achieved by each project.

### 1. Syntech Fuel Management System



The system replaced the previous antiquated system GasBoy, which exceeded its useful life and did not meet the City's needs for accurate accounting of fuel usage by vehicle and equipment.

#### Efficiencies achieved by the project are:

- Replaces 20+ year old unsupported hardware and software with cloud based solution.
- Minimizes/Eliminates data entry errors when fueling because system can read which vehicle is fueling; this greatly improves the accuracy of billing and accounting.
- Allows remote monitoring of fuel levels and manages our fuel consumption at the Corporation Yard and Transfer Station which supports emergency response.
- Will be able to expand to Fire Stations to allow remote monitoring of their fuel levels as well.

### 2. Zonar (Pilot Project) Fleet Telematics System



The GPS – Global Positioning System is being piloted on 112 PW, Parks, and parking enforcement vehicles to support safety and emergency preparedness by providing real time information on assets and equipment. Project also includes electronic vehicle inspections. Vehicle telematics are also critical for fleet electrification and right sizing.

Efficiencies achieved by the project are:

- Provides real time information on where our vehicles are to support emergency response and response to breakdowns.
- Enables electronic pre/post trip inspections; this replace paper inspections and reduces manual entry errors.
- Sends diagnostic codes directly to equipment maintenance mechanics. Allows data-driven real-time vehicle servicing, diagnostics reporting which leads to better maintenance and repair planning and staff time allocation.

### **3. New Irrigation Management System**

Improve water efficiency by replacing 266 individual clocks/controllers for the City's irrigation system in 52 parks and medians with one remote management system.

Efficiencies achieved by the project are:

- Ability to manage the irrigation controllers remotely and the system will allow to communicate via the cloud and automatically coordinate and regulate flow levels
- Provides control and visibility over water usage
- The system takes into account weather conditions and other irrigation factors such as slope and alters watering patterns for each sprinkler accordingly

### **4. Recreation Registration Software**

Implement the Recreation Registration Software, an online calendar utilized for coordinating a variety of recreation programs, to a cloud-based solution and increased efficiency for registering for PRW camps, events, location reservations.

Efficiencies achieved by the project are:

- Increased efficiency for registering for PRW camps, programs, and events, and reservations of picnic sites and tennis courts
- Reduce the use of paper
- Instant access to and up to date information on reservation and registration counts and availability
- Accessible 24/7

- Increase revenue
- Increase customer satisfaction
- Improve Recreation employee's happiness
- Align with the City's Strategic Plan: Be a customer-focused organization that provides excellent, timely, easily accessible service and information to the community.

## 5. NEMO-Q Replacement

Implement a new Ticketing Queuing System in Permit Service Center and Finance Customer Service Center to prioritize queue based on customer service request type and streamline wait times.

### Efficiencies achieved by the project are:

- Faster Permit Service Center Welcome Desk process by adding flexibility to assign permit applicants to the correct queue reducing staff time and Welcome Desk wait times.
- Allows Permit Service Center staff to see who is waiting for what service and for how long and enables staff to proactively help clients if their queue is open, thus making more efficient use of staff time and reducing Permit Service Center wait times.
- Allows staff to monitor the presence of applicants who may be waiting in the Permit Service Center to see them from their desks, eliminates wasted staff time walking out to see if persons have arrived for an appointment.
- Real time monitoring and longer-term trend reporting of Permit Service Center wait times and queue demand enables supervisory staff to make efficiency decisions based on data and real time awareness of problems and successes.

## 6. ACCELA Upgrade Version 8 – Version 10

Upgraded the ACCELA permitting and business license software from version 8 to V10 in early 2020.

### Efficiencies achieved by the project are:

- Reduce Accela system downtime by moving Accela software, Windows Server operating system, SQL Server database software, and ESRI GIS software to supported software versions.
- Accela 10 is reported by staff users to be faster and more responsive than Accela 8 enabling many small, but cumulative, improvements in staff efficiency.

## 7. Business License Upgrade

Implemented online renewal for Short Term Rental business license type. A new Accela Citizen Access website was built for better usability. Automation of the overpayment process was also implemented.

Efficiencies achieved by the project are:

- For renewal of Short-Term Rental business license type, the website allows community members to access the system 24/7.
- The online website is easier to use and reduces paper waste
- Automation of overpayment process allows accurate reporting of revenue when overpayments are received.

## **8. Human Resources Case Management**

Software to manage and track Human Resources Employee Relations and Equal Employment Opportunity cases.

Efficiencies achieved by the project:

- Unifies case management in a centralized database and allows for better search capabilities (case and documents for example PRA) and reporting
- Simplifies the case management process by allowing for routing case management tasks
- Workflow feature that shows tasks, due dates, etc.
- Dashboard that shows status updates on cases

## **9. Commissioner Tracking System (Phase 1)**

Reason: Helps track commissioner membership, commission details and contact information and develops report that gets published to website. During this project, IT performed enhancements and bug fixes to the commissions tracking system.

Tasks completed:

- Migrated the Commissioner Information System (CIS) Access database to Microsoft SQL database
- Converted the CIS Access forms and report to a web application
- Secured the web application with Active Directory

Efficiencies achieved by the project are:

- Migrated off an Access database located on a network drive to a browser based application on a robust enterprise platform
- Provided greater data integrity for concurrent user usage

## **10. Public Safety Projects**

- **NG 911:** this is a set of projects that implements text to 911, enabling emergency requests to be transmitted by Text to the 911 Call Center. Scope of the project included upgrade of the CAD software, adding AT&T fiber, and new servers and connections to 911. Under AB 1168, local 911 dispatch centers must deploy a text-to-911 service allowing individuals to text “911” for emergency services that can accept short message service (SMS) and real time text (RTT) messages. This system also allows for better call routing. If our comm center goes down it is easy to route calls to other comm centers. Berkeley is in final testing phases for this functionality.
- **RIPA:** The Racial and Identity Profiling Act (RIPA) was formed as part of AB953 (Weber, 2016). City of Berkeley has set up and rolled out a RIPA phone application that officers are using to collect stop data information per specific requirements of the DOJ. Berkeley started collecting data in October 2020, well ahead of the January 2022 deadline. Data is posted monthly on the City of Berkeley Open Data Portal.

## **11. Health, Housing and Community Services Projects**

- **REDCap:** REDCap (Research Electronic Data Capture) is a secure HIPAA-compliant web application for building and managing online surveys and databases. Implemented for Public Health to create secure surveys to capture required information when investigating foodborne disease and outbreaks.
- **Clinic Sliding Scales for Self- Pay Charges:** Modified FY19//20 Patient Responsibility table data and created new Sliding Scale schedules for Public Health Clinics that automatically calculate service fees based on poverty rates.
- **Implement State WIC MIS System with California Department of Public Health:** Implemented State MIS system that supports food benefit issuance via EBT processing for all WIC participants in California. Implemented for use by local City program staff to deliver benefits efficiently, reconcile payments, operate affordably, enhance client services by improving access to prescribed WIC foods, and simplify the retail point-of-sale transactions (to reduce participation stigma and improve shopping convenience).
- **Emphasys Elite Major Software Upgrade and System Migration to new Virtual Server**  
The legacy Elite physical server, using SQL Server 2008, was replaced with a virtual server running the latest SQL. All databases were migrated to the new server, and major Elite software upgrades were tested and implemented for two groups: 1) the Berkeley Housing Authority (BHA) using Elite and HQS for Section-8 and inspections in the field; and 2) the City of Berkeley's Health Housing and Community Services (HHCS) Shelter Plus Care (SPC) Program.
- **Mobile Crisis Team Incident Log Software Upgrade Business Analysis and Requirements**  
- Completed business analysis with Mental Health stakeholders to identify new requirements for MH crisis and access service programs. Prepare necessary information to determine if system should be replaced with new product or if custom development of the application is feasible.
- **NextGen Behavioral Health Implementation Project**  
Implement NextGen Behavioral Health templates to replace paper-based charting at the BHS Health Center for Mental Health services provided to clients. Produce export of grant required

data for SBHC visits (Behavioral Health and Physical Health) to eliminate manual entry in external system. Behavioral Health Specialty will be implemented for the first time. Mental Health providers at the BHS Health Centers will begin collecting electronic data; instead of hand-writing information on paper forms. Grant data will also automatically be produced; replacing years if staff swivel-chair process to manually enter data in separate system.

- **NextGen EPM-EHR System Migration to new Virtual Servers**  
Project included standing up new servers; and migration of system from legacy servers running SQL Server 2008 to new servers: Production SQL 2018 Server; Development SQL 2016 Server; Report SQL 2016 Server; Application Server; Communication Server; Interface Server; and 3 Servers with Terminal Services.
- **NextGen Major System Upgrade to EHR 5.9 / EHR 8.4** with Workflow Improvements; and Implement Upgrade Required for E & M Office Visit Changes Effective 2021
- **Implement Public Health Clinic & BHS Health Center Telemedicine**  
Implement new Public Health Clinic workflow with NextGen templates to collect telehealth service information and bill for those services. Clinic service providers now able to deliver important services to clients via telephone calls during shelter-in-place orders. The State has authorized payment for these services when medical claims are submitted with correct codes and information.
- **Targeted Case Management (TCM) Telephone Encounters and Service Claims**  
Persimmony ECM software changes were implemented in order that Case Managers from PHN and Aging Services are able to capture and bill TCM services via telephone encounters instead of face-to-face visits. The State has authorized these services as reimbursable because of the current shelter in place requirements to limit the spread of COVID-19. Ability to provide Targeted Case Management services to our vulnerable Medi-cal client populations, including Seniors, mothers and children.
- **TCM Program Cost Report Data and Audit Files 2019 & 2020**  
Produce Annual TCM Cost Report Data and Provide Audit Support for both fiscal years.
- **Implementation of HIPAA Auditing Solution for Mobile Crisis Team (MCT) Incident Log**  
Determine if and how MCT Incident Log System can be upgraded for HIPAA Compliance auditing and security. Research HIPAA requirements and SQL compliance tools and/or add-ons. Identify application and/or configuration changes required to accommodate auditing tools. Develop the Proof of Concept (PoC) testing and evaluation Develop Issues, Recommendations & Options Report for Mental Health. Conduct Meeting with Mental Health Division stakeholders to review and discuss recommendations and greenlight an option.

## 5.2 In Progress Projects FY 2021 Highlights

1. **Enterprise Resource Planning (ERP) Phase I (Core Financials and HR Payroll Modules)**  
Implement the Tyler Munis Core Financials and HR Payroll Modules – Chart of Accounts, Accounts Payable / Accounts Receivables, Miscellaneous Billing, Contracts Management, HR Payroll, Electronic Timesheets. The core ERP Project team is also assessing current business practices, and identifying areas of business process improvement to optimize efficiency and return on investment of instituting a modern ERP.

2. **Website Redesign Request for Proposals (RFP) and System Selection** – In February 2018, the City issued an RFP seeking a vendor to implement a complete redesign of Berkeley’s website, including a new content management system and secure, high-performance offsite hosting. The RFP received a robust response, garnering over two dozen strong proposals. After three rounds of review by a multi-departmental evaluation team, the City selected [Rolling Orange, Inc.](#) to develop the new website. The details on project status are in the Appendices.
3. **SharePoint Intranet** - In March 2018, contracted with Emgage to design and implement design for a SharePoint intranet and provide a modern method for communications and for information sharing among City Staff. We reviewed work of four vendors and chose Emgage because of ease of use and clean design.

**Status: HOLD**

**The project is on hold due to shelter-in-place order.**

**Reason:** Sharepoint is hosting our new intranet site which will replace the S drive and iCOBWeb. <https://cityofberkeley.sharepoint.com/>

This transition will begin with **ALL documents** in these folders becoming **READ-ONLY as of TBD**. Each department will have their own SharePoint homepage which will serve as a location to share files, data, etc. with other Departments in the City. Each department will also have an internal page specific to their department, divisions, and work groups for internal file sharing. We have the latitude to determine how we wish to organize the file structure and, in general, what permissions we wish to set on them.

4. **Cyber Security Resilience Plan / Business Impact Assessment** – Develop a Cyber Resilience Plan in alignment with the City’s Resilience Strategy, including software upgrade needs, policies and cyber security training for staff. The details on project status are in the Appendices.
5. **Office 365 Migration Planning and Deployment** – Upgrade and migrate all City staff from current Office 2013 client to the most current Office 365 client. The project will be completed in Phases: Email, One Drive, SharePoint, Office suite. Completed the RFP Process in FY 19 and selected the vendor. In the planning phase and will be developing a project plan for migration.
6. **Windows 10 Upgrade** – Upgrade all City computers from Windows 7 to Windows 10, to maintain computer and network security, and to ensure operating system compatibility with modern desktop software applications.
7. **iPhone Upgrades** – Coordinate the purchase and replacement of about 300 City iPhones for remote work due to the Shelter in Place, and to ensure phone data security and compatibility with modern iOS apps.



8. **Backup Replacement and Hosted Cloud Storage** – Replace the City’s backup solution to meet the current and future technology needs of the City. Also provide for redundant cloud-based offsite backup to preserve and protect City data in the event of a local disaster or emergency. The details on project status are in the Appendices.
9. **VOIP Upgrade** - The City is upgrading it's current Voice Over IP (VoIP) telephone system that has been in place since 2013. Upgrades include hardware, software, and voicemail system upgrades, improved call center services (including 311 and the Help Desk), and critical upgrades to meet current “e911” law and regulations in accordance with Kari’s Law, Ray Baum’s Act, and FCC regulations.

#### 10. **Public Records Act (PRA) response software replacement project:**

The PRA software is designed to be an easy-to-use freedom of information act (FIOA) and public records portal, easily accessed by a link from the City Website. City of Berkeley PRA staff are able to receive, work and fulfill requests within a single repository. Community members and requestors can view responsive documents on file and open to the public through the self-service PRA portal, therefore reducing repetitive requests. Workflow and auto-generated reminders and redaction tools allows for better internal management and efficiencies.

**In November 2018**, the City issued an RFP seeking a vendor to implement a Public Records Act response software replacement, including a new online portal, content management system and secure, high-performance offsite hosting. The RFP received two responses. 311 Customer Service Center from Department of IT is leading this project. A project team comprised of members from City Clerk, City Attorney, Planning, Fire, Police, Public Works and IT Security have scored the proposals and participated in Software demonstration presentations. Final vendor selection will be concluded in April 2019 and will follow the City’s procurement processes to get Council Spending Authority approvals.

PRA Software project was launched internally in 2020 and the City’s PRA portal will be functional by Summer 2021.

#### 11. **Mission Mark**

**Status:** In Progress

The Auditor’s office selected Mission Mark Audit Platform to aid the City Auditors in managing ongoing audit recommendations.

**Reason:** Implement the Mission Mark Audit Platform to aid the City Auditors in managing ongoing audits recommendations.

##### **Efficiencies achieved by the project:**

- Streamlines the audit process and provides improved collaboration between the City Auditor’s office and other City departments.
- Centralizes the audit repository and allows for quick searches

- Provides dashboards that provides quick status updates and can publish

## 12. **ServiceNow (Phase 3 in Progress) - IT Service Management/Enterprise PM Tool**

**Status:** In progress

Testing Orlando release upgrade  
Configuring hardware asset management

**Reason:** Replace Help Desk software, implement project portfolio management software, and technology asset management

**Efficiencies achieved by the project:**

- Greater visibility of high priority incidents on dashboards
- Auto-route tickets to the appropriate I.T. teams for greater efficiency.
- Better communication channel between requester and IT via the portal
- Self-service walk-in appointments scheduling for social distancing at IT Help Desk

**Phase 1 and Phase 2 Modules Implemented:**

- Helpdesk Software
- Incident, Change, Problem Management
- Visual Task Boards
- Project Portfolio Management including Council RRV Prioritization
- Self-Service Portal
- Catalog / Database Setup
- Knowledge Base
- Project Reporting

## 13. **Integration Software Upgrade and perform Integration Enhancements**

**Status:** In Progress

**Reason:** Provide a more stable integration platform and prepare the City for additional integration enhancements for FUNDS\$ replacement projects.

**Efficiencies achieved by the project:**

- Provides latest version of Webmethods which provides product enhancements and bug fixes thereby reducing downtime.
- Automates the communication between different applications that will increase customer service response time.  
Optimizes integration environments to allow for increased transaction response time.

### 5.3 **Deferred Projects due to COVID-19**

1. **Customer Relationship Management (CRM) Replacement Project:** The project is deferred due to COVID-19 and RFP for CRM System is planned to be released in the summer of 2021.

## 5.4 Cancelled Projects

1. **Capital Improvement Project (CIP) Management Tracking:** Project (CIP) tracking tool to better document and manage project implementation and related financial information. Rejected proposal; will rebid at a later time. Need ERMA to be developed more prior to implementing. Cost and resources need to be evaluated before starting this critical project.

## 5.5 Planned Projects / Projects List FY 21- FY22

A draft list of projects by department and category with Council Priority for FY21 through FY22, and including carryover projects from prior years will be submitted as part of the FY2022 budget planning process. These projects are also contingent upon Council's adoption of future years' budget and annual appropriation ordinances.

## 6. Reinventing the IT Service Model



### 6.1 Industry Recognition

The city has received the following for its innovative initiatives and exceeding high rate of success in systems deployments:

- Municipal Information Systems Association of California (MISAC) Excellence Award 2017, 2018, 2019
- Helpdesk staff received certifications from HelpDesk Institute
- DoIT staff successfully completed all required training par to the City's Core mandatory trainings provided by Human Resources department
- 5 staff members have completed PMP (Project Management Professional) certification and are sharing knowledge with entire team. Task Force from this group is reviewing all project life cycle documents and processes and refining same for Berkeley IT department. The staff will be creating a knowledge base of documents.

### 6.2 Challenges

The technological needs for departments are growing exponentially and given this new landscape, new additional resources may be needed to provide effective implementation and ongoing support. Some of the other challenges are around Recruitment, Retention and Class specifications.

- Class Specifications are outdated and refer to early 1990 technologies and skill set. The Class specifications don't reflect the current department skillset required and results in low retention rate for new employees (**project deferred due to COVID-19**)
- Staffing Challenges
  - The industry standard ratio of Employee to helpdesk ratio is about 70:1
  - For City of Berkeley the ratio is 266:1 (as we have 6 helpdesk employees serving a staff of approx.. 1600 (Reference - <https://www.roberthalf.com/blog/management-tips/how-many-help-desk-tier-1-personnel-do-you-need>))

- Difficult to recruit – Expectation of Class Specification, Work and Skillset do not match
- Lack of growth opportunities for staff
- Lack of physical space impacts productivity, COVID-19 concerns
- Increased helpdesk requests due to digital transformation efforts and deployment of multiple technologies simultaneously
- Impact to resource allocation for projects where DoIT serves as supporting department such as Implementation of Short Term Rentals, U1 Measure, T1 Bond
- Staff resource deployments to EOC and other adhoc events resulting in shifting priorities from daily assigned tasks
- Additional 311 calls due to unforeseen event such as COVID, PGE Power Shutoff events which results in increased calls for service

## 7. Contact Us



**Hours of On-site Support:**

8:00 am- 5:00 pm  
Monday-Friday

**After Hours Support:**

24 hrs. X 7 days  
Critical Systems only

**Phone:** 510-981-6525

(After hours support, press 0)

**Self-Service Portal:** (requires City Login ID)

<http://cityofberkeley.service-now.com/sp>

**Email:** [helpdesk@cityofberkeley.info](mailto:helpdesk@cityofberkeley.info)

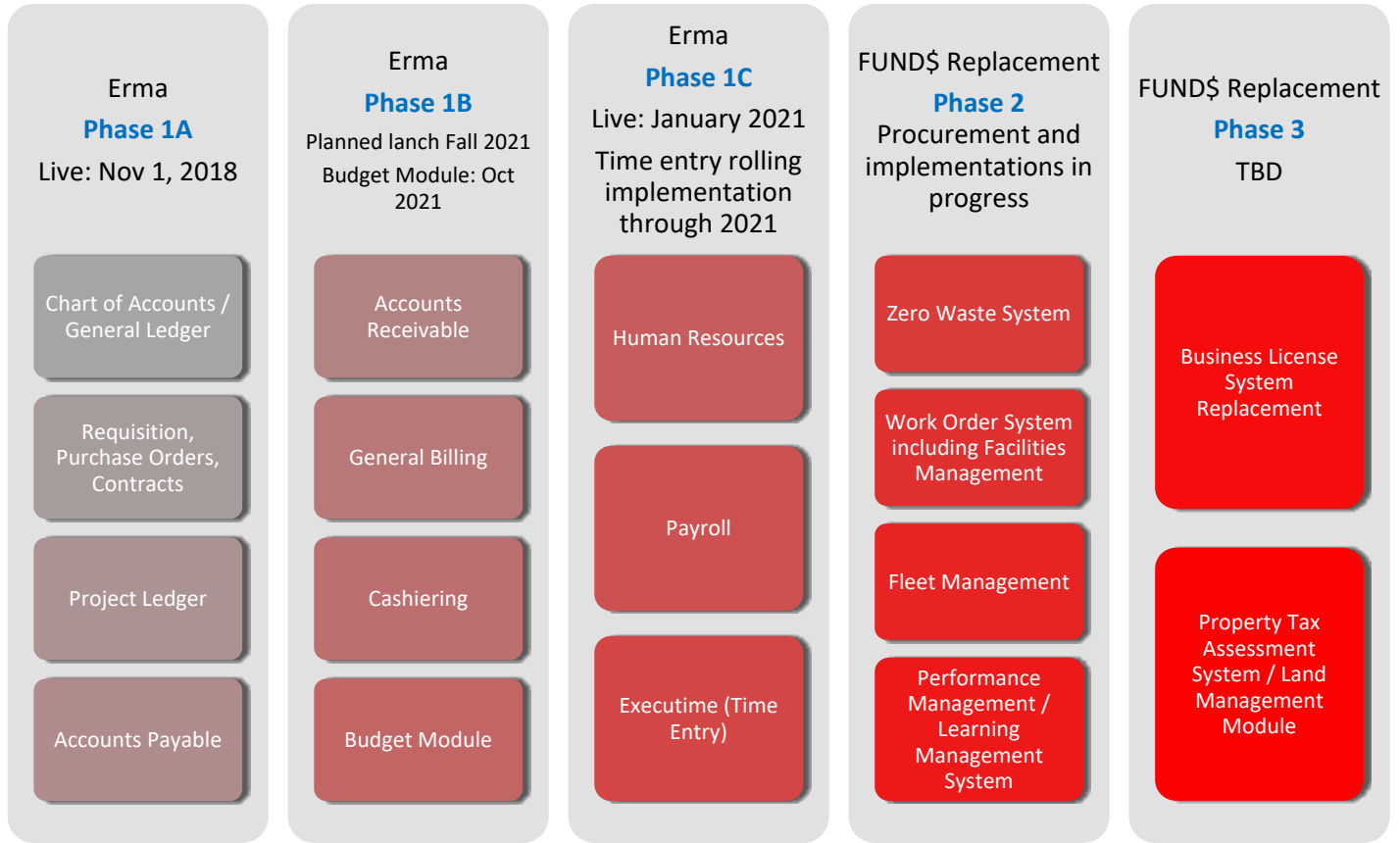
## 8. Appendices



## 8.1 FUNDS Replacement Project

### FUNDS Replacement Project - Phase I: Enterprise Resource Planning (ERP)

Enterprise Resource Planning (ERP) Phase 1 deliverable is to implement a new software solution to address core financials, Human Resources and Payroll services. The project plan extends through several years of the Digital Strategic Plan (DSP) and the phase 1A through Phase 1 C is planned to be fully implemented by the end of FY2022. Each module is defined in the narrative below.



### Phase I: Enterprise Resource Planning (Erma) - Core Financials and Human Resources / Payroll

In May 2015, the City contracted with the Government Finance Officers Association (GFOA) to conduct a needs assessment of its systems and processes including a review of its current financial processes, and for identification of areas for improvement and recommended business process changes.

The City determined that a new enterprise system will improve integration, reporting based on specified criteria, organizational processes, and allow for the implementation of business process best practices. Discussions with GFOA included organizational and functional scope, as well as the development of functional requirements the City should seek in the new ERP system. From the resultant project planning activities, the City has made many strategic future business process decisions based on best practices that are to be included in the system's implementation. Accordingly, the City intends to incorporate and implement the requisite high-level processes into its new enterprise system.



**In February 2016** the City hired a Project Manager to conduct a full replacement of all modules in the current ERP system known as FUND\$.

**In May 2016**, the City released an RFP and in June the City co-located a core team of Functional Leads throughout the City to work on the project. All positions are tied to the project duration and funding.

**In May 2017**, The City completed a rigorous RFP and contract negotiation process and selected Tyler Munis as the software to replace core financial, Human Resources and Payroll functions currently residing in FUND\$. The limited installed functionality and lack of integration between existing systems requires that staff utilize many shadow systems to support key business processes. With this Project, the City aims to improve business processes, gain efficiencies, simplify and standardize use of systems, and install core public sector ERP functionality. The following needs statement and goals were outlined in the RFP:

The Project's key goals and success indicators remain as follows:

- Improvement to business processes
- Implementation of business processes based on best practices
- Implementation of grant, project and budgeting processes and functionality
- Improvements to and updating of outdated technology
- Improvements of system and data integration to stand-alone systems where possible
- Elimination of duplicate data entry
- Provide access to source data and user-friendly reporting tools
- Reduce paper use
- Broaden employee self-service capabilities
- Broaden vendor self-service capabilities

The City purchased the following Tyler Munis modules:

- |                                 |                                       |
|---------------------------------|---------------------------------------|
| • Accounting                    | • Human Resources & Talent Management |
| • Accounts Receivable           | • IVR Gateway                         |
| • CAFR Statement Builder        | • Munis Analytics & Reporting         |
| • Capital Assets                | • Payroll with Employee Self Service  |
| • Cash Management               | • Project & Grant Accounting          |
| • Contract Management           | • Purchasing                          |
| • eProcurement                  | • Tyler Cashiering                    |
| • ExecuTime Time and Attendance | • Tyler Content Manager               |
| • General Billing               | • Tyler Forms Processing              |

**In November 2018**, the City launched the Phase IA which included Chart of Accounts / General Ledger, Requisition, Purchase Orders, Contracts, Project Ledger, Accounts Payable Modules

**Project Challenges** - The project team experienced setbacks with staffing challenges due to retirements and staff moving on to new roles within the organization. Currently, there is one dedicated team for the project to support cityside training and change management, all other team members are located within their home departments and are conducting implementation activities in conjunction with regular department activities. The team began with 7 dedicated team members. Mitigation plans included contracting with an outside project manager to assist with Phase 1A go-live and Phase 1C implementation. Both positive and negative lessons learned from Phase 1A have been documented. Due to the age of the existing financial system, data conversion was a challenge, and a significant portion of the data needed to be converted manually. These challenges are being

addressed, and a project plans are updated to include the additional detail and requirements from the lesson learned from Phase 1A.

**In January 2019**, the City began working with Tyler to develop a timeline which includes launching the following modules: Budget (**Fall/Winter 2021**), Accounts Receivables, General Billing and Cashiering in **FY 2022**.

The payroll and Human Resources modules were launched December 27<sup>th</sup>, 2020. This included payroll and the transition from Employee Transactions Forms (a paper process) to electronic Personnel Actions conducted within the ERP. This eliminating many paper forms. Additionally, once we launch the Employee Self Service Portal we will further reduce use of paper as pay stubs for direct deposit will be available to employees electronically and will only be printed upon request. Employee Time entry (in ExecuTime) will begin 3 months after payroll launch. ExecuTime will be rolled out in 5 phases. Breaking this implementation into smaller launch groups will allow for focused and specialized training and more availability to support the transition with limited resources. As with the other components, this launch will greatly reduce the use of paper to report time and request time off and will have an electronic process that will provide meaningful data.

### **Change Management and Training:**

The Program Manager works closely with the Steering Committee, which provides leadership for the business process changes that go along with implementing a modern ERP. While many changes will coincide with the new system, the change management initiative is a critical component of the implementation. The Program Manager along with an internal change manager and an experienced consultant to work with key stakeholders, subject matter experts and department leadership to identify and facilitate adoption of changes that will create immediate efficiencies. The Program Manager is also engaging in focused change management initiatives to optimize City staff readiness and identify potential areas of risk or low adoption rates and working to mitigate those risks. Deliverables include development of the internal SharePoint site for the payroll component including training videos, workflow maps, cheat sheet, a paystub cross-walk and other critical collateral,

The City has also identified additional needs required to support the level of change the City is experiencing. To address these additional needs, Staff have engaged with a third-party vendor to assist with the development of an additional communications plan, a comprehensive and department-specific training plan relevant to the phase of the FUND\$ Replacement module which Staff are implementing, and process documentation materials that resonate with staff to address questions and business processes and support change management with specific action items to support adoption of the new ERP.

In light of Covid-19, , the team has adjusted the training plan from in person training to virtual platforms. While this was a significant shift for the team developing the training program, there are some benefits to the city. The third party vendor developed recorded trainings (ranging from simple watch videos to interactive learning experiences) which are available to staff after go live to support staff in learning new processes in erma. The process is inclusive and is being informed by staff across the organization indifferent departments and at various levels and with different roles and positions. These trainings will be stored on the intranet and available for staff to use at any time. Additional videos will be created for employee time entry which will begin to roll out in calendar year 2021.

## FUND\$ Replacement Project - Phase II

**In August 2017**, the City released an RFP for a consultant to conduct a needs assessment to guide the replacement of the additional modules in FUND\$: namely: Work Order and Asset Management, Fleet and Facilities, Real Property/Lease Management, Property Tax Software, Refuse Billing, Business licenses, Performance Management and Learning Management. The Needs Assessment includes assessment of current gaps, developing a roadmap for improved business systems to achieve operational excellence, development of requirements and scope for related RFPs and vendor analysis for applicants.

The goal of the FUND\$ Replacement project Phase II is to replace the outdated functionality of the existing FUND\$ system with contemporary and strategic application software. It represents the continuation of the ERMA/Tyler Munis Finance System implementation, except this phase focuses on Public Works: Work Orders, Asset Management, Fleet Management, Real Property Lease Management and Human Resources: Performance/Learning Management technologies.

**In February 2018**, Phase II was kicked off in parallel to Phase I. After a RFP process, Thirdwave was selected to perform the needs assessment and business process requirements. The project was structured in five phases:

1. Ongoing Project Management
2. Discovery Phase
3. Software Requirements Gathering Phase
4. Request for Proposal & Procurement Phase
5. Vendor Selection & Contract Negotiation Phase

February 2018 through April 2018, Requirements definition included holding nineteen (19) Rapid Workflow® workshops. Staff attendance and input was outstanding. Seventy-nine (79) City staff/management representing all of the departments in the project participated, with some staff participating in numerous workshops (anywhere from 2 to 9, and IT Application Portfolio Coordinators, participating in as many as twelve (12) workshops).

Consequently, total workshop participation consisted of 176 City staff, an impressive level of end user engagement.

Business processes assessed in the project include those listed below:

- |  |  |
|--|--|
| 1. Public Works, Fleet Work Orders                     | 11. Public Works, Zero Waste Start Stop  |
| 2. HR Performance Management                           | 12. Public Works Inventory Management    |
| 3. HR Learning Management                              | 13. Public Works, Zero Waste Start Stop  |
| 4. Public Works, Streets Work Orders                   | 14. Public Works, Work Order Reports     |
| 5. Public Works, Asset Management, Depreciation Orders | 15. Parks Landscape Maintenance Work     |
| 6. Public Works, Traffic Meter Maint. Work Orders      | 16. Public Works Interfaces              |
| 7. Public Works, Facilities, Parks Work Orders         | 17. Fixed Asset Management (Equipment)   |
| 8. Public Works, Forestry Work Orders                  | 18. Fixed Asset Management (CIP)         |
| 9. Public Works, Vehicle Replace Internal Bill WOs     | 19. HR Performance & Learning Management |
| 10. Public Works, Owned Lease Management               |  |


**Procurement process in progress at various stages**



**October 2018**, included the development and posting of four solicitations and subsequent procurement activities, including pre-bid conferences, issuance of addendum. The RFPs were posted for the following systems:

- Zero Waste System [Vendor AMCS Selected](#)
- Work Order System including Facilities Management [Vendor NEXGEN Selected](#)
- Fleet Management [Vendor AssetWorks Selected](#)
- Performance Management / Learning Management System [Vendor NEOGOV Selected](#)
- Real Property Leasing and Management Solution [ON HOLD – NO RFP released](#)

To facilitate the evaluations, cross departmental teams were created specific to the software. The vendor selection process is in progress and it is estimated that all vendors will be selected and spending authority approvals will be presented to Council by **June/July 2019**. The detailed timelines will be shared once the vendor selection process is completed.

Given below is the status of various projects of PHASE II.

PROJECT	STATUS
<p><b>NEXGEN Work Order / Asset Management / Facilities Management System for PW/PRW</b></p>	<p><b>Status: IN PROGRESS</b></p> <p><b>Configurations Complete and Signed off (3 of 18):</b> Waterfront, Meters, &amp; Forestry</p> <p><b>Configurations In Progress (10 of 18):</b> Sewer, Storm, Clean City, Electrical, Radio Shop, Facilities (PRW/PW), Landscape, Janitorial, and Safety</p> <p>•<b>Business Analysis Complete, Configuration Not started (5 of 18):</b> Sidewalks, Street Maintenance (Asphalt), Traffic Maintenance, Transportation Engineering, and Engineering/Fiscal/CIP</p> <p><b>Reason:</b> FUND\$ work order module is being replaced because it is 28 years old and does not link to GIS or provide the information staff need to make decisions, budget, effectively respond to customers. Accela is also being replaced.</p>
<p><b>AssetWorks Fleet Management System</b></p> <p></p>	<p><b>Status: IN PROGRESS</b></p> <p><b>Contract Signed and Kickoff Scheduled in March.</b></p> <p><b>Reason:</b> FUND\$ Fleet module is being replaced because it is 28 years old and does not provide the information staff need to make decisions, budget, maintain vehicle records and know when to replace vehicles.</p>

PROJECT	STATUS
<p><b>AMCS Zero Waste Work Order / Billing System</b></p> 	<p><b>Status: IN PROGRESS</b> <b>Contract Signed and Kickoff in March.</b></p> <p><b>Reason:</b> This is a new Zero Waste Division information database for invoicing residential and commercial service, and customer service request. Fund\$ handles current billing of Zero Waste Customers and is being replaced.</p>
<p><b>NeoGov Onboarding, Performance and Learning Management</b></p> 	<p><b>Status: IN PROGRESS</b> <b>Onboarding module in progress to be complete in May 2021.</b></p> <p><b>Reason:</b> Implement a product suite for hiring and developing the employee. From new hires onboarding process to performance feedback and developing training and certifications. The new training product will replace VTA (Virtual Training Assistance).</p>

**FUND\$ Replacement Project - Phase III (UnFunded)**

The ERMA Phase 1B and HR Payroll along with the Phase II Projects required significant staff time from multiple departments. The largest impact was for the Departments of Information Technology, Public Works, Planning and Finance departments. Due to resource limitations it was decided to postpone these projects until funding sources are identified. The IT Department will be conducting workshops for business requirements gathering, developing timelines and working on procurement process for these projects and get back to Council with updates next year.

**These projects are unfunded at this time and will be subject to future and additional budget appropriations.**

**Not Started**

- Business License
- Property Tax Assessment and is dependent on other projects:
  - GIS Master Address database
  - Land Management Module

## 8.2 Website Redesign Update

The City's website, [cityofberkeley.info](http://cityofberkeley.info), receives over 2 million visits each year, serving as the first point of contact for many community members when seeking information about City services.

Despite its critical role as an information and customer service tool, the current website does not meet community expectations for online service delivery. In surveys, focus groups, one-on-one interviews, and direct feedback via email or phone, community members voice dissatisfaction with outdated, duplicative, and conflicting content, dense, jargon-heavy text, difficult navigation, poor search functionality, cumbersome online reporting, and a dated design that does not adapt to mobile devices. Additionally, the City's existing website does not meet ADA compliance standards, meaning the existing resource is not fully accessible to community members with disabilities.

The *Web Reinvention Project* is a multi-year initiative to overhaul all aspects of the City's website, including the replacement of outdated software with a modern content management system, visual redesign, streamlined and simplified web content, and a restructuring of internal web management structures to incorporate clear standards, workflows, and ownership for the creation and maintenance of web content.

### History & Project Summary

Berkeley's 2018-2019 Strategic Plan identified a new City website as the first goal under priority #9, "Be a customer-focused organization that provides excellent, timely, easily-accessible service and information to the community."

*Create a new design, look, and information architecture for the City website so that it is interactive and services and prioritizes the needs of the community, including a focus on increasing the number and types of transactions and services available online.*

City issued an RFP for a vendor to design and develop the new website February 2018. After a competitive bidding process, the City selected [Rolling Orange, Inc.](#), a Bay Area based web design and development firm specializing in government and higher education sites. Rolling Orange has previously developed websites for the City of Hayward, BART, SFMTA, the San Francisco Arts Commission, and UC Berkeley.

The City commenced work with Rolling Orange in March 2019, with the expectation that a new website would launch in 2020. Design work completed with Rolling Orange includes:

- **New information architecture:** Menus and content on the new website will be organized to reflect the way community members interact with the City, creating an intuitive and seamless visitor experience that makes it easy to complete tasks by grouping content into user-friendly categories like *City Services*, *Construction & Development*, and *Your Government*, in keeping with industry best practices.
- **New visual design:** The new website incorporates a spacious, modern design aesthetic that adapts seamlessly to any device. The project team placed special emphasis on typography, using a strong visual hierarchy and large text to ensure content is easily

readable for all visitors, including older residents - a group which particularly reports finding text on the City's current website challenging to read.

- **Content templates:** User-friendly, mobile-responsive templates will allow web contributors to create uniform, attractive, ADA compliant webpages for events, capital projects, boards and commissions, zoning projects, and more with the ease of filling out a form. The new site features 15 templates custom tailored to accommodate the full breadth of information types present on the City's website.

**Community Input:** Rolling Orange conducted usability testing on a prototype version of the new website in the Spring of 2020, asking community members to complete a series of common tasks. The new website performed extremely well and received enthusiastic response from testers.

Concurrent with the site development work with Rolling Orange, the City is streamlining and re-writing all web content to improve ease of use for community members. The City has engaged a web content copywriting firm, NV5, to work with staff subject experts to re-write web content for the launch the new website. This one-time effort will establish a new baseline for what web content should look like. Post-launch, content will be developed and maintained by in-house staff.

**Web Governance:** The Communications Office has developed governing standards to guide staff contributors to the website, including a web style guide that reflects best practices in web usability, readability, and digital accessibility and a web policy that defines clear workflows for the creation, maintenance, and sunset of web content.

To ensure content is kept up-to-date and maintains a high standard of quality, the City will implement a new web governance structure with the launch of the new website. A two-tier posting system will allow for routine updates to be made through simple forms for wide number of contributors, while more complex needs will be funneled to a smaller group of well trained staff who have received in-depth training in digital accessibility and writing for the web. The new system clearly defines maintenance expectations and responsibilities, the absence of which were identified by current staff as the primary reason content on the current website is not kept up to date.

## **Status**

Before the pandemic, the new website was scheduled for launch in October 2020. With project staff redeployed full-time to COVID-19 response, work on the new website has largely been suspended.

The City Council approved funding for two new Digital Communications Coordinator positions in December 2020. One of these positions will assume project management responsibilities for launch of the new website. Recruitment opened March 1, 2021. The City hopes to have this position filled in the next few months, at which point the project can resume at full pace and a new launch timeline will be developed.

Work on content production with staff subject experts had begun in February 2020 and was suspended due to the pandemic. Project staff have recently resumed working with the web

copywriting vendor on a small set of high priority content. Most content production work will take place during summer 2021, once new project staff has been on-boarded.

System development has continued with Rolling Orange during the pandemic at a reduced pace. A secure off-site hosting environment has been provisioned and is being used to host development of the new site.

Core development and configuration for the new content management system are completed. The vendor is now focused on completing development of custom applications, technical integration with the Lagan CRM system which will allow easier online 311 reporting, and testing templates and displays.

Software build-out is expected to be complete in summer 2021. Following this, the next steps will be:

- **Cybersecurity testing:** the City's cyber-resilience team will be overseeing a series of cybersecurity tests on the new website before launch, including penetration testing and a thorough threat modeling analysis.
- **Staff training:** training for web contributors on new software, and organizational training on governance program which is modeled after best practices in other jurisdictions

The new website is projected for launch in late 2021, pending the successful completion of the Digital Communications Coordinator recruitment.



### 8.3 Cyber Resilience Plan Update

Starting in the First Quarter of Fiscal Year (FY) 2019, the City of Berkeley (City) began the process of building a five (5) year, multi-focused City-wide strategy called the “Cyber Resilience Plan (CRP)”. The CRP is an important part of establishing the blueprint that creates a methodical approach and evolves cyber-security for the City of Berkeley to the benefit of its community members. This strategy aligns with the City’s vision of reducing cyber-risk exposure, maturing cyber-security capabilities, technologies and systems, and effecting efficient regulatory compliance.

The City has produced a plan to be more resilient to physical, social, and economic shocks and stresses. The CRP aligns with the City’s adopted Strategic Plan goals of:

- Creating a resilient, safe, connected, and prepared City
- Provide state-of-the-art, well-maintained infrastructure, amenities, and facilities
- Be a customer-focused organization that provides excellent, timely, easily accessible service and information to the community

The CRP also adopts strategies that align with the DSP.

The City established a framework of five (5) key focus areas of cyber-resilience capabilities applicable across the municipality. These areas are:

- **Data Transparency, Data Privacy, and Data Security**
- **Monitoring, Response & Mitigation**
- **Policy and Rationale**
- **Program Functional Design**
- **Training & Culture**

The City’s CRP is the result of a comprehensive and thorough “AS-IS” assessment and evaluation of the City’s existing technologies, operational requirements and service delivery needs against thirty-nine (39) cybersecurity and Public Sector key processes and procedures, organizational norms, and technologies applicable to these five focus areas. The results provide the City a situational awareness of:

- i. its present-day cyber-risk exposure;
- ii. maturity of its cyber-security capabilities, technologies, and systems; and
- iii. its inefficiency in addressing regulatory compliance.

The CRP resulted in action items that the City must act upon in order to reduce its current risk exposure, mature its capabilities, and become more efficient.

Using the action items from the CRP, the City created a five-year implementation plan in order to itemize and prioritize each of the action items. This five-year roadmap defines the workload needed to accomplish each of these action items, identifies which departments will need the most support to complete the action items, and identifies and itemizes the resources required to accomplish each action item. The CRP roadmap is thus technologically strategic, operationally responsive, and fiscally responsible. It addresses the unique requirements of the mission critical business needs of the City and its constituents, visitors, and business community. Staff presented the details about the plan to Council in a closed session on DEC 01, 2020. Annual updates will be provided in closed session.

Staff published two cyber-resilience RFPs in FY 20

Cyber-Resilience FY20 RFPs

1. Back-up Upgrade Solution and Hosted Cloud Storage
2. Cybersecurity Event Monitoring and Security Information and Event Management (SIEM) also known as Managed Security services Provider (MSSP)
3. End Point Protection and Detection/Response (EPP/EDR/MDR)

FY21 will have seen the implementation of both of the MSSP and EPP projects, as well as additional projects for which an RFP is not required:

1. FY20's planned Business Impact Assessment (BIA) – Tier 2 Applications/Infrastructures
2. Improved Cyber Incident Response (IR) Playbook
3. Additional Remote Access and Monitoring
4. More Phishing and Ransomware Awareness Training
5. Launching City-wide Data Safety Program

FY22 will see the implementation of the following cyber-resilience projects, and RFPs if required, pending Council approval of the proposed citywide budget and annual appropriations ordinances:

1. Improved Identity & Access Management (IAM)
2. Additional Cyber-Hygiene with Continuous Patch & Configuration Management
3. Launching City-wide Cyber Risk Management
4. Various Cyber-Resilience policies and procedures

In addition to the CRP, several cyber-security needs - emergent as well as identified in the As Is Assessment - have been addressed and actions taken this year.

## 8.4 Business Impact Assessment/Disaster Recovery (BIA/DR)

FY19 was the first time that the City of Berkeley had ever conducted a Business Impact Assessment (BIA). Performing a BIA is a thorough and comprehensive undertaking. **The second year of the assessment was scheduled for FY20 but was deferred due to COVID-19.** It was intended to address the second most critical applications and infrastructure (called “Tier 2”) that departments require in order to deliver their services to our community members – those that could be momentarily interrupted, but would be needed for each department’s recovery of operations.

The BIA looks at the City’s services, as well as resources and technologies that we use to support those services. For example, some of our city services include answering phone calls at the public safety call centers, health clinical activities, and conducting building inspections. Some of the resources and technologies we use include applications, internet access, and city networks.

The BIA analyzes the City’s services, resources, and technologies so that in a disaster the most critical services, resources, and technologies are provisioned first, aiding a smoother recovery.

**There are five critical questions being asked of each Department and of the senior executive team (SET) within our BIA:**

1. What is the criticality of each the activities we do in the City of Berkeley? Which ones of yours are designated as “essential functions”?
2. What is your Department’s and the City-wide priority to resume each of the processes listed in #1?
3. Following a major disruption or disaster, how soon must time-sensitive City services resume in order to avoid significant adverse impacts on the City and its community members?
4. What resources and technologies are needed to support the time-critical operations and minimize potential services interruption?
5. What are the magnitude of financial, operational, reputational, or legal impacts that arise from extended down-time?

The answers to each of these questions directly impacts the scope and priorities of the Cyber Resilience Plan (CRP) fourth focus area (monitoring, response and mitigation) and the development of disaster recovery (DR) policies, processes and metrics (a component of the third focus area of the CRP). We are also leveraging the BIA to begin to identify the sensitivity of information within the City. This collected information will, in turn, be used to inform our planned data transparency, data privacy, and data security work efforts and milestones (CRP focus area #1).

With the sudden onset and long duration of COVID-19, and its fiscal impact, the BIA data collection effort for FY21 has been adjusted to: (1) validate the FY19 data collected in the specific case of a pandemic, and (2) apply the impacts of a pandemic in answering the above questions for each department’s Tier 2 processes and applications.

## 8.5 Data Center Infrastructure Disaster Recovery - Nutanix Project

One of the major projects was the migration of the City of Berkeley onto the NUTANIX Hyper-Converged Infrastructure (HCI) and the standing up of Xi LEAP, NUTANIX's Disaster Recovery (DR) off-site datacenter as a service (DRaaS). Until this project, the City of Berkeley did not have any off-site datacenter so when a regional disaster – like an earthquake or mass fire – occurs, we would have been dead in the water. All city services depending upon technology would have ceased to operate.

Efficiencies Achieved by this new HCI solution additionally provides full operational redundancy between the datacenters at City Hall and the Public Safety Building. It is built secure, it provides data encryption and other cyber security controls by default, and its security is incident-tested. This is one of the core goals of the Cyber Resilience Plan.

Furthermore, the previous datacenter infrastructure was setup in a 3-tier model (virtual environment, servers, and backend storage) – an outdated technology that required high overhead, was time-consuming - taking 400 hours a year to maintain, including and approximately 40-50 hours of additional overtime per year - and also costly to maintain. It additionally lacked the stability needed for our mission critical applications. Delays were frequent and lengthy when vendor support was needed.

In summary, some of the expected benefits of the solution are:

### 1. Efficiencies

- i) Achieves DoIT operational and cost efficiencies along with improved application performance by leveraging software-defined technology – the latest technology
- ii) Increased datacenter, server and data security
- iii) Enhanced delivery of services to the community

### 2. Disaster Recovery Capabilities

- i) Provides a single management console with high availability and improved failover while also creating disaster recovery (DR) capabilities
- ii) Allows both data centers to replicate between themselves with an increased capacity that is large enough to host both of them in the event one fails
- iii) DR offsite in case both datacenters were to go down and we need to activate the EOC and the DR offsite

### 3. Staff Time

- i) Scalable infrastructure that simultaneously reduces deployment time from days to hours, improving resource allocation of DoIT staff
- ii) Nutanix has the ability to do one button upgrades for all software and components. The staff time savings are estimated at 1/3 staff member (FTE) time which can be reallocated to the other infrastructure projects as identified in the City's Digital Strategic Plan (DSP) and Cyber Resilience efforts.
- iii) Decreased standard maintenance and support delays and overall time to complete

**4. Server Room Space**

- i) Reduced our datacenter footprint, avoiding costs tied to provisioning storage while dynamically expanding resources when and as needed
- ii) The Civic Center Data Center (CCDC) reduced 24U (U- Unit) of rack space to 16U needed for the Nutanix servers or 33% less rack space thus resulting in power savings

**5. Environmental Benefits:**

- i) Reduces our server rack space, power and cooling requirements, producing power savings and reducing our carbon footprint
- ii) Power and Cooling - 20 systems at the CCDC reduced to 8 for Nutanix. Each system uses 2 power cables. For instance, average usage of one server is 850 watts per hour with an average of 7446kWh (kilowatt hour) per year. The existing power consumption comes to 148,920 kWh/year compared to 59,568 kWh/year needed for the Nutanix systems or 60% less power requirement thus resulting in power savings and reducing carbon footprint. According to the U.S. Energy Information Administration ([https://www.eia.gov/electricity/monthly/epm\\_table\\_grapher.php?t=epmt\\_5\\_6\\_a](https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a)), as of December 2018 the average rate for electricity is 19.44 cents per kWh thus bringing the operational power costs down from \$28,950.05 to \$11,580.02 annually

This single Cyber-Resilience Project not only created an off-site datacenter for when a regional disaster strikes, it improved the Department of IT's daily IT operations, it improved application performance for all City of Berkeley departments, and it added baseline cybersecurity to our datacenters' infrastructure.

## 8.6 Backup Strategy

The City is in the process of implementing a modern data backup architecture and solution, Cohesity, through a tiered data protection strategy the Department of IT developed this past year. In order to protect our organization from the loss of data that can happen due to various reasons like hardware or software failure, power failure, natural disasters, data thefts, intrusion, or human errors, backups are required.

We can define “backup” as simply a method and tool for executing two primary functions:

### Data Continuity –

- fast initial access time is critical
- to provide a local copy of data
- uses primary datacenter facility
- enabling fast restore
- smaller retention period

### Data Recovery –

- this need not be time critical
- a copy of data which is off-site
- uses secondary datacenter facility
- restored from another location
- longer retention period

### Tasks Completed

- Implemented retention policies so we can restore data when needed with minimal downtime.
- Support 70+ databases and 230+ applications with our data backup and retention policies.
- Implemented monitoring systems to notify server space, memory, performance, user access to data, servers’ uptime, servers’ maintenance, and other critical functions.

### Current data servers:

- Total AHV SQL VMs=40
- Total AHV Non-SQL VMs=180
- Total NAS and Physical servers=10

### Current data size:

- Total Non-SQL Data size=25TB
- Total SQL Data size=15TB
- Total NAS and Physical file servers=16TB

In February 2020, the City of Berkeley issued **RFP No. 20-11386-C** for a Backup System Replacement and received four (4) qualifying vendor responses. The RFP review committee evaluated each proposal and determined that the proposal from ePlus for the Cohesity Backup Solution with hosted Cloud Storage best met the City’s operational, technological, and fiscal requirements. The Cohesity system implementation is in progress and is expected to be completed in FY 2021.

The Data Backup Solution, is intended to provide retention in accordance with the results of the BIA:

- 1 hour, 12 hour and 1 day Service Level Agreements (SLAs)
- SQL VMs=1-2yr
- Non-SQL VMs=2yr
- NAS and Physical servers=2yr
- Optional O365=1yr

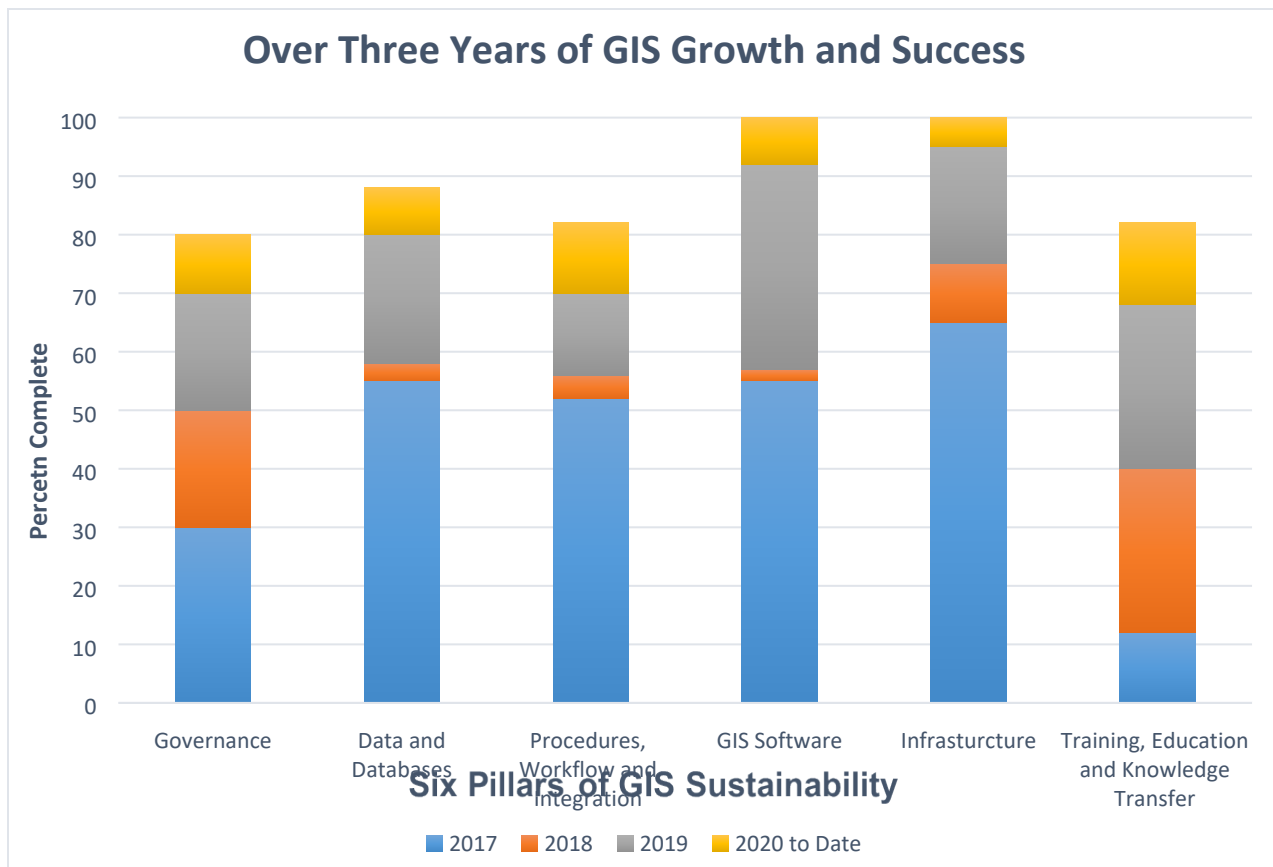
**The expected efficiencies from the new Cohesity backup solution are:**

- **New functionality** - Perform snapshot backups of entire virtual servers instead of just being able to back up the data on the servers. This feature will provide the City a new capability of full virtual server recovery in a disaster recovery scenario.
- **Efficiency / Compliance** - Provide a global search feature to allow staff to search through backups for keywords and file names to ensure fast and efficient recovery of lost data, and to improve regulatory compliance performance.
- **Staff Time Savings** - All newly created virtual servers will be automatically backup up at the time of creation, thus replacing the manual process in the old backup solution.
- **Redundancy** - In addition to Cloud Storage there is an additional local backup appliance for the Cohesity solution which is designed with redundancy in mind, so that no single server or drive failure will cause the solution to stop any backups or recoveries from completing which has been an issue with the current solution.

## 8.7 Geographical Systems (GIS) Master Plan Update

The Geographical Information Systems (GIS) Master Plan was developed in FY 2017 with a 5 year roadmap of GIS data assessment and data layers, to support services provided by these City of Berkeley Programs.

1. **In 2018**, the City created a Mobile GIS Action Plan.
2. **In 2018**, the City create a digital newsletter, The Pin Drop, to maintain a GIS culture of collaboration with stakeholders.
3. **In 2019**, the City developed a comprehensive GIS training program and platform for the City utilizing all resources available such as online and classroom workshops, videos, blogs, social media, and brown bag lunches and provide a plan for knowledge transfer.
4. **To date in 2020**, The City of Berkeley has implemented many of the recommendations detailed in their GIS Strategic Master Plan. The team operates according to Best Business Practices (BBP) and Standard Operating Procedures (SOP). **Successes include:**
  - a. Enterprise Solutions
  - b. Open Data Portal
  - c. Departmental Applications
    - i. Planning and Development
    - ii. Police
    - iii. Parks, Recreation, and Waterfront
    - iv. Health, Housing, and Community Services
    - v. Public Works



### Six Pillars of GIS Sustainability, its successes and efficiencies achieved:

#### 8.7.1 GIS GOVERNANCE

- The GIS Users group is now established and meets on regular basis. The GIS Coordinator keeps the group informed of the progress on various initiatives on GIS Master plan and incorporated feedback to prioritize the projects.

#### 8.7.2 GIS DATA/DATABASES, PROCEDURES

##### • **GIS Newsletter**

- The GIS newsletter markets our successes and services and, in general, increases communications around GIS.
- **Efficiency Achieved**
  - Provide transparency and accountability by keeping stakeholders and community members in the loop through easily accessible media.

##### • **Policies and Procedures Documentation**

- Standard operating procedures and policies detail the ways in which GIS technologies are to be manipulated in order to meet user needs.
- **Efficiency Achieved**
  - Prevent redundancy in data compilation and unnecessary effort. Adoption also decreases organizational liability.



- **GIS Community Portal**

- The GIS Community Portal, <https://www.cityofberkeley.info/gisportal/> , launched to the public in January 2019. An Off Agenda Memo was shared with Council and the News Release was posted on the city website.
- The existing GIS web page had a legacy product known as “Parcel Popper” which allowed citizens to enter an address and receive information for a given property including regulations. The new portal features a custom widget that mimics the functionality of Parcel Popper but also includes additional features.
- **Efficiency Achieved**
  - The GIS Community Portal allows residents, businesses, city officials, and developers the ability to better understand what zoning and land use policies apply to properties of interest to them, without the need to call staff necessarily

- **GIS Data Assessment**

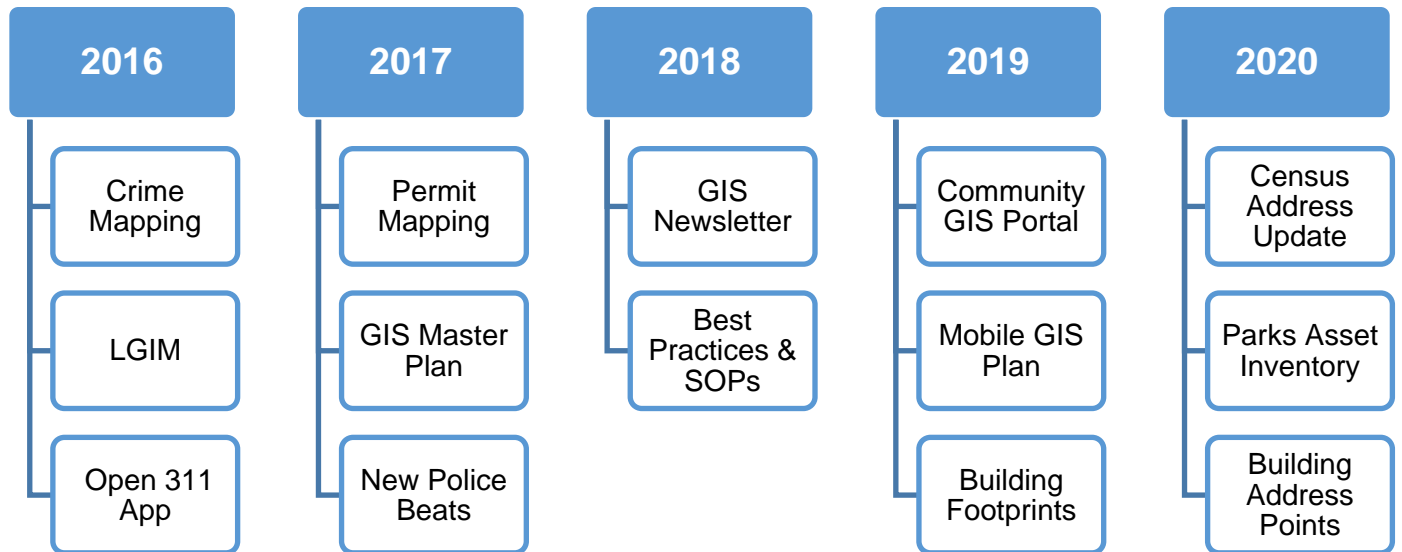
- The GIS Data Assessment was completed in June 2018.
- **Efficiency Achieved**
  - The assessment allows the City to have a comprehensive snapshot of the quality and completeness of all GIS data and establish a benchmark of data accuracy. It also allows the City to plan and prioritize improvements to its extensive data repository. The final report will include an Excel table of price estimates for improving the data layers ordered by Department.

- **GIS Mobile Plan**

- The GIS mobile plan was completed in September 2018.
- **Efficiency Achieved**
  - The mobility of GIS and the use of mobile technology to view, edit and analyze geospatial data, as well as make decisions in the field is a critical factor in building a true citywide, enterprise-wide, scalable, and enduring GIS.

### 8.7.3 **GIS INFRASTRUCTURE, SOFTWARE**

- The GIS server and storage infrastructure was upgraded to latest version for both public safety and non-public safety and then later migrated to Nutanix for Disaster recovery.
- The city also continued its commitment to ESRI Enterprise Licensing Agreement.
- **Efficiency Achieved**
  - The GIS Software was upgraded to meet the needs of Text to 911 needs



## ENTERPRISE SOLUTIONS

### • COMMUNITY GIS VIEWER

- Viewer contains multiple templates for:
  - Property and Planning
  - Recreation
  - Environment
  - Transportation
  - City Services
- A custom “Parcel Conditions” Widget allows users to query information on property within the City from multiple sources. Information can be searched by address, Parcel APN, or Owner.

Visit - <https://www.cityofberkeley.info/gisportal/>

## DEPARTMENTAL SOLUTIONS

### • HEALTH, HOUSING & COMMUNITY SERVICES

- Berkeley has an ordinance that forbids the sale of tobacco within 600 feet of a school. Users can type in the address of their business into this web map to determine whether it lies within the 600-foot buffer zone.
- [Tobacco Retail Buffer Zone Map](#) (clickable link)
- **Daytime Population Mapping & Statistical Analysis – Health, Housing & Community Services Department**
  - In partnership with IT, the Public Health Division utilized the statistics tool, R, and GIS to create an interactive application of statistics and mapping of the daytime population (and daily transitions from night to day) in Berkeley.

- **PARKS, RECREATION & WATERFRONT**

- Story Maps - ArcGIS Applications that combine text, interactive maps and multimedia content to tell the public a story.
- ["Berkeley Parks Highlights: A Virtual Tour"](#) (clickable link)
- ["City of Berkeley Measure T1 Capital Improvement Projects"](#) (clickable link)
- **Tree Inventory Project** - There was a need by the forestry folks to update tree species and their respective common names as drop down menus or picklists to an existing tree inventory application using GIS. Staff figured out how to get the data choices needed into the app in a way that makes it easy for the forestry folks to update the GIS data layer from the field.
- **Parks Viewer**
  - Allows viewing and querying of park assets
  - Contains supplemental data, including the tree inventory, transportation routes and stops, flood zones, and more
  - Includes custom widgets

- **PLANNING DEPARTMENT**

- In 2017, the City launched a map application <https://berkeley.buildingeye.com/> for the public to browse and query permits.
- The 2017 GIS Master Plan identified building outlines as a needed reference data layer and recommended its purchase yearly.
- The Master Plan also recommended building outlines for disaster planning use – to identify location of destroyed structures.
- In 2019, the City acquired a Building Outlines layer from Pictometry.
- Future building outline acquisition allows for change detection of new and demolished structures.
- **Density model of Southside**
  - The GIS team created a density model of the zoning districts R-S and R-SMU. Land Use Planning wants to determine which buildings should be encourage to build with higher density standards.
  - Planning will leverage the model to analyze density and consider zoning changes and land-use options. The tool can also be used for engagement. Zoning can be complex and confusing, and this offers a way to visualize that complex information.

- **POLICE** - Police calls for service are geocoded and uploaded nightly to both our open data portal and the clickable links are provided below:

- [Calls for Service](#)
- [Calls for Service - Heat Map](#)
- And, a private party solution: [CrimeMapping.com](#)
- [The City is considering to replace the crime mapping software in calendar year 2021](#)

- **PUBLIC WORKS**

- [Bike Parking Map](#) - The public uses this web map to help us locate the best places for new bike racks <http://cityofberkeley.info/bikeparkingmap/>

- Engineers use ArcGIS Desktop (ArcGIS Pro) to edit our sanitary sewer network directly in the Enterprise servers. These changes are available to field staff in real time through interactive map applications.
- **Community input map – Public Works Department**
  - The City’s Pedestrian Master Plan update process began in 2018 and continues through 2019. The Transportation Division gathered feedback via an interactive wikimap  
<http://wikimapping.com/wikimap/Berkeley-Pedestrian-Master-Plan.html#.W1EIL9hKiys> .
  - They invite the community to show us where and why you walk in Berkeley by drawing and commenting on the map.

#### 8.7.4 **GIS Trainings and Workshops**

- **GIS Training portal was launched for City staff**
- **GIS 101 Training**
  - Ten staff from across departments attended VTA class “GIS 101 for New Employees” early this year. The GIS Coordinator taught the course. Staff learn the fundamentals of GIS and how to access the city’s Enterprise GIS resources.
- **GIS Orientation for new Planning staff**
  - Six new staff from the Planning Department attended a special GIS 101 with an emphasis on Planning GIS. The GIS Coordinator taught the course.
- **GIS Disaster Preparedness & Resiliency Workshop 2018**
  - Co-hosted by IT and our GIS vendor, Esri, over 20 participants from cities and counties around the Bay Area joined us for a hands-on GIS disaster preparedness and resiliency workshop. We discussed recent disasters in our region and learned how to best prepare our GIS for a natural disaster.
- **Mobile GIS Training**
  - The GIS Coordinator participated in a hands-on Mobile GIS training for City staff with our GPS vendor and our Esri technical advisor. The GIS Coordinator also conducted a classroom Mobile GIS training for City staff in November.
- **Desktop training**
  - The GIS Coordinator led a GIS Desktop Users training in best practices and standard operating procedures in December.
- **GIS Community Portal Trainings**
  - The GIS Coordinator conducted hands-on training in September 2019 for City staff in Planning and Fire whose use the Parcel Conditions application.
- **Census 2020**
  - The GIS Coordinator attended the California State Data Center annual meeting in October. This year’s meeting focused on the 2020 Census and provided an update on the status of LUCA for California.
- **Esri User Conference**
  - The GIS Coordinator and other city staff attended our GIS vendor’s conference in Jul virtually due to COVID

### 8.7.5 **Return of Investment (ROI) and Business Realization Planning**

#### **A GeoSmart City: Resilience and Mission Alignment**

- Improved Information Retrieval
- Real-time, Dynamic Databases
- Innovative Decision Making
- Accurate and Reliable Record Keeping
- Real-time Dashboard Analytics
- Automated and Advanced Field Inspection and Data Collection
- Streamlined Processes and Communications — Better Collaboration
- Improved Navigation and Locational Awareness
- Proactive Management and Increased Efficiencies
- Advanced Community Engagement
- Improved Social Equity
- Interoperability and Integration with other organizational systems
- **Public Safety and Police**
  - Crime Patterns, Crime Zones, Crime Heat Maps
  - Historic data and types of crime.
    - Determine patrol beat changes
    - Determine Community policing strategies
- **Utilities and Assets**
  - Age and condition of Infrastructure and Assets
  - Predict where failure will occur based on age and condition of infrastructure to determine City budget for replacement

*GIS is an advanced tool to support resilience and sustainability.*

### 8.7.6 **GIS MAJOR PROJECTS IN PROGRESS:**

#### **Asset Extraction and 360 Street Level Imagery (In Progress)**

DoIT collaborated with Public Works to identify assets for data extraction. The proposal from CycloMedia is for the following: 360° GeoCycloramas™ will be captured for 285 miles total which will include LiDAR capture and processing. The project was approved by Council in July 2020 and the drive through is completed. The next step is the Asset extraction for various asset types including: Curb paintings, Pavement markings, Signs (MUTCD), Light posts, Parking meters, Pedestrian and bike trails and sidewalk inventory and condition assessment.

**Reason:** Geographic Information Systems (GIS) is a critical tool for infrastructure asset management to gathers, manages and analyzes data in a map based view.

**Sub GIS Projects:** Cyclomedia (Geographic Information System infrastructure asset data acquisition), Sewer Master Plan, NexGen

**Digitize Parks Inventory - GREEN CITY GIS INVENTORY (In Progress)**

This project includes a comprehensive inventory of the City of Berkeley's parks system. This project is phase I of a total solution. It includes the databases design and field inventory of all infrastructure, buildings, such as bathrooms, benches and newly planted trees in the city parks system. (Note: the City has an existing inventory of trees that requires updating). The City is working with the vendor Geographical Technology group (GTG) to digitize irrigation features for 26 parks and nine miles of medians.

**GIS PUBLIC PORTAL ENHANCEMENT (In Progress)**

This project involves updating the City of Berkeley's existing Parcel Condition Widget (PCW). Today the PCW offers very specific functionality that includes access to parcel information stored only in the GIS database. Accessing other parcel pertinent information required linking to other software solutions. The City required the PCW to have additional "seamless" functionality that will include the ability of a user to see parcel information stored in other systems including the City's permitting system. The objective of this project is to add the following functionality to the City's PCW - **Add BESO status and scores via link to Green Building Registry and our open data portal**

## 8.7 Useful Links

### + Digital Strategic Plan (DSP)

- [IT DSP Findings & Recommendations](#)- Identify a comprehensive set of possible management, business process improvement, and Information Technology initiatives.
- [Vol 2: Implementation Roadmap](#) - Provide final proposed and prioritized initiatives, budget estimate, 5-year timeline, and cost allocation plan.
- [Annual DSP Update 2017](#) – Information Report - Sep 19, 2017

+ [Berkeley Community Connection Portal](#) – City's Open Data set powered by 311 requests for service information and enables community members to search by an address or filter by neighborhood and date range, and save the search by creating an alert to monitor changes over time is provided in an easily searchable format and depicted on a city map.

Visit - <https://berkeley.connect.socrata.com>

+ [Geographical Information Systems \(GIS\) Master Plan](#) - The document reflects a combination of Needs and Data Assessment, Technology and Organizational Readiness Assessment, and identifying a roadmap for GIS implementation and Tactical Plan that is technologically strategic, operationally responsive, and fiscally responsible.

+ [GIS Community Portal](#) - Provides GIS interactive maps and map pdf's. All data, information, and maps are provided "as is" without warranty or any representation of accuracy, timeliness or completeness. Visit - <https://www.cityofberkeley.info/gisportal/>

+ [GIS Map Room](#) - City's Geographic Information System (GIS) resources via an interactive map. Visit: <https://www.cityofberkeley.info/maproom/>

+ [Open Data Portal](#)- City's Open Data Portal serves community and provides 120 data sets. Visit: <https://data.cityofberkeley.info/>

+ [Online Permits Portal](#) - Implement an online mapping solution for City-issued permits to enable community members to search and review permit details and to easily identify permitting information based on address and business type. Visit - <https://berkeley.buildingeye.com/>

+ [Online Services Center \(311\)](#) - Contains information on various online services Visit: <https://www.cityofberkeley.info/onlineservicecenter/>

+ [Records Online](#) - Records Online contains Election information, Ordinances, Resolutions, Agendas, Meeting Minutes, Contracts, Communications and other City documents. Visit - <https://www.cityofberkeley.info/recordsonline/paFiles/cqFiles/index.html>

+ [Bike Parking Map](#) - The public uses this web map to help us locate the best places for new bike racks Visit: <http://cityofberkeley.info/bikeparkingmap/>

+ ["Berkeley Parks Highlights: A Virtual Tour"](#)

+ ["City of Berkeley Measure T1 Capital Improvement Projects"](#)

+ [Tobacco Retail Buffer Zone Map](#)







Office of the City Manager

WORKSESSION  
March 16, 2021

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Rama Murty, Acting Budget Manager

Subject: Unfunded Liability Obligations and Unfunded Infrastructure Needs

INTRODUCTION

On May 29, 2012, the City Council adopted Resolution No. 65,748 N.S. "Requiring that the City Manager Develop and Publish a Biennial Report of Current City Liabilities and Projections of Future Liabilities.<sup>1</sup>" The purpose of this report is to provide a thorough overview of the City's long-term expenditure obligations in a format that is easily understandable in a single report.

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

1. Employee and retiree benefit costs over a 10-year horizon
2. Costs for current active employees including:
  - a. total payroll costs for active employees during the current year;
  - b. projected payroll costs for the same number of employees for the next 10-year period with costs increases based on MOU's with bargaining units.
3. A summary of all current City obligations including:
  - a. general obligation bonds;
  - b. certificates of participation;
  - c. loans;
  - d. all other current long-term obligations.

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<sup>1</sup> [http://www.cityofberkeley.info/Clerk/City\\_Council/2012/05May/City\\_Council\\_05-29-2012\\_%e2%80%93\\_Regular\\_Meeting\\_Annotated\\_Agenda.aspx](http://www.cityofberkeley.info/Clerk/City_Council/2012/05May/City_Council_05-29-2012_%e2%80%93_Regular_Meeting_Annotated_Agenda.aspx) (Item #39)

4. Summary of all capital assets and infrastructure including:
  - a. Appraisal of Public Buildings valued at \$5 million or more
  - b. Condition of Streets and Roads using the “Street Saver” information projecting costs to bring streets and roads condition to an average Pavement Condition Index (PCI) of 75 within 5 years.
  - c. Sewers: updated asset management plan for public sewers including projected costs for succeeding 5 years and projected revenue from sewer fees for the succeeding 5 years.

This report is required to be published every two years, in the second year of the biennial budget, in advance of the Council’s consideration of the upcoming biennial budget. The City is implementing a one-year budget for FY 2022 and then implement a biennial budget process for FY 2023 & FY 2024.

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

#### SUMMARY

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

- Due to projected increases in expenses, primarily pension and medical, the City currently projects a General Fund structural deficit.
- The City has a significant pension liability that is anticipated to grow due to recent financial losses experienced by CalPERS. Also, of note, the City’s pension contributions for all City employees are anticipated to increase more than \$40 million over the next ten years putting a strain on resources and services.
- The City’s retiree health plans are significantly underfunded with the funded status of the City’s plans ranging from a low of 6.16% to a high of 43.79%.
- Due to the age of the City’s infrastructure and limited resources allocated to infrastructure, the City’s unfunded needs tied to infrastructure have increased over the years and is anticipated to range around \$1.1 billion from FY 2022 to FY 2026. Of note, the City’s street infrastructure is likely to further deteriorate without a significant infusion of new resources.

- Despite the recent adoption of Measure T1 and Measure O, the City has an aggregate bond tax rate for FY 2020 of 0.0540% (which represents \$54 for each \$100,000 in assessed value (“A.V”), which is below the historical peak of approximately \$95 (per \$100,000 in A.V) in tax year 1999-2000.
- The City’s ability to borrow is negatively impacted by its unfunded liabilities and the City needs to perform additional analysis to determine the extent to which the City’s unfunded liabilities will constrain future bond initiatives.
- Due to significant decreases in revenue and rising expenses, the Marina Fund is on the brink of insolvency and requires additional resources to meet current obligations.

## CURRENT SITUATION AND ITS EFFECTS

### **1. Employee and Retiree Benefit costs over a 10-year horizon**

#### **a. CalPERS Retirement Benefits**

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

On January 1, 2013, the Public Employee Pension Reform Act (PEPRA) went into effect. The State law applies to employees hired after January 1, 2013, who are new to CalPERS. These employees are termed PEPRA members and employees that were enrolled in CalPERS (without significant separation) prior to January 1, 2013, are now referred to as “classic” members.<sup>2</sup>

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

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

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

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

In December 2016, the CalPERS Board lowered the discount rate from 7.50 percent to 7.00 percent using a three-year phase in beginning with the June 30, 2016, actuarial valuation<sup>3</sup>. The employer contribution for FY 2020 was calculated using a discount rate of 7.25 percent. CalPERS reduced the return rate to 7.25 percent in July 2018 and will reduce it further to 7.0 percent this year. CalPERS lowered the discount rate because they determined that achieving a 7.5 percent rate of return was now far less likely. The result of this lowered discount rate is that liabilities have grown and the City’s pension contributions have significantly increased.

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

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

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<sup>3</sup> [https://www.calpers.ca.gov/page/newsroom/for-the-record/2017/action-prudent-smart-decision?utm\\_source=newsroom&utm\\_medium=banner&utm\\_campaign=FTR-Discount-Rate](https://www.calpers.ca.gov/page/newsroom/for-the-record/2017/action-prudent-smart-decision?utm_source=newsroom&utm_medium=banner&utm_campaign=FTR-Discount-Rate)

For FY 2020, CalPERS reported a 4.7 percent return on investments. This is obviously below CalPERS assumed 7 percent discount rate. As a result, the City's pension contributions will likely increase beyond what is projected in this report as CalPERS seeks to recoup its losses commencing in FY 2023.

With respect to future liabilities for the costs of these plans, the City has regularly retained an outside actuary to review the CalPERS' estimates and provide independent actuary estimates that the City can use in budget planning. The chart below provides CalPERS payment amounts for FY 2021 and FY 2022 as provided to the city by CalPERS. The outside actuary provided estimated payment amounts for FY 2023 through FY 2031.

<b>Future Payments to California Public Employees Retirement System All Plans (dollars in millions)</b>											
	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>FY 2030</b>	<b>FY 2031</b>
Misc.	35.87	39.19	41.94	44.26	47.51	48.61	51.41	53.35	55.15	57.78	60.68
Police	16.67	17.99	19.13	20.15	21.36	22.48	23.55	24.46	25.26	26.37	27.52
Fire	9.47	10.06	10.80	11.36	12.15	12.81	13.48	14.00	14.43	15.11	15.85
<b>Total</b>	<b>62.00</b>	<b>67.24</b>	<b>71.87</b>	<b>75.77</b>	<b>81.02</b>	<b>83.90</b>	<b>88.44</b>	<b>91.81</b>	<b>94.84</b>	<b>99.26</b>	<b>104.05</b>
FY 2021 and FY 2022 are based on amounts provided by CalPERS.											
FY 2023 through FY 2031 amounts are based on actuary's projections.											
Rates used reflect current MOU agreements: Miscellaneous includes the 8% employee share paid by the City on behalf of the employee as well as the negotiated employee's contribution to the employer rate.											

There are a couple of important points about the chart. The first is that over the next 10 years there is close to an estimated \$42 million dollar increase in pension costs to the City. The next point is that regardless of the City's financial position the payments will have to be made to CalPERS. This financial challenge will require us to be fiscally prudent over this period of time.

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

The funded status of a pension plan is defined as the ratio of assets to a plans accrued liabilities. Based on the CalPERS' actuarial valuations as of June 30, 2019, the City's plans are currently funded as follows: Miscellaneous 70.0%; Police Safety 61.1%; and Fire Safety 71.0%.

California Public Employees Retirement System Funded Status						
Fund Name	Valuation Date	Actuarial Source	Estimated Liability	Plan Assets	Unfunded Liability	% Funded
Miscellaneous	6/30/2019	CalPERS	\$ 1,095.0	\$ 766.8	\$ 328.20	70.0%
Police	6/30/2019	CalPERS	\$ 438.9	\$ 268.0	\$ 170.90	61.1%
Fire	6/30/2019	CalPERS	\$ 286.5	\$ 203.5	\$ 83.00	71.0%

On June 26, 2018, Council authorized the City Manager to establish an IRS Section 115 Pension Trust Fund. The fund can act as a rate stabilization fund and can be used to ease budgetary pressures resulting from unanticipated spikes in employer contribution rates<sup>4</sup>. On May 14, 2019, Council authorized the City Manager to execute a contract with Keenan Financial Services to establish, maintain, and invest the pension Section 115 Trust<sup>5</sup>. The Section 115 Trust currently has a balance of \$10,628,125.22.

On February 27, 2020 the Budget & Finance Policy Committee discussed ongoing funding into the 115 Pension Trust. The following was recommended:

1. Raise the Property Transfer Tax baseline from \$12.5 million to \$15 million. The additional \$2.5M will be allocated to the Trust
2. Property Transfer Tax in excess of \$15 million would be used to fund the City's capital infrastructure need. However, revenue generated from Measure P is excluded from this transfer.
3. Savings generate by prefunding CalPERS will be contributed to the 115 Pension Trust. On an annual basis, staff will analyze the impact of prefunding CalPERS. If the analysis determines that pre-funding CalPERS will result in budgetary savings, the net savings will be contributed to the Trust.

Staff requested Council to delay adopting these policies because the City was facing the financial impacts of the pandemic.

## b. Retiree Medical Plans

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

<sup>4</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2018/06\\_June/Documents/2018-06-26\\_Item\\_19\\_Authorization\\_to\\_Establish\\_IRS.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2018/06_June/Documents/2018-06-26_Item_19_Authorization_to_Establish_IRS.aspx)

<sup>5</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2019/05\\_May/City\\_Council\\_05-14-2019\\_-\\_Regular\\_Meeting\\_Agenda.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2019/05_May/City_Council_05-14-2019_-_Regular_Meeting_Agenda.aspx) (Item #5)

will receive benefits from the new plan. However, the original plan must still make benefit payments to existing retirees and thus must continue to be funded until those payment obligations cease.

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

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

On April 24, 2017, the City actuary presented various options that would reduce the City's unfunded liabilities tied to post-employee benefits to meet the long-term funding targets. Recommended for Council's consideration were fully prefunding annual actuarially determined contributions, investment reallocations to increase returns, and establishing an irrevocable supplemental trust<sup>6</sup>. Council has already taken action on some of these recommendations.

The following retiree medical plans are discussed in detailed below:

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

### **Police Retiree Income Benefit Plan (closed plan)**

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

Benefits are payable for the retiree's lifetime and continue for the life of the surviving spouse. For employees retiring before September 19, 2012, the City pays a monthly income benefit equal to the City's Active 2-party Kaiser premium regardless of marital status. In 2020, the City's monthly payment per participant for this benefit ranged from

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<sup>6</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2017/04\\_Apr/City\\_Council\\_04-04-2017\\_-\\_Special\\_Meeting\\_Agenda.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2017/04_Apr/City_Council_04-04-2017_-_Special_Meeting_Agenda.aspx)

\$398.27 to \$1,559.93, depending on the retirees' years of service at retirement. The monthly benefit is pro-rated based on years of service.

As of June 30, 2020, the most recent actuarial valuation date, the plan was 7.29% funded. The actuarial accrued liability for benefits in this plan was \$79.95 million, and the actuarial value of assets was \$5.83 million, resulting in an unfunded accrued liability of \$74.12 million. Since the implementation of GASB 67 and 68, the Annual Required Contribution (ARC) is no longer provided. In addition, the Police Retiree Income benefit Plan is a closed plan and therefore no "Actuarially Determined Contribution" is provided due to no new members and no payroll information.

### **Police Retiree Health Premium Assistance Plan**

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

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

Benefits are payable for the retiree's lifetime. In 2019 the City paid for employees retiring on or after September 19, 2012, a maximum of \$762.80/month toward the cost of single-party coverage and up to \$1,525.60/month toward the cost of two-party coverage for retirees under age 65 enrolled in the City's Retiree Health Plan. For retirees over age 65 the City's share of single/two-party coverage is a maximum of \$436.14/\$872.28 per month and retirees must pay the difference of the actual premium cost. The City's share will increase by either the amount Kaiser increases the retiree medical premium for that year or 6%, whichever is less. The monthly benefit is pro-rated based on years of service. The City pays this benefit plan on a pay-as-you-go basis.

As of July 1, 2019, the most recent actuarial valuation date, the Actuarially Determined Contribution (ADC) was \$4.43 million and the plan was 6.16% funded. The actuarial accrued liability for benefits was \$40.43 million, and the actuarial value of assets was \$2.49 million, resulting in an unfunded accrued liability of \$37.94 million

### **Fire Employees Retiree Health Plan**

The City sponsors a retiree health benefit plan for its Fire employees. To be eligible for benefits, Fire employees must retire from the City on or after July 1, 1997, be vested in a CalPERS pension, and retire from the City on or after age 50. Retirees can select



from among any of the health plans offered to active employees. Benefits commence immediately upon retirement, but may also be deferred for a period during which the member is covered under another health insurance plan.

Benefits are payable for the retiree's lifetime and continue for his or her covered spouse's/domestic partner's lifetime. The City makes a contribution toward the medical premium depending on whether the retiree has dependent coverage, and date of retirement. The City's contribution increases by 4.5% per year regardless of the amount of increase in the underlying premium rate. The City's contribution is prorated based on years of service. In 2019, the City's monthly premium cost per participant for this benefit was a maximum of \$606.99 for single party and \$1,210.91 for two-party

As of June 30, 2019, the most recent actuarial valuation date, the plan was 43.79% funded. The actuarial accrued liability for benefits was \$25.83 million, and the actuarial value of assets was \$11.31 million, resulting in an unfunded accrued liability of \$14.52 million.

#### **Retiree Health Premium Assistance Plan (Non-safety Members)**

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

Benefits are payable for the retiree's lifetime and continue for his or her covered spouse's/domestic partner's lifetime. The City pays the monthly cost of the monthly premiums up to a Participant's applicable percentage of the Base Dollar Amount and subject to annual 4.5% increases as specified in the Retiree Health Premium Assistance Plan document. In 2018, the City's monthly premium cost per participant for this benefit was a maximum of \$513.17 for single party and \$886.14 for two-party. A Participant's applicable percentage is based on years of service with the City. The City funds the plan based on the MOU. Contribution amounts are negotiated and vary by bargaining unit.

As of July 1, 2019, the most recent actuarial valuation date, the plan was 40.62% funded. The actuarial accrued liability for benefits was \$68.46 million, and the actuarial value of assets was \$27.81 million, resulting in an unfunded accrued liability of \$40.65 million.

#### **Safety Members Pension Fund (closed plan)**

The City also maintains the Safety Members Pension Fund (SMPF). This plan is a single-employer defined benefit pension plan for fire and police officers that retired before March 1973. In March 1973 all active fire and police officers were transferred

from SMPF to CalPERS. Service and disability retirement benefits from the SMPF are based on a percentage of salary at retirement, multiplied by years of service. Benefits are adjusted annually by either:

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

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

The City was paying the difference between the total SMPF benefits and the amount received from the Massachusetts Mutual Guaranteed Income Contract (GIC). The City will receive declining amounts from the GIC through FY 2019. At June 30, 2020, the unfunded accrued liability was \$1.76 million. There were 8 participants remaining in the plan with the average age at 96.7 years.

Retiree Medical Plan Actuarial Data								
<i>(dollars in millions)</i>								
Plan	Measurement Date	Actuarial Estimated Liabilities	Plan Assets	Net Pension Liability	Actuarially Determined Contribution (ADC)	Actual Contribution *	% Funded	Total Plan Members
Police Employee Retiree Income Benefit Plan (closed)	6/30/2020	\$ 79.95	\$ 5.83	\$ 74.12	\$ -	\$ 2.05	7.29%	149
Police Employees Retiree Health Premium Assistance Plan (new)	7/1/2019	\$ 40.43	\$ 2.49	\$ 37.94	\$ 4.43	\$ 0.40	6.16%	189
Fire Employees Retiree Health Plan	7/1/2019	\$ 25.83	\$ 11.31	\$ 14.52	\$ 2.16	\$ 0.76	43.79%	220
Retiree Health Premium Assistance Plans (Non-Safety Members) *	7/1/2019	\$ 68.46	\$ 27.81	\$ 40.65	\$ 5.53	\$ 2.00	40.62%	1656
Safety Members Pension Fund	6/30/2020	\$ 1.86	\$ 0.10	\$ 1.76	\$ -	\$ 0.57	5.38%	8
		<b>\$ 216.53</b>	<b>\$ 47.54</b>	<b>\$ 168.99</b>	<b>\$ 12.12</b>	<b>\$ 5.78</b>	<b>21.96%</b>	<b>2222</b>
*Actual contribution does not include interest income								

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

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

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

The City's administrators of the money purchase pension plan are Hartford Life Insurance and Prudential Retirement Services. The plan is a defined contribution plan whereby the City contributes 5.7% of salary up to a salary of \$32,400 into a tax-deferred and self-directed investment account and 1% of salary up to a salary of \$32,400 into a disability reserve account for each permanent City employee. The total assets of SRIP I available for benefits at June 30, 2018, was \$7,992,258, which was comprised of participant accounts. These assets are the property of the individual account holders and not the property of the City. These assets cannot be used to pay disability benefits.

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

Benefits are payable for the disabled participant's lifetime or until recovery from disability. The third-party administrator is Cigna. Currently, the City pays the cost of the monthly disability benefits on a pay-as-you-go basis. As of July 1, 2020, there were a total of 62 closed group participants, 8 active employees and 54 disabled participants receiving benefits. The unfunded liability for SRIP I at July 1, 2020, the date of the last actuarial study, was \$13,364,000.

**Workers' Compensation Program**

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

The recent actuarial study by Bickmore Actuarial showed the City's estimated outstanding liabilities as of June 30, 2021 at an 80 percent confidence level is \$42,384,000 for the workers' compensation program. The City's Workers' Compensation Fund ended FY 2020 with a fund balance of \$41,495,756. This means that the City is not quite able to fund its estimated liabilities in its Workers' Compensation Program.

## 2. Current Costs for Active Employees

As of June 30, 2020, the City budgeted for 1,637 full-time equivalents (FTE). At any given time, the number of employees on the payroll is generally less than the budgeted number of FTE due to retirements and employment separations for other reasons. For purposes of this report, the analysis of the projected payroll costs for the next 10 years is based on the number of authorized budgeted FTE. That number was then projected based on the negotiated cost of living adjustments established in collective bargaining agreements. Other increases were also assumed for medical costs, dental costs, cash in lieu, shoes and tools allowance, commuter checks, and other benefits. Based on these assumptions, total payroll costs for all funds would grow from \$278.9 million in FY 2021 to \$391.0 million in FY 2031. The FY 2021 Adopted Fringe Benefits Budget included almost \$15.7 million in personnel budget deferrals to help balance the budget. Taking that into account and with Zero COLAs applied in future years, the entire increase of \$96.4 million is due to the increase in the costs of benefits.

Citywide Total Personnel Costs and Fringe Rate Over Time with Zero COLAS											
Zero COLA	FY 2021 Adopted	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Total Payroll	\$ 174.6	\$ 174.9	\$ 174.9	\$ 174.9	\$ 174.9	\$ 174.9	\$ 174.9	\$ 174.9	\$ 174.9	\$ 174.9	\$ 174.9
Total Benefits	\$ 104.3	\$ 130.3	\$ 141.8	\$ 149.1	\$ 158.1	\$ 165.2	\$ 174.5	\$ 183.2	\$ 192.4	\$ 203.7	\$ 216.1
Fringe Rate	60%	74%	81%	85%	90%	94%	100%	105%	110%	116%	124%
Total Personnel Costs	\$ 278.9	\$ 305.2	\$ 316.7	\$ 324.0	\$ 333.0	\$ 340.1	\$ 349.4	\$ 358.1	\$ 367.3	\$ 378.6	\$ 391.0

A couple of significant factors driving the increase in benefit costs are the following items:

- Health care premiums for active employees (meaning exclusive of retiree medical contributions). The cost of premiums for medical alone is estimated to grow from \$25.6 million in FY 2021 to almost \$79.6 million in FY 2031 assuming annual increases of 12 percent as has been assumed in developing our budgets for many years now.
- Employer Paid Portion of PERS Costs is expected to rise from \$64 million in FY 2021 to \$87 million in FY 2031. This does not take into account any contributions made by employees towards overall City PERS costs that will be paid to PERS annually as shown in a previous chart.

### 3. Summary of all current City Obligations (GO bonds, COPs, etc.)

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

The City currently has five outstanding general obligation (GO) bond authorizations (each with multiple series of bonds) related to public safety, libraries, senior centers, animal shelter, street and integrated watershed improvements, infrastructure and facilities improvement, and affordable housing. The oldest of these authorizations dates back to 1992. The City has an aggregate bond tax rate for FY 2020 of 0.0540 (which represents \$54 for each \$100,000 in assessed value ("A.V"). This rate has dropped from a historical peak of approximately \$95 (per \$100,000 in A.V) in the tax year 1999-2000. Based on projected annual increases in A.V and decreasing aggregate annual debt service over time, the tax rate will drop with the final tax collected in FY 2051 based on the current outstanding debt (Measure O is the latest bond authorization).

<u>Bond Authorization</u>	<u>Authorization Year</u>	<u>Authorization Amount</u>	<u>Bond issued Amount</u>	<u>Unissued Amount</u>	<u>Outstanding Principle Balance as of 6-30-2020</u>	<u>Final Maturity</u>	<u>FY 2020 BONDS TAX Rate</u>
Measure FF	2008	\$26,000,000	\$26,000,000	\$0	\$19,480,000	2040	0.0070%
2015 GO Refunding Bonds (Refunding Measure G, S, I Consolidated)	2015	88,700,000	88,700,000	0	25,960,000	2038	0.0140%
Measure M	2015	30,000,000	30,000,000	0	27,630,000	2045	0.0080%
Measure T1	2016	100,000,000	35,000,000	65,000,000	31,835,000	2047	0.0160%
Measure O	2018	135,000,000	38,000,000	97,000,000	38,000,000	2051	0.0090%
<b>TOTAL</b>		<b>\$379,700,000</b>	<b>\$217,700,000</b>	<b>\$162,000,000</b>	<b>\$142,905,000</b>		<b>0.0540%</b>

It has been the City's debt policy to issue each series of bonds with level amortization and terms of either 25 or 30 years. Many of the series have been refinanced for lower interest rates over time. Given the fixed term for each bond series, the aggregate annual debt service for all outstanding bonds decreases over time as each bond reaches its final maturity. Further information about the City's current and future debt capacity is included in a later section of this report discussing options to address long term costs.

#### 4. Summary of All Capital Assets and Infrastructure

The City has an extensive portfolio of capital assets and infrastructure, which includes 95 public buildings, 254 miles of public sanitary sewer mains and 130 miles of public sewer laterals, 52 parks, 2 pools, 3 camps, and 42 different facilities served by the City's IT systems. Maintaining these assets is a costly and time-consuming enterprise that requires significant resources and constant attention. Additionally, Berkeley is an aging city and thus its infrastructure faces challenges that other younger cities do not.

Several recent actions by the voters have provided an important boost to the resources available for meeting these challenges:

- In November 2016, Berkeley voters passed [Measure T1](#),<sup>7</sup> authorizing the City to sell \$100 million of General Obligation Bonds to repair, renovate, replace, or reconstruct the City's aging infrastructure and facilities, including sidewalks, storm drains, parks, streets, senior and recreation centers, and other important City facilities and buildings. Council approved 45 projects to be completed in Phase 1, spanning 2017 to 2021. [The majority of these projects are now complete](#), with the balance to be completed in 2021.<sup>8</sup> On December 15, 2020, Council approved more than 30 additional projects to be completed in Phase 2, between 2021 and 2026. With these allocations, the full \$100 million of Measure T1 funds will be expended by 2026, if not sooner.
- The November 2014 voter approval of Measure F (a Citywide special parks parcel tax) provided an additional \$750,000 per year for major maintenance projects, raising annual funding for parks capital and major maintenance projects from the prior \$250,000 to \$1 million.
- In November 2012, Berkeley voters approved Measure M (a general obligation bond), to provide an additional \$30 million towards improving the condition of city streets and where appropriate, install Green Infrastructure projects as defined in the Watershed Master Plan. The funds raised with this bond have been fully expended and the City invested these resources to accomplish the following:
  - It would be great to get a summary from public works of the improvements from these bonds - not all the detail but X miles of roads slurry sealed, reconstructed, any green infrastructure projects of note and sidewalk work.

<sup>7</sup> See <https://www.cityofberkeley.info/MeasureT1/>.

<sup>8</sup> See <https://www.cityofberkeley.info/MeasureT1Updates.aspx>.

- In November 2014, Alameda County voters approved Measure BB (assessment 0.5% sales tax), increasing funding for local transportation enhancements. Berkeley's allocation is approximately \$2.6 million annually and is applied to improving the pavement condition and specific street/transportation improvement projects.

Despite these measures, City facilities and infrastructure needs continue to exceed available funds. The minimum unfunded needs in parks, pools and camps exceed \$103 million. The amount of recurring funding to address these needs has been bolstered by the passage of Measure F, but is still only \$1.4 million per year. The unfunded needs at the Waterfront exceed \$113 million. There is \$350,000/year planned for capital in the Marina Fund, which is insufficient to address the unfunded needs at the Waterfront of \$113 million. Even this level of funding exceeds the Fund's resources: the Marina Fund is projected to need \$650,000 in the next budget year just to maintain baseline Waterfront operations. Capital needs at the Waterfront are otherwise dependent on external funding and grants. The City has begun the Berkeley Marina Area Specific Plan (BMAASP), which is expected to develop alternative approaches to address the structural deficit, exhausted reserves, and declining operating revenue that makes it impossible for the Marina Fund to reinvest in its facilities.

The unfunded needs in streets, sidewalks, storm drain/watershed, sewer, transportation and buildings/facilities exceeds \$990 million. The amount of recurring funding to address these needs is \$31.5 million.

These costs will continue to increase through typical wear and tear on our City infrastructure in the coming years, plus the pressures of long-deferred maintenance. As needed improvements continue to be deferred, operating and maintenance costs rise and rehabilitation and replacement costs increase substantially. The figures in Attachment 3 do not account for these additional cost escalators.

#### **a. Parks, Waterfront, Pools, and Camps**

The Parks, Recreation & Waterfront Department (PRW) operates, maintains and manages 52 parks, 4 community centers, 2 clubhouses, 2 pools, 3 resident camps, 15 sports fields, 49 sports courts, 63 play areas, 36 picnic areas, 35,000 street trees and park trees, 152 landscaped street medians and triangles, 263 street irrigation systems, and 30 restrooms and out-buildings. In addition, PRW operates and maintains the Berkeley Waterfront and its related facilities, including the docks, pilings, channel, streets, pathways, parking lots, buildings, trails, Adventure Playground, and 1,000 boat and berth rentals.

Recurring funding available for capital and major maintenance of these facilities is \$1.4M, (see table below).

## Annual Funding for Parks, Waterfront, Pools & Camps Capital & Major Maintenance Needs

Funding Source	Annual Funding
Parks Tax Fund	\$1,000,000
Capital Improvement Fund	\$400,000
Marina Fund	\$350,000
Camps Fund <sup>9</sup>	\$0
<b>Total Funding Available</b>	<b>\$1,750,000</b>

Unfunded needs in these facilities are summarized in the table below, and available in detail at

[http://www.cityofberkeley.info/Parks\\_Rec\\_Waterfront/Home/Unfunded\\_Capital\\_Projects\\_List.aspx](http://www.cityofberkeley.info/Parks_Rec_Waterfront/Home/Unfunded_Capital_Projects_List.aspx).

## Unfunded Needs in Parks, Waterfront, Pools & Camps Facilities and Infrastructure

Needed Improvements	Cost Estimate
Resident Camps	\$5,910,000
Waterfront	\$113,167,000
Pools	\$11,750,000
Park Buildings/Facilities	\$32,960,000
Parks (General)	\$9,900,000
Parks (Specific)	\$38,902,000
Park Restrooms	\$4,450,000
<b>Total</b>	<b>\$217,039,000</b>

The majority of these unfunded needs are at the Waterfront, where many of the docks, pilings, buildings, parking lots and streets have reached the end of their useful life and are starting to fail. As documented in multiple reports over the last several years<sup>10</sup>, there

<sup>9</sup> Due to the loss of Berkeley Tuolumne Camp, the Camps Fund does not have sufficient funds at this time to cover any annual investment in capital or major maintenance.

<sup>10</sup> See November 10, 2020 Marina Fund presentation to Council Budget & Finance Policy Committee ([https://www.cityofberkeley.info/uploadedFiles/Clerk/2020-11-12\\_Item\\_2c\\_Budget.pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/2020-11-12_Item_2c_Budget.pdf)); December 13, 2018 Off-Agenda Memo ([https://www.cityofberkeley.info/uploadedFiles/Clerk/Level\\_3\\_-\\_General/Marina%20Fund%20Update%20121318.pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Marina%20Fund%20Update%20121318.pdf)); November 15, 2018 Worksession Report ([https://www.cityofberkeley.info/Clerk/City\\_Council/2018/11\\_Nov/Documents/2018-11-15\\_WS\\_Item\\_02\\_Parks\\_Recreation\\_Waterfront\\_pdf.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2018/11_Nov/Documents/2018-11-15_WS_Item_02_Parks_Recreation_Waterfront_pdf.aspx)); July 1, 2018 Off-Agenda Report ([https://www.cityofberkeley.info/uploadedFiles/Clerk/Level\\_3\\_-\\_General/CM%20Update%20-%20Waterfront%20-%20Hs%20%20Lordships%20\(w%20attachments\).pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/CM%20Update%20-%20Waterfront%20-%20Hs%20%20Lordships%20(w%20attachments).pdf)); May 8, 2018 Worksession Report ([https://www.cityofberkeley.info/Clerk/City\\_Council/2018/05\\_May/Documents/2018-05-08\\_WS\\_Item\\_03\\_Parks\\_Recreation\\_Waterfront.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2018/05_May/Documents/2018-05-08_WS_Item_03_Parks_Recreation_Waterfront.aspx)); May 8, 2018 Proposed Budget Update ([https://www.cityofberkeley.info/Clerk/City\\_Council/2018/05\\_May/Documents/2018-05-08\\_WS\\_Item\\_01\\_FY\\_2019\\_Proposed\\_Budget\\_Update.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2018/05_May/Documents/2018-05-08_WS_Item_01_FY_2019_Proposed_Budget_Update.aspx)); April 12, 2018 Off-Agenda Report ([https://www.cityofberkeley.info/uploadedFiles/Clerk/Level\\_3\\_-\\_General/Marina%20Fund%20Update%20041218.pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Marina%20Fund%20Update%20041218.pdf)); and November 7, 2017 Worksession Report ([https://www.cityofberkeley.info/Clerk/City\\_Council/2017/11\\_Nov/Documents/2017-11-07\\_WS\\_Item\\_02\\_Parks\\_Recreation\\_and\\_Waterfront\\_CIP.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2017/11_Nov/Documents/2017-11-07_WS_Item_02_Parks_Recreation_and_Waterfront_CIP.aspx)).



is a diminishing ability to pay for the pressing capital needs in the Waterfront. The Marina Fund, which is the City's mechanism for managing all Waterfront revenues and expenditures, is projected to be insolvent in FY 2022. Revenues have declined by 20% in the last five years, from \$6.4 million in FY 2016 to an estimated \$5.1 million in FY 2021 as a result of safety and security concerns and failing infrastructure, and most recently due to the COVID-19 pandemic, which has hit our restaurant, hotel and commercial office tenants particularly hard. The combination of falling revenue and increasing expenditures have strained the relatively small Marina Fund to a breaking point.

The City has begun a long-term planning effort – the Berkeley Marina Area Specific Plan – to establish the community's vision for the Waterfront and a plan for the Marina to achieve financial viability. There is still a need to address an estimated \$113 million in infrastructure repairs to finger docks, pilings, electrical systems and restrooms. The City is finalizing a \$5.5 million loan from the State to replace D&E docks, which are failing and in urgent need of replacement. If these and additional investments are not made, facilities and infrastructure will either require more costly emergency funding or be closed as in the case of the Berkeley Pier. Waterfront customers will continue to leave the Berkeley Marina, continuing the downward spiral of revenue loss and blight.

#### **b. Public Buildings**

The City is responsible for maintenance of 95 facilities, not including Library facilities and facilities leased to other entities, which were not part of this analysis. These 95 facilities include: 39 facilities in the Parks Recreation and Waterfront inventory and 56 facilities in the Public Works inventory.

The City regularly performs assessments and provides updated condition reports and cost estimates for the City's facility inventory. The most recent assessment for city facility needs estimates the cost of improvements at approximately \$282 million, while the programmed baseline budget allocation to Public Works over the next five years for this work is a cumulative \$4 million allocation from the Capital Improvement Fund. In addition to utilizing one-time sources of project funding, such as the T1 bond, the department is evaluating the establishment of an internal service fund methodology for major facility capital replacement similar to the established internal service fund for maintenance of city owned facilities.

#### **c. Streets & Roads**

Berkeley has 216 centerline miles (450 lane miles) of public streets within the City limit, which is comprised of 22 miles of arterials, 37 miles of collectors, and 156 miles of residential streets. The current citywide Pavement Condition Index (PCI) rating for those streets is 57 (out of 100), putting Berkeley streets collectively in the "At-Risk" category. This is well below the 2012 City Council approved City Auditor recommendation to achieve a PCI rating goal of 75.

The City currently allocates about \$7.3 million in recurring funding to Street paving from local and state sources, including Measure BB, Vehicle Registration Fees (VRF), State Transportation Tax/SB1 and the City's Capital Improvement Fund. This funding for street paving projects is not only spent on paving, but is also spent on complete streets project elements: traffic calming; signal maintenance and improvements; transit area improvements; sidewalk maintenance and capital improvements; and storm drainage and green infrastructure improvements. The City has used bond funding to supplement its recurring sources of funding, including the 2012 approved Measure M, and the 2016 T1 Infrastructure Bond, in which \$8.5 million was programmed to Streets in Phase 1 and \$6.8 million is planned in Phase 2.

According to the City's Street Saver system software and detailed analysis and projections provide by a Streets Engineering consultant, the streets network has approximately \$250 million in deferred maintenance needs. The City would need to allocate \$17.3 million a year to paving just to maintain its current PCI, and increase its annual paving funding to \$27.3 million a year to increase PCI by 5 points. In order to merely maintain the City's PCI after one-time bond funds are expended, it will be necessary to identify additional annual funding for the pavement management program. To significantly improve Berkeley's pavement condition, a substantial investment and influx of funding will have to be made.

#### **d. Sidewalks**

The City manages sidewalk repair programs to keep the City's sidewalks safe and provide for safe pedestrian passage, including make-safe repairs, annual proactive and responsive repair programs, and the City's 50/50 replacement cost share program in which the City shares the liability and costs for broken sidewalks with property owners. Approximately \$700,000 is available in annual funding towards sidewalks maintenance and repair construction from baseline allocations from the Capital Improvement Fund and 50/50 Program contributions from residents. Over time, the backlog of sidewalk repairs identified to be addressed through the 50/50 program has grown significantly beyond the funding capacity to make the needed repairs. Staff estimates that it would require \$6 million to close the remaining 50/50 program funding gap to address the backlog within the next 5-year CIP cycle, with about \$5 million in other sidewalk infrastructure repairs needed over that same period. A one-time allocation of \$500,000 in Excess Equity revenue was added to the FY 2020 Sidewalks CIP budget, but a second \$500,000 allocation programmed for FY 2021 was deferred due to citywide budget balancing needs. Any reallocation to sidewalks from local streets and roads funds such gas tax would impact the streets paving program.

### e. Sewers

In 2014, the City (along with EBMUD and all agencies conveying flows to EBMUD) concluded negotiations with the Environmental Protection Agency and the Department of Justice for violation of the Clean Water Act and agreed to a stipulated settlement known as the final [Consent Decree](#)<sup>11</sup>. To comply with the Consent Decree, the City is required to rehabilitate an average of 4.2 miles of sewer pipeline annually based on a three-year rolling average. Effectively, this mandated significant additional maintenance activities and capital improvements results in increased costs of managing the City's existing sewer system. After a sewer rate study was completed, a [series of rate adjustments were adopted](#)<sup>12</sup> beginning in FY 2016 to support the added financial load of the Consent Decree requirements.

The City is currently on track to meet rehabilitation mileage targets with revenues generated from sanitary sewer fees, however the costs per mile for sewer construction have increased since the rate study was completed. These costs will have to be closely monitored going forward over the duration of the Consent Decree, in case funding supplementation from additional sources or future rate adjustments are needed to fund the cost of the required capital improvements. Public Works is currently underway with development of a Sanitary Sewer Master Plan, which will identify areas of high inflow and infiltration and capacity deficiency in the sanitary sewer system, provide prioritization of capital improvements, develop 5-year and 15-year capital improvement plans, and analyze the City's current sanitary sewer rate structure's ability to fund future improvements. Based on the results of this master plan, a better assessment of future liability will be presented in the next Unfunded Liabilities Report.

### f. Storm Drains – Clean Stormwater Program

The City's engineered storm drains include approximately 78 miles of underground pipes, manholes, catch basins and cross-drains, and 30 green infrastructure installations. Much of the stormwater infrastructure is over 80 years old and needs substantial rehabilitation. The backlog of projects includes: rehabilitation of pipeline reaches; conveying dry weather flows; replacement of deteriorated drain inlets and piping; major cleaning of the primary storm collectors in the lower Berkeley drainage watersheds; and replacement of street cross drains. The City desires to address these issues while forwarding its policies to improve the environment by pursuing Green Infrastructure and Low Impact Development (LID) methods.

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<sup>11</sup> See [http://www.cityofberkeley.info/Clerk/City\\_Council/2014/09\\_Sep/Documents/2014-09-09\\_Item\\_62\\_EPA\\_Litigation.aspx](http://www.cityofberkeley.info/Clerk/City_Council/2014/09_Sep/Documents/2014-09-09_Item_62_EPA_Litigation.aspx) for EPA litigation settlement report

<sup>12</sup> See [http://www.cityofberkeley.info/Clerk/City\\_Council/2015/06\\_Jun/Documents/2015-06-30\\_Item\\_21\\_Setting\\_New\\_Sustainable.aspx](http://www.cityofberkeley.info/Clerk/City_Council/2015/06_Jun/Documents/2015-06-30_Item_21_Setting_New_Sustainable.aspx) for Sanitary Sewer Rate increases and Proposition 218 information.

In 2012, City Council adopted the City's [Watershed Management Plan \(WMP\)](#)<sup>13</sup>. The WMP uses LID methods to develop an integrated and sustainable strategy for managing stormwater resources that addresses water quality, flooding, and the preservation of local creek habitats and the San Francisco Bay. According to the 2012 Watershed Management Plan, the total unfunded need of the stormwater system is a present-day-projected \$208 million. Staff estimates an additional need of \$38 million over the next five years towards unfunded maintenance of storm water infrastructure as well as storm drain and Green Infrastructure Plan capital improvement projects. Set to begin in 2021 are updates to the Watershed Management Plan and development of a Storm Drain Master Plan, which will assist with the planning for rehabilitation and replacement of aging infrastructure and how to address future water runoff flows. The City has two Clean Stormwater Fee sources assessed to owners of real property that contribute to stormwater runoff and use the City's storm drain for collection and conveyance. The first Clean Stormwater Fee was established in the early 1990's and generated enough revenue to cover only baseline stormwater maintenance operations and emergency storm drain response efforts. In FY 2018, the City passed a second Clean Stormwater Fee through voter approval of a majority of responding property owners. In addition to increasing revenue for maintenance and operations, the new fee has added an additional \$1.1 million in annual revenue available for capital projects.

#### **g. Traffic Signals & Parking Infrastructure**

The City currently has 142 traffic signals and 20 Rectangular Rapid Flashing Beacons (RRFBs) maintained by the Public Works Department. To support this network, Public Works has a baseline budget of \$300,000 in capital maintenance for signals and other traffic calming devices, and \$100,000 toward new traffic calming requests. These funding levels are insufficient to bring all of the signals up to date. As a result, there are deficiencies at many intersections throughout the city, including lack of detection devices, lack of pedestrian push buttons, and lack of battery backup for signal controllers in case of power outage. Any reallocation to traffic signals from street and transportation funds such as gas tax and Measure B & BB would impact the street paving program or other transportations projects.

Parking capital infrastructure is newly added to the Future Liability needs report in FY 2021. COVID driven impacts to both on-street and off-street parking revenue have depleted parking fund reserves earmarked for major capital improvements to the City's parking infrastructure. The Telegraph Channing Garage Elevator Replacement Project, scheduled to begin in FY 2021 but deferred to a future fiscal year, has an estimated full project cost of approximately \$1.0M. The Citywide Parking Meter Upgrade/Replacement project is estimated to cost \$6.0M and is scheduled for FY 2023, to align with cell network carrier technology upgrades. Public Works has programmed an annual contribution to the On-Street Parking Fund balance at a rate of \$1.0M/year through FY

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<sup>13</sup> See [http://www.cityofberkeley.info/Clerk/City\\_Council/2012/10Oct/Documents/2012-10-30\\_Item\\_20\\_Watershed\\_Management\\_Plan.aspx](http://www.cityofberkeley.info/Clerk/City_Council/2012/10Oct/Documents/2012-10-30_Item_20_Watershed_Management_Plan.aspx)

2023 to fund the project. By FY 2023, those fund balances will have been completely drained to cover parking program operations. Funding for these major projects is uncertain until the parking funds can restore revenues.

Attachment 3 contains the budget and projected funding needs for both the Public Works and Parks, Recreation and Waterfront department facilities and assets described above.

## **h. Information Technology Infrastructure**

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

### **Summary**

Currently, the City's asset inventory comprises approximately 1,300 desktops, 530 laptops, 100 tablets, and 100 Public Safety Mobile Data Computers (MDCs), which is an increase of 20% compared to last Fiscal Year (FY) 2019 due to remote work expansion.

In FY 2015 the City established a replacement fund for our core enterprise financial system, FUND\$. The property tax in excess of the \$10.5 million baseline was allocated for FUND\$ replacement, based on the timing and replacement costs reported in the FUND\$ Status Report<sup>14</sup>.

In FY 2016, the City released an RFP to identify a vendor and product to replace FUND\$. In FY 2017, the City assembled a team of subject matter experts from across the organization to lead the implementation process of the new software with a focus on change management and process improvement. The team completed the evaluation process and selected a vendor to propose to Council. The team is also charged with replacing additional modules utilized in FUND\$ that are not core financial or HR/Payroll. The Core Financials went live in November 2018 and the HR/Payroll went live in January 2021. Other modules will occur in subsequent years and are detailed in the Digital Strategic Plan presented to Council on November 11, 2016.<sup>15</sup>

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<sup>14</sup> [https://www.cityofberkeley.info/uploadedFiles/Clerk/Level\\_3\\_-\\_City\\_Council/2010/06Jun/2010-06-01\\_Item\\_54\\_FUND\\_Status\\_Report.pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_City_Council/2010/06Jun/2010-06-01_Item_54_FUND_Status_Report.pdf)

<sup>15</sup> [http://www.cityofberkeley.info/Clerk/City\\_Council/2016/11\\_Nov/Documents/2016-11-15\\_WS\\_Item\\_01\\_Digital\\_Strategic\\_Plan.aspx](http://www.cityofberkeley.info/Clerk/City_Council/2016/11_Nov/Documents/2016-11-15_WS_Item_01_Digital_Strategic_Plan.aspx)

In FY 2016, the City established a replacement fund for the citywide telephone system, estimating a ten-year replacement cycle. Staff is planning to replace the handsets at the five-year mark, as the current handsets are already one generation behind. Annual maintenance cost for the VOIP system has increased to \$65,000.

In FY 2016, the City funded additions to our storage area network (SAN), which supports the backend storage for our virtual server infrastructure and add storage capacity for the City needs of data storage and retention.

In FY 2017, the City upgraded its Microsoft Office software licenses to enable video conferencing and Office 365 capabilities. These upgraded licenses provided more reliable security and will help enhance the disaster recovery (DR) process, which is designed to allow email to be accessible on mobile devices should City Hall be impacted in a disaster. Later phases of this project will improve access to data and files from any location thus increasing employee efficiencies. Investment decisions will prioritize initiatives that achieve the best performance outcomes and greatest benefit so funding and other resources currently dedicated to operations and maintenance efforts can be recapitalized and invested in modernization efforts.

In FY 2019, the IT Department developed a Technology Internal Service Fund, which accounted for IT infrastructure costs. Now, PCs, servers, storage, wireless, uninterrupted power supplies (UPS), and network devices are fully funded. Cyber Security initiatives remain partially unfunded at this time.

In FY 2019, the IT department upgraded the server and storage backend infrastructure to support the City's Cyber Resilience efforts and to provide operational and offsite DR including business continuity to our critical applications. The City now has operational backup between the two data centers for business continuity and a remote offsite for DR. In FY 2019, the network routers and switches were consolidated at remote sites to advanced layer 3 switches resulting in 40% reduction in network equipment thus resulting in energy efficiencies and reduced staff time in support.

In FY 2020, the IT Department began the RFP process for the VoIP phone system upgrade and backup replacement solutions, both of which will be implemented in FY 2021. The VoIP Phone system will provide a redundant onsite system for DR needs. The offsite redundancy is still unfunded. The backup replacement solution will provide both onsite and offsite backup and redundancy.

In FY 2021, the IT Department will also replace the legacy core network switches located in City Hall and the Public Safety Building, as well as the network switches on each floor that serve our largest City facilities; City Hall, the Public Safety Building, and 1947 Center Street.

Four critical projects need to be addressed through unfunded liabilities:

## 1. **Cybersecurity Resiliency Plan:**

The goal of this project to implement foundational safeguards that address documented gaps and deficiencies in the City's procedures and technologies to support the delivery of services to the community in a safe and resilient manner<sup>16</sup>.

In FY 2021 Council approved a portion of funding for the cyber resilience plan for the top 5 projects and implementation is underway to address efforts around data safety, data hygiene and data classification including the onboarding of a Managed Security services provider (MSSP).

There are approximately eight projects for FY 22, and the purpose of the projects is to address the most critical and consequential issues and action items identified by the City's consultant that impact or are impacted by pandemic induced work from home in the delivery of services to the community. These projects are prioritized to address the current threat and regulatory environments, then considers the traffic patterns and key components of a "new normal" of distributed operations and faces the known challenges that the City faces in meeting and keeping up with the needs of both.

The focus areas driving the projects selection and their scope are the (i) user, (ii) the last mile (endpoint devices and clients), (iii) the resources being used (City, home, ISP, and cellular networks) to (iv) access the last mile (Cloud, server, files, and applications), and (v) the resilience of each.

## 2. **Customer Relationship Management (CRM):**

In FY 2019, the City of Berkeley upgraded the existing CRM software application to version V14R2, Verint-Lagan, used by 311, Public Works and Parks to enter community service requests. Both the CRM and Verint-Lagan knowledge system used by 311 were upgraded. The new 311 CRM system replacement and implementation targeted for FY 2021 was delayed due to COVID related proposed budget reduction.

A new CRM system will give 311 the ability to capture, route, and manage all forms of requests through multiple communication channels with integration to Public Works work order system and Zero Waste billing system. Allow community members to see status of their requests through online status of service requests or a City of Berkeley branded mobile solution and an provide an integrated knowledge system with the City Website.

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<sup>16</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2020/12\\_Dec/City\\_Council\\_12-01-2020\\_-\\_Special\\_Closed\\_Meeting\\_Agenda.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2020/12_Dec/City_Council_12-01-2020_-_Special_Closed_Meeting_Agenda.aspx)

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

Goal of the Project – To establish one master address database out of the City’s multiple sources of address data. This master address database will be a modern, GIS based system, that will provide addresses that are more accurate and parcel information that is consistent and current across the City’s various applications.

As the City rolls out a new work order system, zero waste billing system, digital permitting system, and CRM system and others, it is critical that we have a modern, centralized address database that can easily feed accurate and consistent GIS address data. Having one source of truth for address data will allow for ease of maintenance, timely updates, and consistency. This will bring greater efficiencies for staff through various workflows including permitting, building inspections, work orders, billing, assessments and more. It will result in service that is more effective to our community by providing real time and accurate address data across departments.

### **4. IT Department Move to 1947:**

The Department of Information Technology was scheduled to move to 1947 Center Street in FY 2020. This move was cancelled due to COVID related proposed budget reductions.

In their current space, the IT Department is unable to work at a safe distance from each other. Remote work will be a long-term strategy unless the City can identify a safe seating arrangement and improve the work environment for staff to return safely to work. Extended remote work has its challenges and may have a negative service impact on response times to tickets as well as resolutions to hardware issues.

## **Options to Address Long Term Retirement and Infrastructure Costs**

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

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

- On June 26, 2018, Council authorized the City Manager to establish an IRS Section 115 Pension Trust Fund (Trust) to be used to help pre-fund pension obligations<sup>17</sup>. On May 14, 2019, Council authorized the City Manager to execute

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<sup>17</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2018/06\\_June/Documents/2018-06-26\\_Item\\_19\\_Authorization\\_to\\_Establish\\_IRS.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2018/06_June/Documents/2018-06-26_Item_19_Authorization_to_Establish_IRS.aspx)



a contract with Keenan Financial Services to establish, maintain, and invest the pension Section 115 Trust<sup>18</sup>.

- The Section 115 Trust currently has a balance of \$10,628,125.22.

On February 27, 2020 the Budget & Finance Policy Committee discussed ongoing funding into the 115 Pension Trust. The following was recommended:

- Raise the Property Transfer Tax baseline from \$12.5M to \$15M. The additional \$2.5M will be allocated to the Trust.
- Property Transfer Tax in excess of \$15 million would be used to fund the City's capital infrastructure need. However, revenue generated from Measure P is excluded from this transfer.
- Savings generate by prefunding CalPERS will be contributed to the 115 Pension Trust. On an annual basis, staff will analyze the impact of prefunding CalPERS. If the analysis determines that pre-funding CalPERS will result in budgetary savings, the net savings will be contributed to the Trust.

Staff requested Council to delay adopting these policies because the City was facing the financial fallout of the pandemic.

- The City prefunded the unfunded liability portion of the FY 2021 CalPERS pension resulting in savings totaling \$1.3 million.
- In addition, as the General Fund subsidy to the Safety Members Pension Fund declines over the next several years, the amount of the annual decrease will be used to help fund the new Police Employee Retiree Health Plan.

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

### **Effects of Unfunded Liabilities on Bonding Capacity:**

The long term liability burden is one of the major criteria that bonding rating use in determining the ratings of Municipal Issuers. The others are Revenue Framework, Expenditure Framework and Operational Performance. The long term liability assessment typically considers both direct and overlapping debt. Pension liabilities are now considered part of an issuers' long term debt picture and bond rating agencies have placed these obligations on par with debt obligations as a component of the long term liability picture.

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<sup>18</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2019/05\\_May/City\\_Council\\_05-14-2019\\_-\\_Regular\\_Meeting\\_Agenda.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2019/05_May/City_Council_05-14-2019_-_Regular_Meeting_Agenda.aspx) (Item #5)

Municipal securities issuers (i.e., Berkeley) must prepare an “Official Statement” (OS) before presenting the primary offering. These municipal disclosure documents provide information for investors, including the terms of the bond offering and financial information on the issuer. They also typically contain information regarding the purpose of the bond; whether the issuer can redeem the bonds prior to maturity; and when and how principal and interest on the bond will be repaid.

After the Preliminary Official Statement (POS) is prepared, it is submitted to a bond rating agency. The bond rating agency reviews and evaluates the POS and other financial information and issues a rating on the bonds being issued. Municipal bond credit ratings measure the issuer’s risk of paying all interest and principal back to investors. A bond rating system helps investors distinguish an issuer’s credit risk. The three major rating agencies are Moody’s Investor Services, S&P Global Ratings, and Fitch Ratings.

The City utilized S&P Global Ratings to rate its latest 2020 bonds that was issued (Attachment 5 Exhibit A). The below summarizes their findings and indicates the weaknesses of the City’s financial health because of the City’s Unfunded Pension Liability.

#### Rating Summary

The rating reflect S&P Global Ratings (view of the following credit characteristics of the City:

#### Weaknesses

The weaknesses S&P identified in their ratings evaluation were the following:

- Weak debt and contingent liability profile, with debt service carrying charges of 4.2% of expenditures and net direct debt that is 47.8% of total governmental fund revenue;
- Large pension and other postemployment benefits (OPEB) and the lack of a plan to sufficiently address the obligations
  1. The City has a large pension and OPEB liability that is pressuring the City’s operations, and while the City has made progress in planning-including, establishing a Section 115 trust, S&P Global Ratings does not believe the City has adequately planned for expected cost escalation;
  2. The City’s pension funding ratios as of June 30, 2019 (Miscellaneous-70%; Fire-71%; and Police-61%), combined with recent changes in the assumed discount rate and amortization methods, will likely lead to accelerating costs in the medium term;
  3. The City is not making full actuarially determined contributions towards its OPEB liabilities (combined 45% funded), which will lead to significant contribution volatility over time.

Additional Information Requested

After staff reviewed and analyzed the rating rationale, staff was concerned about the section that stated that the City had a “Weak debt and contingent liability profile”. Staff wrote to S&P for additional information and clarification on how S&P conducted the analysis of the city’s debt and contingent liability profile. On February 28, 2020, S&P issued additional information that detailed their methodology (Attachment 5 Exhibit B).

Summary of Initial Debt and Contingent Liabilities Score

S&P used two criteria to form the initial debt and contingent liabilities score for the City:

- Total governmental funds debt service as a percentage of total governmental funds expenditures; and
- Net direct debt as a percentage of total governmental funds revenue

Net direct debt is the total amount of general obligation debt, including notes and short-term financing issued by a municipality or state.

The potential scores were the following:

- 1 Very Strong
- 2 Strong
- 3 Adequate
- 4 Weak
- 5 Very Weak

S&P gave the City a score of 4, indicating a weak debt and contingent liability profile, as a result of total governmental funds debt service of 4.2% of total governmental funds expenditures and net direct debt of 47.8% of total governmental funds revenue. The initial scoring of the debt and contingent liabilities score of 2 indicated a strong scoring but when S&P added an additional qualitative adjustments factor with a negative impact on Berkeley’s initial debt and contingent liabilities score, it resulted in a final debt and contingent liability score of four. From their point of view, one of the negative qualitative factors is the presence of an unaddressed exposure to large unfunded pension or OPEB obligations which represents a significant pressure on the budget over the medium term. In their view, the city has a large pension and OPEB liability that is pressuring the city’s operations, and while the city has made progress planning, including establishing a Section 115 Trust, they do not think the City has adequately planned for the expected cost escalation.

The take away from this analysis is that the impact of the huge pension liability has a negative effect on the city’s debt capacity. It appears that the assumption that as long as the debt service on General Obligation Bonds is being paid by the citizens and businesses, and not directly by the City, will not affect the City’s debt capacity is not true. Implicit in the S&P weak score of 4 for the City’s debt and contingent liability profile is a warning that this is not the case and the City needs to be aware of it.

Staff Observations, Conclusions and Recommendations

1. S&P Global Ratings acknowledged the City's current strong credit profile and the City's attempt to start planning for a reduction in its pension and OPEB liabilities, but there was an underlying warning from them that what the City is currently doing is not enough. There is an 800 pound gorilla in the room, and that is the City's large unfunded pension liability, and CalPERS and others are predicting a significant increase in those pension liabilities in the next several years.

In fact, despite the substantial increases in CalPERS pension rates over the last several years, the funding ratios for all three plans has worsened, as illustrated in Tables 1 through 3 below. In addition, the funding ratios for the OPEB plans have remained flat or declined, at very low levels, as illustrated in Tables 4 through 6:

Table 1: CalPERS Miscellaneous Defined Benefit Pension Plan Trends-By Fiscal Year

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY2019</b>
	<i>(\$ in millions)</i>					
Liability	\$864	\$874	\$902	\$983	\$1,016	\$1,072
Net Position	655	656	641	696	736	767
Net Liability	209	218	261	287	280	305
Funded Ratio	76%	75%	71%	71%	72%	71%

Table 2: CalPERS Fire Defined Benefit Pension Plan Trends-By Fiscal Year

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
	<i>(\$ in millions)</i>					
Liability	\$241	\$240	\$247	\$267	\$273	\$284
Net Position	186	182	177	183	197	203
Net Liability	55	58	70	78	76	80
Funded Ratio	77%	76%	72%	69%	72%	72%

Table 3: CalPERS Police Defined Benefit Pension Plan Trends-By Fiscal Year

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
	<i>(\$ in millions)</i>					
Liability	\$357	\$362	\$372	\$405	\$417	\$430
Net Position	233	232	226	245	258	268
Net Liability	124	130	146	160	159	162
Funded Ratio	65%	64%	61%	61%	62%	62%

Table 4: OPEB: Miscellaneous Retiree Health Plan Trends-By Fiscal Year

	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
	<i>(\$ in millions)</i>			
Liability	\$62	\$59	\$66	\$90
Net Position	24	25	28	29
Net Liability	38	34	37	61
Funded Ratio	39%	42%	43%	33%

Table 5: OPEB: Fire Retiree Health Plan Trends-By Fiscal Year

	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
	<i>(\$ in millions)</i>			
Liability	\$28	\$27	\$31	\$33
Net Position	10	10	11	12
Net Liability	18	17	20	21
Funded Ratio	36%	37%	37%	36%

Table 6: OPEB: Police Retiree Health Plan Trends-By Fiscal Year

	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
	<i>(\$ in millions)</i>			
Liability	\$47	\$43	\$49	\$60
Net Position	46	42	46	57
Net Liability	1	1	3	3
Funded Ratio	4%	4%	5%	4%

- Staff would like to point out that the lower the discount rate is for a pension plan, the higher the unfunded liability is. In staff’s view, even these low funding ratios reported by CalPERS are overstated because CalPERS is not reporting and charging local governments pension rates based on what it believes the true discount rate is. Instead, it reports ongoing, small piecemeal annual reductions in the discount rate, in order to avoid immediately increasing the pension rates to a level they feel local governments could not afford.

This means that, even after those piecemeal discount rate reductions and resulting increase in the unfunded liability, the City’s unfunded liability for each of the three plans is understated.

To summarize, rather than provide local and state governments with what CalPERS actually believes the discount rate to be, CalPERS is providing the reductions in small increments over a period of time, so that they don’t have to raise the employer contribution rate so dramatically that it will put such a strain on local and state government budgets, that many won’t be able to make them without significant cuts in service or financial trouble. What that means is that the City’s current real unfunded pension liability is larger than the amounts reported

by CalPERS each year, and that the real funded ratio is lower than the ratio reported by CalPERS each year.

Furthermore, the discount rate (or expected return on future investments) is very likely to continue to decline in the future, for the following reasons, among others: (1) In order to reduce risk, much of the equity portfolio is typically invested in mature countries and mature companies in those countries. As a result, future earnings growth will slow; (2) Higher Interest rates and higher Inflation are expected in the future. The stock market has been in a 12- year bull market due primarily to the Federal Reserve (the Fed) lowering interest rates to zero and dramatically increasing the money supply by dramatic increases in bond purchases (i.e., quantitative easing). At some point, interest rates and inflation will increase (in fact, long-term interest rates have already started rising significantly recently). The Federal Reserve can't control long-term interest rates. As inflation moves above the Fed's 2 percent target, the Fed will be forced to tighten monetary policy to combat inflation. If the Fed tightens the monetary supply, stocks are likely to decline;(3) As a result of an increase in nationalism, there will be slower growth throughout the world; (4) Fixed income instruments will become more attractive to investors as interest rates rise. This will put downward pressure on stocks as fixed income investors move money out of equity securities. During this 12-year stock bull market, many fixed income investors have been forced to participate in the equity market in order to get some yield, since fixed-income yields were near zero. (5) There will be less earnings from the fixed income portion of the portfolio as a result of the extremely low interest rates throughout the world; and (6) mortality improvements will mean that pensioners get paid for a longer period of time

3. There have been some discussions about the possibility of issuing additional debt to fund some of the infrastructure needs that will help fix some of the crumbling infrastructure and lack of low-income housing. In these conversations, the justification used is that the State debt limit allows it, so therefore the City has capacity.

Staff will like to point out that the maximum debt margin is merely a ratio of 15 percent of assessed value to total assessed value. All it does is establish an arbitrary maximum level of general obligation bonds that general law cities may issue under State law. It does not consider all the level or status of the City's liabilities, especially net pension liability and net OPEB liability.

Any measure that does not take into account all of an organization's liabilities, and the trend in those liabilities, is not a measure that should be used to determine how much to borrow (the Capacity of the entity). An organization should not take on a level of debt that makes it difficult to sustain its financial position. The debt margin for general law cities is not a reasonable measure for assessing an organization's debt profile or borrowing capacity, and it is not the

one used by debt rating agencies or financial analysts to assess debt profiles or borrowing capacity. In fact, the evaluation standards used by the S & P Global debt rating agency were (1) total governmental funds debt service as a percentage of total governmental expenditures; and (2) Net direct debt as a percentage of total governmental funds revenue.

4. The City has not adequately planned for expected pension and OPEB cost increases. The more these pension and OPEB costs increase, the more strain there will be on the City's budgets and operations. Failure to address this could result in:
  - a. Reduction in the number of employees
  - b. Reduction in pension benefits
  - c. Reduction in services provided to citizens and businesses
  - d. Possible future tax increases
  - e. A combination of these possible outcomes

Staff also believes that a huge increase in borrowing by the City, without the development of an effective plan for reducing the substantial unfunded pension and OPEB liabilities, might be met by skepticism from bond rating agencies (i.e., possible downgrade of the City's general obligation bonds, resulting in even higher taxes to the citizens and businesses in the City) and skepticism from investors (i.e., lower demand for the City's general obligation bond, resulting in higher interest rates on the bonds, and resulting increase in taxes to citizens and businesses).

#### Staff Recommendations

1. Before any additional borrowing is contemplated, the City should contract with a debt rating agency and/or actuarial consultant that specializes in evaluating and assessing debt profiles, borrowing capacity and actuarial analysis and reporting to provide the City guidance in these areas, and to assess the ramifications of substantially increasing borrowing.
  - Assess the potential rating agency response to significantly increased borrowing
  - Assess potential investor response to significantly increased borrowing
  - Assess tax impact on citizens and businesses
  - Determination of the actual discount rate and the actual unfunded pension liabilities
  - Options and costs of reducing the pension and OPEB liabilities
2. Meetings and discussions among all the stakeholders to identify and understand the problems before working toward a solution.

3. Pending the analysis and recommendations in #1 above, staff believe the City needs to contribute more to the Section 115 Pension Trust Fund than it is currently contributing, so that the increases in the CalPERS contributions plus the amount in the Section 115 Pension Trust Fund are used to reduce the unfunded pension liability, and not to offset the increase in the liability resulting from the reductions in the discount rate.

### General Fund Revenue Projections

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

The chart below provides a summary of total General Fund Revenues projected through FY 2026. The revenue projections have been updated to reflect results from the first six months of Fiscal Year 2021. Fifty-eight percent (58%) of the City's FY 2021 Projected General Fund revenue is derived from Secured Property, Property Transfer, Utility Users and Sales Taxes. Each major contributing revenue stream is described in more detail below. Additional detail on General Fund Revenue Projections can be found in Attachment 4.

General Fund Revenues Projections (dollar in millions)						
	FY 2021 Projected	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
<b>GF Revenues</b>						
<b>Baseline</b>	\$ 195.9	\$ 186.5	\$ 192.1	\$ 197.0	\$ 201.9	\$ 206.6

### Property Tax

Real Property Taxes are applied to all taxable real and personal property and are set at 1% of the assessed value. Proposition 13 limited the amount that this tax can be increased to no more than 2% each year. The Alameda County Assessor maintains property tax assessment rolls that account for all property. The City's Property Tax is collected by Alameda County. The City receives approximately 32.57% of the real property tax dollar generated within the City limits. (Berkeley receives a comparatively higher share of the property tax dollar than other cities in Alameda County, many of



whom receive about 15% of the tax dollar due to the way that Proposition 13 was implemented in 1978.) The projections above assumed a 7.7% increase in property tax in FY 2021, an increase of 4.5% in FY 2022, and an annual increase averaging 3.5% from FY 2023 through 2030.

### **Property Transfer Tax**

The Property Transfer Tax rate set by the City of Berkeley is 1.5% of the value of consideration of \$1.5 million, and 2.5% for transfer properties with consideration of over \$1.5 million (Measure P Revenues). The tax is due when the documents of transfer are recorded with the County. Title companies collect the tax as part of the sales closing process, and remit the funds to Alameda County when sales or transfers are finalized. Alameda County remits the amounts due monthly, and the amounts are credited to the General Fund.

*In addition, the City has a Seismic Retrofit Rebate Program.* In Berkeley, a portion of Transfer Taxes are used to fund the City's Seismic Retrofit Rebate Program for residential housing. Upon transfer of a qualifying residential property, the buyer may voluntarily choose to reserve up to 1/3 of the total Transfer Tax to perform voluntary seismic upgrades as specified by the City.

Property owners have up to one year after the recording of the sale to complete the seismic work and file for the rebate. An extension for good cause may be requested in writing up to one year past the original deadline date, provided the request is made prior to the one-year filing deadline. The total amount of seismic rebates to property owners is netting against the Property Transfer Taxes remitted to the City by the County, to determine the net Property Transfer Tax revenue each year.

Because Property Transfer Tax is tied directly to real property sales, it is a volatile revenue source, and difficult to predict more than one year at a time. Understanding the volatility of this General Fund revenue stream, Council adopted a policy that Transfer Tax in excess of \$12.5 million is treated as one-time revenue to be transferred to the Capital Improvement Fund for capital infrastructure needs. Therefore, the amount of Property Transfer Tax included in the chart above is set at the baseline level of \$12.5 million annually since any remainder is transferred into the Capital Improvement Fund after the fiscal year ends.

### **Utility Users Tax**

Utility Users Tax (UUT) is charged at the rate of 7.5% to all users of a given utility (gas, electricity, telephone, cable, and cellular). UUT is Berkeley's 4<sup>th</sup> largest source of General Fund revenue. Factors that affect the revenue generated by UUT include consumption, PUC rate changes, regulatory actions, evolution of technology and market forces.

## Sales Tax

Sales Tax is an excise tax imposed on retailers. The proceeds of sales and use taxes imposed within the boundaries of Berkeley are distributed by the State to various agencies, with the City of Berkeley receiving 1% of the amount collected. City staff review sales tax revenues regularly and compares Berkeley's performance with other cities in Alameda County, as well as statewide trends. Sales tax is a relatively stable revenue source for Berkeley. Berkeley is somewhat unique in that 24.5% of its sales tax is from restaurants compared to 16.2% statewide (SF Bay Area is 15.1%). Berkeley otherwise has a generally well diversified sales tax base that is projected to continue to modestly improve over time, unless the Bay Area experiences a recession or as the city is noticing the significant effects of the current pandemic on its Sales revenues.

## General Fund Revenues versus General Fund Expenditures

One value of producing long term General Fund revenue projections is to compare them against General Fund expenditure projections. Since about 67% of the General Fund expenditures are personnel costs, any change in those costs has an impact on the balance between revenues and expenditures. The chart below reflects all currently negotiated impacts on salaries and benefits. The expenditure projections assume no cost of living adjustments (COLA) beyond what is currently negotiated. The chart below is offered as a demonstration only and is not a proposal or budget plan.

<b>General Fund Revenues v.s. Expenditures - Demonstrative Comparison (dollars in millions)</b>						
	<b>FY 2021 Adopted</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>
<b>GF Revenues Baseline</b>	\$ 188.35	\$ 186.50	\$ 192.10	\$ 197.00	\$ 201.90	\$ 206.60
<b>GF Expenditures - Zero COLA</b>	\$ 187.04	\$ 208.77	\$ 216.55	\$ 221.62	\$ 227.70	\$ 233.11
<b>Surplus/(Deficit)</b>	\$ 1.30	\$ (22.27)	\$ (24.45)	\$ (24.62)	\$ (25.80)	\$ (26.51)

Staff is in the process of developing the FY 2022 Budget, however, the preliminary forecast above indicates that the City has a structural deficit that needs to be addressed. Both Council and operating departments have identified additional funding needs tied to Council mandates and priorities, which are not included in the expenditures noted above.

It is important to note that not included in the chart above are General Fund revenues from Rental Unit Business License Tax (U1)<sup>19</sup> estimated to be about \$2.8 million in FY 2022 as well as General Fund revenues generated from Measure P<sup>20</sup> estimated to be

<sup>19</sup> Measure U1 is a revenue stream assigned to fund affordable housing and protect Berkeley residents from homelessness.

<sup>20</sup> Measure P is a general fund revenue stream assigned for general municipal purposes such as aviation centers, mental health support, rehousing and other services for the homeless.

about \$6.2 million in FY 2022. Also not included in the chart above are corresponding General Fund expenditures tied to U1 and Measure P.

Attachment 4 details the projected General Fund revenues.

### CONCLUSION

One of the terms that is often used with respect to the long-term obligations that are described above is “unfunded liabilities.” Unfunded liabilities are defined as identifiable obligations of an organization for which the organization does not have 100% of the funding (cash or other assets) set aside to cover the cost should all obligations become immediately due. Generally, an organization manages a balance between funding a portion of the entire obligation and the associated risk that the obligation will be due at the same time. This balance is considered the practical and responsible approach since payment demands of these obligations rarely, if ever, occur simultaneously. The alternative would be to 100% fund the obligations causing a great portion of cash to be reserved and not available for providing services or meeting other immediate obligations, needs, or desires of the community. Maintaining a careful balance between cash on hand to fund daily operations and liquidity to cover unfunded liabilities is a key challenge for all governments. With that said, the City’s unfunded liabilities tied to benefits total \$751 million, and the City’s unfunded infrastructure needs total \$1.1 billion.

### POSSIBLE FUTURE ACTION

The information contained in this report will be referenced throughout the budget planning meetings in advance of the FY 2022 budget adoption and during the FY 2023 & FY 2024 Biennial Budget process.

### FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

See information described above.

### ENVIRONMENTAL SUSTAINABILITY

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

### CONTACT PERSON

Rama Murty, Acting Budget Manager, City Manager’s Office, 981-7000  
Henry Oyekanmi, Finance Director, Department of Finance, 981-7300

### Attachments:

1. Employee and Retiree Benefits Funded Status
2. City’s Debt Obligations
  - Exhibit A: General Obligation bonds
  - Exhibit B: Certificates of Participation
  - Exhibit C: Revenue Bonds
3. Capital Assets

Exhibit A: Infrastructure

Exhibit B: Appraisal of Buildings Valued at \$5 million or more

4. General Fund Revenues

5. Effects of Unfunded Liabilities on Bonding Capacity

Exhibit A: S&P Global Ratings: Ratings Direct

Exhibit B: S&P Additional Information on Debt and Contingent Liability Analysis

Employee and Retiree Benefits Funded Status (dollars in millions)						Attachment 1
Fund Name	Valuation Date	Estimated Liability	Plan Assets	Funding Target	Net Liability	% Funded
Police Retiree Income Plan (closed)*	6/30/2020	\$ 79.95	\$ 5.83	2	\$ 74.1	7.29%
Police Employee Retiree Health Plan (new)*	7/1/2019	\$ 40.43	\$ 2.49	2	\$ 37.9	6.16%
Fire Employees Retiree Health Plan*	7/1/2019	\$ 25.83	\$ 11.31	1	\$ 14.5	43.8%
Retiree Health Premium Assistance Plan (Non-Safety Members)*	7/1/2019	\$ 68.46	\$ 27.81	1	\$ 40.7	40.62%
Safety Members Pension Fund*	6/30/2020	\$ 1.86	\$ 0.10	2	\$ 1.76	5.4%
Miscellaneous CalPERS Plan*	6/30/2019	\$ 1,095.0	\$ 766.8	1	\$ 328.2	70.0%
Police CalPERS Plan*	6/30/2019	\$ 438.9	\$ 268.0	1	\$ 170.9	61.1%
Fire CalPERS Plan*	6/30/2019	\$ 286.5	\$ 203.5	1	\$ 83.00	71.0%
<b>TOTAL</b>		<b>\$ 2,036.9</b>	<b>\$ 1,285.8</b>	-	<b>\$ 751.1</b>	<b>63.1%</b>

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

Funding Target:

1 - percentage of payroll

2 - pay as you go

*\*Retiree Medical Plan data from actuarial reports from Bartel Associates, LLC and CalPERS Plans data from CalPERS*



## Attachment 2 Exhibit B

**Certificates of Participation**

FY	2010 COP Animal Shelter		Total Annual P & I	End of FY COPs Balance
	Principal	Interest		
			\$ -	
2020				4,890,000
2021	125,000	276,800.00	401,800.00	4,765,000
2022	135,000	270,106.25	405,106.25	4,630,000
2023	140,000	262,200.00	402,200.00	4,490,000
2024	150,000	253,862.50	403,862.50	4,340,000
2025	155,000	245,093.75	400,093.75	4,185,000
2026	165,000	235,893.75	400,893.75	4,020,000
2027	175,000	226,118.75	401,118.75	3,845,000
2028	185,000	215,768.75	400,768.75	3,660,000
2029	195,000	204,843.75	399,843.75	3,465,000
2030	210,000	193,200.00	403,200.00	3,255,000
2031	220,000	180,837.50	400,837.50	3,035,000
2032	235,000	167,756.25	402,756.25	2,800,000
2033	245,000	153,956.25	398,956.25	2,555,000
2034	260,000	139,437.50	399,437.50	2,295,000
2035	275,000	124,056.25	399,056.25	2,020,000
2036	290,000	107,812.50	397,812.50	1,730,000
2037	310,000	90,562.50	400,562.50	1,420,000
2038	325,000	72,306.25	397,306.25	1,095,000
2039	345,000	53,043.75	398,043.75	750,000
2040	365,000	32,631.25	397,631.25	385,000
2041	385,000	11,068.75	396,068.75	-
Grand Total	\$ 4,890,000.00	\$ 3,517,356.25	\$ 8,407,356.25	

**Revenue Bonds**

FY	Berkeley Rep. 2012 Refunding		1947 Center 2012 Refunding		2016 Parking Revenue Bond		Total		Annual Total P & I	End of FY Rev Bonds Balance
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest		
2020										52,465,000
2021	320,879.33	178,817.04	1,049,121	584,645.46	780,000	1,130,250.00	2,150,000	1,893,713	4,043,712.50	50,315,000
2022	337,274.63	162,363.19	1,102,725	530,849.31	805,000	1,106,850.00	2,245,000	1,800,063	4,045,062.50	48,070,000
2023	352,498.83	146,881.34	1,152,501	480,231.16	840,000	1,074,650.00	2,345,000	1,701,763	4,046,762.50	45,725,000
2024	366,551.94	130,667.56	1,198,448	427,219.93	870,000	1,041,050.00	2,435,000	1,598,937	4,033,937.49	43,290,000
2025	386,460.51	111,842.25	1,263,539	365,670.25	905,000	1,006,250.00	2,555,000	1,483,763	4,038,762.50	40,735,000
2026	405,197.99	92,050.79	1,324,802	300,961.71	945,000	970,050.00	2,675,000	1,363,063	4,038,062.50	38,060,000
2027	427,448.74	71,234.62	1,397,551	232,902.88	980,000	932,250.00	2,805,000	1,236,388	4,041,387.50	35,255,000
2028	442,672.95	53,908.31	1,447,327	176,254.19	1,020,000	893,050.00	2,910,000	1,123,213	4,033,212.50	32,345,000
2029	459,068.24	40,095.28	1,500,932	131,092.22	1,060,000	852,250.00	3,020,000	1,023,438	4,043,437.50	29,325,000
2030	320,879.33	16,461.17	1,049,121	102,695.08	1,105,000	809,850.00	2,475,000	929,006	3,404,006.25	26,850,000
2031			1,450,000	74,187.50	1,145,000	765,650.00	2,595,000	839,838	3,434,837.50	24,255,000
2032			1,500,000	25,312.50	1,190,000	719,850.00	2,690,000	745,163	3,435,162.50	21,565,000
2033					1,240,000	672,250.00	1,240,000	672,250	1,912,250.00	20,325,000
2034					1,290,000	622,650.00	1,290,000	622,650	1,912,650.00	19,035,000
2035					1,340,000	571,050.00	1,340,000	571,050	1,911,050.00	17,695,000
2036					1,380,000	530,850.00	1,380,000	530,850	1,910,850.00	16,315,000
2037					1,425,000	489,450.00	1,425,000	489,450	1,914,450.00	14,890,000
2038					1,465,000	446,700.00	1,465,000	446,700	1,911,700.00	13,425,000
2039					1,510,000	402,750.00	1,510,000	402,750	1,912,750.00	11,915,000
2040					1,555,000	357,450.00	1,555,000	357,450	1,912,450.00	10,360,000
2041					1,600,000	310,800.00	1,600,000	310,800	1,910,800.00	8,760,000
2042					1,650,000	262,800.00	1,650,000	262,800	1,912,800.00	7,110,000
2043					1,700,000	213,300.00	1,700,000	213,300	1,913,300.00	5,410,000
2044					1,750,000	162,300.00	1,750,000	162,300	1,912,300.00	3,660,000
2045					1,805,000.00	109,800.00	1,805,000	109,800	1,914,800.00	1,855,000
2046					1,855,000.00	55,650.00	1,855,000	55,650	1,910,650.00	-
<b>Grand Total</b>	<b>\$ 3,818,932</b>	<b>\$ 1,004,322</b>	<b>\$ 15,436,068</b>	<b>\$ 3,432,022</b>	<b>\$ 33,210,000</b>	<b>\$ 16,509,800</b>	<b>\$ 52,465,000</b>	<b>\$ 20,946,144</b>	<b>\$ 73,411,144</b>	



	FY 2022 Year 1	FY 2023 Year 2	FY 2024 Year 3	FY 2025 Year 4	FY 2026 Year 5	Total Year 1- 5
<b>Parks, Park Buildings, Pools, Waterfront, and Camps</b>						
Available Funding <sup>(1)</sup>	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$8,750,000
Expenditures	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$8,750,000
Capital & Maint. Need <sup>(2)</sup> \$217,039,000						
<b>Unfunded Liability</b>	<b>(\$219,594,780)</b>	<b>(\$222,201,676)</b>	<b>(\$224,860,709)</b>	<b>(\$227,572,923)</b>	<b>(\$230,339,382)</b>	<b>(\$230,339,382)</b>
<b>Public Buildings</b>						
Available Funding	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,000,000
Expenditures	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,000,000
Capital & Maint. Need \$282,300,000						
<b>Unfunded Liability</b>	<b>(\$287,130,000)</b>	<b>(\$292,056,600)</b>	<b>(\$297,081,732)</b>	<b>(\$302,207,367)</b>	<b>(\$307,435,514)</b>	<b>(\$307,435,514)</b>
<b>Sidewalks</b>						
Available Funding	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000	\$3,500,000
Expenditures	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000	\$3,500,000
Capital & Maint. Need \$11,120,000						
<b>Unfunded Liability</b>	<b>(\$10,628,400)</b>	<b>(\$10,126,968)</b>	<b>(\$9,615,507)</b>	<b>(\$9,093,818)</b>	<b>(\$8,561,694)</b>	<b>(\$8,561,694)</b>
<b>Streets &amp; Roads</b>						
Available Funding	\$6,820,000	\$6,820,000	\$6,820,000	\$6,820,000	\$6,820,000	\$34,100,000
Expenditures	\$6,820,000	\$6,820,000	\$6,820,000	\$6,820,000	\$6,820,000	\$34,100,000
Capital & Maint. Need \$250,000,000						
<b>Unfunded Liability</b>	<b>(\$248,043,600)</b>	<b>(\$246,048,072)</b>	<b>(\$244,012,633)</b>	<b>(\$241,936,486)</b>	<b>(\$239,818,816)</b>	<b>(\$239,818,816)</b>
<b>Sewers</b>						
Available Funding	\$21,974,583	\$16,456,882	\$20,188,912	\$24,206,893	\$24,700,000	\$107,527,270
Expenditures	\$21,974,583	\$16,456,882	\$20,188,912	\$24,206,893	\$24,700,000	\$107,527,270
Capital & Maint. Need \$193,800,000						
<b>Unfunded Liability</b>	<b>(\$175,261,925)</b>	<b>(\$161,981,144)</b>	<b>(\$144,628,077)</b>	<b>(\$122,829,608)</b>	<b>(\$100,092,200)</b>	<b>(\$100,092,200)</b>
<b>Storm Water</b>						
Available Funding	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$6,500,000
Expenditures	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$6,500,000
Capital & Maint. Need \$245,820,000						
<b>Unfunded Liability</b>	<b>(\$249,410,400)</b>	<b>(\$253,072,608)</b>	<b>(\$256,808,060)</b>	<b>(\$260,618,221)</b>	<b>(\$264,504,586)</b>	<b>(\$264,504,586)</b>
<b>Traffic Signals &amp; Parking Infrastructure</b>						
Available Funding	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$2,000,000
Expenditures	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$2,000,000
Capital & Maint. Need \$14,838,800						
<b>Unfunded Liability</b>	<b>(\$14,727,576)</b>	<b>(\$14,614,128)</b>	<b>(\$14,498,410)</b>	<b>(\$14,380,378)</b>	<b>(\$14,259,986)</b>	<b>(\$14,259,986)</b>
<b>TOTAL</b>						
Available Funding	\$33,744,583	\$28,226,882	\$31,958,912	\$35,976,893	\$36,470,000	\$166,377,270
Expenditures	\$33,744,583	\$28,226,882	\$31,958,912	\$35,976,893	\$36,470,000	\$166,377,270
T1 Funding: \$100M Infrastructure Bond <sup>(3)</sup>	\$10,650,000	\$10,650,000	\$10,650,000	\$10,650,000	\$10,650,000	\$53,250,000
Capital & Maint. Need \$1,214,917,800						
<b>Unfunded Liability</b>	<b>(\$1,193,933,681)</b>	<b>(\$1,178,935,473)</b>	<b>(\$1,159,905,270)</b>	<b>(\$1,136,476,483)</b>	<b>(\$1,112,086,012)</b>	<b>(\$1,112,086,012)</b>

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

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

<sup>(3)</sup> The remaining \$53.25M of the bond allocated to project budgets is estimated to be equally distributed over 5 years, (\$10.65 million/year).

		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 1- 5
<b>Cybersecurity Resiliency Plan<sup>1</sup></b>							
Available Funding		\$489,000	\$0	\$0	\$0	\$0	\$489,000
Expenditures		(\$2,129,500)	(\$2,649,000)	(\$3,701,500)	(\$2,189,500)	(\$2,298,975)	(\$12,968,475)
Capital & Maint. Need	\$12,479,475						
<b>Unfunded Liability</b>		<b>(\$1,640,500)</b>	<b>(\$2,649,000)</b>	<b>(\$3,701,500)</b>	<b>(\$2,189,500)</b>	<b>(\$2,298,975)</b>	<b>(\$12,479,475)</b>
<b>Customer Relationship Management (CRM) System</b>							
Available Funding		\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$320,000
Expenditures		(\$200,000)	(\$80,000)	(\$80,000)	(\$80,000)	(\$80,000)	(\$520,000)
Capital & Maint. Need	\$520,000						
<b>Unfunded Liability</b>		<b>(\$200,000)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$200,000)</b>
<b>GIS: Master Address Database (MAD)</b>							
Available Funding		\$0	\$0	\$50,000	\$50,000	\$50,000	\$150,000
Expenditures		(\$250,000)	(\$100,000)	(\$50,000)	(\$50,000)	(\$50,000)	(\$500,000)
Capital & Maint. Need	\$500,000						
<b>Unfunded Liability</b>		<b>(\$250,000)</b>	<b>(\$100,000)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$350,000)</b>
<b>Information Technology Move to 1947</b>							
Available Funding		\$0	\$0	\$0	\$0	\$0	\$0
Expenditures		(\$770,000)	(\$200,850)	(\$206,876)	(\$213,082)	(\$219,474)	(\$1,610,281)
Capital & Maint. Need	\$1,610,281						
<b>Unfunded Liability</b>		<b>(\$770,000)</b>	<b>(\$200,850)</b>	<b>(\$206,876)</b>	<b>(\$213,082)</b>	<b>(\$219,474)</b>	<b>(\$1,610,281)</b>
<b>TOTAL</b>							
Available Funding		\$0	\$80,000	\$130,000	\$130,000	\$130,000	\$470,000
Expenditures		(\$3,349,500)	(\$3,029,850)	(\$4,038,376)	(\$2,532,582)	(\$2,648,449)	(\$15,598,756)
Capital & Maint. Need	\$15,128,756						
<b>Unfunded Liability</b>		<b>(\$3,349,500)</b>	<b>(\$2,949,850)</b>	<b>(\$3,908,376)</b>	<b>(\$2,402,582)</b>	<b>(\$2,518,449)</b>	<b>(\$15,128,756)</b>

<sup>1</sup> As presented to Council in the closed session dated 12/1/2020

Page 43 of 62  
**Public Buildings - Appraisal of Assets Valued @ \$5M or More**

Other ID.	Address	Sq Feet	Year Built	Last Appr.	Occupied As	Leased Owned	Total Values
MAIN LIBRARY	2090 KITTREDGE STREET (FRONT)	102000	1931	2016	LIBRARY - HIGH END	OWNED	\$ 65,314,995
VEHICLES	VARIOUS LOCATIONS	0			RC, COMP & COLLISION	OWNED	\$ 55,896,045
CIVIC CENTER BUILDING ANNEX	1947 CENTER STREET	112798	1947	2016	PUBLIC WORKS ENGINEERING AND TRANSPORTATION	OWNED	\$ 47,904,716
CENTER STREET GARAGE AND COMMERCIAL SPACE	2025 CENTER STREET	248000	2018	2018	CITY AND PUBLIC PARKING AND OFFICE	OWNED	\$ 47,061,572
MARTIN LUTHER KING JR. CIVIC CENTER	2180 MILVIA STREET	89075	1940	2016	OFFICE BUILDING	OWNED	\$ 36,913,177
PUBLIC SAFETY BUILDING (INCLUDES PRIMARY EOC)	2100 MARTIN LUTHER KING JR WAY	60108	2000	2016	POLICE STATION/FIRE STATION OFFICES	OWNED	\$ 26,636,433
OLD CITY HALL	2134 MARTIN LUTHER KING JR. WAY	38400	1908	2016	OFFICE	OWNED	\$ 17,435,819
TELEGRGRAPH/CHANNING (SATHER GATE) MALL AND GARAGE	2438 DURANT AVENUE/CHANNING AVENUE	186890	1990	2016	PARKING GARAGE W/RETAIL	OWNED	\$ 15,052,194
FIRE DEPARTMENT WAREHOUSE	1011 FOLGER AVENUE	8021	2011	2019	WAREHOUSE	OWNED	\$ 11,818,413
DONA SPRING ANIMAL SHELTER	1 BOLIVAR DRIVE	11700	2013	2016	Animal Shelter	OWNED	\$ 10,300,011
LIBRARY-WEST BRANCH	1125 UNIVERSITY AVENUE	9300	2013	2014	LIBRARY	OWNED	\$ 8,022,103
125-127 University Office Building	125-127 UNIVERSITY AVE.	15396	1968	2015		OWNED	\$ 7,810,758
TAREA HALL PITTMAN SOUTH BRANCH	1901 RUSSELL STREET	8700	2013	2016	LIBRARY	OWNED	\$ 6,936,886
OXFORD STREET GARAGE	2165 KITTREDGE STREET	42128	2009	2016	PARKING/RETAIL	OWNED	\$ 6,796,983
BERKELEY REP THEATER	2025 ADDISON STREET	24893	2000	2016	THEATRE	OWNED	\$ 6,678,445

## Public Buildings - Appraisal of Assets Valued @ \$5M or More

Other ID.	Address	Sq Feet	Year Built	Last Appr.	Occupied As	Leased Owned	Total Values
VETERANS MEMORIAL HALL	1931 CENTER STREET	33254	1923	2016	ASSEMBLY AND HOMELESS SHELTER	OWNED	\$ 6,588,339
NORTH BERKELEY SENIOR CITIZENS CENTER	1901 HEARST AVENUE	20880	1977	2011	SENIOR CENTER	OWNED	\$ 6,179,583
JAMES KENNEY RECREATION CENTER	1718 & 1720 8TH STREET	17724	1973	2019	RECREATION CENTER/ASSEMBLY	OWNED	\$ 5,841,155
LIBRARY-NORTH BRANCH	1170 THE ALAMEDA	9555	1936	2019	LIBRARY	OWNED	\$ 5,823,439
LIBRARY - CLAREMONT BRANCH	2940 BENVENUE AVENUE	8110	1924	2019	LIBRARY	OWNED	\$ 5,496,807
SOUTH BERKELEY SENIOR CENTER	2939 ELLIS STREET	17156	1977	2019	SENIOR CENTER	OWNED	\$ 5,582,332
BERKELEY MARINA	201 UNIVERSITY AVENUE	152571	1974	2019	BOAT DOCKS	OWNED	\$ 5,340,000
<b>TOTAL</b>							<b>\$ 411,430,205</b>

### PROJECTED GENERAL FUND REVENUES

	Projected General Fund Revenue FY 2021 through FY 2026					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
<b>Undesignated Revenues</b>						
Secured Property Taxes	68,058,514	71,121,147	73,610,388	76,186,751	78,853,287	81,613,152
Unsecured Property Taxes	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Supplemental Taxes	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Property Transfer Taxes	16,500,000	12,500,000	12,500,000	12,500,000	12,500,000	12,500,000
Sales Taxes	16,727,492	16,705,100	17,569,800	18,475,300	19,117,700	19,550,400
Soda Tax	970,794	990,210	1,010,014	1,030,214	1,050,819	1,071,835
Utility Users Taxes	12,750,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000
Transient Occupancy Taxes(TOT)	3,070,000	3,394,880	3,496,726	3,601,628	3,709,677	3,849,903
TOT for Short-Term Rentals	476,260	500,073	525,077	551,330	578,897	607,842
Business License Taxes	12,984,192	14,043,702	14,605,450	15,189,668	15,797,255	16,429,145
Business License Taxes for Cannabis Recreational	1,300,000	1,326,000	1,352,520	1,379,570	1,407,162	1,435,305
Vehicle In Lieu Taxes	14,384,459	15,031,760	15,557,872	16,102,397	16,665,981	17,249,290
Other Taxes	1,456,560	1,471,126	1,485,837	1,500,695	1,515,702	1,530,859
Parking Fines	4,049,000	4,129,980	4,212,580	4,296,831	4,382,768	4,470,423
Moving Violations	190,000	190,000	190,000	190,000	190,000	190,000
Interest Income	4,051,200	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Ambulance Fees	3,342,159	3,342,159	4,200,000	4,200,000	4,200,000	4,200,000
Franchise Fees	1,581,650	2,152,513	2,195,563	2,239,474	2,284,263	2,329,948
Indirect cost reimbursements	5,490,000	5,490,000	5,490,000	5,490,000	5,490,000	5,490,000
Transfers	17,274,293	5,874,293	5,874,293	5,874,293	5,874,293	5,874,293
Other Revenues	6,246,348	6,246,348	6,246,348	6,246,348	6,246,348	6,246,348
<b>Total Undesignated Revenues</b>	<b>195,902,922</b>	<b>186,509,291</b>	<b>192,122,467</b>	<b>197,054,501</b>	<b>201,864,152</b>	<b>206,638,744</b>
<b>Designated Revenues</b>						
Prop. Transfer Taxes for capital improvements		3,500,000	3,500,000	3,500,000	3,500,000	3,500,000
Prop. Transfer Taxes-Measure P	6,247,414	6,247,414	6,247,414	6,247,414	6,247,414	6,247,414
Measure U1 for low income housing	2,700,000	2,808,000	2,920,320	3,037,133	3,158,618	3,284,963
<b>Total Designated Revenues</b>	<b>8,947,414</b>	<b>12,555,414</b>	<b>12,667,734</b>	<b>12,784,547</b>	<b>12,906,032</b>	<b>13,032,377</b>
<b>TOTAL REVENUES AND TRANSFERS</b>	<b>204,850,336</b>	<b>199,064,705</b>	<b>204,790,201</b>	<b>209,839,048</b>	<b>214,770,184</b>	<b>219,671,121</b>

1. Secured Property Taxes- Projections based on actual or forecast increase in assessed values: FY 2021 7.70%; FY 2022 4.5%;FY 2023-FY 2026 3.5%. Conservatively assumes the real estate market will remain active for the next two years, and then dip and level off.
2. Unsecured Property Taxes, Supplemental Taxes,Utility Users Taxes, and Ambulance Fees-Historical revenues have been flat for several years, and are expected to remain so.
3. Property Transfer Taxes- Projections assume a \$16.5 million level from FY 2021 to FY 2022 and then a drop to the \$16 million level from FY 2022 through FY 2026.
4. Sales Taxes- Projections are "the most likely outcome" each year up to FY 2026, as provided by MuniServices, the City's Sales Tax consultant that maintains the City's Sales Tax data base. 1% growth each year after FY 2026.
5. Transient Occupancy Taxes- After several years of double-digit growth, this revenue source was devastated by COVID-19 in FY 2021; Thereafter, 3% growth is projected through FY 2026.
6. Business License Taxes (excluding Cannabis Recreational)-Huge decline is expected in FY 2021 as a result of COVID-19; Thereafter, assumes a 4% growth rate from FY 2022-FY 2026
7. Business License Taxes- Cannabis Recreational- Assumes a 4% growth rate from FY 2022-FY 2026.
8. Vehicle In Lieu Taxes- Projections based on actual or forecast increase in assessed values: FY 2021 7.70%; FY 2022 4.5%; FY 2023-FY 2026 3.5%.
9. Parking Fines- Ticket writing has been in a downward spiral for many years; the projections assume flat revenue each year from FY 2022 through FY 2026.
10. Interest Income-The Fed lowered rates to zero again. After a big hit in FY 2021, projection assumes flat growth through FY 2026.
11. Franchise Fees- This revenue source has historically experienced relatively low growth. After a big hit in FY 2021, projection assumes 2% each year through FY 2026.
12. Indirect Cost Reimbursements-Reimbursement increases result from increases in the indirect cost allocation base (i.e., total direct salaries and wages in the fund), an increase in the indirect cost rate or both. Projections assume flat revenue through FY 2026.
13. Transient Occupancy Taxes- Short-term Rentals- After a big hit in FY 2021 as a result of COVID-19, projections assume a 4% growth rate.
14. Soda Taxes- This revenue source was always expected to decline, as the decline in sweet drinks decline. Projections assume a dip in FY 2021 and then 2% growth each year until the tax sunsets on 12/31/2026.



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## Summary:

# Berkeley, California; Appropriations; General Obligation

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Rationale

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Related Research

**Summary:****Berkeley, California; Appropriations; General Obligation****Credit Profile**

US\$38.0 mil 2020 GO bnds (2018 Election Measure O) due 09/01/2050		
<i>Long Term Rating</i>	AA+/Stable	New
US\$12.12 mil 2010 GO rfdg bnds (2008 Election Measure FF) ser B due 09/01/2039		
<i>Long Term Rating</i>	AA+/Stable	New
US\$7.755 mil 2009 GO rfdg bnds (2008 Election Measure FF) ser A due 09/01/2039		
<i>Long Term Rating</i>	AA+/Stable	New
US\$4.01 mil 2010 certs of part rfdg bnds due 10/01/2040		
<i>Long Term Rating</i>	AA/Stable	New

**Rationale**

S&P Global Ratings assigned its 'AA+' long-term rating to Berkeley, Calif.'s 2020 general obligation (GO) bonds (Measure O Authorization) (\$38 million in planned par), 2020 GO refunding bonds series A (\$7.8 million in planned par), and 2020 GO refunding bonds series B (\$12.1 million in planned par). S&P Global Ratings additionally assigned its 'AA' long-term rating to the city's 2020 lease revenue refunding bonds (\$4 million in planned par). Finally, S&P Global Ratings affirmed its 'AA+' long-term rating and underlying rating (SPUR) on Berkeley's general obligation (GO) debt outstanding, and its 'AA' long-term rating on the city's certificates of participation (COPs) and lease revenue bonds (LRBs) outstanding. The outlook on all ratings is stable.

**Security and use of proceeds**

Revenue from unlimited ad valorem taxes levied on taxable property in the city secures both the new and outstanding GO bonds. The city has the power and obligation to levy these taxes without limitation as to rate or amount. Proceeds from the 2020 GO bond (Measure O Authorization) will be used for improvements to and acquisition of affordable and transition housing within the city. Proceeds from the series A and series B 2020 GO refunding bonds will refund a portion of the city's outstanding debt for level interest savings.

The LRBs and COPs outstanding are payable from lease payments to be made from the city to the Berkeley Joint Powers Financing Authority for use of real property in the city. The LRBs are payable under a lease-leaseback agreement whereby the city leases the property to the authority and the authority leases it back to the city. As provided in the lease for the LRBs and the 2010 COPs, payments are triple net, without right of set-offs, and the city is responsible for the maintenance, taxes, and utilities of the leased property. Base rental payments may be abated in the event of damage to, or the destruction of, the assets. To mitigate the risk of abatement in such a case, the city has covenanted to maintain at least 24 months' rental interruption insurance coverage, except with respect to earthquake coverage. In addition, insurance against loss or damage, for certain causes of loss equal to the lesser of 100%

outstanding aggregate principal amount of the bonds or 100% replacement cost of all structures, is required under the lease. The transaction documents do not require the city to fund a debt service reserve. In accordance with our criteria, we do not view the lack of a debt service reserve as a significant credit weakness because the three-month lag between the start of the city's fiscal year (July 1) and the debt service due date (Oct. 1) mitigates late budget adoption risk. Our ratings on the city's LRBs and COPs are one notch below the city GO rating to reflect appropriation risk. Proceeds from the series 2020 lease revenue refunding bonds will be used to refund a portion of the city's outstanding debt. The city is planning to redirect the savings, which will be frontloaded, to the city's section 115 pension trust.

### **Credit overview**

The city of Berkeley's credit quality is anchored by the city's desirable location on the San Francisco Bay in Alameda County, as well as the presence of the University of California's flagship Berkeley campus. These factors have helped the city enjoy extraordinary growth during the recent expansion. Importantly, the city has successfully leveraged this wealth to fortify its financial position. A history of strong operating surpluses has allowed the city to maintain very strong budgetary flexibility. While the city has begun to take steps to plan for continued increases in pension costs, we believe the city's elevated pension liabilities will continue to challenge the city, particularly if a recession once again causes a decline in revenue. We also believe the statewide challenges of housing affordability and homelessness are beginning to affect the city's credit quality, with the city dedicating significant attention and, increasingly, fiscal resources to address the problems.

The ratings further reflect our view of the following credit characteristics of the city:

- Very strong economy, with access to a broad and diverse metropolitan statistical area (MSA) and a local stabilizing institutional influence;
- Very strong management, with strong financial policies and practices under our Financial Management Assessment (FMA) methodology;
- Strong budgetary performance, with operating surpluses in the general fund and at the total governmental fund level in fiscal 2019;
- Very strong budgetary flexibility, with an available fund balance in fiscal 2019 of 50% of operating expenditures;
- Very strong liquidity, with total government available cash at 105.2% of total governmental fund expenditures and 24.8x governmental debt service, and access to external liquidity we consider strong;
- Weak debt and contingent liability profile, with debt service carrying charges at 4.2% of expenditures and net direct debt that is 47.8% of total governmental fund revenue, as well as a large pension and other postemployment benefit (OPEB) obligation and the lack of a plan to sufficiently address the obligation; and
- Strong institutional framework score.

### **Very strong economy**

We consider Berkeley's economy very strong. The city, with an estimated population of 123,328, is located in Alameda County in the San Francisco-Oakland-Hayward, Calif., MSA, which we consider to be broad and diverse. The city also benefits, in our view, from a stabilizing institutional influence. The city has a projected per capita effective buying income of 159% of the national level and per capita market value of \$167,618. The city's market value grew by 7.0% over the past year to \$20.7 billion in 2020. The county unemployment rate was 3.0% in 2018.



Berkeley is located on the east side of the San Francisco Bay, approximately 10 miles northeast of San Francisco. The University of California, on the eastern side of the city, acts as a stabilizing institution and serves as a major component of the city's economy, employing approximately 13,400 (roughly 20% of total employment) full- and part-time workers. In our view, the University of California's student population (roughly 43,000 enrolled students in 2019) lowers income levels within the city. According to management, the university is planning to continue adding students after adding nearly 10,000 in recent years. Management also reports that the city is continuing to experience a significant construction boom as a result of major residential and commercial construction projects as well as an increase in single-family home renovations.

Looking ahead at macro-level considerations, despite some indications of a weakening economy at the national level, state and local government credit quality has not shown any signs of broad deterioration. We believe the prolonged trade dispute with China is pulling down projections for U.S. GDP growth. That said, we note that the city could face some economic risk due to increasingly unaffordable housing across much of coastal California and due to the cap on the state and local tax deduction imposed by the federal Tax Cuts and Jobs Act--although we have not seen these risks materialize thus far. For additional information, see "In The Mist Of Mixed Economic Signals, U.S. State And Local Credit Quality Remains Strong" (published Oct 29, 2019) and "U.S. Tax Reform: Mapping The Potential Winners And Losers By County" (published May 2, 2018).

### **Very strong management**

We view the city's management as very strong, with strong financial policies and practices under our FMA methodology, indicating financial practices are strong, well embedded, and likely sustainable.

Highlights of the city's approach to financial management include:

- A budget formation process that incorporates historical revenue and expenditure trends, as well as some independent revenue forecasts;
- A biannual budget process with formal revision twice per calendar year, coupled with quarterly monitoring of budget-to-actual results;
- A five-year financial forecast that is updated annually;
- A five-year capital improvement plan, updated annually as part of the budget process, that identifies all known revenue sources to support potential projects;
- A formal investment policy that details permitted instruments and portfolio objectives and includes monitoring requirements with quarterly presentations to the council;
- A basic debt policy that includes some quantitative limits but does not include robust quantitative measures or benchmarks; and
- A minimum reserve and fund balance policy of 13.8% of budgeted revenue, with a longer-term goal of 30%.

### **Strong budgetary performance**

Berkeley's budgetary performance is strong, in our opinion. The city had operating surpluses of 9.7% of expenditures in the general fund and of 17.0% across all governmental funds in fiscal 2019. Our assessment accounts for our expectation that budgetary results could deteriorate somewhat in the near term.

We believe the city is operationally balanced, and due largely to the city's robust economic growth in recent years, the city has experienced sizable positive net general fund results due to positive variation in revenue. However, the city's challenges with housing and homelessness have absorbed much of this additional fiscal capacity in recent years, in our view. In the city's 2016 and 2018 election, the two most significant fiscal measures--a new real estate transfer tax that was expected to generate \$6 million-\$8 million annually and a \$135 million GO authorization--were both passed by voters as measures to address the city's housing affordability and homelessness challenges. While the actions the city has taken to date are significant and unique in the region, at this point it's not clear if they will be sufficient. If not, the city may need to dedicate additional ongoing budgetary resources or debt capacity to respond to the challenge.

The city is budgeting for balanced general fund results over the 2020-2021 biennium, and we believe they will likely end better than budgeted.

We have adjusted general fund expenditures upward and the corresponding net transfers downward to reflect ongoing transfers out to various special funds to support operations and maintenance. We also adjusted general fund revenue and the corresponding net transfers in the past three audited years to reflect ongoing transfers in from the parking enterprise fund.

### **Very strong budgetary flexibility**

We expect the available fund balance to remain above 30% of expenditures for the current and next fiscal years, which we view as a positive credit factor.

The city maintains very strong reserves and has no plans to spend them down. We do not anticipate that the city will spend them down.

### **Very strong liquidity**

In our opinion, Berkeley's liquidity is very strong, with total government available cash at 105.2% of total governmental fund expenditures and 24.8x governmental debt service in 2019. In our view, the city has strong access to external liquidity if necessary.

We believe the city's investment policy restricts its ability to maintain an aggressive investment portfolio, and we have not identified any contingent risks that would jeopardize the city's liquidity. The city invests in money market funds, medium-term notes, and municipal bonds. We do not expect the city's liquidity position to deteriorate over the medium term, based on historical performance and a lack of identified material risks to liquidity.

### **Weak debt and contingent liability profile**

In our view, Berkeley's debt and contingent liability profile is weak. Total governmental fund debt service is 4.2% of total governmental fund expenditures, and net direct debt is 47.8% of total governmental fund revenue.

In November 2018, the city's voters approved \$135 million in general fund bond authorization specifically to address the city's housing challenges, and this series will be the first issuance. According to management, the city will likely issue the remaining \$97 million in three series over the next several years, with the next issuance expected in 2023. In addition, the city still has \$65 million in authority from its 2016 measure T1 authorization.

Management also confirmed that the city has no alternative financing obligations.

**Pension and OPEB highlights**

- In our view, the city has a large pension and OPEB liability that is pressuring the city's operations, and while the city has made progress planning—including establishing a Section 115 trust—we don't yet believe the city has adequately planned for expected cost escalation.
- The city's pension funded status, combined with recent changes to assumed discount rate and amortization methods, will likely lead to accelerating costs in the medium term. However, we believe this approach will help the city make timely progress reducing pension liabilities.
- While the city is not making full actuarially determined contributions (ADCs) toward its OPEB liability, which will lead to significant contribution volatility over time, we believe Berkeley's pension costs represent a more urgent source of adverse credit pressure.

The city participates in the following plans funded as of June 30, 2018:

- California Public Employees' Retirement System (CalPERS) miscellaneous plan: \$281 million in net liability, or 72% funded;
- CalPERS police plan: \$159 million in net liability, or 62% funded;
- CalPERS fire plan: \$76 million in net liability, or 72% funded; and
- Retiree Health Plan: single-employer OPEB plan with \$37 million in net liability, or 45% funded.

Berkeley's combined required pension and actual OPEB contributions totaled 15.9% of total governmental fund expenditures in 2019. Of that amount, 14.8% represented required contributions to pension obligations, and 1.1% represented OPEB payments. The city's 2018 ADC for all three of its CalPERS plans fell short of static funding, indicating that the city's pension liabilities increased. While CalPERS' recent adoption of a 20-year, level dollar amortization approach for new gains and losses will lead to more rapid contribution increases, a shorter amortization period will provide a faster recovery to plan funding following years of poor investment performance or upward revisions to the pension liability, which we view favorably. However, we believe costs will continue to increase for the next several years to retire existing unfunded liability, much of which is amortized over 30-year periods using a level percent of payroll approach. In our view, the discount rate of 7.15% contributes to contribution volatility.

**Strong institutional framework**

The institutional framework score for California municipalities required to submit a federal single audit is strong.

**Outlook**

The stable outlook reflects our view of Berkeley's historically stable financial position and demonstrated willingness to reduce expenditures as volatile revenues decline. We also expect that city management will continue to balance its operations and maintain very strong reserves. We do not expect to change the ratings within the two-year outlook horizon.

**Upside scenario**

We could raise the ratings if the city significantly reduces its unfunded pension liability and we believe the city will not

need to increase its ongoing fiscal commitments to address its housing and homelessness challenges.

### Downside scenario

We could lower the ratings if the city's financial performance and flexibility deteriorate to a level we consider adequate, and if debt or economic scores worsen.

## Related Research

- SeismiCat Earthquake Model, May 4, 2018
- S&P Public Finance Local GO Criteria: How We Adjust Data For Analytic Consistency, Sept. 12, 2013
- Criteria Guidance: Assessing U.S. Public Finance Pension And Other Postemployment Obligations For GO Debt, Local Government GO Ratings, And State Ratings, Oct. 7, 2019
- 2019 Update Of Institutional Framework For U.S. Local Governments

Ratings Detail (As Of February 14, 2020)		
Berkeley GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Berkeley GO (BAM)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Berkeley APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Berkeley GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Berkeley 2010 certs of part rfdg bnds due 10/01/2040		
<i>Long Term Rating</i>	AA/Stable	Affirmed
<b>Berkeley Jt Pwrs Fing Auth, California</b>		
Berkeley, California		
Berkeley Jt Pwrs Fing Auth (Berkeley) 2012 rfdg lse rev bnds		
<i>Long Term Rating</i>	AA/Stable	Affirmed

Many issues are enhanced by bond insurance.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at [www.standardandpoors.com](http://www.standardandpoors.com) for further information. Complete ratings information is available to subscribers of RatingsDirect at [www.capitaliq.com](http://www.capitaliq.com). All ratings affected by this rating action can be found on S&P Global Ratings' public website at [www.standardandpoors.com](http://www.standardandpoors.com). Use the Ratings search box located in the left column.

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To: Henry Oyekanmi  
From: Ben Geare  
Date: Feb 28, 2020  
Re: Additional information on debt and contingent liability analysis

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Dear Henry,

Per your request, please find below some additional information on how we conducted our analysis of the city of Berkeley's debt and contingent liability profile.

Please note that certain terms used in our rating report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria.

The debt and contingent liabilities section of our analysis relies on the three documents listed below (attached in Appendix 4). Note that these documents, as well as any other criteria used to assign the rating, should be read in full to understand all aspects of our analysis.

- “Debt Statement Analysis” criteria, published Aug 22, 2006
- “U.S. Local Governments General Obligation Ratings: Methodology And Assumptions” criteria, published Sept. 12, 2013
- “Assessing U.S. Public Finance Pension And Other Postemployment Obligations For GO Debt, Local Government GO Ratings, And State Ratings” guidance, published Oct 7, 2019

#### Initial debt and contingent liabilities score

The criteria form the initial debt and contingent liabilities score from the combination of two measures: total governmental funds debt service as a percentage of total governmental funds expenditures and net direct debt as a percentage of total governmental funds revenue. Table 14 from our “U.S. Local Governments General Obligation Ratings: Methodology And Assumptions” criteria (listed in Appendix 2 below) details the scoring for the debt and contingent liabilities score. A score from that table of 1, 2, 3, 4, or 5 are very strong, strong, adequate, weak and very weak, respectively.

Our description of Berkeley's debt and contingent liability profile as “weak” indicates a score of 4. As we stated in our report, we determined (according the methods described in our Debt Statement Analysis criteria) that Berkeley's total governmental fund debt service is 4.2% of total governmental fund expenditures, and net direct debt is 47.8% of total governmental fund revenue. If you reference Table 14 below, you will see that these two scores result in an initial debt and contingent liabilities score of 2 (with TGF debt service below the 8% threshold and net direct debt as a percentage of TGF revenue between 30% and 60%).

#### Additional qualitative adjustments related to pension and OPEB liabilities

As our report also indicates, there was an additional qualitative factor with a negative impact on Berkeley's initial debt and contingent liabilities score, resulting in a final debt and contingent

liabilities score of four. As you can see in table 14 in Appendix 2 below, one of these negative qualitative factors is the presence of an “unaddressed exposure to large unfunded pension or OPEB obligations leading to accelerating payments over the medium term that represent significant budget pressure...” and the criteria goes on to say that: “If there is a plan to address the obligations, the final score will worsen by one point, otherwise the score worsens by two points”. As we stated in the rating report, “...In our view, the city has a large pension and OPEB liability that is pressuring the city's operations, and while the city has made progress planning--including establishing a Section 115 trust--we don't yet believe the city has adequately planned for expected cost escalation”.

Paragraph 82 of our Sept. 2013 Local Government GO Ratings criteria (included in appendix 2 below) provides more detail on areas of analytical focus when assessing pension and OPEB burden. This section notes: “A combined carrying charge (required annual pension payment plus annual OPEB payment as a percentage of total governmental funds expenditures) of 10% or more will be considered elevated, however, we will consider whether we expect the elevated payments to result in lower future obligations.” And then goes on to state that when pension plan funded ratios “are less than 80%, they will receive further review especially when the carrying charge is elevated.” As we noted in our report, “Berkeley's combined required pension and actual OPEB contributions totaled 15.9% of total governmental fund expenditures in 2019. Of that amount, 14.8% represented required contributions to pension obligations, and 1.1% represented OPEB payments.” We also noted that, as of June 30, 2018, the city's miscellaneous, police, and fire CalPERS plans were funded at 72%, 62%, and 72%, respectively.

Our Oct. 7, 2019 pension guidance document provides guidelines that we commonly consider when analyzing the potential for pension cost acceleration and budget stress. This document defines how we calculate our assessment of “static funding” and “minimum funding progress,” which are metrics used to assess cost trajectory and potential for budgetary stress. See appendix 3 for the definition of these metrics and an explanation of how they are calculated. Our statement in the report that all three of the city's CalPERS plans “fell short of static funding” refers to this metric. The pension guidance document also includes guidelines we use to assess other actuarial methods and assumptions, including the plan amortization approach and discount rate.

I hope this answers your question. We are happy to discuss any additional questions you might have.

Kind Regards,

Ben Geare  
Feb 28, 2020

## Appendix 1:

### The debt and contingent liabilities section for the City of Berkeley's Feb 14, 2020 Rating Report

#### “Weak debt and contingent liability profile

In our view, Berkeley's debt and contingent liability profile is weak. Total governmental fund debt service is 4.2% of total governmental fund expenditures, and net direct debt is 47.8% of total governmental fund revenue.

In November 2018, the city's voters approved \$135 million in general fund bond authorization specifically to address the city's housing challenges, and this series will be the first issuance. According to management, the city will likely issue the remaining \$97 million in three series over the next several years, with the next issuance expected in 2023. In addition, the city still has \$65 million in authority from its 2016 measure T1 authorization.

Management also confirmed that the city has no alternative financing obligations.

#### Pension and OPEB highlights

- In our view, the city has a large pension and OPEB liability that is pressuring the city's operations, and while the city has made progress planning--including establishing a Section 115 trust--we don't yet believe the city has adequately planned for expected cost escalation.
- The city's pension funded status, combined with recent changes to assumed discount rate and amortization methods, will likely lead to accelerating costs in the medium term. However, we believe this approach will help the city make timely progress reducing pension liabilities.
- While the city is not making full actuarially determined contributions (ADCs) toward its OPEB liability, which will lead to significant contribution volatility over time, we believe Berkeley's pension costs represent a more urgent source of adverse credit pressure.

The city participates in the following plans funded as of June 30, 2018:

- California Public Employees' Retirement System (CalPERS) miscellaneous plan: \$281 million in net liability, or 72% funded;
- CalPERS police plan: \$159 million in net liability, or 62% funded;
- CalPERS fire plan: \$76 million in net liability, or 72% funded; and
- Retiree Health Plan: single-employer OPEB plan with \$37 million in net liability, or 45% funded.

Berkeley's combined required pension and actual OPEB contributions totaled 15.9% of total governmental fund expenditures in 2019. Of that amount, 14.8% represented required contributions to pension obligations, and 1.1% represented OPEB payments. The city's 2018 ADC for all three of its CalPERS plans fell short of static funding,



indicating that the city's pension liabilities increased. While CalPERS' recent adoption of a 20-year, level dollar amortization approach for new gains and losses will lead to more rapid contribution increases, a shorter amortization period will provide a faster recovery to plan funding following years of poor investment performance or upward revisions to the pension liability, which we view favorably. However, we believe costs will continue to increase for the next several years to retire existing unfunded liability, much of which is amortized over 30-year periods using a level percent of payroll approach. In our view, the discount rate of 7.15% contributes to contribution volatility.”

## Appendix 2

Selections from “U.S. Local Governments General Obligation Ratings: Methodology And Assumptions” criteria, published Sept. 12, 2013

### I. Debt And Contingent Liabilities Score

78. The criteria form the initial debt and contingent liabilities score from the combination of two measures: total governmental funds debt service as a percentage of total governmental funds expenditures and net direct debt as a percentage of total governmental funds revenue. Debt service as a percentage of expenditures measures the annual fixed-cost burden that debt places on the government. Debt to revenues measures the total debt burden on the government's revenue position rather than the annual cost of the debt, which can be manipulated by amortization structures. Net direct debt is calculated as of the date of our analysis, including any debt issuance we are currently rating. Debt to expenditures is measured similarly, recognizing any near-term changes due to the government's debt structure. Table 14 details the scoring for the debt and contingent liabilities score. For more information on debt measurement, see "[Debt Statement Analysis](#)," published Aug. 22, 2006.

Table 14 Assessing The Debt And Contingent Liabilities Score (see paragraphs 78-84)					
	Net Direct Debt As % Of Total Governmental Funds Revenue				
Total Governmental Funds Debt Service As A % of Total Governmental Funds Expenditures	<30	30 to 60	60 to 120	120 to 180	≥180
< 8	1	2	3	4	5
8 to 15	2	3	4	4	5
15 to 25	3	4	5	5	5
25 to 35	4	4	5	5	5
≥35	4	5	5	5	5
A score of 1, 2, 3, 4 and 5 are very strong, strong, adequate, weak and very weak, respectively.					
Qualitative factors with a positive impact on the initial score:			Qualitative factors with a negative impact on the initial score:		
Overall net debt as a percentage of market value below 3%.			Significant medium-term debt plans produce a higher initial score when included.		
Overall rapid annual debt amortization, with more than 65% coming due in 10 years.			Exposure to interest-rate risk or instrument provisions that could increase annual payment requirements by at least 20%.		
			Overall net debt as a percentage of market value exceeding 10%.		
			Unaddressed exposure to large unfunded pension or OPEB obligations leading to accelerating payment obligations over the medium term that represent significant budget pressure (see paragraph 82). If there is a plan to address the obligations, the final score worsens by one point; otherwise the score worsens by two points.		
			Speculative contingent liabilities or those otherwise likely to be funded on an ongoing basis by the government representing more than 10% of total governmental revenue.		
For each relevant qualitative factor, the score changes by one point, except for unaddressed exposure to unfunded pension or OPEB obligations which can worsen the final score by two points. The final debt and contingent liabilities score equals the initial score adjusted up or down based on the net effect of the qualitative factors. Metrics equal a cutoff point between two initial scores will equate to the worse score.					

79. *Qualitative adjustments may raise or lower the final debt and contingent liabilities score relative to the initial score, as shown in table 14. The criteria consider pending debt issuance through an upward score adjustment when including the planned or recently issued debt results in a worse score.*

80. *The criteria improve the final score by one point when above-average annual debt amortization (based on total direct debt) inflates the debt service as a percentage of expenditures score and masks the future flexibility stemming from an early deleveraging. The criteria do not apply this adjustment when the early amortization results from a near-to-medium term bullet maturity that will not be retired with funds on hand. Exposure to interest-rate risk or instrument provisions that cause amortization or interest-rate changes beyond the issuer's control increase the score by one point, reflecting additional uncertainty as to whether current debt service costs will be sustained. Examples include unhedged variable-rate debt or higher interest rates resulting from failed remarketings in instruments such as auction-rate securities, variable-rate demand bonds, and certain direct purchase obligations.*

81. *An overall net debt to TMV level of above 10% worsens the score by one point, while a low level, below 3%, improves the score by one point. This statistic captures the burden of the local government's debt in addition to that of overlapping jurisdictions on the overall tax base. An atypical debt burden can present extra challenges or flexibility over and above that suggested by the individual government's debt burden alone.*

82. *The impact of pension and OPEB obligations depends on the degree to which such costs will likely escalate and whether the government has plans to address them. Relative to debt, governments have a higher level of flexibility to address these costs, both from a temporal payment perspective and from an obligation level perspective. Many governments have the flexibility to alter benefit levels, and some governments already have availed themselves of this ability. Most governments also can pay less than the annual required contribution without leaving the fund unable to meet actual payments in the current and following year. On the other hand, such delays accelerate the growth rate of future payments. When the potential for such accelerations exists and the increased payments would increase budget stress, the final debt and contingent liabilities score worsens by one point when a specific and credible plan to address this burden is in place. Otherwise, the score worsens by two points relative to the initial score. Among the areas of analytic focus when assessing the pension and OPEB burden will be:*

- *The required annual pension payment plus annual OPEB payment as a percentage of total governmental funds expenditures. A combined carrying charge of 10% or more will be considered elevated, however, we will consider whether we expect the elevated payments to result in lower future obligations.*
- *The actuarial funded ratio(s) of the pension plan(s) a local government participates in or sponsors. If the ratio(s) are less than 80%, they will receive further review especially when the carrying charge is elevated. We also consider the magnitude of the unfunded obligation in tandem with the funded ratio(s) when assessing the potential for stress.*
- *The contributions actually made to all pension plans a local government participates in or sponsors. The degree to which a local government contributes less than its full*

*required contribution(s) could be an indication of either short-term cash flow issues or a willingness of management to defer difficult decisions.*

- *The OPEB costs exceed 5% of total governmental funds expenditures and the local government has limited flexibility to change or amend these benefits.*

*83. Finally, another adjustment considers additional future contingent liabilities not yet requiring government support. While our debt burden calculation already considers other nondirect debt requiring government support and our liquidity score considers the near-term impact of any contingent liabilities, the adjustment to the debt score results from a likelihood of ongoing payment obligations not yet occurring that represent more than 10% of total governmental funds revenues. Once the payment obligations become reality, they are included in the debt measure. Examples of contingent liabilities include potential legal judgments, currently self-supporting government enterprise debt that is likely to require support in the near future, guaranteed debt likely to need support in the near future, and additional costs resulting from pending changes in law.*

## Appendix 3

Selections from “Assessing U.S. Public Finance Pension And Other Postemployment Obligations For GO Debt, Local Government GO Ratings, And State Ratings” guidance, published Oct 7, 2019

### *Actual Contribution*

*Not all pension plans have an actuarial funding plan in place, which can hinder evaluation of the funding discipline. One way we may evaluate how effective the most recent year's contributions are at reaching 100% funding within a reasonable timeframe is our minimum funding progress (MFP) metric. The MFP metric assesses whether the most recent employer and employee contributions cover total service cost plus unfunded interest cost plus 1/30th of the principal and is defined as follows:*

$$MFP = SC + IC + NPL/30$$

- *Service cost = new benefits earned during the year*
- *Unfunded interest cost = interest earned during the year on the net pension liability*
- *Net pension liability (NPL) = NPL at beginning of year*

*When contributions are to equal service cost plus unfunded interest cost alone, the plan would typically maintain its current funding levels and not make any progress toward full funding; in other words, it is "static funding." We generally do not view static funding as prudent because failing to make measureable progress on the unfunded liability, especially during periods of economic expansion, indicates poor plan management that increases the risk of higher costs during down markets. We view contributions that cover static funding plus 1/30th of the unfunded liability in the most recent annual contribution as a minimum amount of progress that governments should make toward full funding, without regard to an actuarial funding plan.*

## Appendix 4

### Selected Criteria and Guidance documents

<a href="http://spratings.com">Link to spratings.com</a>	“Debt Statement Analysis” criteria, published Aug 22, 2006
<a href="http://spratings.com">Link to spratings.com</a>	“U.S. Local Governments General Obligation Ratings: Methodology And Assumptions” criteria, published Sept. 12, 2013
<a href="http://spratings.com">Link to spratings.com</a>	“Assessing U.S. Public Finance Pension And Other Postemployment Obligations For GO Debt, Local Government GO Ratings, And State Ratings” guidance, published Oct 7, 2019



Office of the City Manager

WORK SESSION

March 16, 2021

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Rama Murty, Acting Budget Manager

Subject: FY 2021 Mid-Year Budget Update

INTRODUCTION

This report presents the FY 2021 Mid-Year Budget Update and focuses on projected General Fund revenues and actual General Fund and Special Fund expenditures from July 2020 to December 2020.

CURRENT SITUATION AND ITS EFFECTS

The City of Berkeley is currently in Fiscal Year 2021 (FY), the second of two fiscal years in the FY 2020 & FY 2021 biennial budget cycle, which Council adopted on June 30, 2020<sup>1</sup>. In June 2020, the City Council adopted a significant revision to the FY 2021 budget due to the loss of anticipated revenue from the COVID-19 pandemic. FY 2021 runs from July 1, 2020 through June 30, 2021.

As depicted in the table below, as of December 31, 2020, while General Fund revenues are on track to exceed initial estimates, General Fund expenses are also somewhat higher than anticipated.. Given these trends and the fiscal uncertainty attributed to the COVID-19 pandemic, Staff will carefully monitor revenues and expenses in the second half of FY 2021.

*\$'s in Millions*

	Adjusted Budget	FY 2021 Mid-Year Actuals	% Received/ Expensed and Encumbered
Revenues	\$195.8	\$102.2	52%
Expenditures	(\$224.1)	(\$118.3)	53%
Carryover and Excess Equity	\$ 29.4		
Balance	\$ 1.1		

<sup>1</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2020/06\\_June/Documents/2020-06-30\\_Item\\_40\\_FY\\_2021\\_Mid-Biennial\\_Budget\\_pdf.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2020/06_June/Documents/2020-06-30_Item_40_FY_2021_Mid-Biennial_Budget_pdf.aspx)

The carryover and excess equity are carried forward from FY 2020. Additional information on the carryovers and excess equity allocation is discussed later in this report under the General Fund Expenditures section.

### FY 2021 Mid-Year Summary

On November 17, 2020, Council was provided the [FY 2020 Year-End Results and FY 2021 First Quarter Budget Update](#) report. At the time, both the General Fund revenues and the General Fund expenditures were tracking within budget.

The chart below shows FY 2021 General Fund Revenues through the first six months and compares them to the first six months of FY 2020.

### General Fund Revenues (Adopted and Year to Date Actual thru December 31)

Revenue Categories	FY 2021				FY 2020				Comparison FY21 vs FY 20	
	Adopted	Actual	Variance	% Received	Adopted	Actual	Variance	% Received	Amount	%
	(a)	(b)	c=(b) - (a)	(d) = (b)/(a)	(e)	(f)	g=(f) - (e)	(h) = (f)/(g)	(i) = (b) - (f)	(j) = (i)/(f)
Secured Property	\$61,165,454	\$34,731,618	(\$26,433,836)	56.78%	\$63,199,622	\$32,175,526	(\$31,024,096)	50.91%	2,556,092	7.94%
Redemptions - Regular	534,512	432,291	(102,221)	80.88%	668,140	356,477	(\$311,663)	53.35%	75,814	21.27%
Supplemental Taxes	1,260,000	855,050	(404,950)	67.86%	1,400,000	808,127	(\$591,873)	57.72%	46,923	5.81%
Unsecured Property Taxes	2,250,000	2,995,351	745,351	133.13%	2,500,000	2,705,126	\$205,126	108.21%	290,225	10.73%
Property Transfer Tax	16,500,000	10,665,913	(5,834,087)	64.64%	12,500,000	15,043,643	\$2,543,643	120.35%	(4,377,730)	-29.10%
Property Transfer Tax-Measure P (New December 21, 2018)	4,747,414	4,254,324	(493,090)	89.61%	1,509,218	7,046,430	\$5,537,212	466.89%	(2,792,106)	-39.62%
Sales Taxes	15,786,200	8,069,851	(7,716,349)	51.12%	18,238,000	9,430,533	(\$8,807,467)	51.71%	(1,360,682)	-14.43%
Soda Taxes	970,794	530,328	(440,466)	54.63%	1,459,057	765,628	(\$693,429)	52.47%	(235,300)	-30.73%
Utility Users Taxes	12,750,000	6,304,755	(6,445,245)	49.45%	15,000,000	6,327,260	(\$8,672,740)	42.18%	(22,505)	-0.36%
Transient Occupancy Taxes	5,070,000	1,084,961	(3,985,039)	21.40%	7,800,000	4,483,409	(\$3,316,591)	57.48%	(3,398,448)	-75.80%
Short-term Rentals	676,260	218,590	(457,670)	32.32%	1,020,000	867,507	(\$152,493)	1,020,000	(648,917)	-74.80%
Business License Tax	12,984,192	390,253	(12,593,939)	3.01%	19,584,000	1,166,980	(\$18,417,020)	5.96%	(776,727)	-66.56%
Recreational Cannabis	1,300,000	355,641	(944,359)	27.36%	510,000	702,857	\$192,857	137.82%	(347,216)	-49.40%
U1 Revenues	2,700,000	53,389	(2,646,611)	1.98%	1,000,000	187,700	(\$812,300)	18.77%	(134,311)	-71.56%
Other Taxes	922,048	705,675	(216,373)	76.53%	1,116,860	769,335	(\$347,525)	68.88%	(63,660)	-8.27%
Vehicle In-Lieu Taxes	12,421,597	7,190,227	(5,231,370)	57.88%	13,333,826	6,678,022	(\$6,655,804)	50.08%	512,205	7.67%
Parking Fines-Regular Collections	5,049,000	1,714,828	(3,334,172)	33.96%	6,600,000	2,337,328	(\$4,262,672)	35.41%	(622,500)	-26.63%
Parking Fines-Booting Collections			0		200,000	8,685	(\$191,315)	4.34%	(8,685)	-100.00%
Moving Violations	190,000	42,277	(147,723)	22.25%	190,000	114,850	(\$75,150)	60.45%	(72,573)	-63.19%
Ambulance Fees	5,103,208	1,414,206	(3,689,002)	27.71%	4,200,000	2,392,802	(\$1,807,198)	56.97%	(978,596)	-40.90%
Interest Income	2,851,200	2,627,359	(223,841)	92.15%	3,500,000	3,019,829	(\$480,171)	86.28%	(392,470)	-13.00%
Franchise Fees	1,551,696	370,029	(1,181,667)	23.85%	2,068,928	421,414	(\$1,647,514)	20.37%	(51,385)	-12.19%
Other Revenue	6,246,348	5,631,071	(615,277)	90.15%	8,044,544	4,494,527	(\$3,550,017)	55.87%	1,136,544	25.29%
IDC Reimbursement	5,490,000	2,683,137	(2,806,863)	48.87%	6,100,000	2,525,542	(\$3,574,458)	41.40%	157,595	6.24%
Transfers	17,274,293	8,865,281	(8,409,012)	51.32%	5,266,688	2,633,344	(\$2,633,344)	50.00%	6,231,937	236.65%
			-				-		-	
<b>Total Revenue:</b>	<b>\$195,794,216</b>	<b>\$102,186,405</b>	<b>-\$93,607,811</b>	<b>52.19%</b>	<b>\$197,008,883</b>	<b>\$107,462,881</b>	<b>-\$89,546,002</b>	<b>54.55%</b>	<b>(\$5,276,476)</b>	<b>-4.91%</b>

Note: This statement is presented on a budgetary basis.



The Mid-year review generally focuses on the major revenue fluctuation and changes that have occurred that might result in significant changes in future projections. However, in light of the disruptions created by the COVID-19 pandemic, Staff believes it would be prudent, where possible, to indicate where revisions to revenue projections maybe needed based on mid-year trends and macro-economic indicators. Staff have identified this in the detailed discussions of the specific revenue streams below. Staff will continue to monitor the actual revenues received over the next two quarters and then provide revised projections as appropriate.

During the first six months of FY 2021, General Fund revenue and transfers decreased from the first half of FY 2020 by \$5,276,476 or 4.91%, from \$107,462,881 in the first half of FY 2020 to \$102,186,405 during the first half of FY 2021. This is primarily due to decreases in the following:

- Property Transfer Tax - \$4,377,730,
- Property Transfer Taxes- Measure P - \$2,792,106,
- Sales Tax - \$1,360,682,
- Transient Occupancy Taxes (TOT) decline of \$3,398,448,
- Parking Fines - \$622,500,
- Ambulance Fees - \$978,596, and
- Interest Income - \$392,470.

These decreases were partially offset by increases in the following:

- Transfers In of \$6,231,937,
- Secured Property Tax - \$2,556,092,
- Vehicle in Lieu Taxes - \$512,205,
- Other Income - \$1,136,544.

Based on results from the first six (6) months of the Fiscal Year, Staff is increasing the total projected General Fund revenues for FY 2021 by \$9,056,121 or 4.6% to \$204,850,337 from the \$195,794,216 reflected in the Adopted Budget.

The following table summarizes the Adopted FY 2021 forecast and the Revised FY 2021 forecast.

<b>FY 2021 Revenue Comparison</b>			
	<b>FY 2021 Adopted</b>	<b>FY 2021 Revised</b>	<b>Change</b>
<b>Undesignated Revenues</b>			
Secured Property Taxes	61,165,455	68,058,514	6,893,059
Regular Redemptions	534,511		
Unsecured Property Taxes	2,250,000	3,000,000	750,000
Supplemental Taxes	1,260,000	2,000,000	740,000
Property Transfer Taxes	16,500,000	16,500,000	0
Sales Taxes	15,786,200	16,727,492	941,292
Soda Tax	970,794	970,794	0
Utility Users Taxes	12,750,000	12,750,000	0
Transient Occupancy Taxes(TOT)*	5,746,260	3,546,260	(2,200,000)
Business License Taxes**	14,284,192	14,284,192	0
Vehicle In Lieu Taxes	12,421,597	14,384,459	1,962,862
Other Taxes	922,048	1,456,560	534,512
Parking Fines	5,049,000	4,049,000	(1,000,000)
Moving Violations	190,000	190,000	0
Interest Income	2,851,200	4,051,200	1,200,000
Ambulance Fees	5,103,208	3,342,159	(1,761,049)
Franchise Fees	1,551,696	1,581,650	29,954
Indirect cost reimbursements	5,490,000	5,490,000	0
Transfers	17,274,293	17,274,293	0
Other Revenues	6,246,348	6,246,348	0
<b>Total Undesignated Revenues</b>	<b>\$188,346,802</b>	<b>\$195,902,922</b>	<b>\$8,090,631</b>
*TOT for Short-Term Rentals	676,260	476,260	
**Business License Taxes for Cannabis Recreational	1,300,000	1,300,000	
<b>Designated Revenues</b>			
Prop. Transfer Taxes for capital improvements	0	0	
Prop. Transfer Taxes-Measure P	4,747,414	6,247,414	
Measure U1 for low income housing	2,700,000	2,700,000	
<b>Total Designated Revenues</b>			
<b>TOTAL REVENUES AND TRANSFERS</b>	<b>\$195,794,216</b>	<b>\$204,850,336</b>	<b>\$9,056,120</b>

These projections will be reviewed and analyzed every quarter as more data is collected and revenue trends are determinable.

After the COVID-19 pandemic started and the shelter in place orders were implemented, the economic activities that drives some of the General Fund's major revenue streams caused a sharp decline in the growth rate for the first six months of FY 2021. However, some revenue streams were impacted differently than others.

Property Tax Revenue Streams:

Because of the way property taxes are assessed, due and paid, the major property tax revenue sectors were only mildly impacted or not impacted at all. For example:

For Secured Property Taxes in FY 2021, assessed values were determined and taxes were liened on January 1, 2020, before the start of the COVID-19 pandemic. Therefore, the taxes could only be significantly affected by a lower collection rate. (i.e., a higher level of taxpayers who are delinquent in paying the taxes).

In addition, assessed values for Unsecured Property Taxes were determined and taxes were liened on January 1, 2020, before the pandemic started; and, these taxes are due and primarily paid during the first quarter. Therefore, revenues in this tax category will be unaffected by the COVID-19 pandemic in FY 2021.

Revenue Streams Reliant Upon Business and Other Activity:

As a result of the initial shelter in place orders to close all non-essential businesses and the stops and starts since then, business-related activity declined sharply and resulted in significant negative impacts on the following revenue streams in the first six months of FY 2021 compared to the first six months of FY 2020:

- Transient Occupancy Taxes (TOT)- Decline of 75.8%;
- Short-Term Rentals – Decline of 74.8%
- Property Transfer Taxes- Decline of 29.1%;
- Measure P Property Transfer Taxes-Decline of 39.6%
- Parking fines – Decline of 26.6%;
- Sales Taxes -Decline of 14.4%;
- Ambulance fees -Decline of 40.9%; and
- Interest Income -Decline of 13.0%

**Secured Property Tax (+\$2,556,092 more than FY 2020 Actual). Increase projections by \$6,893,062**

During the first half of FY 2021, Secured Property Tax revenues totaled \$34,731,618, which was \$2,556,092 or 7.94% more than the \$32,175,526 received for the same period in FY 2020. The Staff revenue projection reflected in the FY 2021 Adopted Budget assumes a 3.22% decline for the year, while the County's Certification of Assessed Valuation reflects growth of 7.70%. The receipts in the first half of FY 2021 are consistent with the County's Certification of Assessed Value growth of 7.70%.

Since assessed values for Secured Property Taxes were determined as of January 1, 2020, and they were liened as of that date, the only material factor that could impact Secured Property Tax revenues as a result of COVID-19 would be a significant increase in delinquent property taxes, resulting in a significant reduction in the collection rate, and Staff does not expect that to occur. As indicated in the table below, the collection rate for

the City of Berkeley has been high and rising for many years. In addition, the COVID-19 pandemic had little, if any, impact on the second Secured Property Tax payment for FY 2020, which was due February 1, 2020 and was delinquent on April 10, 2020 (i.e., The total Secured Property Tax revenues in FY 2020 was the amount expected based on the actual growth in assessed value for FY 2020).

**Percentage of Secured Property Tax Levy Collected Within the Fiscal Year of Levy  
Fiscal Year Ended June 30**

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>96.71%</b>	<b>97.27%</b>	<b>97.47%</b>	<b>98.16%</b>	<b>98.57%</b>	<b>98.73%</b>	<b>98.58%</b>	<b>98.92%</b>	<b>98.89%</b>	<b>98.97%</b>

Staff is revising the FY 2021 projection to \$68,058,516 from the \$61,165,454 reflected in the FY 2021 Adopted Budget, consistent with the County's Certification of Assessed Value growth of 7.70%.

**Unsecured Property Tax (+\$290,225 more than FY 2020 Actual). Increase projections by \$750,000**

During the first half of FY 2021, Unsecured Property Tax revenues totaled \$2,995,351, which was \$290,225 or 10.73% more than the \$2,705,126 received for the same period in FY 2020. The Staff revenue projection reflected in the FY 2021 Adopted Budget assumes a 15.2% decline for the year, versus the County's Certification of Assessed Valuation growth of 8.23%.

Since unsecured property taxes lien on January 1, 2020, were due July 1, 2020, and were mostly collected in the first half, these taxes do not appear to be impacted by COVID-19 in FY 2021. As a result, staff is increasing the projection from the \$2,250,000 reflected in the Adopted Budget to \$3,000,000.

**Property Transfer Tax (-\$4,377,730 less than FY 2020 Actual)**

During the first half of FY 2021, Property Transfer Tax totaled \$10,665,913, which was \$4,377,730 or 29.1% less than the \$15,043,643 received for the first half of FY 2020. The primary reasons for the \$4,377,730 decrease in Property Transfer Tax were

- The FY 2020 total includes the sale of a small group of properties that resulted in huge Property Transfer Taxes in August 2019 and October 2019;
- The dollar value of property sales declined by 34.5% during the first half of FY 2021, as illustrated in the table below; and
- The number of property sales transactions declined by 25 or 5.1% during the first half of FY 2021, as illustrated in the table below.

**In Millions \$**

Property Sales \$	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
FY 2021	\$ 74.0	\$115.0	\$106.4	\$127.2	\$139.1	\$118.4	\$ 680.1
FY 2020	113.4	234.1	112.8	317.2	119.5	142.0	1,039.0
Change	-39.4	-119.1	-6.4	-190.0	19.6	-23.6	-358.9
% Change	-34.7%	-50.9%	-5.7%	-59.9%	16.4%	-16.6%	34.5%

Transactions	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
FY 2021	50	82	73	89	91	85	470
FY 2020	86	86	84	68	85	86	495
Change	-36	-4	-11	21	6	-1	-25
% Change	-41.9%	-4.7%	-13.1%	-30.9%	7.1%	11.1%	-5.1%

**Measure P Property Transfer Tax (-\$2,792,106 less than FY 2020 Actual). Increase projections by \$1,500,000**

In addition, \$4,254,324 in Measure P Property Transfer taxes (a tax which took effect on December 21, 2018) was collected during the first half of FY 2021 compared to \$7,046,430 collected during the first half of FY 2020, a decline of \$2,792,106 or 39.6%. The decline was for the same reasons identified for Property Transfer Taxes above. Staff is revising the projected amount for FY 2021 to \$6,247,414.

**Sales Tax (- \$1,360,682 less than FY 2020 Actual). Increase projections by \$941,292)**

For the first half of FY 2021, Sales Tax revenue totaled \$8,069,851, which is \$1,360,682 or 14.43% less than the \$9,430,533 received for the first half of FY 2020. Staff is revising the projection for Sales Taxes from the \$15,786,200 reflected in the FY 2021 Adopted Budget to \$16,727,492, based on the latest sales tax return and collection trends compiled by the City's Sales Tax Consultant:

**FY 2020 Actual Revenues and FY 2021 Projected Revenues**

Tax Quarter	FY2021 Projected	FY 2020 Actual	\$ Change	% Change
Quarter:				
3 <sup>rd</sup> Quarter	\$ 4,058,762	\$ 4,680,703	-\$621,941	-13.29%
4 <sup>th</sup> Quarter	4,787,297	4,764,553	+ 22,744	+ 0.48%
1 <sup>st</sup> Quarter	4,562,188	5,067,679	-505,491	- 9.97%
2 <sup>nd</sup> Quarter	3,319,245	3,063,078	+256,167	+ 8.36%
Total	\$16,727,492	\$17,576,013	-\$848,521	-4.83%

**Utility Users Taxes (- \$22,506 less than FY 2020 Actual)**

Utility Users Tax revenue for the first half of FY 2021 totaled \$6,304,755, which is \$22,506 or .36% less than the \$6,327,260 received for the same period in FY 2020. This decline of \$22,506 was primarily a result of a \$208,686 increase in electric charges that were offset by declines in telephone charges (\$12,899), cable charges (\$90,565), and cellular charges (\$152,578) as follows:

**FY 2021 Actual First Half Revenues versus FY 2020 Actual First Half Revenues**

	FY2021	FY 2020	\$ Change	% Change
Telephone	\$ 778,162	\$ 765,263	\$ 12,899	-1.69%
Cable	487,938	578,502	- 90,565	-15.66%
Cellular	518,275	670,853	-152,578	- 22.74%
Electric	3,655,820	3,447,134	208,686	6.05%
Gas	864,560	865,507	-948	-.11%
Total	\$6,304,755	\$6,327,260	-\$ 22,506	-.36%

Staff expects Utility Users Tax revenue in FY 2021 to meet or slightly exceed the FY 2021 revenue projection of \$12,750,000.

**Transient Occupancy Tax (-\$3,398,448 less than FY 2020 Actual). Lowering projections by \$2,000,000**

Transient Occupancy Tax (TOT) revenue for the first half of FY 2021 totaled \$1,084,961, which is \$3,398,448 or 75.8% less than the \$4,483,409 received for the first half of FY 2020. The decrease in FY 2021 is primarily attributable to a decline of 77.0% at the five largest hotels in Berkeley during the first half of the fiscal year. The declines ranged from

50.3% to 97.4%. During FY 2020, there were remittances made by all five hotels for all six months. However, during FY 2021, in addition to remittances being significantly lower, there were months where there were no remittances or a small remittance for some of the hotels. Given the lack of activity at our hotels/motels, Staff is lowering the FY 2021 projection of \$5,070,000 reflected in the Adopted Budget to \$3,070,000.

**Short-Term Rentals (-\$648,917 less than FY 2020 Actual). Lowering projections by \$200,000**

Short-Term Rentals revenue for the first half of FY 2021 totaled \$218,590, which is \$648,917 or 74.8% less than the \$867,507 received for the first half of FY 2020. This decline was consistent with the percentage decline in TOT for the period. Staff is lowering the FY 2021 projection of \$676,260 in the FY 2021 Adopted Budget to \$476,260.

**Business License Taxes (-\$776,727 less than FY 2020 Actual)**

Business license Taxes (BLT) revenue for the first half of FY 2021 totaled \$390,253, which is \$776,727 or 66.6% less than the \$1,166,980 received for the first half of FY 2020. BLT are not due yet, so it is too soon to gauge the effect COVID-19 has had on FY 2021 Business License Tax revenue.

**Recreational Cannabis (-\$347,216 less than FY 2020 Actual)**

Recreational Cannabis revenue for the first half of FY 2021 totaled \$355,641, which is \$347,216 or 49.4% less than the \$702,857 received in the first half of FY 2020. This decline is partially attributable to \$160,250 of FY 2019 Recreational Cannabis revenues which were recorded in the first quarter of FY 2020. Recreational Cannabis taxes are not yet due, so it is too soon to gauge the effect COVID-19 has had on FY 2021 Recreational Cannabis.

**U1 Revenues (-\$134,311 less than FY 2020 Actual)**

U1 revenues for the first half of FY 2021 totaled \$53,389, which is \$134,311 or 71.6% less than the \$187,700 received in the first half of FY 2020. U1 revenues are not yet due, so it is too soon to gauge the effect COVID-19 has had on FY 2021 U1 revenues.

**Vehicle In Lieu Taxes (+\$512,205 more than FY 2020 Actual). Increase projections by \$1,962,862**

Vehicle in Lieu Taxes (VLF) received during the first half of FY 2021 totaled \$7,190,227, which is \$512,205 or 7.67% more than the total of \$6,678,022 received for the same period in FY 2020. However, the Staff revenue projection reflected in the FY 2021 Adopted Budget assumes a 6.8% decline for the year, while the County's Certification of Assessed Valuation reflects growth of 7.70%.

Changes in VLF revenues are based on the growth in assessed values.

Since assessed values for VLF Taxes were determined as of January 1, 2020, and they were liened as of that date, the only material factor that could impact revenues as a result

of COVID-19 would be a significant increase in delinquent property taxes, resulting in a significant reduction in the collection rate. Staff does not expect this to occur. As indicated in the table below, the collection rate for the City of Berkeley has been high and rising for many years. In addition, the COVID-19 pandemic had little, if any, impact on the second payment of Property Taxes for FY 2020, which was due February 1, 2020 and was delinquent on April 10, 2020.

**Percentage of Secured Property Tax Levy Collected Within the Fiscal Year of Levy  
Fiscal Year Ended June 30**

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
96.71%	97.27%	97.47%	98.16%	98.57%	98.73%	98.58%	98.92%	98.89%	98.97%

Staff is revising the FY 2021 projection from \$12,421,597 reflected in the Adopted Budget to \$14,384,459, consistent with the County's Certification of Assessed Value growth of 7.70% for FY 2021.

**Parking Fines (-\$622,500 less than FY 2020 Actual). Lowering projections by \$1,000,000**

Parking Fines revenue for the first half of FY 2021 totaled \$1,714,828, which is \$622,500 or 26.6% less than the \$2,337,328 received for the first half of FY 2020. The primary reason for the decline is the reduction in ticket writing, due to the shelter in place orders. From March 17, 2020 to approximately July 1, 2020, Parking Enforcement was directed to only enforce Street Sweeping violations, and violations that impacted safety or impeded access to essential services. In addition, during this period of time, the City Manager's Office informed customers that if the citation received for Street Sweeping represented a hardship during the shelter in place period that they could contact the City and one citation per household would be dismissed/voided. On July 1<sup>st</sup>, meters returned with a pay rate of 50 cents per hour, but parking was not in high demand due to the shelter in place orders. The Residential parking enforcement program did not begin again until October 1<sup>st</sup>. In addition, the Traffic and Parking Bureau was in quarantine from December 24<sup>th</sup> to January 7<sup>th</sup>.

During the first half of the fiscal year, ticket writing declined from 58,900 in the first half of FY 2020 to 55,824 in the first half of FY 2021, as follows:

	July	August	Sept.	Oct.	Nov.	Dec.	Total
FY 2020	8,640	9,888	9,122	9,431	10,667	11,152	58,900
FY 2021	6,810	7,744	9,093	12,519	10,357	9,301	55,824
Difference	-1,830	-2,144	-29	-3,088	-310	-1,851	-2,976
% Difference	-21.2%	-21.7%	-.3%	-32.7%	-2.9%	-16.6%	-5.1%

Staff has lowered the Parking Fines projection to \$4,049,000 from the \$5,049,000 reflected in the FY 2021 Adopted Budget.



**Ambulance Fees (-\$978,596 less than FY 2020 Actual). Lowering projections by \$1,761,049**

Revenue from Ambulance Fees for the first half of FY 2021 totaled \$1,414,206, which is \$978,596 or 40.9% less than the \$2,392,802 received for the same period during FY 2020. Prior to the COVID-19 pandemic, the City's Ambulance Fees vendor was projecting 6,541 transports and \$4,774,200 in Ambulance Fees revenues on a cash basis. Currently, they are projecting that transports and Ambulance Fees revenue for FY 2021 will decline to 4,579 transports and \$3,342,159 in revenue.

As a result, Staff is lowering the FY 2021 projection from the \$5,103,208 reflected in the Adopted Budget to \$3,342,159.

**Interest Income (-\$392,470 less than FY 2020 Actual). Increase projections by \$1,200,000**

For the first half of FY 2021, interest income totaled \$2,627,359, which is \$392,470 or 13.0% less than the total of \$3,019,829 received for the same period in FY 2020. This decrease is primarily attributable to a sharp drop in short-term and long-term interest rates, as a result of the Federal Reserve Board's (the Fed) vote on March 15, 2020 to cut interest rates back to zero, in order to mitigate the negative impact of the COVID-19 pandemic on the US economy. The Fed subsequently also announced that it expects to keep rates at this low level through FY 2023.

Primarily as a result of the Fed's actions, the net interest rate earned by the City dropped from a range of 1.97%-2.33% during the first half of FY 2020, to a range of 1.12%-1.17% during the first half of FY 2021, as follows:

**Monthly Net Interest Rate Earned**

<b>FY</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>	<b>November</b>	<b>December</b>
2020	2.33%	2.29%	2.23%	1.97%	2.25%	2.09%
2021	1.17%	1.13%	1.14%	1.12%	1.16%	1.14%

As a result of the sharp decline in the net interest rate being earned by the City, interest income in FY 2021 and beyond will be significantly lower than the total earned in FY 2020. Staff expected a sharp decline in interest rates. However, the impact thus far has not been as negative as anticipated, and Staff has increased the FY 2021 Interest Income projection to \$4,051,200 from the \$2,851,200 level reflected in the FY 2021 Adopted Budget (Down from the \$6,696,279 received in FY 2020).

**Franchise Fees (-\$51,385 less than FY 2020 Actual). Increasing projections by \$29,954**

Franchise Fees for the first half of FY 2021 totaled \$370,820, which is \$51,385 or 12.2% less than the \$421,414 received for the same period in FY 2020. Staff is slightly increasing the FY 2021 Franchise Fees revenues projection to \$1,581,650 from the \$1,551,696 reflected in the Adopted Budget (but down from the \$1,839,102 received in FY 2020), based on the projected COVID-19 impact below:

Category	FY 2020 Actuals	Est. FY 2021 COVID Impact %	Est. FY 2021 COVID Impact \$	FY 2021 Revised Projection
Cable	\$ 791,663	-20%	-\$158,333	\$ 633,330
Electric	598,023	-5%	-29,901	568,122
Gas	422,442	-10%	-42,244	380,198
Total	\$1,812,128	-13%	-\$230,478	\$1,581,650

**Transfers (+\$6,231,937 more than FY 2020 Actual)**

Transfers from other funds for the first half of FY 2021 totaled \$8,865,281 which is \$6,231,937 or 236.7% more than the \$2,633,344 received for the same period in FY 2020. This is primarily attributable to the transfer of \$3,450,000 from the Stabilization Reserve Fund and the transfer of \$2,250,000 from the Catastrophic Reserve Fund during the first half of FY 2021, to mitigate the negative impact of COVID-19. It should be noted that as part of the FY 2021 Adopted Budget, a total of \$6,900,000 and \$4,500,000 was authorized by City Council to be transferred from the Stabilization Reserve Fund and Catastrophic Reserve Fund to support General Fund operations in FY 2021.

**Other Revenues (+\$1,136,544 more than FY 2020 Actual)**

Other Revenues consists of licenses and permits; grants; preferential parking fees; general government charges for services; public safety charges for services; health charges for services; culture and recreation charges for services; rents and royalties; and other miscellaneous revenues that are not considered major.

Other Revenues for the first half of FY 2021 totaled \$5,631,071 which is \$1,136,544 or 25.3% more than the \$4,494,527 received for the first half of FY 2020, This increase resulted from the receipt of \$1,513,511 received from the State (Cares Act Funds) and \$936,500 from East Bay Community Foundation for the Berkeley Relief Fund, to finance grant payments to assist businesses and nonprofit organizations impacted by the COVID-19 pandemic. Even though the Other Revenue projections includes the implementation of the TNC tax that is effective January 1, 2021, the projection is unchanged as the \$200,000 projected for the tax will be offset by the projected decrease in other revenues.

### General Fund Expenditures

On January 19, 2021, the City Council approved General Fund recommended rollovers, carryovers, and adjustments totaling \$29.4 million in the [Amendment to the FY 2021 Annual Appropriations Ordinance](#)<sup>2</sup>(AAO).

The changes to the FY 2021 General Fund Budget from the AAO are shown below:

FY 2021 Adopted Budget	Encumbered Recommended	Unencumbered Recommended	Other Adjustments	FY 2021 Revised Budget
\$ 194,718,710	\$ 7,191,365	\$ 4,702,740	\$ 17,489,694	\$ 224,102,509

The encumbered rollovers reflect contractual obligations entered into in FY 2020, which had not been paid as of June 30, 2020. Unencumbered carryovers are approved by Council for specific purposes that had not been completed by the end of FY 2020. Funding for these commitments is brought forward into the current fiscal year to provide for payment of these obligations. Adjustments are new allocations for projects and Council priorities as detailed in the AAO.

Included in the other adjustments of \$17.5 million are Council authorized allocations for the following items:

1. \$13,389,336 for the Mayor's Proposed Supplemental Recommendations for the Allocation of General Fund Excess Equity
2. \$719,017 for a transfer to the Public Liability Fund for outside counsel, court costs, and claims and judgements in FY 2021
3. \$411,270 for Wittman Enterprises LLC contract to provide emergency response billing, fire inspection billing, and related hardware, software, and program oversight
4. \$406,952 for transfer of Excess Property Transfer Tax Revenue to the Workers' Compensation Fund to repay loan to purchase Premier Cru (University Center)
5. \$360,437 for a survey of the Underground Utility District (UUD) No. 48 at Grizzly Peak
6. \$234,881 for Measure JJ for the Mayor and Councilmember Salaries and Benefit increases approved by voters on November 3, 2020
7. \$270,000 for contract with the National Institute for Criminal Justice Reform to Manage and Lead a Community Engagement Process to Develop a New Paradigm of Public Safety in Berkeley.

<sup>2</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2021/01\\_Jan/Documents/2021-01-19\\_Item\\_01\\_Ordinance\\_7748.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2021/01_Jan/Documents/2021-01-19_Item_01_Ordinance_7748.aspx)

General Fund expenditures are tracking slightly over budget as of December 31, 2020 as shown in the chart below.

Some departments that are tracking over 50 percent spent in personnel is due to staff time charged to the General Fund instead of to other funds. These departments will process personnel corrections to adjust labor charges from the General Fund to other funds. These corrections will be processed in the second half of FY 2021.

Departments that are over 50 percent in non-personnel is due to encumbrances for contractual obligations entered into in FY 2021 in which payment might not be currently due as good or services might be in progress or not yet complete.

FY 2021 MID-YEAR GENERAL FUND EXPENDITURES (AS OF DECEMBER 31, 2020)							
DEPARTMENT	FY 2021 ADOPTED	FY 2021 REVISED*	YTD ACTUAL + ENCUMBRANCES	AVAILABLE BUDGET	% USED	PERSONNEL % USED	NON- PERSONNEL % USED
11 MAYOR AND COUNCIL	2,559,046	2,626,468	1,174,065.03	1,452,403	45%	45%	44%
12 CITY AUDITOR	2,657,863	2,640,324	1,204,953.27	1,435,371	46%	45%	49%
21 CITY MANAGER'S OFFICE	10,450,066	12,059,855	5,960,474.58	6,099,380	49%	47%	54%
31 CITY ATTORNEY	2,587,273	2,668,059	1,313,780.08	1,354,279	49%	51%	41%
32 CITY CLERK	2,338,047	3,149,587	1,471,479.11	1,678,108	47%	51%	43%
33 FINANCE	5,978,002	7,503,046	4,087,713.61	3,415,333	54%	51%	61%
34 HUMAN RESOURCES	2,280,207	2,910,875	1,297,727.30	1,613,148	45%	41%	51%
35 INFORMATION TECHNOLOGY	580,710	2,153,885	1,162,287.43	991,598	54%		54%
51 HEALTH, HSG & COMMUNITY SVC	14,850,382	26,346,918	18,152,732.41	8,194,186	69%	49%	82%
52 PARKS, RECREATION & WATERFR	6,831,086	7,746,386	3,566,581.29	4,179,804	46%	43%	51%
53 PLANNING & DEVELOPMENT	2,178,037	2,361,990	1,375,928.85	986,062	58%	55%	66%
54 PUBLIC WORKS	4,408,589	6,688,258	3,162,558.33	3,525,700	47%	48%	47%
71 POLICE	65,460,524	64,843,729	37,976,902.73	26,866,826	59%	57%	70%
72 FIRE & EMERGENCY SERVICES	32,272,610	36,964,113	20,836,524.83	16,127,589	56%	54%	63%
99 NON DEPARTMENTAL	39,286,268	41,691,072	15,540,911.71	26,150,160	37%	100%	37%
<b>Grand Total</b>	<b>194,718,710</b>	<b>222,354,566</b>	<b>118,284,621</b>	<b>104,069,945</b>	<b>53%</b>	<b>54%</b>	<b>53%</b>

*\*FY 2021 Revised does not reflect as of December 31, 2020 all Council approved allocations included in the FY 2021 AAO #1.*

Some of the significant overages in departments that need further explanation are the following:

- **Health, Housing & Community Services (HHCS):** In the first 6 months of FY 2021, HHCS has encumbered and spent almost \$9.4 million in General Fund community agency contract funds. The department also had \$1.1 million in FY 2020 Measure U1 Funds loan encumbrances that were carried over to FY 2021. These two items along with other regular expenditures led to General Fund Non-Personnel expenditures being at 82 percent spent through the first six months.
- **Police:** Through December 2020, Police overtime is \$3,459,236. This represents about 2/3 of what has been allocated to the department after adjusting for the

\$3.5 million allocated to the department in December 2020 but excluding the \$1.0 million set aside in reserves. A portion of overtime reserves (approximately \$180,000) has been allocated to enable the downtown bike patrol team to operate 7 days/week. The Department's use of overtime is due to a number of factors including, but not limited to, mutual aid requests, reimbursable overtime requested by third-parties, COVID-19, and training. Staff is monitoring Police Department expenditures and working with the Department on these to develop strategies to ensure that Police Department expenditures are consistent with appropriated funds.

- Fire: Fire Department overtime is anticipated to exceed budgeted amounts due a number of factors such as observing COVID-19 isolation and quarantine protocols, being deployed to multiple wildfires, and staffing up for red-flag events, the vaccination clinic, and COVID-19 testing sites. Offsetting the increase in overtime are reimbursement requests for the wildfires totaling \$640,554.

Staff is carefully monitoring the FY 2021 General Fund budget to make sure the City stays within budget and is also watching to make sure that savings realized as part of the adopted budget deferrals for FY 2021 are met by the end of the year.

Additional information regarding General Fund revenues and expenditures will be presented in May with the FY 2022 Proposed Budget. Final FY 2021 year-end General Fund revenues and expenditures information will be included in the **FY 2021 Year-End Report and FY 2022 First Quarter Update** that will be presented to Council in November 2021.

### **All Funds Expenditures**

The General Fund comprises 30.1 percent of the total adjusted budget. The rest of the budget consists of various Special Funds. Special Funds are collected for a specific purpose; therefore, are not discretionary. Only costs associated with the Special Fund activity may be charged to a Special Fund. Included in the FY 2021 Mid-Year All Fund Expenditures by Department chart below are both the General Fund expenditures to date and the Special Funds expenditures to date. On an All Funds basis, the City is tracking over budget as of December 31, 2020 as can be seen in the following chart:

FY 2021 MID-YEAR ALL FUNDS EXPENDITURES (AS OF DECEMBER 31, 2020)						
DEPARTMENT	YTD ACTUAL +			AVAILABLE BUDGET	% USED	
	FY 2021 ADOPTED	FY 2021 REVISED	ENCUMBRANCES			
11 MAYOR AND COUNCIL	2,559,046	2,641,468	1,174,065	1,467,403	44%	
12 CITY AUDITOR	2,786,499	2,768,960	1,260,217	1,508,743	46%	
13 RENT STABILIZATION BOARD	6,646,209	6,772,560	3,592,645	3,179,915	53%	
21 CITY MANAGER'S OFFICE	13,515,943	15,666,114	7,570,305	8,095,809	48%	
22 BERKELEY PUBLIC LIBRARY	21,846,159	25,044,555	12,822,260	12,222,295	51%	
31 CITY ATTORNEY	4,509,824	6,159,772	3,399,452	2,760,320	55%	
32 CITY CLERK	2,839,880	3,651,420	1,783,808	1,867,612	49%	
33 FINANCE	8,555,177	10,088,120	4,806,945	5,281,175	48%	
34 HUMAN RESOURCES	4,072,239	4,815,202	2,208,374	2,606,828	46%	
35 INFORMATION TECHNOLOGY	20,647,410	27,513,549	11,909,300	15,604,249	43%	
51 HEALTH, HSG & COMMUNITY SVC	53,834,105	116,663,573	64,341,785	52,321,788	55%	
52 PARKS, RECREATION & WATERFR	32,561,123	83,753,434	42,819,299	40,934,134	51%	
53 PLANNING & DEVELOPMENT	25,022,338	27,284,553	11,836,192	15,448,361	43%	
54 PUBLIC WORKS	138,631,154	207,439,781	106,212,507	101,227,274	51%	
71 POLICE	70,325,114	69,882,747	40,415,183	29,467,564	58%	
72 FIRE & EMERGENCY SERVICES	41,254,373	47,812,600	27,138,762	20,673,838	57%	
99 NON DEPARTMENTAL	83,711,926	86,480,963	41,146,263	45,334,699	48%	
<b>Grand Total</b>	<b>533,318,519</b>	<b>744,439,372</b>	<b>384,437,364</b>	<b>360,002,008</b>	<b>52%</b>	

Health, Housing, & Community Services, Parks, Recreation & Waterfront, and Public Works carried over funds for projects and grants started in FY 2020. These departments also appropriated new grant funds that support programs and services as well as special funds for capital improvements. Details of these carryover requests can be found in the December 15, 2020, [Amendment to the FY 2020 Annual Appropriations Ordinance<sup>3</sup>](#) (AAO) discussed earlier in this report.

The following key special funds need further discussions regarding their current status:

#### Marina Fund

The Marina Fund is experiencing revenue shortages in lease revenues and berth rentals revenues in FY 2021 and is still facing exhausting all reserves by the end of FY 2022. A detailed presentation on the fund and potential solutions to address the deficit were included in an update on the Berkeley Marina Area Specific Plan that was presented to Council on February 16, 2021<sup>4</sup>

<sup>3</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2020/12\\_Dec/Documents/2020-12-15\\_Item\\_43\\_Amendment\\_FY\\_2021\\_Annual.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2020/12_Dec/Documents/2020-12-15_Item_43_Amendment_FY_2021_Annual.aspx)

<sup>4</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2021/02\\_Feb/Documents/2021-02-16\\_WS\\_Item\\_02\\_Berkeley\\_Marina\\_Area\\_Specific\\_Plan\\_pdf.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2021/02_Feb/Documents/2021-02-16_WS_Item_02_Berkeley_Marina_Area_Specific_Plan_pdf.aspx)

### Permit Service Center Fund

The Permit Service Center Fund began FY 2021 with a fund balance of approximately \$14.75 million. Due to the COVID-19 pandemic, the Planning Department staff is concerned about a potential slowdown in development activity that could result in the need to rely on reserves to sustain operations. A detailed presentation on the fund was presented to the Budget & Finance Policy Committee on February 25, 2021<sup>5</sup>.

### Parking Meter Fund

Due to the pandemic related revenue loss to the parking program, a General Fund allocation of \$3.2 million was approved by the Council on December 15, 2020 to cover some FY 2021 operational costs. In addition to that, the Parking Meter Fund utilized a significant amount of its reserves thereby depleting resources that had been set aside for future capital replacement. As a result of these balancing measures, the Parking Meter Fund will need an allocation of \$3,355,000 over the next two fiscal years (FY 2022 – FY 2023) to fund the replacement of the elevator at the Telegraph/Channing Garage and to upgrade and replace parking meters.

### Public Liability Fund

The Public Liability Fund pays for all of the City's legal costs including costs for outside counsel and claims and judgements paid out by the City. The fund also pays for 75 percent of a Deputy City Attorney III position, 75 percent of a Senior Legal Secretary position, and 100 percent of another Senior Legal Secretary position in the City Attorney's Office. The fund is supported by an annual transfer from the General Fund of approximately \$1.7 million.

The City's legal costs have been steadily increasing over the last several years. Council allocated an additional General Fund allocation of \$719,017 in the First Amendment to the FY 2021 Annual Appropriations Ordinance to the Public Liability Fund to cover additional legal costs in FY 2021. Recent award settlements and additional legal costs may require additional funds in FY 2021 or a possible increase in the General Fund transfer amount in FY 2022. Staff is working with the City Attorney's Office to determine how much and the timing of when the funds may be needed.

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<https://www.cityofberkeley.info/uploadedFiles/Clerk/Item%204%202.25.21%20PSC%20Fund%20Status%20Update%20for%20Budget%20and%20Finance%20Committee.pdf>

**Next Steps:**

Staff is currently in the process of preparing the FY 2022 Budget approved which will be presented to Council on May 11, 2021.

The table below outlines key Council meeting dates at which budget information will be provided.

<b>FY 2022 Budget Calendar</b>	
<b>Date</b>	<b>Action/Topic</b>
March 16, 2021	<ul style="list-style-type: none"> <li>FY 2021 Mid-Year Update &amp; Projections of Future Liabilities Report (includes preliminary budget challenges)</li> </ul>
April 27, 2021	<ul style="list-style-type: none"> <li>Public Hearing on CDBG &amp; ESG Annual Action Plan and proposed funding allocations to community agencies</li> </ul>
May 11, 2021	<ul style="list-style-type: none"> <li>FY 2022 Proposed Budget Presentation</li> <li>Public Hearing #1: Budget</li> <li>Proposed Fee Increases</li> <li>FY 2021 Annual Appropriations Ordinance Amendment #2</li> </ul>
May 25, 2021	<ul style="list-style-type: none"> <li>Public Hearing #2: Budget</li> </ul>
June 1, 2021	<ul style="list-style-type: none"> <li>Council recommendations on budget due to the City Manager</li> </ul>
June 15, 2021	<ul style="list-style-type: none"> <li>Council discussion on budget recommendations</li> </ul>
June 29, 2021	<ul style="list-style-type: none"> <li>Adopt FY 2022 Proposed Budget Update &amp; FY 2022 Annual Appropriations Ordinance</li> </ul>

The FY 2021 Mid-Year Budget Update is a Strategic Plan Priority, advancing our goal to provide an efficient and financially-healthy City government.

**ENVIRONMENTAL SUSTAINABILITY**

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

**CONTACT PERSON**

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Henry Oyekanmi, Finance Director, Department of Finance, 981-7300





Office of the City Manager

**WORK SESSION**  
March 16, 2021

To: Honorable Mayor and Members of the City Council  
 From: Dee Williams-Ridley, City Manager  
 Submitted by: Scott Ferris, Director, Parks, Recreation & Waterfront (PRW) Department  
 Subject: Parks, Recreation & Waterfront Department Capital Improvement Projects (CIP) Update

**SUMMARY**

The purpose of this report is to provide an update on funded improvements and current unfunded needs in the City's parks, medians, waterfront and resident camps infrastructure.

**CURRENT SITUATION AND ITS EFFECTS**

**Current CIP Funding**

Parks, Recreation and Waterfront (PRW) capital funding is made up of [Recurring Capital](#)<sup>1</sup> from the Parks Tax, General Fund, Marina Fund and the Camps Fund<sup>2</sup>. This \$1.75M, along with bond funds from Measure [T1](#)<sup>3</sup>, and a variety of grant funds, including [Measure WW](#)<sup>4</sup>, are being used to address our most critical unfunded needs. [Measure F](#)<sup>5</sup>, the Parks Tax increase approved by Berkeley voters in 2014 has increased Parks Tax yearly capital by \$750,000, from \$250,000 to \$1,000,000, since FY 2016. Additionally, Measure F provides a yearly \$450,000 for minor maintenance projects.

**Recently Completed CIP Projects (last 18 months):**

- Parks – Aquatic Park – South Pathway (Parks Tax/ Bayer Fund)
- Parks – Aquatic Park - Tide Tube Clean Out (T1)
- Parks – George Florence age 2-5 & 5-12 Play Structures (T1)
- Parks – James Kenney age 2-5 & 5-12 Play Structures (Grant/ Parks Tax)
- Parks – John Hinkel Upper Picnic Area and ADA (Grant/Parks Tax/ Insurance)

<sup>1</sup> See

[https://www.cityofberkeley.info/Parks\\_Rec\\_Waterfront/Home/CIP\\_Capital\\_Projects\\_Recurring\\_Funding\\_Allocation.aspx](https://www.cityofberkeley.info/Parks_Rec_Waterfront/Home/CIP_Capital_Projects_Recurring_Funding_Allocation.aspx)

<sup>2</sup> The Camps Fund has historically contributed \$250,000 to the recurring CIP funding. However, since Berkeley Tuolumne Camp was destroyed in the 2013 Rim Fire, it has been unable to contribute.

<sup>3</sup> See <https://www.cityofberkeley.info/MeasureT1/>

<sup>4</sup> See <https://www.cityofberkeley.info/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=119940>

<sup>5</sup> See <https://www.cityofberkeley.info/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=128423&libID=127066>

- Parks – Live Oak Community Center (T1/Parks Tax)
- Parks – Strawberry Creek Park 2-12 Play Area (T1/ Parks Tax)
- Parks – Strawberry Creek Park Restroom (T1)
- Waterfront – Dock O, LM, DE, FGHI (4) Restroom Remodels (General Fund)
- Waterfront – South Cove Bay Trail, Docks and ADA (3 Grants/Marina Fund)
- Waterfront – Finger Dock Replacement Phase 1 and 2 (General Fund/Marina Fund)

#### “Planning Only” Completed (last 18 months)

- Parks – Frances Albrier Community Center with Pool – Conceptual Design (T1)
- Parks – Tom Bates Sports Complex: Field House/ Restroom – Conceptual Design (T1)
- Parks – Willard Clubhouse Replacement- Conceptual Design (T1)
- Camps – Echo Lake ADA Phase 1 Design/Phase 2 Conceptual Design (General Fund)
- City Wide – Restroom Feasibility Study (T1)
- Waterfront – Marina Sea Level Rise AB691 Assessment Study (T1/ Marina Fund)

#### Projects in Construction (or about to start construction):

- Parks – Rose Garden Pergola Pathways and Tennis Courts Reconstruction (T1/ Parks Tax)
- Parks – San Pablo Park ages 2-5 & 5-12 Play Structures (T1/ Parks Tax)
- Parks – San Pablo Tennis Courts (T1/ Parks Tax)
- Parks – King Park ages 2-5 & 5-12 Play Areas (Parks Tax/ Insurance)
- Camps – Berkeley Tuolumne Camp (Insurance/ FEMA Grant/General Fund)
- Waterfront – Marina Streets University Ave - Spinnaker Way (T1, Streets Fund, Double Tree)
- Waterfront – Bike Lockers (20) (Grants/ General Fund/ Marina Fund)
- Waterfront – Finger Dock Replacement- Phase 3 (General Fund/ Marina Fund)
- Waterfront – Corporation Yard Electrical Upgrade (T1)

#### “Planning Only” Projects in Process

- Waterfront – Berkeley Marina Area Specific Plan (GF)
- Waterfront – Municipal Pier Structural Assessment/Ferry Feasibility Study (T1/Marina Fund/WETA)

#### Projects in Design Development

- Parks – Aquatic Park – Access Dock Parking and ADA: In final design (Parks Tax)
- Parks – Grove Park – Sports Field Renovation: In design (Parks Tax/ T1)
- Parks – John Hinkel Amphitheatre, Picnic and Play Areas: In final design (Parks Tax/ T1p2)
- Parks – Ohlone Park (Milvia) ages 2-5 & 5-12 Play Structures, Mural Garden and Exercise: In conceptual design (Parks Tax/T1p2)
- Camps – Cazadero Camp – Jensen Dormitory Rebuild: In final design (Insurance)
- Waterfront – Marina – Piling Replacement Project: In final design (T1p2/ General Fund)
- Waterfront – Marina – O and K Electrical: In final design (Marina Fund/ General Fund)

#### Projects Funded T1 Phase 2 (not started)

- Parks – MLK Jr. Youth Services Center Renovation
- Parks – Willard Clubhouse and Restroom Replacement
- City Wide – African American Holistic Resource Center (new)

- Parks – Tom Bates Restroom and Community Space (new)
- Parks – Harrison Park Restroom Renovation
- Parks – Ohlone Park – Restroom (new)
- Parks – Ohlone Park Lighting
- Parks – Grove Park Play ages 2-5 & 5-12 Structures
- Parks – Aquatic Park Tide Tubes Clean Out: Soil Removal
- Parks – Civic Center Park – Turtle Garden
- Pools – King Pool Tile and Plaster Replacement
- Camps – Cazadero Camp Dining Hall Renovation & ADA Improvements
- Waterfront – K Dock Public Restroom Renovation
- Waterfront – Cesar Chavez Park – Public Restroom (new)

A list of over 30 funded projects is contained in the [Currently Funded Projects List](#)<sup>6</sup>. More detailed information about each project is provided in the [PRW Detailed Project Summary](#)<sup>7</sup>.

### Current Minor Maintenance Projects

The passage of Measure F established a yearly minor maintenance allocation of \$450,000. This allocation is used to fund small maintenance contracts or in-house projects such as court resurfacing, painting, and sports field renovations. Some of the FY 2021 projects include the following:

- Pathway Improvements in Marina Inner Pathway and Codornices Park
- Infield Renovations at Glendale-LaLoma, James Kenney and San Pablo Parks
- Turf renovations at Tom Bates, Codornices, Cedar Rose, Harrison, James Kenney, Ohlone, San Pablo, and Willard Parks
- Garbage Can Replacements (28) at various parks;
- Driveway Improvements –Glendale LaLoma Park, Launch Ramp
- Restroom Improvements at BC and FG Docks
- Storefront Replacement at King Pool
- Light Standard Replacement at West Campus Pool
- Tree Plantings in James Kenney and John Hinkel Parks
- Pollinator Gardens at George Florence, John Hinkel, Strawberry Creek, James Kenney and San Pablo Parks

A complete list of projects completed since FY 2016 and being undertaken currently can be found at the following link [Minor Maintenance Projects](#)<sup>8</sup>.

### DISCUSSION

The City of Berkeley has amazing recreation assets, resident camps, skate parks, dog parks, rock parks, community centers, theaters, pools, clubhouses, nature centers, lagoons, Adventure Playground, bay trail, concrete slides, neighborhood parks, and destination parks. For many years, the PRW Department's capital and major maintenance programs have been

<sup>6</sup>See

[https://www.cityofberkeley.info/Parks\\_Rec\\_Waterfront/Home/CIP\\_Currently\\_Funded\\_Capital\\_Projects\\_List\\_\(6/2019\).aspx](https://www.cityofberkeley.info/Parks_Rec_Waterfront/Home/CIP_Currently_Funded_Capital_Projects_List_(6/2019).aspx)

<sup>7</sup> See [https://www.cityofberkeley.info/uploadedFiles/Parks\\_Rec\\_Waterfront/Level\\_3\\_-\\_General/FundedCapitalProjects.2017-11-01.pdf](https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3_-_General/FundedCapitalProjects.2017-11-01.pdf)

<sup>8</sup> See [https://www.cityofberkeley.info/Parks\\_Rec\\_Waterfront/Home/Capital\\_Improvements\\_Program\\_\(CIP\).aspx](https://www.cityofberkeley.info/Parks_Rec_Waterfront/Home/Capital_Improvements_Program_(CIP).aspx)

underfunded, which has accelerated the deterioration of our parks, park buildings, waterfront, and resident camps. Several years ago the PRW unfunded need was well over \$200M. Recent funding sources have helped to address some of these needs. The 2008 East Bay Regional Park District Measure WW Parks Bond Program (“Measure WW”), the 2014 voter approved increase in the Parks Tax by 17% (“Measure F”), the 2016 voter approved T1 Infrastructure bond program and recent influx of General Funds of \$7M for the Waterfront and Camps has provided significant resources to start to reverse this trend. Unfortunately, \$2.25M of these funds were deferred in FY 2021 that were earmarked for Marina Docks, Echo Lake ADA and West Campus Pool.

Despite the addition of these funds, the unfunded need at Parks, Recreation and Waterfront facilities is approximately \$182M. Below, the unfunded need is divided into six categories:

\$ 9.9M	Parks General – Lighting, Pathways, Courts, ADA, Irrigation etc.
\$ 3.7M	Parks Facilities – Buildings in Parks
\$ 37.5M	Parks Specific (including playgrounds, drainage, parking, etc.)
\$ 7.5M	Pools
\$ 5.9M	Camps – Echo Lake, Cazadero and Tuolumne Camps
\$113 M	Waterfront – Includes Infrastructure Needs West of I 80
\$ 4.5M	<u>Restrooms – Includes existing Park Restrooms</u>
\$182M	Total Unfunded Need

The following [link](#)<sup>9</sup> includes a general description, location and cost of each identified unfunded project. These numbers include \$30M for the Berkeley Pier, but do not include the estimated \$32M for the Frances Albrier Community Center and Pool and the \$8M for the King Pool Replacement with a 25 meter competitive pool.

Below is a discussion of the PRW Department’s three major areas of capital funding need (Waterfront, Parks and Camps), their funding sources, current major projects and a brief discussion of priorities for unfunded improvements in these areas.

## **Waterfront**

### Marina Enterprise Fund and Capital Projects

The Marina Fund, which is the City’s mechanism for managing all Waterfront revenues and expenditures, can no longer accommodate the pressing capital needs in the Waterfront. The unstable state of this special fund has been well documented.<sup>10</sup> While this operations fund has struggled, much of the Waterfront infrastructure has deteriorated from use and age. Recently, the City has worked across multiple fronts to improve infrastructure at the Waterfront to prevent boaters and their associated revenue from leaving the Marina.

<sup>9</sup> See [https://www.cityofberkeley.info/uploadedFiles/Parks\\_Rec\\_Waterfront/Level\\_3\\_-\\_General/Unfunded%20PRW%20Capital%20Projects%20-%202021-1-28.pdf](https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3_-_General/Unfunded%20PRW%20Capital%20Projects%20-%202021-1-28.pdf)

<sup>10</sup> See Feb 16, 2021 Worksession report ([https://www.cityofberkeley.info/Clerk/City\\_Council/2021/02\\_Feb/Documents/2021-02-16\\_WS\\_Item\\_02\\_Berkeley\\_Marina\\_Area\\_Specific\\_Plan\\_pdf.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2021/02_Feb/Documents/2021-02-16_WS_Item_02_Berkeley_Marina_Area_Specific_Plan_pdf.aspx)) and Dec 18, 2018 Off-Agenda ([https://www.cityofberkeley.info/uploadedFiles/Clerk/Level\\_3\\_-\\_General/Marina%20Fund%20Update%20121318.pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Marina%20Fund%20Update%20121318.pdf)) .

Prior to the Covid-19 pandemic, these efforts were beginning to pay off, with lease and berth rental revenue beginning to stabilize and even increase. Since March 2020, however, these revenues have plummeted, leaving the fund in need of General Fund support in FY 2022. The projected loss of revenue due to Covid-19 over a four-year period (FY20-23) is estimated at \$3.5M. Additionally, there remains a significant structural deficit, which means the fund will need to identify external funding sources to address capital projects at the Waterfront in the near future. Currently the fund budgets only \$350,000/year from the Marina Fund for capital projects and \$150,000/year for maintenance projects. Yet there is more than \$113M in unfunded needs in Waterfront streets, parking lots, docks, electrical systems, underground utilities, bathrooms, buildings, and the Berkeley Pier.

In recent years the General Fund has contributed \$4.5M to deal with some immediate needs at the Waterfront including electrical upgrades on the docks, the docks themselves, restrooms, selective piling replacement and the Berkeley Marina Area Specific Plan (BMAASP). This funding has made a significant difference. In FY 2021, \$1.395M of this \$4.5M was deferred and further work on the docks and pilings has been delayed. Fortunately \$1.2M of Phase 2 of Measure T1 funding was identified to complete the piling work and replace some of this funding.

The below table is a list of currently funded Capital Projects in the Waterfront.

Currently Funded Projects in the Waterfront	Project Cost
K Dock Public Restroom Renovation (T1p2)	\$400,000
Cesar Chavez Restroom (T1p2)	\$400,000
D and E Dock Replacement (\$5.5M DBW Loan, T1p2)	\$6,000,000
Additional Selective Piling Replacement (T1p2)	\$1,355,000
South Cove West Parking Lot -Design Only (GF)	\$80,000
Marina Streets Projects: University Ave., Spinnaker Way, Marina Blvd (T1, Streets Fund, Double Tree)	\$8,206,000
Electrical Upgrades (Marina Fund/GF)	\$1,382,000
Bike Lockers (Grant/GF/Marina Fund)	\$138,000
Finger Dock Replacement – Phase 3 (Marina Fund)	\$230,000
Berkeley Marina Area Specific Planning Study (GF)	\$1,050,000
Pier-Ferry Feasibility Study (T1/WETA/Marina Fund)	\$485,000
<b>Total</b>	<b>\$19,726,000</b>

### Marina Streets Improvement

This project includes the lane reconfiguration of University Avenue (between West Frontage Road and Marina Boulevard), Spinnaker Way pavement rehabilitation and drainage improvements, and Marina Boulevard pavement rehabilitation. This project features a traffic roundabout at the University Ave and Marina Blvd intersection, and pervious pavement on Spinnaker Way. The goal is to alleviate pavement undulation, improve traffic operation and efficiency, promote pedestrian and bicyclist access and safety, and implement storm water

green infrastructure improvements. Construction was delayed a year because of a shortfall in T1 funding, but is anticipated to begin in May of 2021.

#### Berkeley Marina Area Specific Plan (BMASP)

The goal of the BMASP is to provide a vision and a plan for achieving a financially self-sustainable, publicly-owned Marina with infrastructure and amenities to support current and future community needs, while adapting to climate changes and promoting environmental stewardship. The project involves extensive community processes and includes a Program Environmental Impact Report (PEIR) to provide the City with overall programmatic environmental guidelines and mitigations that will assist in streamlining subsequent project-based CEQA evaluations. Much of the background work has been completed and the 2 year community process is underway. Staff brought this item before Council in a February worksession and received supportive feedback. It will come back to council in a year for another update.

#### Berkeley Pier - WETA Scale Ferry Facility Feasibility Study

In partnership with San Francisco Bay Area Water Emergency Transportation Authority (WETA), the feasibility study in the planning phase is currently in the public process phase. Numerous studies have been completed and the first series of focus groups and the first of three public meetings is complete. Staff will continue to seek public feedback on the functionality, location, and amenity needs of the dual-use pier that would serve both as passenger ferry facility for berthing public ferry vessels, and provide public access to the San Francisco Bay, restoring the public amenities that were once offered by the now closed pier. This process should conclude in November, and staff anticipates bringing it back to City Council in December of 2021.

#### Outside Sources of Funding for Waterfront Projects

On February 26, 2020, staff received a funding agreement from the Bay Area Air Quality Management District for a \$50,000 grant funding from the Transportation Fund for Clean Air Regional Fund for the installation of 20 electronic bicycle lockers at the Berkeley Marina Mall area. These will be installed this spring.

On February 14, 2020, California State Parks' Boating and Waterways Commission approved a \$5.5 million loan to replace D&E Docks, which will hold 79 boat slips. These docks are more than 50 years old, and have far outlived their useful life. Design work will begin this summer.

On May 9, 2019, San Francisco Bay Area Water Emergency Transportation Authority (WETA) approved a \$250,000 funding contribution to conduct a feasibility study on public ferry facility at the Berkeley Marina on Seawall Drive. This study is described above.

In 2020, staff completed the South Cove Launch Area projects that included three different grants, including \$500k from the Metropolitan Transportation Commission (MTC), \$500k from the State Coastal Conservancy, and a total of \$952k from the National Fish and Wildlife Foundation/Cosco Busan grant program.

Staff will continue to apply for grants and other contributions to supplement the capital project needs at the Waterfront.

Key Unfunded Projects in the Waterfront

The largest portion of unfunded work in the Waterfront is in our Marina dock system. Over \$41M is needed to update our main docks, finger docks and pilings. An additional \$8.5M in dredging is required in the main basin and the South Cove.

CampsCamps Fund and Unfunded Capital Project Needs

Despite the loss of funding from Berkeley Tuolumne Camp (BTC) after it was burned down in 2013, the Camps Fund has been able to stay in the black due to the reorganization and popularity of Echo Lake Youth and Family Camp. The fund is projected to stay positive through the summer of 2022 when BTC reopens.

Berkeley Tuolumne Camp

In August of 2013, the California Rim Fire destroyed Berkeley Tuolumne Family Camp (BTC). The fire was declared a federal disaster, which allows the rebuilding of Camp to qualify for funding from the Federal Emergency Management Authority (FEMA) and the California Office of Emergency Services (CAL OES). While FEMA and CAL OES will contribute a portion of the funding, it is anticipated that the City's insurance policy will cover the majority of the rebuild costs. The estimate for the total project is approximately \$55M, which includes the necessary staff, design, permitting, and construction costs. On April 4, 2017, the City Council funded the estimated shortfall of \$3.3M not covered by insurance, FEMA, and CAL OES funds by using the City's Catastrophic Reserve Fund. Currently, staff estimates that only \$2.7M in City funds (5% of the total project budget) are required to complete the project. Additional funding for ineligible project costs like shade structures is coming from donations from the Friends of Berkeley Tuolumne Camp.

After seven years of public input, planning, insurance negotiations, environmental analyses, design, and permitting, construction finally began on May 26, 2020, and will last about two years. Pre-construction achievements included:

- Successful negotiations with insurance and FEMA to cover ~95% of project costs;
- Securing and executing a new 30-year Special Use Permit for construction and operation of Camp with the United States Forest Service;
- Completion of both federal and state environmental analyses, public processes, documentation and determinations (NEPA / CEQA);
- Acquisition of construction and operational permits from Tuolumne County, California Department of Fish and Wildlife, United States Army Corps of Engineers and California Regional Water Quality Control Board.

BTC is currently 10 months into construction and has made significant progress as the staff cabins, camper cabins, Recreation Hall and the Dining Hall have started to emerge from the landscape. With over 100 structures spread across 30-acres, the Berkeley Tuolumne Camp project is the largest and most complex construction project ever undertaken by the City of

Berkeley. Project construction is proceeding on schedule, and Berkeley Tuolumne Camp is anticipated to re-open in summer 2022.

### Cazadero Camp

In April of 2016, a landslide occurred at the City-owned Cazadero Camp which caused irreparable damage to the existing Jensen dormitory structure. The cost to rebuild the damaged dormitory and fix the landslide, which included the repair of Austin Creek Road, exceeded \$2M, the bulk of which was covered by insurance. This project was completed in 2018. Design for the reconstruction of Jensen dorm is now in the final permitting stage, and the project is anticipated to be bid and awarded in the spring of 2021, with construction anticipated to begin soon after.

Council approved the execution of a new lease with the long time non-profit, Cazadero Performing Arts Camp, on [December 1, 2020](#).<sup>11</sup> This lease specifies \$1.2M of facility and ADA improvements on site, of which the City will contribute \$400,000 of T1 funds and the lessee will contribute the balance.

### Echo Lake Camp

During the summer of 2018, the City completed analysis of the Echo Lake Camp leach field system and the repairs needed to restore the full capacity of the system. In the winter of 2018-2019, significant snow loads resulted in damage to multiple Camp structures. Repairs were funded by insurance proceeds, and completed in June, 2019.

Making improvements to the accessibility at Echo Lake Camp is a high priority to ensure equitable access for youth and families using the Camp. In October of 2018, the City completed the conceptual design for Echo Lake ADA improvements. The detailed design for the first phase of work was completed in the fall of 2019 and the project was released for bidding in the spring of 2020. The Phase 1 project, which is expected to cost \$700,000, was deferred, however, as part of the City-wide COVID-related budget reduction effort. Design and construction for Phase 2, which includes additional pathways, two additional accessible cabins, and one accessible restroom, is estimated to cost \$1.3M.

### Key Unfunded Projects in Camps

With the BTC rebuild funded and several key repair projects at Cazadero and Echo Lake funded largely by insurance, the most critical remaining work of the \$5.9M identified is the ADA work at Cazadero and Echo Lake. The General Fund has funded the full ADA conceptual design at Echo Lake and the design development of Phase 1. Both phases will cost approximately \$2M. ADA, dining hall, pool and fire safety work comprises most of the work at Cazadero.

## **Parks**

### Parks Tax Fund and Other Funding Sources

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<sup>11</sup> See [https://www.cityofberkeley.info/Clerk/City\\_Council/2020/12\\_Dec/Documents/2020-12-01\\_Item\\_01\\_Lease\\_for\\_5385\\_Cazadero\\_Hwy.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2020/12_Dec/Documents/2020-12-01_Item_01_Lease_for_5385_Cazadero_Hwy.aspx)



With [Measure F<sup>12</sup>](#), the Parks Tax increase approved by Berkeley voters in 2014, the yearly Parks Tax contribution to capital funding has increased by \$750,000, from \$250,000 to \$1,000,000, since FY2016. Parks Tax funding, in many cases during the last several years, has been used to supplement a variety of other funding sources including grants and Measure T1 to complete projects. In 2010, the City conducted a process to allocate \$4,876,584 from the EBRPD Measure WW funds to sixteen parks for improvement projects. The final two projects were recently completed and are in close-out phase to complete the grant documentation. John Hinkel Park picnic area and ADA improvements was completed in July 2020, and James Kenney Park Playground Renovation project was completed in December 2020. With the completion of these projects, the EBRPD Measure WW funds has been exhausted. Although City staff have several outstanding grant submissions, all other upcoming planned park improvement projects are funded by a combination of Parks Tax, General Funds, insurance and/or Measure T1.

Measure T1 is now a significant source of funding for park improvement projects. The projects receiving funding from Measure T1 include, but are not limited to: the Live Oak Community Center renovation, the San Pablo Park tennis courts and play area renovations, the Willard Park Clubhouse Renovation, the Grove Park ballfield and play area renovation, the Rose Garden Tennis Courts and Pathways renovation projects, the Martin Luther King Jr. Youth Services Center renovation, John Hinkel Park amphitheater and play area renovation, and projects throughout Ohlone Park.

#### Eight West Berkeley Play Areas Completed

With the upcoming completion of the San Pablo Park 2-5 and 5-12 play structures, the City will have completed the renovation of eight West Berkeley play areas at five different sites in the last three years. Along with the two at San Pablo Park, the Becky Temko Park 2-5, Strawberry Creek Park 2-12, James Kenney Park 2-5 and 5-12 and the George Florence Park 2-5 and 5-12 play structures have all been renovated. These play areas will serve Berkeley families for many years to come. Funding sources for these projects is from T1, Parks Tax and grants.

#### Live Oak Community Center

This four-year long and almost \$7M project will be opened on March 31<sup>st</sup>. This project included a seismic retrofit of the complete structure, new HVAC and electrical systems, three new interior restrooms, considerable ADA work, new office space and a fully renovated kitchen.

#### Rose Garden Phase 2

The Rose Garden Pergola Reconstruction and ADA Site Improvements project is anticipated to complete construction this May using Parks Tax, General Fund, and Measure T1 bond funds. This project will complete the reconstruction of the majestic redwood pergola, provide ADA improvements to both Codornices park and the Rose Garden, renovate the tennis courts, replace many pathways and stone work, and replace the irrigation system in the garden.

#### Aquatic Park Tide Tubes

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<sup>12</sup> <https://www.cityofberkeley.info/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=128423&libID=127066>

Aquatic Park Central Tide Tubes Sediment Removal and Inspection project is complete and has resulted in the successful establishment of good tidal flow between the bay and the lagoon. The operating capacity of the tide tubes has been fully restored. This complicated project required permits from the U.S. Army Corps of Engineers, San Francisco Bay Regional Water Quality Control Board, CA Department of Fish and Wildlife, San Francisco Bay Conservation and Development Commission, and CA Department of Transportation. The sediment off haul for this project will be completed with T1 Phase 2 funding later this year.

#### Remaining FY 2021 Projects

Improvements at King School Park, funded by insurance and supplemented with Parks Tax and improvements at John Hinkel Park including a new play structure and picnic area funded by the Parks Tax and T1 phase 2 should be complete by the end of the summer.

#### Key Unfunded Projects in Parks

The last remaining community center to be seismically retrofitted and renovated is the Frances Albrier Center in San Pablo Park. The baseline cost for this work is estimated at \$2.75M. During a conceptual design process for a new center, the community supported a total rebuild of this undersized facility that includes a gymnasium and pool with an estimated cost is \$32M. The City still has many play structures that don't meet ADA requirements and need improvements. Staff have identified the 2-5 and 5-12 play structures at Glendale LaLoma and Cedar Rose, and Dreamland in Aquatic Park as the highest use areas with the greatest need. The successful cleanout of the Aquatic Park Tide Tubes was just the first stage of work that needs to be done to keep the lagoon water quality in good shape. Three other tubes need to be cleaned out and all eight tubes need to be sleeved before the existing tube shells collapse. This cost is estimated at \$6.5M

### BACKGROUND

#### Summary of Facilities and Infrastructure Inventory

The Parks, Recreation & Waterfront Department (PRW) is responsible for managing, maintaining, and upgrading an extensive portfolio of community-serving parks and parks facilities.

PRW operates, maintains and manages 54 parks, 4 community centers, 2 clubhouses, 2 pools, 3 resident camps, 15 sports fields, 49 sports courts, 63 play areas, 36 picnic areas, 42,000 street and park trees, almost 11.5 miles of street medians that include 152 landscaped areas, 263 irrigation systems, and 29 restrooms and out buildings. In the Berkeley Waterfront, PRW operates and maintains all related facilities, including the buildings, docks, parking lots, parks and trails and other infrastructure, Adventure Playground, and the marina basin with 1,000 rentable boat slips. Additionally, PRW manages 39 leases within its assigned property.

#### Capital & Major Maintenance Prioritization Process

Project prioritization occurs in the following way: 1) staff prioritizes needs according to the following criteria: protect life safety; fix and maintain existing infrastructure; provide community-wide benefits; promote geographic and racial equity; and leverage existing funds; 2) Commissions and the public provide feedback; and 3) Council approves the proposed work plan for capital projects during the biennial budget process.

Prior City Council Communications

Capital and major maintenance needs have been presented to Council in a number of recent reports:

In an informational memo on January 21, 2020, Parks, Recreation & Waterfront (PRW) and Public Works provided a bi-annual report on the Measure T1 City Infrastructure Bond Program.

In an [April 14, 2020 information report](#)<sup>13</sup> to Council, PRW provided a detailed update on capital improvement projects.

In a [December 10, 2019 off-agenda report](#)<sup>14</sup>, PRW detailed the planning and public input process for the selection of projects for Phase 2 of the Measure T1 infrastructure bond program.

In an informational memo on July 23, 2019, PRW and Public Works provided a [bi-annual report on the Measure T1 City Infrastructure Bond Program](#)<sup>15</sup>.

The Council-adopted [FY20-FY21 Capital Improvement Program](#) provides an overview of planned projects and unfunded needs in June 2019.<sup>16</sup>

In a [report to Council on March 26, 2019](#)<sup>17</sup>, Parks, Recreation & Waterfront and Public Works provided recommendations to close the funding gap to complete Measure T1 City Phase 1 Projects.

In an [Off-Agenda memo on March 5, 2019](#)<sup>18</sup>, the City Manager provided Council with an update on Cazadero Camp.

At a work session on December 6, 2018, Parks, Recreation & Waterfront and Public Works provided a [bi-annual report on the Measure T1 City Infrastructure Bond Program](#)<sup>19</sup>.

At a work session on November 15, 2018, Parks, Recreation & Waterfront and Public Works provided an overview of current capital projects and unfunded needs.

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<sup>13</sup> See [https://www.cityofberkeley.info/Clerk/City\\_Council/2020/04\\_Apr/Documents/2020-04-14\\_Item\\_45\\_PRW\\_CIP\\_Update.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2020/04_Apr/Documents/2020-04-14_Item_45_PRW_CIP_Update.aspx)

<sup>14</sup> [https://www.cityofberkeley.info/uploadedFiles/Clerk/Level\\_3\\_-\\_General/Measure%20T1%20Update%20on%20Phase%202\\_121019.pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Measure%20T1%20Update%20on%20Phase%202_121019.pdf)

<sup>15</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2019/07\\_Jul/Documents/2019-07-23\\_Item\\_43\\_Update\\_on\\_Measure\\_T1.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2019/07_Jul/Documents/2019-07-23_Item_43_Update_on_Measure_T1.aspx)

<sup>16</sup> <https://www.cityofberkeley.info/uploadedFiles/Manager/Budget/FY-2020-2021-CIP-budget.pdf>

<sup>17</sup> [https://www.cityofberkeley.info/Clerk/City\\_Council/2019/03\\_Mar/Documents/2019-03-26\\_Item\\_20a\\_Providing\\_direction\\_on\\_closing\\_funding\\_gap.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2019/03_Mar/Documents/2019-03-26_Item_20a_Providing_direction_on_closing_funding_gap.aspx)

<sup>18</sup> [https://www.cityofberkeley.info/uploadedFiles/Clerk/Level\\_3\\_-\\_General/Cazadero%20Camp%20Update%20030519.pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Cazadero%20Camp%20Update%20030519.pdf)

<sup>19</sup> [https://www.cityofberkeley.info/uploadedFiles/Parks\\_Rec\\_Waterfront/Level\\_3\\_-\\_General/T1%20Semi-Annual%20Update%20Council%20December%202018.pdf](https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3_-_General/T1%20Semi-Annual%20Update%20Council%20December%202018.pdf)

In an [Off-Agenda memo on October 5, 2018](#)<sup>20</sup>, the City Manager provided Council with a detailed update on the Berkeley Tuolumne Camp Project.

At a work session on May 8, 2018, Parks, Recreation & Waterfront and Public Works provided an overview of current capital projects and unfunded needs; as well as a [bi-annual report on the Measure T1 City Infrastructure Bond Program](#)<sup>21</sup>.

In an [Off-Agenda memo on April 12, 2018](#)<sup>22</sup>, the City Manager provided Council with a detailed update on the Waterfront and Marina Fund, describing financial concerns related to safety and infrastructure challenges.

### ENVIRONMENTAL SUSTAINABILITY

The City aims to provide safe, green, accessible and efficient facilities and infrastructure. Staff evaluates the environmental impacts of all proposed projects and seeks to integrate energy and water efficiency improvements in all capital and major maintenance projects.

### CONTACT PERSONS

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Christina Erickson, Parks, Recreation & Waterfront, 510-981-6703

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<sup>20</sup> [https://www.cityofberkeley.info/uploadedFiles/Clerk/Level\\_3\\_-\\_General/Berkeley%20Tuolumne%20Camp%20100518.pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Berkeley%20Tuolumne%20Camp%20100518.pdf)

<sup>21</sup> [https://www.cityofberkeley.info/uploadedFiles/Parks\\_Rec\\_Waterfront/Level\\_3\\_-\\_General/T1%20Bi-Annual%20Update%20Council%20Report%20%205-8-18.pdf](https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3_-_General/T1%20Bi-Annual%20Update%20Council%20Report%20%205-8-18.pdf)

<sup>22</sup> [https://www.cityofberkeley.info/uploadedFiles/Clerk/Level\\_3\\_-\\_General/Marina%20Fund%20Update%20041218.pdf](https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Marina%20Fund%20Update%20041218.pdf)



Office of the City Manager

WORKSESSION

March 16, 2021

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Liam Garland, Director, Department of Public Works

Subject: *Turning Vision 2050 into Reality*: Public Works Capital Improvement Plan for Fiscal Year 2022SUMMARY

By this report, staff seeks City Council's input on Vision 2050 implementation and planned improvements to the City's public facilities and infrastructure for the Fiscal Year (FY) 2022 Proposed Capital Improvement Plan (CIP).

CURRENT SITUATION AND ITS EFFECTS

The CIP aims to maintain and improve our City's aged public infrastructure as best it can with the resources available. While our City's strategic goal is state-of-the-art, well maintained infrastructure, the lack of investment over many years in our infrastructure has resulted in something far short of that goal.

2021 marks the first year that Berkeley's unmet infrastructure needs will surpass \$1 billion. Without urgent action, Berkeley's infrastructure will continue to deteriorate, quality of life will suffer, and costs will escalate dramatically. For example, studies demonstrate that delaying infrastructure repairs can result in 3-4x repair costs later.

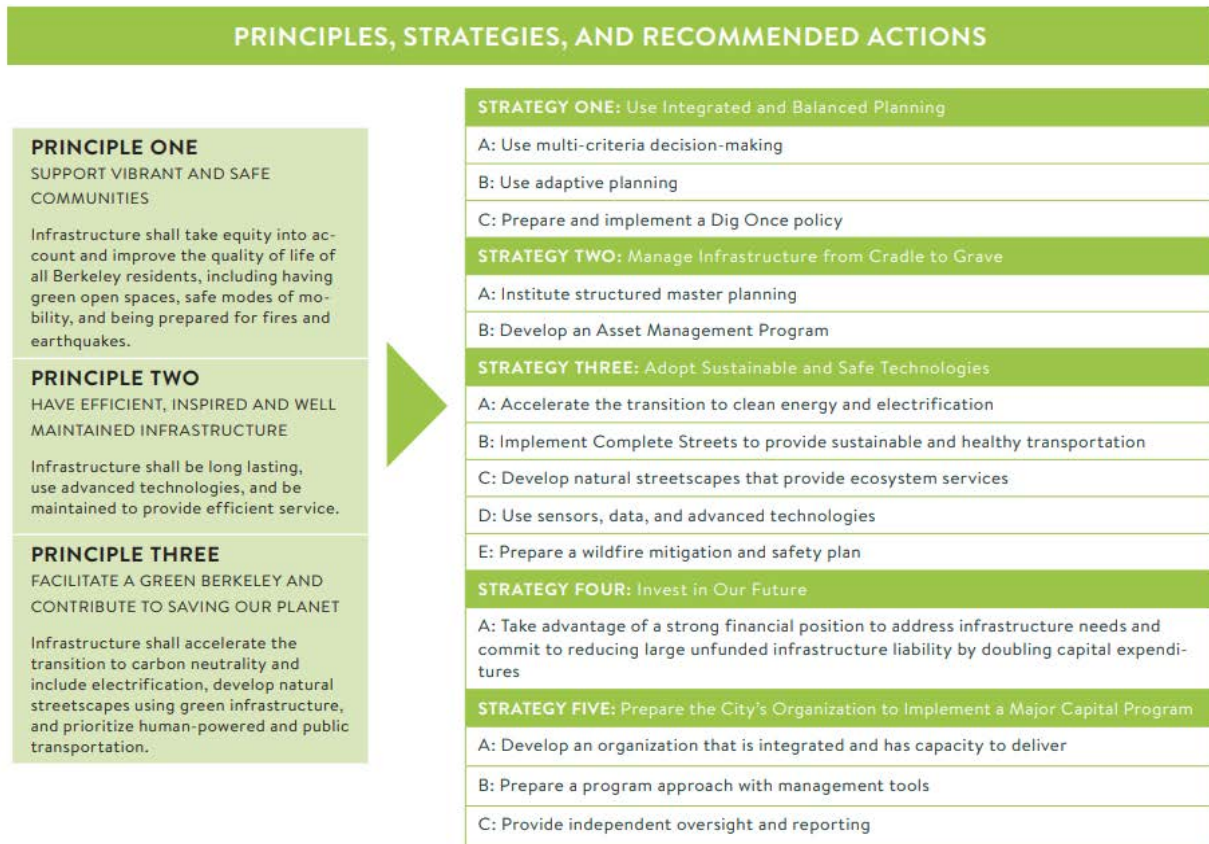
Despite enormous, unfunded infrastructure needs, the City's last three years represent a considerable uptick in investment in capital projects and infrastructure. Public Works and Parks, Recreation and Waterfront have demonstrated the ability to renovate deteriorated, outdated buildings, recreation centers, parks, and streets with state-of-the-art, well maintained infrastructure that is pleasing to the eye, resilient, and responds to our climate crises. These departments, in partnership with the Finance Department and City Manager's Office, have been able to deliver projects while keeping overhead low. In the first phase of T1, overhead costs were less than 11%. As the detailed CIP report from the Parks Department for the March 16, 2021 worksession shows, when our City is aligned on high-priority projects and dedicates the right staffing and resources, those projects can be delivered efficiently, even during a global pandemic.

*Vision 2050.* On the November 2018 ballot, Measure R asked: “Shall the measure, advising the Mayor to engage citizens and experts in the development of Vision 2050, a 30-year plan to identify and guide implementation of climate-smart, technologically-advanced, integrated and efficient infrastructure to support a safe, vibrant and resilient future for Berkeley, be adopted?” 85% of voters approved.



Soon after, a residents’ task force of over 40 members was formed and the group worked for 18 months to prepare a framework to modernize Berkeley’s infrastructure. Their report, *Sustainable and Resilient Infrastructure, Creating a Better Future for Berkeley*, was approved by City Council in September 2020.

The Vision 2050 framework identified four core values, three principles, five strategies, and recommended actions, as show in the chart below.



In December 2020, the City Manager convened an implementation team comprised of four key contributors to the Vision 2050 framework (Ray Yep, Margo Schueler, Gordon

Wozniak, and Tano Trachtenberg) and four key staff (Liam Garland, Scott Ferris, Andrew Brozyna, and Billi Romain). This team was tasked with turning Vision 2050 into reality and kicked off with a draft implementation plan. Input on the implementation plan was solicited from the members of Vision 2050's steering committee and the following commissions: Disaster and Fire Safety, Energy, Public Works, Parks and Waterfront, Transportation.

The implementation plan included the following near term actions:

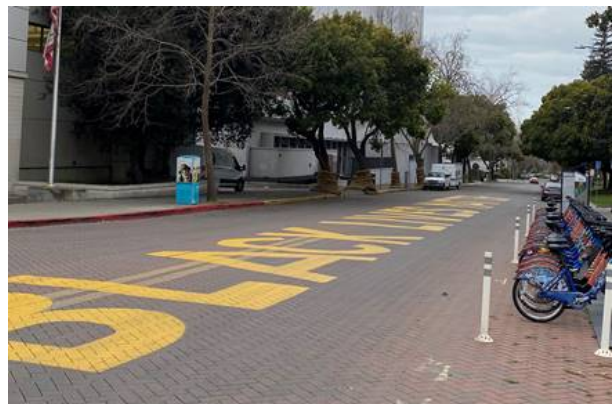
- **Keep staff focused on delivery of current infrastructure improvements.** Much progress is being made with the construction of infrastructure improvements committed to in the FY2019-2021 CIP and Measure T1, Phases 1 and 2. Doing so is no small accomplishment amidst the City's pandemic response, 15%+ staff vacancies in the two main capital focused departments, and existing workload. In addition, this work advances key Vision 2050 elements, as building renovations promote sustainability and resilience by including solar, EV charging stations, battery storage, and seismic improvements. Paving projects incorporate green infrastructure and enhance safety for pedestrians and bicyclists. New sidewalk repair methods reduce greenhouse gases and expand access and safety for those with mobility impairments.
- **Propose a CIP that incorporates Vision 2050.** The City's adopted capital improvement program (CIP) is the City's definitive budget-related statement on public infrastructure. This will be the first adopted CIP that incorporates Vision 2050's strategies and begins to implement them.
- **Leverage Vision 2050 to take advantage of Federal and State support.** Staff and consultants are monitoring potential infrastructure funding from the new Federal administration, and resiliency and sustainability are likely to be criteria to receive that funding.
- **Submit Vision 2050 budget requests.** The process to develop Vision 2050 was wholly volunteer led. Implementing Vision 2050 continues with significant volunteer leadership, now in close coordination and collaboration with existing staff. However, no current funding is associated with Vision 2050. Staff is planning to include Vision 2050 budget requests for FY 2021-2022 that will advance each of the five strategies, as described below.

Should City Council approve the associated budget requests, the following actions can occur from July 1, 2021 through December 31, 2022:

- **Boost Master Planning.** As identified in the Vision 2020 Report, the City's current infrastructure planning is contained in over 20 reports dating back at least a dozen years. There are some aspects of our infrastructure that are well planned, such as our sewer collection system. It has both long-term plans, maintenance plans, and a dedicated funding source that is adjustable every five years. Other asset areas

either do not have master plans or planning is insufficient. These plans identified below each have dedicated special funding sources (not General Fund), and the plans themselves will help match available funding resources with needed projects and programs.

- Continuation of already-budgeted master plan for streetlights (\$200,000).
  - Continuation of already-budgeted master plan for storm water system, including drains, watershed, and green infrastructure (\$1.6 million).
  - Continuation of already-budgeted master plan for sewers (\$800,000).
  - Continuation of already-budgeted master planning and condition assessments for building facilities (\$100,000).
  - New request for \$100,000 in transportation funds for development of a long-term paving plan.
  - New request for \$75,000 to add or upgrade a position within the Engineering Division to *Capital Projects Manager, Vision 2050*. This position would be responsible for coordinating Public Works' various master plans, ensuring their update and consistency with Vision 2050, and implementing Vision 2050.
- **Expand capacity to implement sustainable and resilient infrastructure.** To expand staff's ability to develop sustainable and resilient infrastructure, Public Works will gain Envision<sup>1</sup> certifications, both for engineering and planning staff and projects (\$30,000 from non-General Funds).
  - **Adopt sustainable and safe technologies.** Renovation of City buildings will include installation of solar, battery storage, and EV charging. Implementation of the 2020 Municipal Fleet Electrification Assessment will continue, including installation of various charging stations and purchase of electric vehicles. New pervious concrete piloted in the 2021 paving project will be utilized in future paving projects. More green infrastructure will be installed throughout the City. To further reduce greenhouse gas emissions, staff are looking at programs and policies to replace natural gas use in buildings, and



Allston Paver Project

<sup>1</sup> <https://sustainableinfrastructure.org/envision/overview-of-envision/>



opportunities for the installation of solar and battery storage at critical facilities to provide clean and renewable energy during grid outages.

- **Increase capital investment to address infrastructure needs.** Consistent with Vision 2050's proposal to double capital investment, the implementation plan proposes preparing for an infrastructure-focused revenue measure in November 2022 through the following actions.
  - *Community engagement.* This would gain input from the community on infrastructure priorities and assess residents' willingness to support an infrastructure-focused revenue measure. The work could include a website, community forums, community surveys, community-wide mailers, and other activities.
  - *Conduct financial analysis and evaluate funding options.* There are various funding options to consider, and different asset groups have different funding options. Those options can be evaluated through financial analysis, including related to the City's ability to take on new debt due to the City's significant pension and other post-employment benefit liabilities. Consideration shall be given to funding options for capital improvements versus funding on-going maintenance. To turn Vision 2050 into reality will require capital projects that improve infrastructure from deteriorated to good condition, and proper maintenance (and funding) to keep infrastructure in that good condition.
  - *Program delivery assessment.* While the City has learned lessons from implementing Measure M and Measure T1, it will probably require a new organizational structure to deliver on a larger major capital program. To look more closely at our experience to date and learn from other cities implementing major capital programs, such as San Francisco and San Diego, staff will conduct an assessment that results in a proposed organizational structure that can deliver should a revenue measure be successful.
  - *Prepare a Program Plan.* The information gathered above will be compiled into a Program Plan. It will plan the construction of infrastructure improvements over a longer time period, describe financial analysis funding options, a project delivery approach, the community engagement process to date, and possible oversight if a revenue measure will be successful. City Council will consider the Program Plan in advance of an ultimate decision in June 2022 on whether to place an infrastructure-focused revenue measure or measures on the November 2022 ballot.

Staff estimate these actions would require a budget of \$400,000 from General Funds. Given time constraints, staff will prepare a request for proposals to issue in June and award a contract to initiate this work in July. Should City Council decide

against the development of the public engagement plan and program plan, the very minimum required would be \$150,000 for two community surveys and a comprehensive third party analysis of the City’s bonding capacity.

*Streets.* Public Works maintains 214 miles of street. The City’s paving condition has remained for more than 10 years in the at risk condition, and if nothing changes, these streets will be failing by 2050 and require \$1 billion to repair. As shown in the chart below, an infusion of \$306 million between now and 2030 would bring Berkeley’s streets into good condition, and if an additional \$8 million is infused annually, keep them in that good condition. Such an infusion may come from a revenue measure or measures.

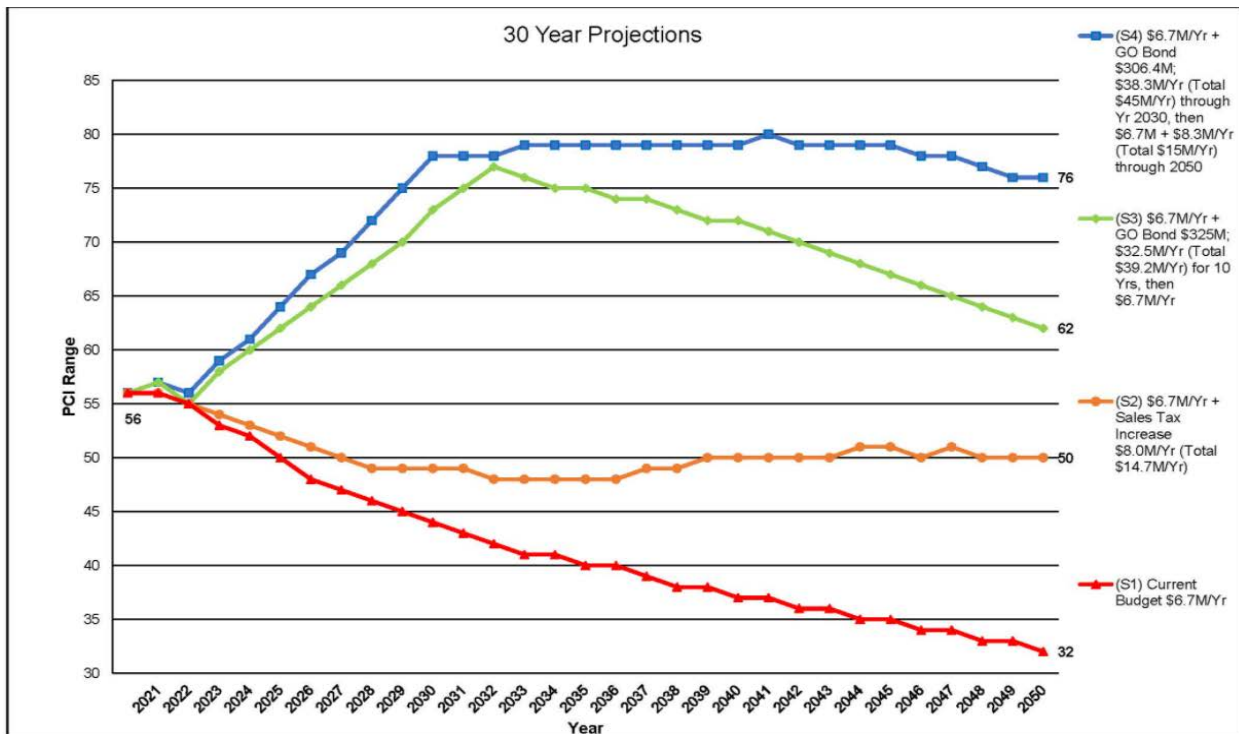


Figure 1 Projection of Paving Condition Per Four Funding Scenarios

Poorly maintained streets are inherently inequitable, as low-income residents are more seriously impacted by higher vehicle repair costs than higher income residents; those with mobility or visual impairments face greater challenges of unequal access and safety compared to those without such challenges; bicyclists and pedestrians face greater danger than those driving; and poorly maintained streets in dense, more populous neighborhoods are detrimental to more users than a poorly maintained street in less dense neighborhoods.

Between FY 19-21, Public Works paved 13.7 miles, including T1 segments at Ward, Monterey, Adeline, Hearst, and Milvia. Due to the infusion of T1, Public Works was able to more than double the prior average of 3.2 miles paved per year.

In the next two years, Public Works will invest \$14M in annual repaving funds along with the first \$3.75 million in T1, Phase 2 funds. This will enable paving of the first year of the

recently adopted Five Year Paving Plan, plus more. Elements included in paving include installation and/or upgrades of curb ramps and addition of transportation elements, such as a concrete island bicycle crossings, bicycle lanes, painted bulbouts, high visibility crosswalks, and bus boarding islands, and sidewalk repair among others.

The Public Works Commission and staff are currently developing the first update to the street rehabilitation and maintenance policy in 10+ years and incorporating equity directly in the updated policy.

*Transportation:* Berkeley's streets, sidewalks, paths, and public transportation system enable residents to travel within the City and beyond, to make progress toward a City free of serious injury or death related to this network, and encourage less dependence on solo commute driving.

A key component of traffic safety is the network of traffic calming installations across our city, as represented in the map below.

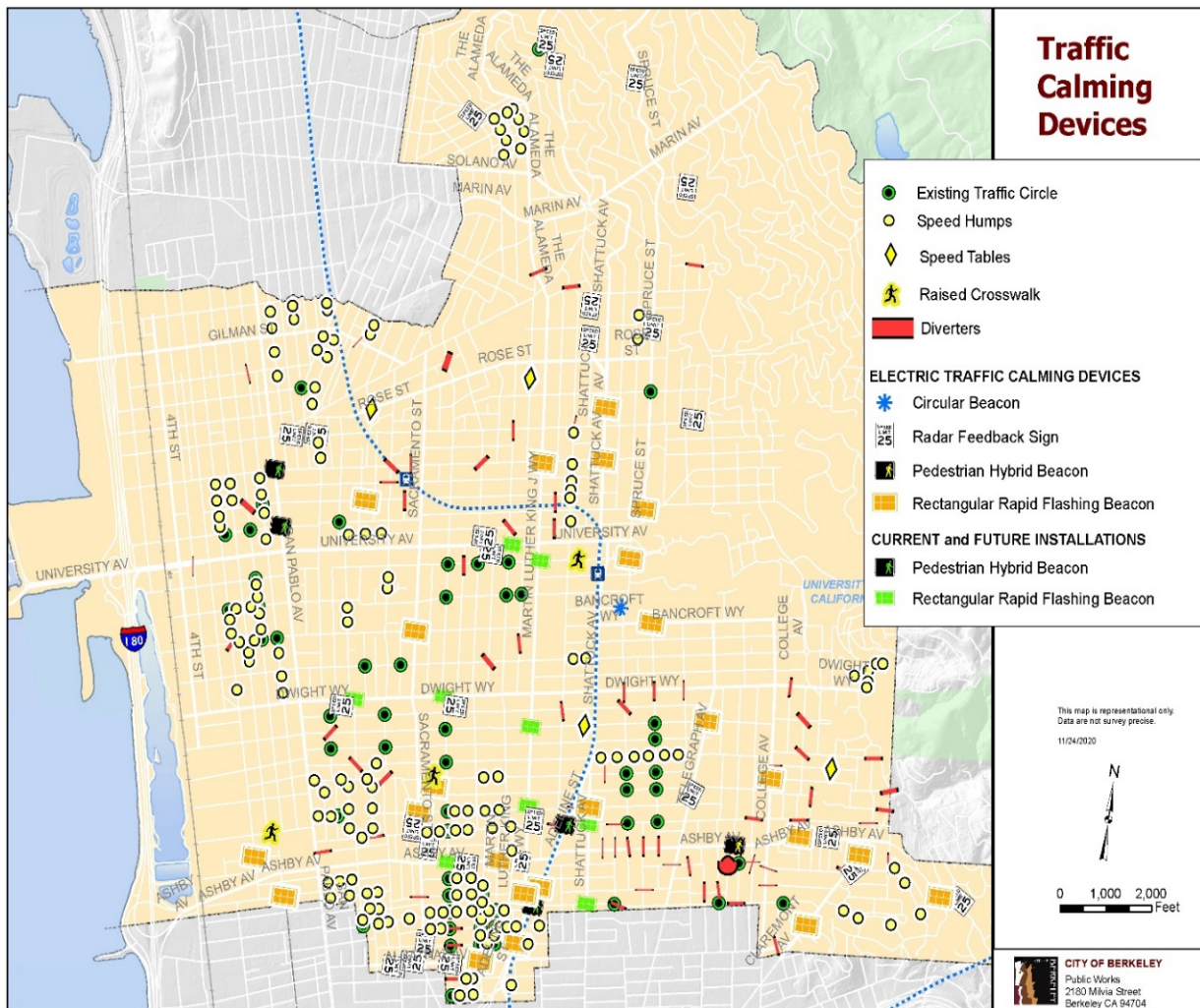


Figure 2 Traffic Calming Locations throughout the City



**Adeline safety improvements were enabled by T1**

The transportation component of the CIP implements the Berkeley Strategic Transportation Plan (2016), Bicycle Plan (2017), Pedestrian Plan (2020), and Vision Zero Action Plan (2020). Over the past two years, the result has been completion of the Shattuck Reconfiguration, Hearst Protected Bike Lanes, and Adeline Corridor Improvements. Construction commenced for the 9<sup>th</sup> Street Path and Crossing at Ashby and Sacramento Complete Streets project, and bidding is underway on the Gilman Interchange and Pedestrian

Overcrossing project. The Milvia Bikeway, Addison Bikeway, and University Avenue Bus Bulb projects had construction contracts awarded, the Southside Streets and Hopkins Corridor projects have commenced the planning phase.

In FY 21-23, Public Works will complete planning on Southside Streets, San Pablo at Ashby Intersection Improvements, and Hopkins Corridor projects; assist in the completion of the Gilman interchange and pedestrian overcrossing, construct improvements on Milvia and Addison, and update the Bicycle Plan and Berkeley Strategic Transportation Plan.

Public Works will also commence a concrete bus pad paving program to prevent deterioration of asphalt pavement at bus stop locations, thereby reducing the need for costly pavement repairs and ruptured pavement that causes problems for pedestrians, cyclists, and others.

*Sidewalks:* Public Works maintains 300+ miles of sidewalk citywide. An ADA evaluation of every city block of sidewalk is being completed by June 30, 2021, which will identify many more repair locations.

State law places responsibility for sidewalk repairs on adjacent homeowners. As a courtesy to its residents, Berkeley makes sidewalk repairs when the lift or failure is caused by the tree roots of a City-maintained street tree. Trees are only removed as a last resort, and all tree removals related to the paving or sidewalk programs require explicit authorization of the Public Works director. The City began to offer a program in 2011 that split sidewalk repairs 50/50 between adjacent property owners and the City, but that program was backlogged within several years. That backlog currently stands at 3,700 addresses. Public Works has been utilizing a concrete “cutting” service that enables the City to make many sidewalk repairs at a lower cost per repair, and helps address the climate crises by reducing greenhouse gas emissions through reduced reliance on concrete.

Over the last two years, staff have completed 3,600 repairs at 725 addresses. This has reduced the backlog in the 50/50 program by 25%. With existing funds and an infusion from T1, Public Works is on course to invest another \$3.8M in 6,000 sidewalk repairs at

1,800 addresses in the next two years. As a result, the backlog of repairs in the 50/50 program should be reduced by 75%.

*Green Infrastructure, Creek Restoration, and Storm Drains:* Green infrastructure (GI) slows or divert stormwater runoff, prevents pollution such as PCBs and trash from reaching the Bay, and can recharge groundwater. Incorporation of these projects beautifies the City and advances the City’s goal of being a global leader in addressing climate change, advancing environmental justice, and protecting the environment. Examples of GI include the permeable pavers on Allston Way, as well as bus pads, parking lanes, and crosswalks throughout residential neighborhoods in the City. Bioswales at the corner of Hearst Street and Oxford Street, at the intersection of Hopkins Street and Rose Street and at Presentation Park have also been constructed. The map below shows the 30 City-owned GI installations.

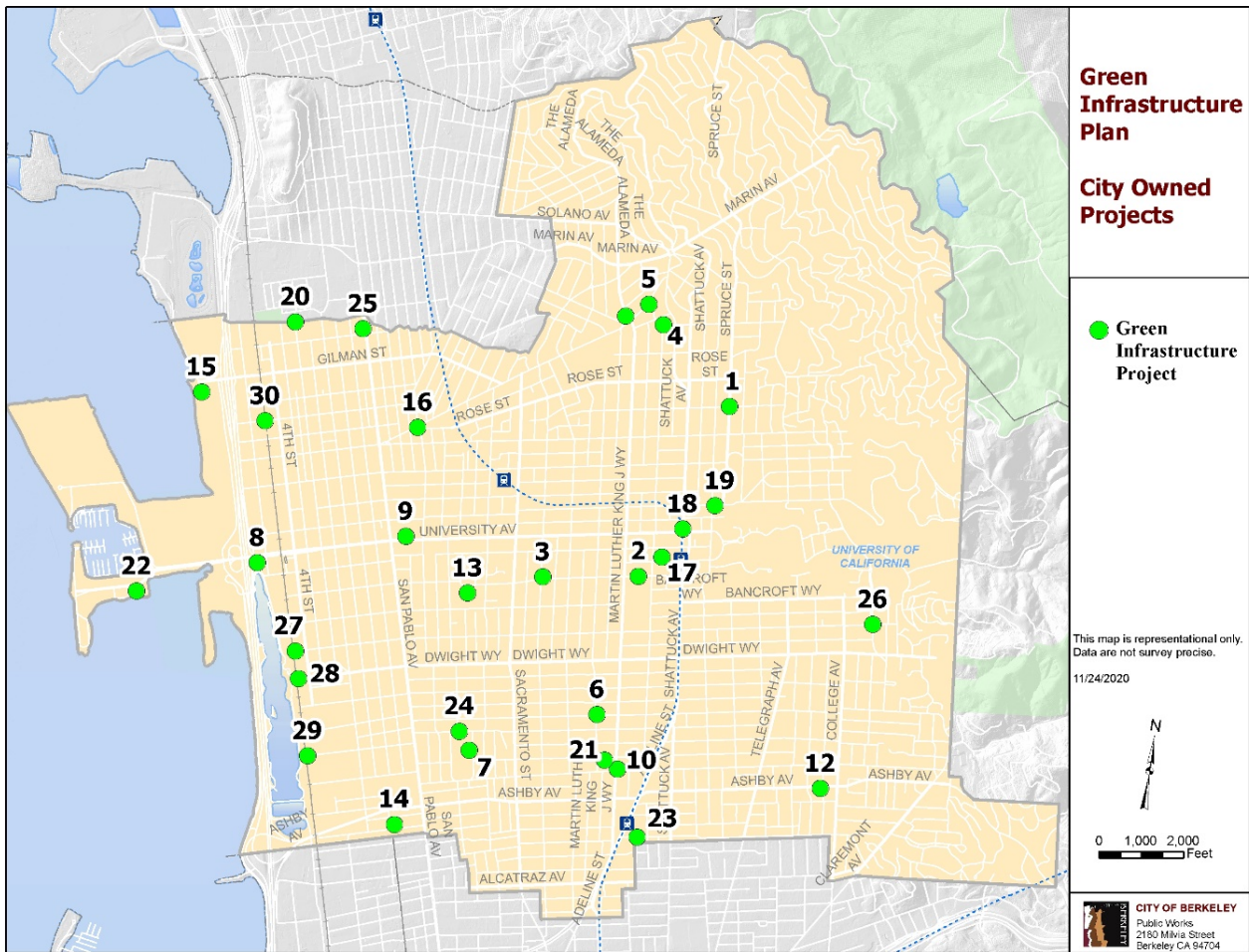


Figure 3 City owned GI Installations

In FYs 2019-2021, Public Works completed a pervious concrete project on Ward Street; GI installations at Grayson, Dwight, Page, Piedmont Avenue Traffic Circle and Medians, and Woolsey; and the Codornices Creek restoration at Kains. In all, Public Works has installed nine bioretention basins in the last two years.



**Piedmont Circle GI**

For the next two years, bioswale projects are planned for 9<sup>th</sup> and 10<sup>th</sup> Streets at Codornices Creek. These bioswales will have a collective potential treatment area of 2 acres. Staff are also considering feasibility studies for a GI project at the Sacramento Street medians and land along the former Santa Fe Railroad right-of-way. Staff also will complete a master plan for stormwater infrastructure, which will incorporate updates to the 2012 Watershed Plan and 2019 Green Infrastructure Plan, updates to the City's existing hydraulic

model for the storm drainage infrastructure, condition and capacity assessments, and prioritization of future capital improvement rehabilitation needs for the City's storm drainage program. In addition to GI, the City's engineered storm drain infrastructure consists of approximately 78 miles of underground pipes, maintenance-holes, catch basins and cross-drains. This stormwater infrastructure is over 80 years old and has an estimated \$246 million in deferred maintenance.

*Streetlights.* There are a total of 8,011 City-owned streetlights of which 4,499 fixtures are mounted on PG&E's wooden poles and the remaining 3,512 are mounted on City-owned poles. In FY 19/20 approximately 75% of City street light fixtures were replaced with refurbished LED fixtures that increased energy efficiency and further lowered operating costs. In the next FY, Public Works will complete a Streetlight Master Plan. The Master Plan will help support Public Works in its mission to fund, operate, and maintain its street lighting infrastructure, develop standards to guide streetlight pole replacements, ensure the City's streetlights are maximizing traffic safety benefits, and match the Streetlight Fund's assets with planned streetlight installations.

*Sanitary Sewer.* There are 254 miles of sewer mains and 130 miles of sewer laterals. More than 90% have been replaced since the current program began in 1987, with some of the oldest, hardest-to-replace sewers remaining. As part of obligations under a 23-year agreement with the United States Environmental Protection Agency, State and Regional Water Boards, and others, Public Works rehabilitates an average of 4.2 miles of City owned sewer main and associated lower laterals per year. Public Works also administers the Private Sewer Lateral (PSL) Ordinance to address the sewer pipes located on private property owned and maintained by the property owner portion of the sewer laterals (on private property). Taken in combination, the sewer main and lower lateral rehabilitation, and the PSL programs represents a comprehensive approach to attack the problem of water entering the sewer system and contributing to sewer overflows. In FYs 19-21, Public Works rehabilitated 12.7 miles of sewer. In FYs 2021-2023, Public Works will rehabilitate another 12.6 miles of sewer and complete the Sewer System Master Plan.

**Facilities.** Public Works maintains 56 public buildings and estimates the deferred maintenance in these buildings at \$250M. Where renovations occur, staff seek opportunities to add solar systems, battery backups, electric vehicle (EV) charging stations, and electrification. The City performs condition assessments every 5-10 years, which are used to prioritize facility projects. Additional facility projects are identified by departments. Before the end of this fiscal year, Public Works will start the process to develop a facilities master plan and conduct another 5+ condition assessments on critical buildings.

The following was accomplished in FYs19-21: Adult Mental Health Upgrade (T1 project), North Berkeley Senior Center Upgrade (T1 project), Corp Yard Building G Electrical Upgrade (T1 project), Marina Corp Yard Electrical Upgrade, Public Safety Building Leak Repair, Carpet Replacement at Civic Center, Fire Station 2 Kitchen, Fire Station 3 Roof Repair, and 125/27 University Building and Parking Upgrades (T1 project).

The following is proposed to be accomplished in FYs 21-23: South Berkeley Senior Center Seismic Upgrade (T1 project), 2+ Public Restrooms in Right of Way (T1 project), Corp Yard Facility Improvements (Building B and H), 1947 Center Street HVAC System Upgrade (T1 project), Fire Station 2 and 6 Upgrades, Corp Yard EV Charger System, West Berkeley Service Center Upgrade, Fire Warehouse Office Upgrade, Telegraph Channing Elevator Upgrade, Stair Center Water Meter Replacement, Fire Station 3 Roof Replacement, Leak Evaluation and Design Old City Hall and Veterans Building.

Future facility improvements will incorporate EV charging stations per the schedule below. To keep on schedule, Public Works will require an additional \$850,000 to accomplish charging station installation at the Corp Yard by April 2022.

Facility Name	Chargers	Installation Status
<b>Center Street Garage</b> 2025 Center	28 dual-head, 1 single L2 (existing)	Installed and in service
<b>Mental Health Clinic</b> 2636/2640 MLK	2 dual-head L2	Installed 1 dual head L2. Ready for add'l dual head at \$25k in FY 22/23.
<b>Berkeley Transfer Station,</b> 1201 Second	1 dual-head L2	Will install March 2021, 1 dual head L2
<b>North Berkeley Senior Center,</b> 1901 Hearst Ave	1 dual-head L2	Will install Aug 2021, 1 dual head L2
<b>Corp Yard,</b> 1326 Allston	4 dual-head L2, 1 DCFC	Seeking \$850,000 for Apr 2022 installation, enabling up to 100 chargers
<b>South Berkeley Senior Center,</b> 2939 Ellis	1 dual-head L2	1 dual head in T1, Phase 2 Project
<b>Mental Health Clinic</b> 1890 Alcatraz	1 dual-head L2	1 dual head in T1, Phase 2 Project
<b>Berkeley Marina</b> 125/127 University	4 dual-head L2	Proposed FY 22/23 (\$80k). Need new PGE service, more charging stations, and right features for 2026 deployment of 27 <u>PEO</u> scooters. No charger \$s.
<b>Civic Center,</b> 2180 Milvia	2 dual-head L2	Proposed FY 22/23 (\$95k)
<b>Public Safety Building</b> 2100 MLK	1 dual-head L2	Proposed FY 22/23 (\$35k)
<b>Central Library Parking Lot,</b> 2031 Bancroft	1 dual-head L2	Proposed FY 23/24 (\$40k)
<b>Adult Mental Health Clinic,</b> 1521 University	3 dual-head L2	Proposed FY 23/24, but this is a leased facility.

*Undergrounding.* The Utility District (UUD) No. 48 project will underground the overhead utilities in the Grizzly Peak area of Berkeley. The district includes 175 parcels along Grizzly Peak between Hill Road and the southeastern City limit. Despite decades of delay, the project is expected to go out to bid at the end of March 2021 with community meetings in June and July and construction beginning in September 2021.

In addition, City Council has received the Phase 3 report on undergrounding utility wires. This report identified 15.1 miles of priority locations for undergrounding, including specified evacuation routes. The report estimates \$90 million to complete this work at an average cost of \$6 million per mile.

*Future Editions of this Report.* This is the first CIP worksession report to incorporate Vision 2050. In future iterations, the Vision 2050 elements and CIP will be intertwined so that neither is distinguishable from the other. A shorter version of the City's CIP book will be produced and completed by May 15, 2021 titled *Turning Vision 2050 into Reality: CIP in Brief*. That document will identify particular CIP projects with the Vision 2050's values of equity, public health & safety, strong local economy, and resiliency & sustainability.

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