BERKELEY CITY COUNCILMEMBER
TERRY TAPLIN
DISTRICT 2

To: Honorable Mayor and Members of the City Council

From: Councilmember Taplin (Author), Councilmember Kate Harrison (Co-Sponsor),
        Councilmember Rigel Robinson (Co-Sponsor)

Subject: Budget Referral: Vision 2050 Complete Streets Parcel Tax Community
           Engagement and Program Plan

RECOMMENDATION
Refer $400,000 to the June 2023 mid-year budget update to conduct community engagement, public information campaign, and program plan development for potential 2024 complete streets and climate-resilient infrastructure revenue measures.

FINANCIAL IMPLICATIONS
$400,000 in General Fund impacts with an estimated $100,000 in cost to conduct community outreach, and an additional $300,000 to develop a final 2050 Program Plan.

CURRENT SITUATION AND ITS EFFECTS
Investing Berkeley's deferred maintenance needs with Complete Streets funding and long-range asset management planning is a Strategic Plan Priority Project, advancing our goals to: provide state-of-the-art, well-maintained infrastructure, amenities, and facilities; create a resilient, safe, connected, and prepared city; champion and demonstrate social and racial equity; and be a global leader in addressing climate change, advancing environmental justice, and protecting the environment.

In 2017, the City of Berkeley had the 15th worst pavement condition index (PCI) out of 101 jurisdictions in the Bay Area region. While baseline funding has marginally improved since then, deferred maintenance for infrastructure continues to outpace available resources, and costs continue to grow. In November 2020, the Berkeley City Auditor reported: "Berkeley streets have an asset replacement value of approximately $777.6 million, and deferred maintenance needs of streets exceeded $251 million in 2019… In addition to the continued deterioration of pavement condition, the current level of funding would also increase deferred maintenance costs to an estimated $328 million by 2023. In 2018, a City contractor estimated the City would need $17.3 million annually to maintain the current PCI or $27.3 million annually to increase PCI by five points in five years."[1]

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[1] Wong, J., et al (2020). Rocky Road: Berkeley Streets at Risk and Significantly Underfunded. *Berkeley City Auditor.* Retrieved from https://berkeleyca.gov/sites/default/files/2022-01/Rocky-Road-Berkeley-Streets-at-Risk-and-Significantly-Underfunded.pdf

In July 2022, the City Council voted to increase the annual street paving budget from $7.3 million to $15.3 million. Under 2020 estimates, the funding gap for improving PCI by 5 points citywide in 5 years is still $12 million annually. However, street paving costs can increase five-to-tenfold when conditions necessitate "full rehabilitation" beyond regular maintenance. Thus, paving costs will continue to increase sharply the longer they are deferred.

In November 2022, Berkeley voters approved Measure L by only 59.4%, short of the two-thirds supermajority required to approve the $650 million bond measure. Measure L would have funded the following categories of capital projects:

- $300 million for street safety improvements, including pedestrian crossings, bicycle facilities, and street paving;
- $200 million for affordable housing;
- $150 million for public parks, facilities, pools, utility undergrounding along fire evacuation routes, and climate resiliency.

In a January 2022 Work Session, the City Manager presented several revenue measure options to fund deferred infrastructure needs, including: "A parcel tax of $12M annually (or $250M if bonded against) to address street repair and traffic safety." In an online survey of 1,024 Berkeley residents concluding on January 12, 2022, a plurality of 28.5% of respondents ranked "Street Repair" as their top priority.

As deferred maintenance costs continue to increase, it is more urgent than ever to foster broad-based community trust in designing future revenue measures for infrastructure. Developing and finalizing a Program Plan will be essential for identifying and prioritizing projects while maintaining the flexibility to respond to changing conditions.

BACKGROUND
The City of Berkeley began developing the Vision 2050 Framework in 2018 to ensure that a 30-year long-term investment plan for sustainability and resilience in City infrastructure would reflect the community's collective vision across the lifespan of our public assets. Berkeley voters supported Vision 2050 with the passage of Measure R in the November 2018 election, which 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?*

The Vision 2050 Framework lays out 5 strategies for a sustainable, "cradle-to-grave" planning process to maintain Berkeley's infrastructure. Additionally, three core principles have guided planning for the Draft Vision 2050 Program Plan:

1. **Support vibrant and safe communities.** Infrastructure shall take equity into account and improve quality of life of all Berkeley residents, including having green open spaces, safe modes of mobility, and being prepared for fires and earthquakes.
2. **Have efficient, inspired and well maintained infrastructure.** Infrastructure shall be long lasting, use advanced technologies, and be maintained to provide efficient service.
3. **Facilitate a green Berkeley and contribute to saving our planet.** Infrastructure shall accelerate the transition to carbon neutrality and include electrification, develop natural streetscapes using green infrastructure, and prioritize human-powered and public transportation.

In 2022, Berkeley's total estimated infrastructure funding needs—including capital costs and ongoing maintenance costs for streets—totaled $1.8 billion.

Four major outcomes have been identified as goals in the Draft Program Plan for Vision 2050:
1. Streets are safer, more sustainable, improved to a good condition, and maintained.
2. Infrastructure is resilient, protects the environment, and is adapted to climate change impacts.
3. Open space, parks, and recreation improve our quality of life.
4. Public facilities are safe and provide community placemaking.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS
Aligning paving schedules with Complete Streets safety upgrades and design standards identified in the Berkeley Bicycle Plan, Pedestrian Plan, and Vision Zero Action Plan, would reduce planning and construction costs while maintaining consistency with Berkeley's transportation and climate policy goals. At the statewide level, the California Air Resources Board reported in 2018 that even the most optimistic assumptions about Electric Vehicle adoption would still require a 25% reduction in Vehicle Miles Traveled per capita to meet California's emission reduction goals.

Locally, Berkeley's 2019 greenhouse gas inventories identify 60% of the City's carbon footprint coming from the transportation sector. (The decrease in 2020 has been largely attributed to the COVID-19 pandemic.)[2] Meeting our ambitious decarbonization goals will require significant investments in well-paved streets that are safe for all transportation modes, especially increasing safety for pedestrians and cyclists of all body types and abilities.

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[2] https://berkeleyca.gov/sites/default/files/documents/2021-11-30%20Item%2032%20Berkeley%E2%80%99s%202019%20Community-Wide%20Greenhouse%20Gas%20Emissions%20Inventory.pdf

2019 Greenhouse Gas Inventory

Summary:
Buildings: 36%
Transportation: 60%
Waste: 3%
Water: <1%

Transportation 60%

Commercial Natural Gas 15%

Residential Natural Gas 17%

Commercial Electricity 3%

Residential Electricity 2%

Municipal Buildings 0.3%

Water Consumption & Waste Water 0.3%

Landfill Waste 3%

While Berkeley has a strong tradition promoting bicycles and other mobility devices, surveys have consistently shown that transport mode choices are strongly affected at the margins by perceptions and experiences of safety. [3]

THE SAFER PEOPLE FEEL, THE MORE THEY CYCLE

% using a **bicycle** as their **primary mode** of transport for a **2km/1 mi** distance

% agreeing that "**cycling** from one place to another **in my area is too dangerous**"

Netherlands, China, Japan, Germany, Belgium, India, Sweden, Poland, Hungary, Global Country Average, Colombia, Argentina, Peru, Chile, Mexico, Italy, South Korea, France, Turkey, Brazil, Malaysia, United States, Australia, South Africa, Spain, Saudi Arabia, Great Britain, Norway, Canada

R² = 0.4309

Base: 20, 507 online adults across 28 countries
The "Global Country Average" reflects the average result for all the countries and markets where the survey was conducted. It has not been adjusted to the population size of each country or market and is not intended to suggest a total result.
The samples in Brazil, Chile, China (mainland), Colombia, India, Malaysia, Mexico, Peru, Saudi Arabia, South Africa, and Turkey are more urban, more educated, and/or more affluent than the general population.

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Cycling%20Across%20the%20World-2022%20Report.pdf

Smoother pavement, wider sidewalks, and physical separation from motor vehicles both significantly reduce the risk of dangerous collisions. The Berkeley City Council has consistently supported incorporating Complete Streets safety designs into road maintenance projects to increase safety and reduce automobile dependence, while also reducing traffic congestion for motorists and reducing stress on street pavement.

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Attachments:
1: Draft Vision 2050 Program Plan
2: January 20, 2022 Work Session: Vision 2050 Update

VISION 2050
PROGRAM PLAN

JULY 2022

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THE INFRASTRUCTURE PROGRAM PLAN: OVERVIEW

This section provides an overview of the Vision 2050 Initiative and describes the Program Plan.

1.1 The Vision 2050 Initiative

The Vision 2050 initiative was introduced by Mayor Arreguin at his 2017 State of the City address. He described a complex network of pipes, streets, utility wires, bikeways, and transportation systems that are old and have suffered from historic disinvestment, neglect, and poor maintenance. As our infrastructure ages, we need a plan to make sure our systems are resilient to handle a growing population and climate change, including sea-level rise, more flooding, and wildfires. As technological innovations emerge and the condition of our infrastructure declines, we have an enormous and exciting opportunity to reimagine our streets and public spaces. This initiative is about building a future for Berkeley that provides essential services for future generations.

In November 2018, Berkeley voters approved Measure R. The Measure 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?" The response was a resounding yes.

A 40-member residents' task force was formed and the team analyzed quality of life, environmental and technology trends, and funding issues. To help keep focus on the future, the team imagined being on a street corner in Berkeley in the year 2050. What will Berkeley be like then? Figure 1 shows a street corner view from 2050.

The task force worked diligently for 18 months and developed the principles, strategies and recommended actions shown on Figure 2. Community engagement was at the center of Vision 2050. Outreach began early in 2018 with four information nights across Berkeley. Outreach continued in an effort to reach people where they already congregate, including neighborhood and faith-based groups and community organizations. From September 2018 to July 2019, the Mayor's Office presented at thirteen community organization meetings in conversations that ranged from a handful to one hundred people. Community feedback was used to develop the principles, strategies, and recommended actions.

Hi, I'm Maria. It's already a warm morning as I cycle down the bike path, calling out to neighbors who are walking their kids to school and getting ready for work. I continue down the street, thankful for the protected and pothole-free bike lanes. What a difference the safe streets initiative (Vision Zero) has made to bike and pedestrian safety!

I am on my way to the South Berkeley co-op where my great aunt Lizzie lives. She's 85 and asked me if I'd like to join her at a habitat restoration workshop at the updated Berkeley Marina. She wants to learn how to improve the shared open area in her community.

My watch pings to let us know that the accessible shuttle, now celebrating its 20th year of electrified operation, will pick us up in five minutes. After we board, I take a moment to check my phone and see that my home's smart energy system has turned on my dishwasher and washing machine to take advantage of the strong output from our solar panels. It also notifies me that the window shades have been drawn on the sunny south side of the house.

▲ **Figure 1:** Street Corner View from Vision 2050 report

VISION 2050

The Vision 2050 Framework focused on better coordination, integrated project delivery, utilizing new financing mechanisms, and broad principles and strategies for our infrastructure needs. The Framework was approved by Berkeley's City Council in September 2020. The City Manager then turned to implement the recommendations and assigned the Public Works Department to lead the effort. A timeline for the Vision 2050 initiative is shown below.

2017
Mayor Arreguin announces Vision 2050 Initiative

November 2018
Measure R approved by voters

2018-2019
Residents task force conducted analysis

September 2020
City Council approves Vision 2050 Framework

Current
Implementation led by City Manager

▲ **Figure 3:** Timeline for Vision 2050 Initiative

PRINCIPLES, STRATEGIES AND RECOMMENDED ACTIONS

1 STATEGY ONE   Use Integrated and Balanced Planning

> Use multi-criteria decision-making

> Use adaptive planning

> Prepare and implement a Dig Once policy

2 STATEGY TWO   Manage Infrastructure from Cradle to Grave

> Institute structured master planning

> Develop an Asset Management Program

3 STATEGY THREE Adopt Sustainable and Safe Technologies

> Accelerate the transition to clean energy and electrification

> Implement Complete Streets to provide sustainable and healthy transportation

> Develop natural streetscapes that provide ecosystem services

> Use sensors, data, and advanced technologies

> Prepare a wildfire mitigation and safety plan

4 STATEGY FOUR   Invest in Our Future

> Take advantage of a strong financial position to address infrastructure needs and commit to reducing large unfunded infrastructure liability by doubling capital expenditures

5 STATEGY FIVE   Prepare the City's Organization to Implement a Major Capital Program

> Develop an organization that is integrated and has capacity to deliver

> Prepare a program approach with management tools

> Provide independent oversight and reporting

▲ **Figure 2:** Vision 2050 Principles, Strategies, and Recommended Actions

1.2 What is an Infrastructure Program Plan?

This Infrastructure Program Plan (Plan) is the City of Berkeley's roadmap to rebuild our public infrastructure over the next 30 years. This Plan supports the Vision 2050 principles and provides information on outcome objectives, program elements, community input, the funding plan, program implementation, and program oversight and reporting. The Plan serves as a roadmap to guide the many infrastructure decisions that will be required throughout the next three decades. The Plan is flexible and adaptable, so the City can anticipate and address new challenges that we will face in the future. Why prepare a Plan now?

Improving the City's infrastructure requires new funding and a revenue measure or measures, which voters may consider on the November 2022 ballot. This Plan is prepared to provide the public with an understanding of the "big picture" for Vision 2050 in advance of voting for new funding. This approach is an advancement from prior measures. The Plan describes the work at the asset category level–streets, stormwater, parks, waterfront, etc. It is not a project-by-project prioritization. That will happen if voters approve funding, after which a project and program team will be formed and an oversight committee designated.

1.3 Core Values and Principles Guide our Planning

Berkeley's streets, storm drains, sewers, and water lines date back to the early decades of the 20th century. Critical systems are simply wearing out. Recent budgets have been insufficient to address these infrastructure needs, let alone modernize our systems or improve their resilience. As defined in the City's resilience strategy, resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.

The growing backlog of aging infrastructure leaves the community vulnerable to unplanned failure and service interruptions. For residents, workers, and businesses, this can translate to unsafe conditions, increased cost, and impediments to quality of life. Examples of infrastructure needs are shown in Figure 4.

As we begin to grapple with Berkeley's unfunded infrastructure needs, new challenges are emerging. The local impacts of the global climate crisis pose a major threat to our aging infrastructure. Extreme storm events, wildfires, heat waves, drought, groundwater, and sea level rise will challenge streets, pipes, and open spaces that were designed for a more benign environment. These vulnerabilities are layered upon other acute risks such as a major earthquake, and chronic challenges such as inequity. If our city is to survive and thrive, we must increase our resilience to these challenges.

PRINCIPLE ONE
SUPPORT VIBRANT AND SAFE COMMUNITIES

Infrastructure shall take equity into account and improve the quality of life of all Berkeley residents, including having green open spaces, safe modes of mobility, and being prepared for fires and earthquakes.

PRINCIPLE TWO
HAVE EFFICIENT, INSPIRED AND WELL MAINTAINED INFRASTRUCTURE

Infrastructure shall be long lasting, use advanced technologies, and be maintained to provide efficient service.

PRINCIPLE THREE
FACILITATE A GREEN BERKELEY AND CONTRIBUTE TO SAVING OUR PLANET

Infrastructure shall accelerate the transition to carbon neutrality and include electrification, develop natural streetscapes using green infrastructure, and prioritize human-powered and public transportation.

▲ **Figure 2:** Vision 2050 Principles

As we rebuild our infrastructure and, at the same time, reimagine a landscape for a changing future, our infrastructure decisions must remain flexible, yet grounded in a set of clear values. For this reason, the Vision 2050 Framework identified four core values as shown in Figure 5. These values will guide implementation of Vision 2050.

Street Pavement Damage

Sidewalk Repair
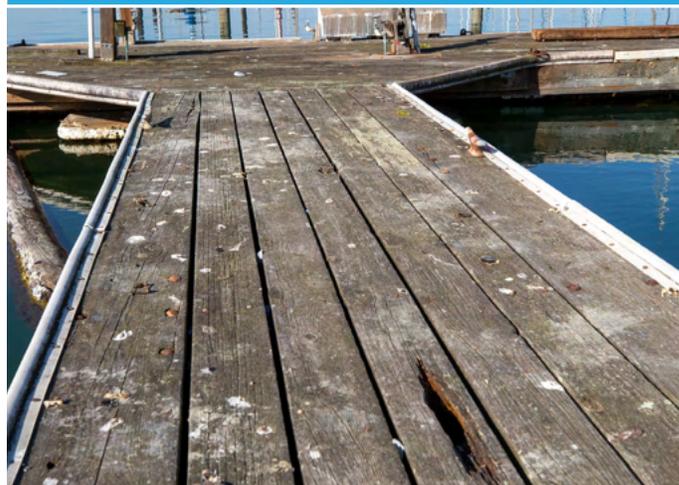
Deteriorated Marina Dock

▲ **Figure 4:** Example Infrastructure Needs

CORE VALUES FOR INFRASTRUCTURE DEVELOPMENT

EQUITY
The benefits of improved infrastructure must be distributed equitably throughout the entire community. Equity should mean that disadvantaged citizens with more pressing needs experience benefits sooner than others and receive benefits particularly tailored to their unique needs.

EQUITY

STRONG LOCAL ECONOMY
A strong local economy provides resources to Berkeley citizens and creates an opportunity to build local skills and employment opportunities that support the city's diverse community.

STRONG LOCAL ECONOMY

PUBLIC HEALTH AND SAFETY
This core value considers safe and convenient access to greenspaces, public services, clean air, and social support networks, all of which can have a big impact on people's emotional and physical health.

PUBLIC HEALTH AND SAFETY

RESILIENCY AND SUSTAINABILITY
Resilience requires systems and structures that are able to recover quickly from temporary and, sometimes, catastrophic events. Sustainability refers to the ability to minimize our impacts on the environment while still providing core services.

SUSTAINABILITY AND RESILIENCY

▲ **Figure 5:** Vision 2050 Core Values

INFRASTRUCTURE NEEDS AND COMMUNITY PRIORITIES

This section provides an update on the City's infrastructure funding needs and the community's infrastructure priorities.

2.1 Infrastructure Needs

The City has an extensive portfolio of capital assets and infrastructure, including 216 miles of streets, more than 300 miles of sidewalks, 255 miles of sewers, 78 miles of underground storm drains, 95 public buildings, 52 parks, 2 pools, and 3 camps. In addition, the City operates and maintains the Berkeley Waterfront and its related facilities, including the pier, docks, pilings, channel, streets, pathways, parking lots, buildings, trails, Adventure Playground, and 1,000 berth marina.

A City budget is prepared every two years and it includes a Capital Improvement Program (CIP). The City's ability to fund its CIP is limited by the total available resources that are competing with other community priorities. CIP funding resources include the General Fund, a number of special revenue funds, grants, and loans. The CIP attempts to identify all known CIP projects, categorizing them as baseline (annual, recurring program), one-time (special allocations, grants, loans), and unfunded (funding source has yet to be identified).

The FY2022 CIP identified an infrastructure capital funding need of more than $1 billion in Berkeley. However, these infrastructure needs are constantly changing due to increased construction costs and new planning studies that result in updated cost estimates. Past estimates also focused primarily on "fix it first" type repairs rather than the transformational infrastructure sought by the Vision 2050 Framework.

For this reason, Table 1 provides an updated list of infrastructure needs. This list includes updates from prior estimates and advances Vision 2050 in several significant ways. It adds asset categories that are more than simply fixing or repairing an asset and are about the ultimate use and safety of the asset. For example, instead of solely identifying the deferred maintenance in our pavement, the list includes the cost of fully implementing our adopted Bicycle and Pedestrian Plans, which would keep our streets safe for all users, especially bicyclists and pedestrians. Instead of focusing solely on traditional infrastructure, it includes trees as an important infrastructure category and begins to address the climate crises by building in the cost of undergrounding the City's evacuation routes.

Some of these categories have existing, dedicated funding for which an increase is necessary to cover these needs. Others categories may require multiple revenue sources, such as the General Fund, grants, State and Federal funding, developer contributions, user rates, and new revenue sources. An estimate of potential revenue from these funding sources is provided in Section 4.

Figure 6 summarizes these same needs, grouped by asset category within each of the four Vision 2050 Program outcomes discussed in Section 3. If these needs are addressed, then Vision 2050's goal of resilient and sustainable infrastructure will be reached.

TABLE 1 INFRASTRUCTURE FUNDING NEEDS (These are updated on an ongoing basis)	
Asset Category	**Infrastructure Funding Needs, in 2022 dollars**
More immediate needs	
Parks, camps, and pools	$116,000,000
Watefront	$131,000,000
Public buildings	$288,000,000
Sidewalks	$60,000,000
Streets	$248,000,000
Sewers	$194,000,000
Stormwater	$259,500,000
Traffic Controls, Streetlights, and Parking	$26,000,000
Longer-term needs	
Bike and Pedestrian plan projects	$122,500,000
Maudelle Shirek Building (Old City Hall), Veterans Memorial Building, Civic Center Park	$110,000,000
Transfer station and recycling center	$76,000,000
Transit projects	$45,000,000
Trees	$21,000,000
Utility Undergrounding	$105,000,000
Total Average	**$1,802,000,000**

Table 1's cost estimates are largely work that would be capital funded. In some cases, such as with streets and roads, the estimate includes recurring annual costs to keep the asset performing at the expected level and without deterioration. The requirement to fund the annual maintenance of assets is addressed in the Asset Management Program discussed in Section 6.
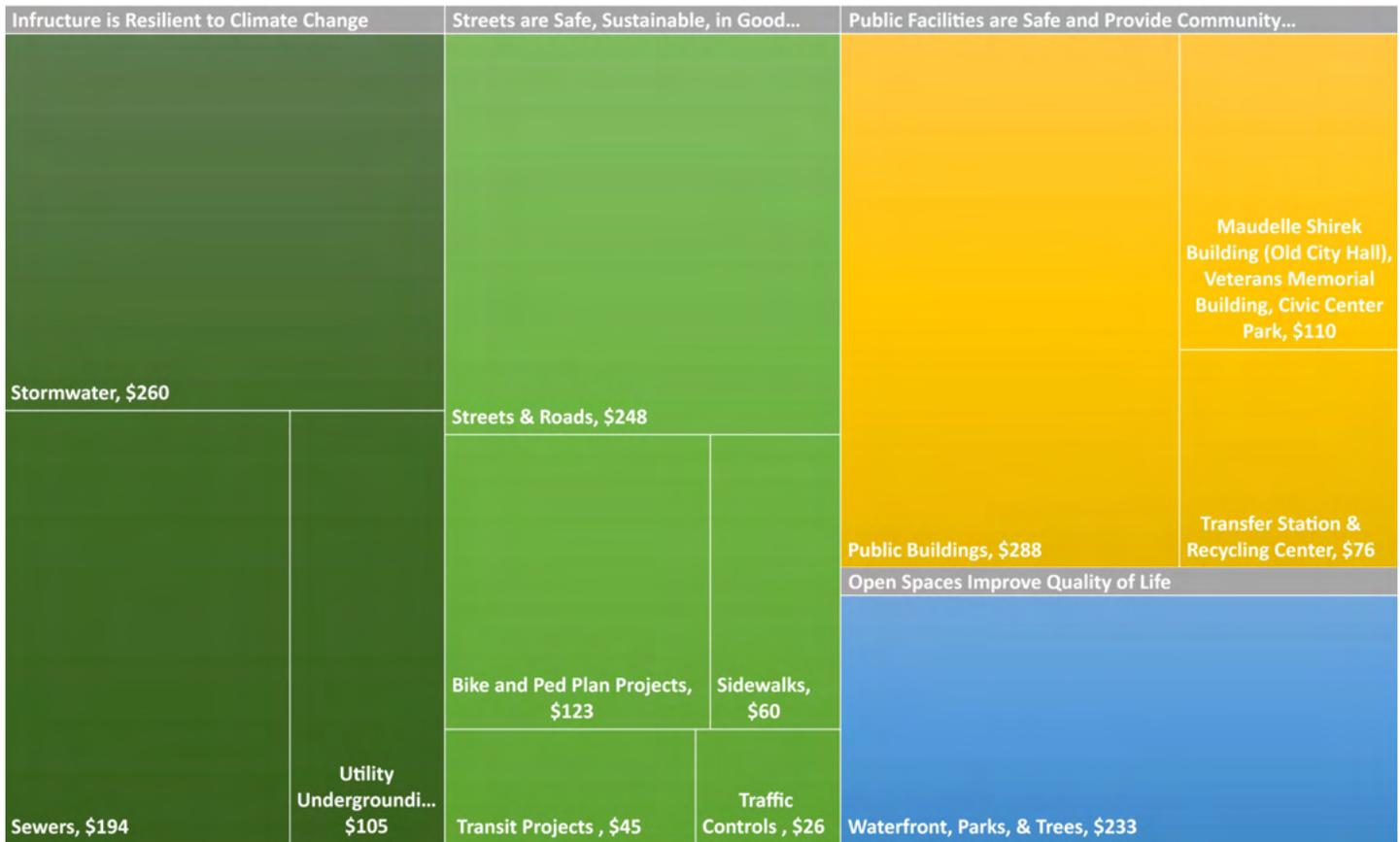
Figure 6: Infrastructure Funding Needs by Vision 2050 Outcome Objective

2.2 Community Input and Priorities

To better understand the community's infrastructure priorities, the following was completed in winter 2021 through spring 2022:

› Two statistically-reliable surveys of a representative sample of 500 Berkeley voters

› Meetings with over 25 commissions and local community organizations

› An online public survey that received over 1,000 responses

› An informational mailer to all Berkeley residents

› Development of a Vision 2050 website **BerkeleyVision2050.org**

› Four virtual large area public meetings

All of these efforts have been instrumental in sharing information and gaining input in the development of this Program Plan.

A survey in October 2021 of a random, representative sample of 500 Berkeley voters elicited respondents' infrastructure priorities and found that voters' top priorities included:

› Increasing affordable housing for low-income and homeless residents (79% rated as "important")

› Upgrading storm drains, green infrastructure, and watersheds to keep pollution from the Bay (79% important)

› Developing climate change resiliency, including protecting against sea level rise, wildfires and drought (78% important)

› Undergrounding utilities to reduce the risk of wildfire (73% important)

› Repairing deteriorating streets (73% important)

An online survey was also conducted and a total of 1,024 responses were received. For the most part, the results from the online survey aligned with the scientific survey. More so than the scientific survey, street repair stood out as a clear top priority followed by affordable housing. The top five ranked priorities are listed below, with percentages indicating the number of respondents who ranked the particular item as top priority:

› 28.5% – Street repair

› 19.2% – Affordable housing

› 8.3% – Bike lanes/safety

› 7.5% – Climate change resiliency

› 6.8% – Pedestrian safety

Input on this Program Plan was gained from four large area public meetings held on March 30, April 6, April 13, and April 20 and the following Commissions: Environment and Climate, Disaster and Fire Safety, Disabilities, Parks and Waterfront, Public Works, and Transportation. Berkeley residents brought their questions, input, and comments, a summary of which can be found at **BerkeleyVision2050.org**.

This program plan reflects input gathered from these meetings and City Council meetings on May 31 and June 21, 2022:

› More detail on possible climate and street investments

› Adding regular five-year updates

› Address overall vision

› Incorporate trees as public infrastructure assets

› Include indicator on tree canopy and diversity

› Address sidewalks

› Address equity and reference existing equity-based plans

› Include transit

› Explain why affordable housing is being considered for the revenue measure(s)

› Include developers' fees as source of revenue

› Address General Fund commitments to maintaining public infrastructure

› Include public art

› Revise indicators on EVs, sidewalks, and micromobility

› Revise Program Delivery section to address paving, traffic safety, and a multi-benefit approach

› Include more on climate change, e.g., resilience and electrification in buildings

› Include reference to the San Pablo Park pool

› Include coordination of programs/projects for multiple benefits

03

INTRODUCING THE
30-YEAR PROGRAM PLAN

The City's infrastructure systems are very complex, are in daily use, and can't be improved all at once. This Plan proposes making the improvements over a 30-year planning period in order to achieve a sustainable and resilient infrastructure. This is a reasonable time frame given the need to balance the work priority, the funding required, tax impacts, and the ability to deliver the projects. This also allows time for incorporating new technologies as they develop.

This 30-year Program Plan provides the following information:

› The major outcomes from implementing the Plan

› Implementing the Plan over 30 years in phases

› Possible results from the first phase

3.1 Outcomes of the Program Plan

This Plan includes visible outcomes. Four major outcomes have been identified that incorporate and advance Vision 2050 principles and core values, and incorporate community input received to date. The outcomes are shown in Figure 7 and the related infrastructure components are described below.

1 STREETS ARE SAFER, MORE SUSTAINABLE, IMPROVED TO A GOOD CONDITION, AND MAINTAINED

2 INFRASTRUCTURE IS RESILIENT, PROTECTS THE ENVIRONMENT, AND IS ADAPTED TO CLIMATE CHANGE IMPACTS

3 OPEN SPACE, PARKS, AND RECREATION IMPROVE OUR QUALITY OF LIFE

4 PUBLIC FACILITIES ARE SAFE AND PROVIDE COMMUNITY PLACEMAKING

▲ **Figure 7:** Outcomes of the Program Plan

Outcome 1 – Have Safe and Good Quality Streets

Streets are Safer, More Sustainable, Improved to a Good Condition, and Maintained

Having streets and streetscapes that are safer, greener, vibrant and enjoyable, use sustainable technologies, and are in "good" or better condition is a top priority from the community input, has been a subject of City audits, and is a priority of the Council. The asset categories to achieve this outcome are described below.

Asset Category 1 – Street Surface

The poor condition of Berkeley's streets has been documented by the City Auditor's report *Rocky Road: Berkeley Streets at Risk and Significantly Underfunded*, by residents' complaints, and by an overall low Pavement Condition Index (PCI). On a scale of 0 to 100, streets in a "good" condition have a PCI between 70 – 79. Berkeley's streets are "at risk" with an overall average PCI of 57 and, without more funding, will continue to deteriorate. From a community survey conducted in the fall of 2021, improving the condition of Berkeley's streets is one of the community's highest infrastructure priorities. The target is to improve Berkeley's streets to a PCI of more than 70.

Berkeley's streets in 2050 will look much different than today. Personal automobiles will be rarer, and public transit, ride sharing services, bicycling, and walking more common. Streets will better serve all users, and include visible engineering improvements that make bicycling and walking safer. These streets will make transit easier, safer, faster, and more reliable to access and use. Work in our streets will also require a coordinated approach to the infrastructure above, both at and below the street surface. This will require planning that is integrated and uses concepts such as "Dig Once".

We also will use other street surface technologies that are long lasting, help absorb stormwater and reduce pollution, reduce surface temperatures and the "urban heat island" effect, and reduce our dependence on asphalt paving, the production of which generates greenhouse gas emissions.

The expected outcome is for Berkeley's street surface to be in an overall "good" condition, to move toward using sustainable technologies, and to have Vision Zero and Dig Once policies fully implemented.

Reimagine Streets:

› Implement Multi modal Streets with Protected Sidewalks and Bike Lanes

› Introduce Pervious and/or Cool Pavement

› Reclaim Street Parking for Trees and Vegetation

› Promote transit use

▲ **Figure 8:** Vision 2050 Streets

Asset Category 2 - Sidewalks

Most Berkeley residents use a sidewalk daily, and many of us much more. Sidewalks in 2050 will be an even more important part of the transportation network. They will accommodate and promote the City's trees and healthy urban forest, serve users

of all levels of ability and accessibility, and use materials that help filter stormwater and reduce surface temperatures. At present, the City faces a backlog of thousands of sidewalk repairs that have been requested by residents. While Measure T1 has significantly reduced that backlog, the backlog is about to grow again as City staff complete the first proactive assessment of the City's sidewalks to identify repair locations. This proactive assessment is being conducted as part of the City's update to its Americans with Disabilities (ADA) Transition Plan. The City addresses sidewalk repairs with short-term grinding and filling of problem areas and long-term replacement of damaged sidewalks. Where conflicts with the urban forest exist, tools like meandering sidewalks are used to reduce or resolve those conflicts and make tree removal a last resort.

The expected outcome is for the backlog of Berkeley's sidewalk repairs to be completed and to have adequate resources to address future repair needs.

Asset Category 3 – Bicycle and Pedestrian Plans

Eighty percent of the collisions that result in deaths or severe injuries on our streets involve someone riding a bike or walking. Making our streets safer means prioritizing bicycle and pedestrian safety. This is especially important to help more residents and workers choose these fossil fuel-free active transportation modes, and is why Berkeley's vision for the future of its transportation network is to be

multi-modal, fossil-fuel free, and equitably accessed. The City has adopted the 2017 Bicycle Plan and the 2020 Pedestrian Plan, and has identified projects to help to bring the City closer to these safe and accessible multi-modal goals.

The City is transforming the City's bicycle network into a low-stress experience with a goal of reducing motor vehicle conflicts and connecting cyclists with the most utilized portions of the City. At the end of the program, over 50 miles of city streets will comprise bikeways, with 15.8 miles of these streets being full bicycle boulevards that criss-cross the City.

Walking is also a core mode of transportation in Berkeley. Improving walkability makes Berkeley safer, more inclusive, and more connected. As the most accessible and affordable form of transportation, walking lies at the core of an equitable mobility network and a healthy community. In addition to enhancing Berkeley's quality of life, improving walking will help the City to achieve its Vision Zero Policy goal of zero traffic deaths and severe injuries.

The Berkeley Pedestrian Plan includes an infrastructure inventory and an assessment of pedestrian demand and safety. The plan identifies ten priority street segments requiring projects to improve pedestrian safety and walkability. Projects provide improved street design, upgraded pedestrian crossings, installed speed management and traffic calming, and improved sidewalk maintenance and accessibility.

The expected outcome is for Berkeley's Bicycle and Pedestrian plans to be fully implemented.

Asset Category 4 - Traffic Controls, Streetlights, and Parking

In support of creating safe, accessible, and easy to use streets, the City of Berkeley is planning upgrades to existing traffic signals, including detection at 67 locations, ADA accessibility, pedestrian push buttons at 103 locations, and battery back-ups at 124 locations. Public Works maintains 8,011 streetlights and is planning replacements and upgrades of 2,100 parking meters and 240 pay stations.

The expected outcome is for these traffic controls, streetlights, and parking needs to be addressed.

Outcome 2 – Protect the Environment

Infrastructure is Resilient, Protects the Environment, and is Adapted to Climate Change Impacts

Global warming is a significant threat to communities globally and to the City of Berkeley. Berkeley's 2009 Climate Action Plan, 2016 Resilience Strategy, and 2019 Local Hazard Mitigation Plan establish city-wide actions to reduce greenhouse gas emissions and adapt to climate change impacts. The message is clear that the City's infrastructure must be resilient to prepare the City for these risks. Key goals of the City's climate action plans are to use energy more efficiently, transition to renewable energy as a power source for both buildings and transportation, improve access to sustainable transportation modes, recycle our waste, and build local food systems. The asset categories to achieve this outcome are described below.

Asset Category 1 - Stormwater and Watershed Management

The 2012 Watershed Management Plan (WMP) identified projects to improve storm drains, restore creeks, attenuate peak flows and to reduce pollutants entering San Francisco Bay. That project modelled the Potter and Codornices watersheds. The City is in the process of updating the WMP. The updated plan will consider flooding and drought caused by extreme storm events, sea level, and groundwater rise, implementation of the Green Infrastructure Plan, and modelling of all the watersheds. Infrastructure improvements will include storm drains, flow attenuation basins, permeable surfaces, bio-swales, and improvements at Aquatic Park.

The expected outcome is to have a stormwater system that addresses future climate impacts, reduces impervious surfaces, minimizes flooding, meets the City's stormwater discharge permit into San Francisco Bay, prevents pollution from reaching the San Francisco Bay, and revitalizes the urban watershed.

Asset Category 2 - Sewers

The City's wastewater collection system includes approximately 254 miles of City-owned sanitary

sewers, 7,200 manholes and other sewer structures, seven pump stations, and approximately 31,600 service laterals. The City is responsible for maintenance and repair of the lower portion of the service laterals (located within the public right-of-way) from the property line cleanout to the connection to the City's sewer main. Wastewater generated in the City's collection system is conveyed to the East Bay Municipal Utility District (EBMUD) wastewater interceptor system and is treated at EBMUD's Main Wastewater Treatment Plant.

During the 1980s, EBMUD and the seven Satellite agencies conducted studies to address the problem of overflows and bypasses of untreated wastewater that occurred during large wet weather events due to excessive infiltration and inflow (I/I) into the collection systems. These studies resulted in a long-term program of construction of collection system relief sewers and sewer rehabilitation. The City has rehabilitated or replaced over 200 miles of its gravity sewers and associated lower laterals over the past 30 years. Since 2006, the City has also implemented a private sewer lateral (PSL) certification program requiring the inspection and/or repair or replacement of private (upper) sewer laterals at the time of property transfer or major building remodel.

The seven Satellites and EBMUD are in a Consent Decree with the U.S EPA, the State Water Resources Control Board, and the Regional Water Quality Control Board, which establishes requirements for achieving the elimination of untreated wastewater overflows and bypasses over the next 20 to 25 years.

The expected outcome is to comply with the City's requirements in the Consent Decree and seal the sewer system from storm water intrusion, thereby reducing the risk of untreated sewage reaching the Bay during wet weather. This will become even more important as storms intensify due to the climate crisis.

Asset Category 3 - Undergrounding Overhead Utility Wires

The City of Berkeley's stated goal, as outlined in the General Plan, Disaster Preparedness and Safety Element, is to ensure the City's disaster related efforts are directed toward preparation, mitigation, response and recovery from disaster shocks. The Berkeley Local Hazard Mitigation Plan states that our two greatest disaster challenges are a Hayward Fault rupture and Wildland Urban Interface (WUI) fire. The climate crisis will result in periods of drought followed by very wet winters, producing heavy vegetation, dry summers, and hot easterly winds in the late summer. These conditions are known to create significant fires such as the 1991 Oakland Hills Tunnel Fire and fires in many parts of California in the past five years.

Methods to reduce the threat of overhead wires creating WUI fires include aggressive vegetation management and other fire hardening techniques. Overhead power lines, more so than undergrounded wires, can exacerbate unsafe conditions either by contributing to the disaster itself or hampering public safety efforts and evacuations. Earthquakes and landslides can knock over utility poles creating a special hazard. In an earthquake,
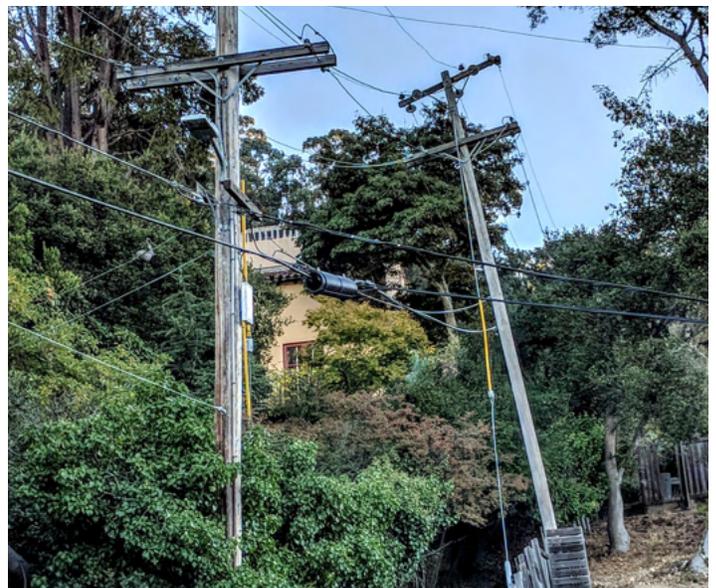
poles have a tendency to sway in opposite directions causing wires to snap and throw sparks. Some of California's biggest fires have started because of live wires in contact with combustible fuel.

The Public Works Commission led a three-phase study to underground overhead utility wires in Berkeley. The Phase 3 report recommended undergrounding along evacuation routes to support public safety through ingress of first responders and egress of community members in the event of a major disaster.

The expected outcome is to implement the Phase 3 study recommendations to underground overhead utility wires along Berkeley's evacuation routes and to support neighborhoods in fire zones that choose to underground.

Asset Category 4 – Electrification of Buildings Neighborhoods and Transportation

A major goal of Vision 2050 is to decrease the City's overall climate impact. This effort requires both the reduction of City-wide energy use and transition away from fossil fuels to renewable energy. The Existing Buildings Electrification Strategy in 2021 transitions existing buildings in Berkeley from natural gas appliances to all-electric alternatives in a way that benefits all residents, especially members of historically marginalized communities. As identified in the City's Resilience Strategy and Climate Action Plan, Berkeley seeks an energy system that, by 2045, is carbon neutral and delivers carbon-free electricity across a highly distributed system. Multifaceted changes to existing infrastructure and its uses are required to achieve carbon neutrality. Improvements to the existing energy grid may include, among other items:

› Increasing electricity distribution capacity to accommodate neighborhood electrification and mobility charging, in coordination with streets and other infrastructure improvements

› Improving or expanding access to transformers, vaults, and switchgears

› Seeking opportunities to decommission gas pipes in areas where buildings or neighborhoods are transitioning to all-electric

› Supporting solar energy and storage for critical facilities that prioritizes renewable backup power over diesel generators, including mobile batteries and electric vehicle-to-building connections

› Increasing electric vehicle infrastructure for municipal fleet and distributed mobility charging for residents

The expected outcome is to achieve the City's goal of becoming a fossil fuel-free city as soon as possible.

Asset Category 5 – Urban Forest

The City's municipal forest includes approximately 42,000 street, park, and median trees. These are often referred to as "city trees" or "public trees."

CLIMATE EQUITY FUND PILOT PROGRAMS

In 2021, the Berkeley City Council allocated $600,000 for Climate Equity Fund Pilot Programs that provide decarbonization and resilience programs for low income community members to retrofit homes, increase access to electric bikes or other forms of electric micro mobility, and gain access to resilience measures and other electrification measures.

They are maintained by the Parks, Recreation, and Waterfront's Urban Forestry Unit, which performs pruning, removing, and planting trees. These trees are hard at work. They remove pollutants and carbon dioxide from the air, help cool the City during the summer, absorb stormwater during storms, and help the City stay green and support a high quality of life. However, there are approximately 10,000 vacant tree locations and many of these locations are in areas with higher proportions of low-income residents of color. The expected outcome is to increase our City's tree canopy by planting thousands more trees for the purpose of enhancing our urban forest, sequestering carbon, addressing equity, mitigating urban heat island impacts, and improving quality of life.

Asset Category 6 - Specific Resilience Infrastructure Assets

While limiting City-wide climate impact is necessary, the effects of global warming are already testing traditional infrastructure and will continue to push our resources to their limits. Worsening drought conditions, increased risk of extreme weather events such as flooding and sea level rise create major challenges for our water supplies, watershed management, and resilience of our underground infrastructure systems. These events also have implications on the safety, health, and well-being of the community. The City has identified several new technologies and infrastructure to build while working towards climate adaptation and resilience. Some of the new infrastructure and adaptation strategies include:

› Develop rainwater catchments, expanding the use of gray water and expanding the distribution and use of EDMUD recycled water (purple pipe) for landscaping irrigation.

› Use natural green infrastructure solutions including infiltration basins, wetlands, bioswales, permeable paving, etc. to mitigate

flooding from the combined effects of groundwater, sea level rise, and extreme rain events.

› Increase the urban forestry canopy and use cool paving technologies to protect against extreme heat.

› Upgrade Community Resilience Centers and Resilience Hubs to ensure respite and evacuation capacity.

› Identify and manage urban – wildland forest canopy to mitigate wildfire risks.

› Install technologies such as air filtration to mitigate wildfire smoke impacts.

› Use "cool" paving and reduce dark asphalt street surfaces to combat urban heat island effects.

› Improve seismic safety systems in City facilities to reduce impacts from future earthquakes.
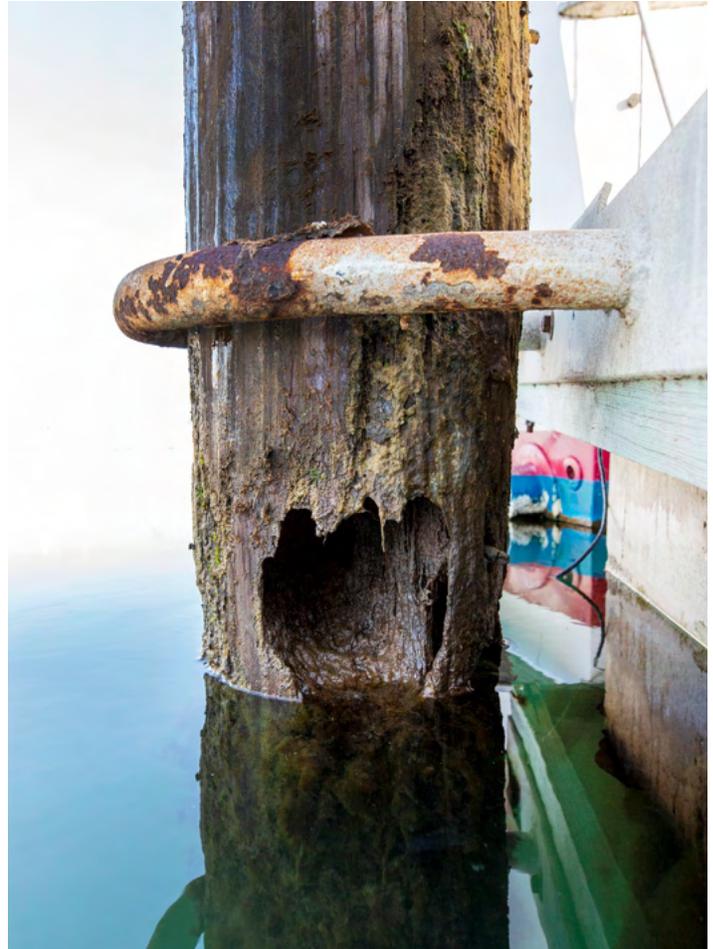
Outcome 3 – Promote Quality of Life
Open Space, Parks, and Recreation Improve Our Quality of Life

A key outcome of the Vision 2050 initiative is to improve our overall quality of life through the promotion of open spaces, parks, and recreational opportunities. The asset categories to achieve this outcome are described below.

Asset Category 1 - Parks

The City has 52 parks that contain 15 athletic fields, 49 sports courts (basketball and tennis), and 63 play areas. Many parks need significant improvements to pathways, lighting, irrigation systems, play structures, and athletic fields. The expected outcome is to implement these improvements.

Asset Category 2 – Pools

The City has two swimming pools, one by King Middle School and the other at West Campus. The pools require improvements to the locker rooms and office areas, and improvements to piping, decking, tiling, and roofs. While the King pool has a 30-year lease, the West Campus site has a five-year lease with the possibility that a new pool will be built at San Pablo Park that serves south and west Berkeley residents.

Asset Category 3 – Park Buildings and Restrooms

The City has four community centers, 2 clubhouses, 29 restrooms, and outbuildings. Many of the required improvements have been made with funding from Measure T1. Future improvements include seismic/deferred maintenance at some park buildings, renovation of existing restrooms, and construction of new restrooms. The expected outcome is to implement the required improvements, including electrification, elimination of natural gas connections, and the addition of solar and battery storage, where feasible.

Asset Category 4 – Camps

The City of Berkeley's non-resident camps include Cazadero Camp located off the Russian River, Echo Lake Camp located just above South Lake Tahoe, and Berkeley Tuolumne Camp located just east of Yosemite Park. These camps include hundreds of facilities, amphitheaters, bridges, pathways, water systems, and swimming pools.

There are two significant camp projects in progress. The rebuilding of Berkeley Tuolumne Camp is nearly completed and is scheduled to reopen in the summer of 2022. At Cazadero Camp, the Jensen Dorm, which was destroyed by a landslide in 2016, has been reconstructed. These projects are primarily funded by insurance.

The expected outcome is to complete the construction at the camps and to have them back in operation.

Asset Category 5 – Waterfront

The Waterfront is the largest public marina in the Bay Area located on 125 acres of land and 50 acres of water, and includes approximately 1,040 berths, public access docks, pilings, channels, streets, pathways, parking lots, buildings, restrooms, buildings, and small boat launch ramps.

There are many funding needs at the Waterfront, where many of the facilities have reached the end of their useful life and are starting to fail. As documented in multiple reports, there is a diminishing ability to pay for the pressing capital needs in the Waterfront. The Marina Fund is the City's mechanism for managing all Waterfront revenues and expenditures. Revenues steeply declined in the last two years as a result of safety and security concerns and failing infrastructure. The combination of falling revenue and increasing expenditure needs 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 (Figure 9)– to establish the community's vision for the Waterfront and to plan for making the Marina Fund viable and stable. There is still a need to address urgent infrastructure repairs to finger docks, pilings, electrical systems, and restrooms.

If these 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.

The expected outcome is to make the urgent repairs, complete the Berkeley Marina Area Specific Plans, and to return the Marina Fund to solvency.

> › Ensure Structural Integrity
> › Develop for Recreational Use
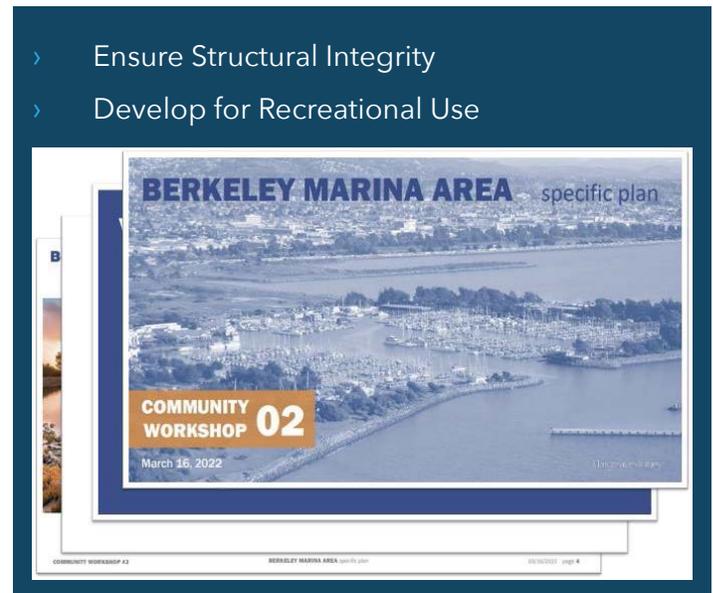
▲ **Figure 9:** Marina Community Vision

Outcome 4 – Have Safe Public Facilities
Public Facilities are Safe, Resilient, and Provide Community Placemaking

The City is responsible for maintenance of 95 facilities, not including Library facilities and facilities leased to other entities. These facilities include 39 facilities in the Parks, Recreation, and Waterfront inventory and 56 facilities in the Public Works inventory. These facilities house City staff and are places where residents receive public services. These facilities need to be safe, healthy, and resilient, and provide community placemaking, where the connection between people and these places is strengthened. The asset categories to achieve this outcome are described below.

Asset Category 1 – Public Buildings
In 2013, staff retained a consultant to perform

assessments and provide updated condition reports and cost estimates for the City's facility inventory. The recommended improvements are extensive. All projects included in these assessments are considered either major maintenance or capital projects. Despite support from a variety of City funds, the cost for routine maintenance, major maintenance, and capital improvements far exceeds currently existing sources of funds.

The expected outcome is that condition assessments of the City's public buildings will be conducted regularly, and necessary improvements identified and completed. These improvements include electrification, elimination of natural gas

connections, and addition of solar and battery storage, where feasible.

Asset Category 2 – Civic Center

The Civic Center comprises portions of the area surrounding Martin Luther King Jr. Civic Center Park including the Maudelle Shirek Building "Old City Hall" (1909) and the Veterans Memorial Building (1928). Presently, the historic buildings have decades of accumulated deferred maintenance and are seismically unsound. As part of the city's Measure T1 program, the Veterans Memorial Building and Old City Hall were slated for structural analysis and visioning of possible conceptual design alternatives, in concert with Civic Center Park. A consultant was retained to conduct a community outreach strategy, perform an assessment of the existing infrastructures, identify programs and functions for the two buildings, develop concepts for improvements for the Park. The consultant completed this work and presented a suite of financing and revenue generation strategies for the facility. City Council approved the following vision:

CIVIC CENTER VISION

The Civic Center will be the heart of Berkeley's community. Civic Center will be the prime space for civic life, culture, and the arts. It will reflect the city's diverse identities, celebrating its history, and contributing to shaping its future. A place of shared resources and a platform for free expression accessible to all, Civic Center aims to manifest the city's values, advance social justice, and demonstrate the power of true public space.

The expected outcome is to design and construct a Civic Center consistent with this vision and to provide placemaking.

Asset Category 3 – Transfer Station and Recycling Center

The city's current solid waste transfer station was opened in 1983. In the late 1980s, Berkeley's recycling operations relocated to the site to be operated by the Community Conservation Center. In the 1990s, the residential recyclable collection operator, the Ecology Center, was allocated an area at the site for its operations yard and office building. These facilities are not integrated and operations are not coordinated in a way that provides customers ease of use, access, or efficient drop-off of materials. These facilities do not meet current seismic requirements, have not been upgraded or improved since constructed, exceed their serviceable life, and cannot help meet the city's Zero Waste Goal.

The city retained a consultant to conduct a feasibility study to build a new solid waste transfer and recycling facility. Through active collaboration and community participation between November 2018 to May 2019, the city has developed a consensus around two conceptual facility designs.

The expected outcome is that the CEQA analysis and design of the approved project will be completed and a replacement facility constructed that helps the city achieve its Zero Waste goal.

Award Winning Remodel of the Mental Health Building

3.2 Work Prioritization and Phasing

The Vision 2050 program is planned to be implemented over 30 years in approximately three, 10-year phases. Due to the work's complexity and volume, an understandable prioritization process is needed to sequence the work. The Program Plan uses a scoring system based on these components and weighting:

> › Envision criteria, 60% weighting

> › Community input criteria, 40% weighting

The Vision 2050 report recommended the use of multi-criteria decision-making and suggested using the Envision criteria as prioritization tool. Envision is a program that is organized by the Institute for Sustainable Infrastructure and provides an objective framework of criteria designed to help identify ways in which sustainable approaches can be used to plan, design, construct, and operate individual infrastructure projects.

The Envision framework includes 64 sustainability and resilience indicators organized around five categories: quality of life, leadership, resource allocation, natural world, and climate and resilience. Envision is now widely applied to civil infrastructure projects akin to LEED certification. This criteria is given a weighting of 60%.

The other criteria comprises community input from the surveys, online feedback and community meetings. What the community wants for Berkeley is important and this criteria is given a weighting of 40%. The resulting criteria and score sheet is shown on Table 2.

TABLE 2:
PRIORITIZATION SCORE CARD

Envision Criteria (Weight 60%)
Quality of Life
Public Health and Safety
Equity
Public Space
Leadership
Integrated Planning
Lifecycle Maintenance
Local Economy
Resource Allocation
Sustainable and Durable Materials
Reduces Energy Use
Preserves Water Resources
Ready to Implement
Natural World
Green Infrastructure
Open Space and Habitats
Climate and Resilience
Reduces Greenhouse Gas Emissions
Extreme Climate Impacts
Resilience Strategy
Total Envision Points
Community Input Criteria (Weight 40%)
Complies with Community Survey Input
Complies with Commisions and Public Input
Total Community Input Points

Each asset category was rated using the score sheet, and initial scoring was completed by managers in the Public Works and Parks, Recreation and Waterfront departments. A summary of the scoring results is shown on Table 3. This rating is intended as a general guideline for resource allocation. It does not dictate when the works gets done as there may be other project requirements.

TABLE 3 SUMMARY OF PRIORITY SCORING	
Priority	Asset Category by Score
1	Streets
	Bicycle and Pedestrian Plan projects
	Sidewalks
2	Undergrounding
	Stormwater
	Parks
	Trees
	Waterfront
3	Traffic Controls, Streetlights, and Parking
	Transit projects
	Civic center
	City buildings
	Transfer station
	Sewer

For planning purposes, the work can be placed in three priority groups as shown in Table 3. This can serve as a start for the planning of a 30-year program. More details of the 3-phase program will be developed by the program team, should voters approve new funding for the program. Ultimately, the City Council will select the projects to fund and their timing.

The Program Plan's goal is to ensure all of these asset categories become Priority 1 well before 2050. Asset categories in Priorities 1 and 2 are most aligned to resilience and sustainability measures in the criteria and are closest to being able to move into construction. Many of the asset categories in Priorities 2 and 3 require more public process, planning, and/or engineering, some of which may be supported by a revenue measure or measures.

Some of these asset categories, such as sewer, have sufficient, dedicated funding sources that make them unnecessary to prioritize for new revenue funding.

When sufficient funding mechanisms and the project team are in place, the work of selecting projects will begin. The process will be carried out separately for each 10-year program phase. The project selection process is shown on Figure 10. This process is being used successfully on the second phase of the Measure T1 program. Projects that are identified as high priority for implementation within each 10-year phase will move forward to final acceptance after staff analysis, community and Commission input, and City Council review and approval. The prioritization of the projects will use the scorecard shown on Table 2, or as updated at the time.
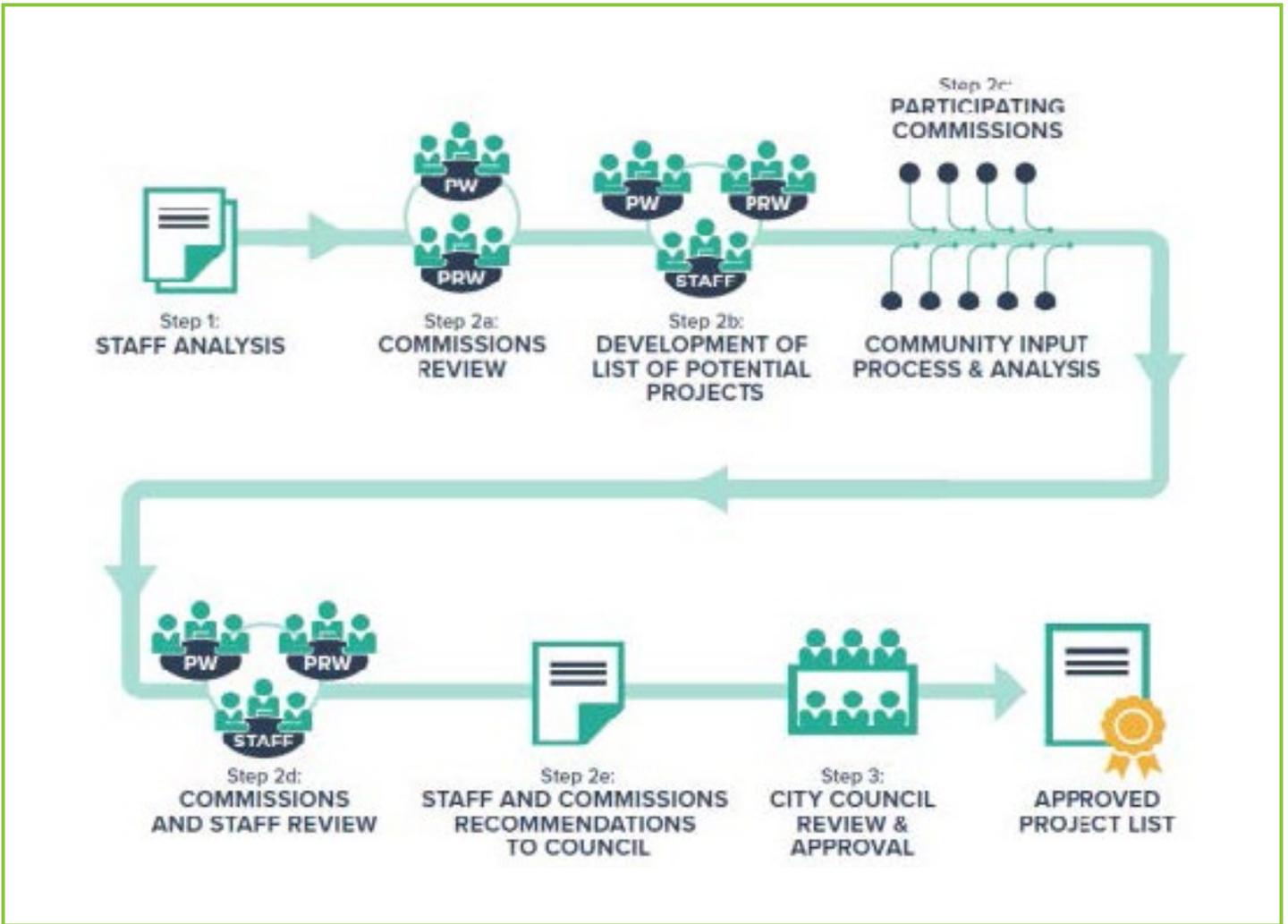
▲ **Figure 10:** Project Approval Process

04

THE PLAN'S FUNDING, RESULTS, AND TAX IMPACT

This section describes a high-level funding approach to achieving resilient and sustainable infrastructure by 2050, the various sources of funds available for this work, results that could be delivered, and a review of the tax impacts on residents for implementing a Vision 2050 program.

4.1 Funding Sources

Achieving a resilient and sustainable infrastructure by 2050 will require new revenue from a variety of sources, including new voter-approved measures. Adjustment to user fees and rates that are dedicated to certain services will be another important source of infrastructure funding. For example, Berkeley's sewer system is operated and maintained through user fees charged to customers. Through financial analysis, staff have determined that the $194 million needed in the city's sewer systems can be addressed in the next decade or so with cost-of-living adjustments to existing rates. Other services have dedicated funding sources (or rates), but that funding falls short. This is true of the city's stormwater fee and a special parcel tax for parks and trees. Other sources of funds include grants (federal, state, and other), developer fees, city funds (including the General Fund), and property owner fees, e.g., 50/50 sidewalk repairs.

Figure 11 shows the anticipated funding sources that will be available to complete each of the four Program outcomes and deliver sustainable and resilient infrastructure by 2050. This is a high-level projection with many assumptions yet to be proven, but is offered to show a funding path to the Vision 2050 destination and its dependence on a variety of revenue sources.
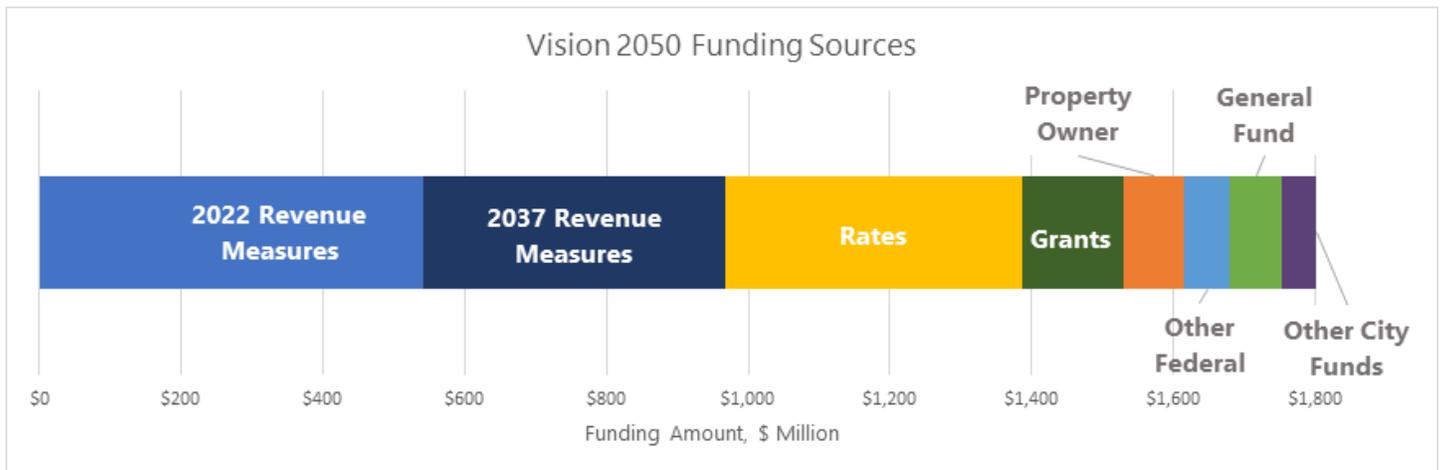
▲ **Figure 11:** Vision 2050 Funding Sources

4.2 Funding Alternatives

For the November 2022 ballot, two types of infrastructure revenue measures are being considered: a General Obligation Bond (or Infrastructure Bond) and Parcel Tax.

General Obligation Bonds (GO Bonds) are paid by an ad valorem property tax based on taxable property assessed value and can only be used to fund capital improvements (no maintenance, operations or services). GO Bonds are considered the most secure type of municipal debt and carry the lowest interest rates given the taxing power for repayment of the debt service. GO Bonds can also be structured to match the life expectancy of the infrastructure improvements and be issued in independent series as required based on project costs and timing. This phasing can allow for a better alignment of infrastructure utilization and repayment of the debt. Also, bond measures are generally considered progressive forms of taxation since they are based on the assessed value of properties.

The city has historically managed its GO Bond program for each authorization (Measures G, S, I, FF, M, T1 and O) through the issuance of individual bond series calculated to meet the capital funding requirements of the projects. Bonds were issued in amounts that minimized the impact on the tax rate required to make debt service payments. Since 1992, the city has maintained annual tax rates below original projections represented to voters for each of the GO Bond authorizations.

A **Parcel Tax** is a property tax that generates annual special revenues for capital, operations, maintenance and services. State law provides for a number of different tax formulas for levies to all properties (residential and commercial) including per parcel, building square footage or land use. A parcel tax cannot be based on property value. A parcel tax based on building square feet is generally considered a progressive form of taxation since larger properties pay more than smaller properties, exemptions for seniors and low-income property owners are allowed.

Given the scale of the infrastructure need, the Program Plan assumes two 2022 Revenue Measures. First, a parcel tax of $0.30 per building square foot for 14 years, raising approximately $25 million annually, that is dedicated to streets, sidewalks, and traffic safety as described under Outcome Number 1. Second, an infrastructure bond of $300 million with $150 million to address affordable housing for low-income persons and the unhoused and $150 million to improve resilience to climate change, wildfire prevention and protection, and to improve other select public infrastructure, as described in Outcome Numbers 2, 3, and 4.

These measures fund the community's top priorities voiced in the public outreach: affordable housing, street repair, and resilience to climate change. Multiple measures provide more flexible sources of funding that could address maintenance needs in addition to capital improvements. Street repair, sidewalk repair, and traffic safety are also top needs identified by online survey respondents, and is supported by the city's prioritization using the Vision 2050/Envision scorecard. These measures would significantly reduce the city's risk related to infrastructure unfunded liabilities, and improve the City's streets for all users.

TABLE 4
FUNDING MECHANISMS

Type	GO Bond	Parcel Tax
TAX BASIS	Assessed Value (AV)	Building square footage
USE OF FUNDS	Capital only	Capital + Maintenance
TAX PROGRESSIVITY	Progressive	Progressive
EXEMPTIONS	None	Low income/senior
PROS	Relative tax burden decreases as total AV increases	Fixed payments with cost of living adjustments, funds capital and maintenance
CONS	Cannot pay for maintenance or operations Does not adjust for future costs	Increases tax burden if building square footage increases

Why is affordable housing included in these possible revenue measures?

The Vision 2050 Framework focused on infrastructure, not affordable housing. However, on April 27, 2021, City Council approved exploring revenue measures that addressed both infrastructure and affordable housing, given both were top priorities for residents. Housing and infrastructure are connected. Ensuring affordable housing in a city such as Berkeley reduces greenhouse gas emissions because it affords lower and middle-income residents an opportunity to live closer to where they work, which means less emissions getting to work. At the same time, ensuring affordable housing is an important tool for ensuring a diverse and equitable city, which is an important priority of our community and City Council.

Results

Per Section 4.1, these results assume:

› The City continues its track record of successfully leveraging state, federal, and regional grants.

› City Council allocates a total of $15 million to annual paving from non-revenue measure sources in order to ensure proper ongoing maintenance of the City's streets, as accomplished for FY 2024.

› Parcel tax revenue of $25M annually is distributed roughly two-thirds to paving condition and one-third to traffic safety and sidewalks.

› GO bond revenue is distributed roughly 60% to climate change, resiliency, and wildfire protection projects; and 40% to public realm and other infrastructure projects.

These investments would:

› Improve streets to good paving condition and repave 97% of street mileage across the City.

› Implement 100% of adopted traffic safety plans (bike/ped) and achieve Berkeley's vision of a low-stress bike network

› Begin to underground the City's evacuation routes to enable emergency responders' ingress and evacuating residents' egress in the event of a wildfire, earthquake, or other disaster

› Complete selected sea level rise projects at the Waterfront

› Replace and improve Aquatic Park, storm drain, and green infrastructure citywide to prevent pollution from reaching the Bay and improve the City's resiliency from climate-infused storms

› Assist in advancing the city's park and public realm projects, e.g., Waterfront, Civic Center Renovation, and San Pablo Park pool
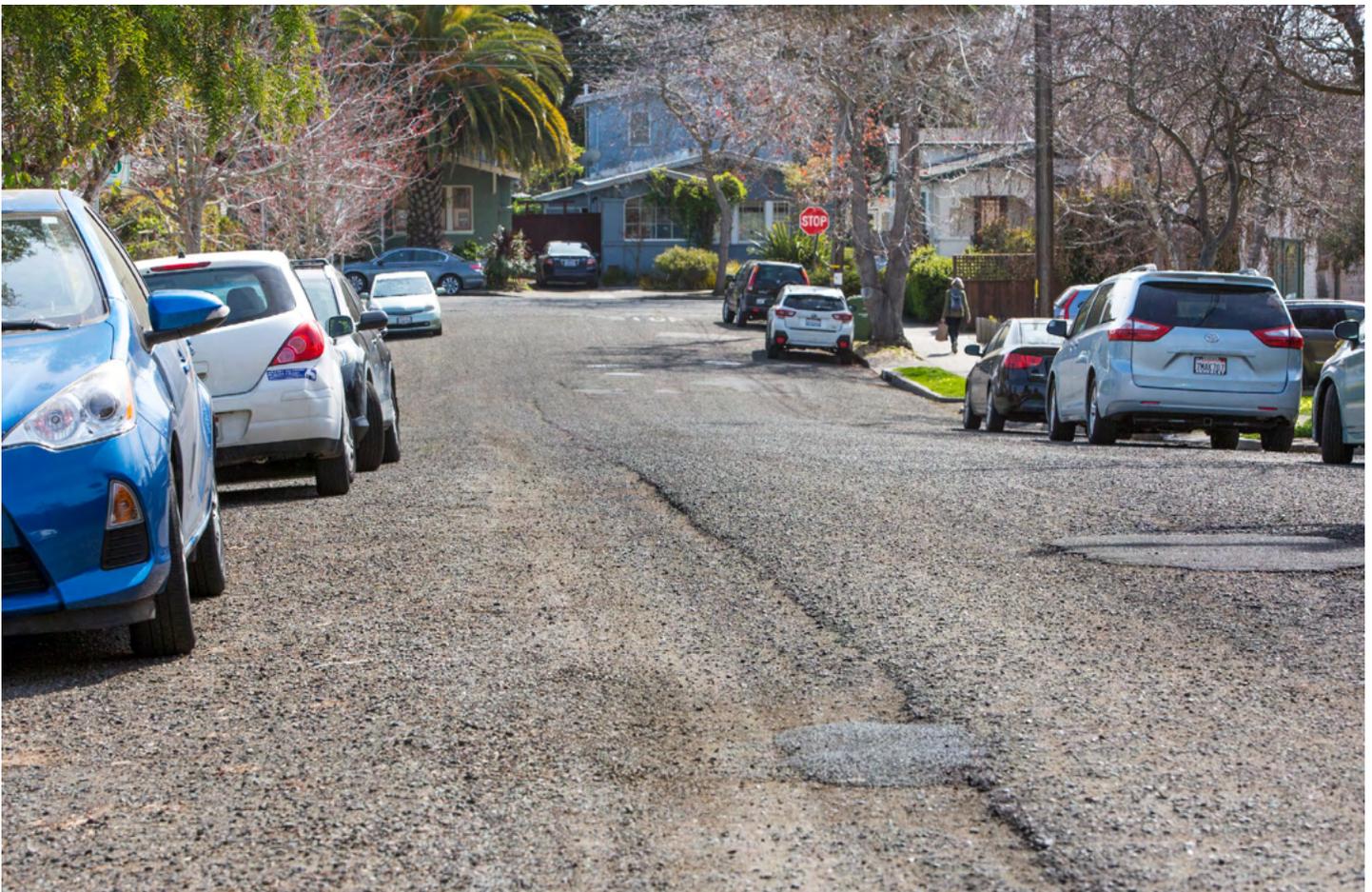
4.3 Review of Tax Implications

Property tax rates for Berkeley property owners are comparable to neighboring cities. After accounting for ad valorem taxes, city voter-approved taxes and assessments, school district taxes, and other fixed charges, FY 2021 tax rates in Berkeley (1.58%) were on par with Oakland (1.54%) and lower than in Albany (1.89%).

The city's prior bond issuances include Measure FF (neighborhood libraries), Measures G, S, and I (public safety, main library/seismic retrofit, animal shelter), Measure O (affordable housing), Measure M (streets and watershed), and Measure T1 (infrastructure and public facilities). Debt service from prior bond measures constitutes only 3.2% of the average property owner's tax bill.

The city has a current debt service of $52.90 per $100,000, which is low compared to nearby cities and their school districts, as shown in the table below. Even after implementation of a $300M GO bond, the city's debt service will continue to be lower than nearby cities and school districts.

TABLE 6
DEBT SERVICE COMPARISON

City or District	Debt Service per $100,000 of Assessed Value
City of Oakland	$201.10
Albany School District	$195.00
Berkeley School District	$145.10
City of Albany	$130.30
Oakland School District	$120.20
City of Berkeley plus $300M bond	$79.75 (average)
City of Berkeley (current)	$52.90 (average)

TABLE 5
EXISTING DEBT SERVICE AND TAX IMPACT

2021/22 Tax Rates	Total GO Bond Tax Burden
Per $100,000	$52.90
Average Tax (based on assessed property value of $647,972)	$342.78

The city has historically maintained low GO Bond tax rates as shown in Figure 12. This represents the previously approved bond measures including the remaining bonds for Measures T1 and O to be issued over the next four years.

If voters approved a $300 million GO bond, the average tax required for the new bond authorization will be $27 per $100,000 of assessed value. Assuming the existing GO bond authorization capacity are issued as scheduled, the cumulative debt service on all GO Bonds will increase through 2036, and then begin to decrease as prior bonds are paid off.

City of Berkeley
Historical & Projected Property Tax (per $100,000 A.V.)
Assumes No Additional Bond Authorizations
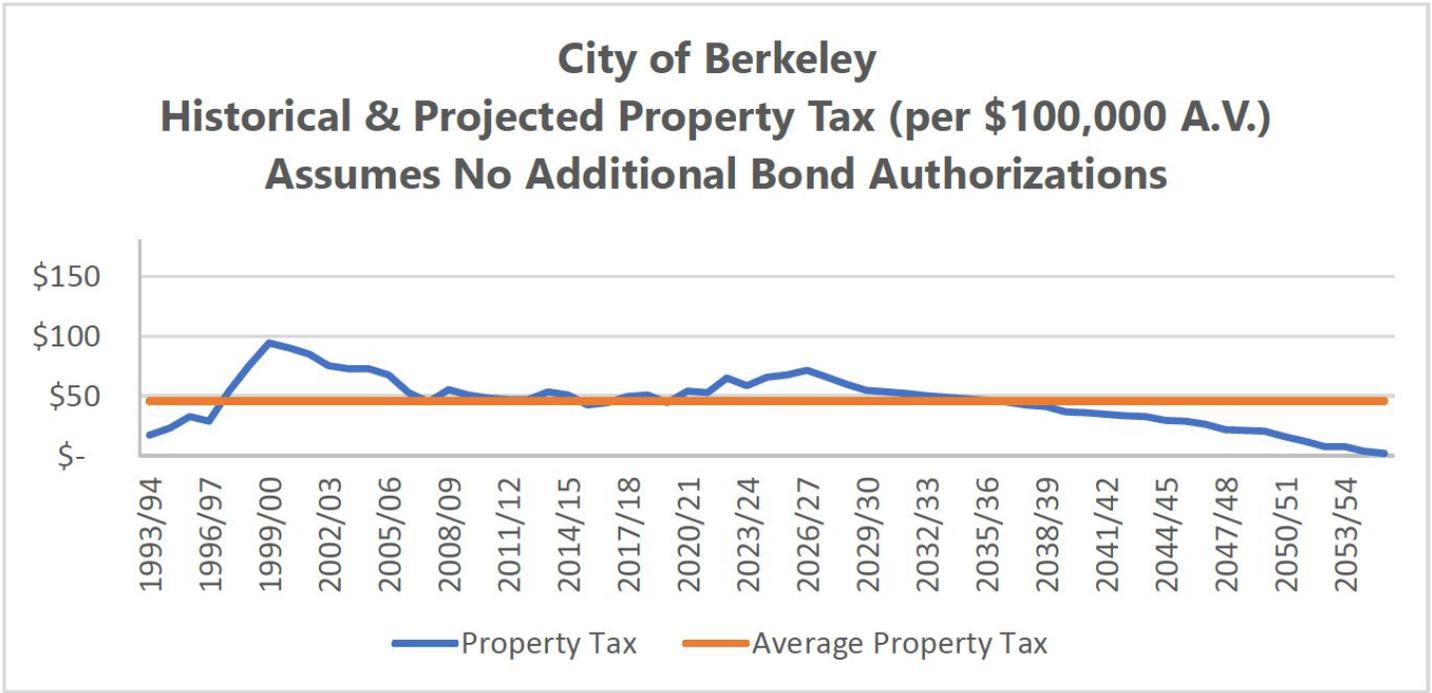
▲ **Figure 12:** Historical & Projected Property Tax

Assuming average developed property size of 1,900 square feet, a parcel tax of 30 cents per square foot would add $570 annually to the average property owner's tax bill, which is comparable to the annual cost of refuse service based on a 32-gallon cart.

Below is a summary of the tax impacts on an average property, assumed to be an average valued house at $647,972 (assessed value) with 1,900 sq ft.

TABLE 7	
SUMMARY OF TAX IMPACTS	
	$300M **GO Bond + Parcel Tax**
Tax Rate ($100,000 A.V.)	Avg Bond = $27 Parcel = 30 cents per sq. ft.
Tax (Avg Home: $647,972; 1,900 sq ft)	Avg Bond = $166 Parcel = $570 Total = $736

4.4 Other Benefits of Infrastructure Spending

Infrastructure spending has other benefits. It creates jobs. The U.S. Department of Transportation has found that for every $1 billion in infrastructure investment, 13,000 jobs are created. In a place like Berkeley, which follows both state law on public works expenditures and local law via a Community Workforce Agreement, this means jobs that pay prevailing wages and benefits.

Infrastructure spending also can add art to our public spaces. If 1 percent of a revenue measure is dedicated to local public art, as was the case with Measure T1, or City Council commits an annual General Fund allotment of a similar amount, then Berkeley's public spaces will get more public art. Public art plays an integral role in improving our community's wellbeing by creating inspired spaces that reflect the unique character of our city. Public art breathes life into the built environment, engages the community with creative art experiences, and fosters a sense of belonging.

Art Installation at Civic Center Garage

Statue of William Byron Rumford

Art Installation at Shattuck & Center

▲ **Figure 13:** Public Art in Berkeley

05

PROGRAM DELIVERY

The City has well-established capital project divisions in the Public Works Department and Parks, Recreation, and Waterfront Departments, delivering a wide range of infrastructure projects. Given this major 30-year program to rebuild infrastructure, this section looks ahead on how the City will deliver the program, evaluating the City's current capabilities, sharing information on other cities' approaches to implementing large capital programs, and recommending actions to implement the Vision 2050 program.
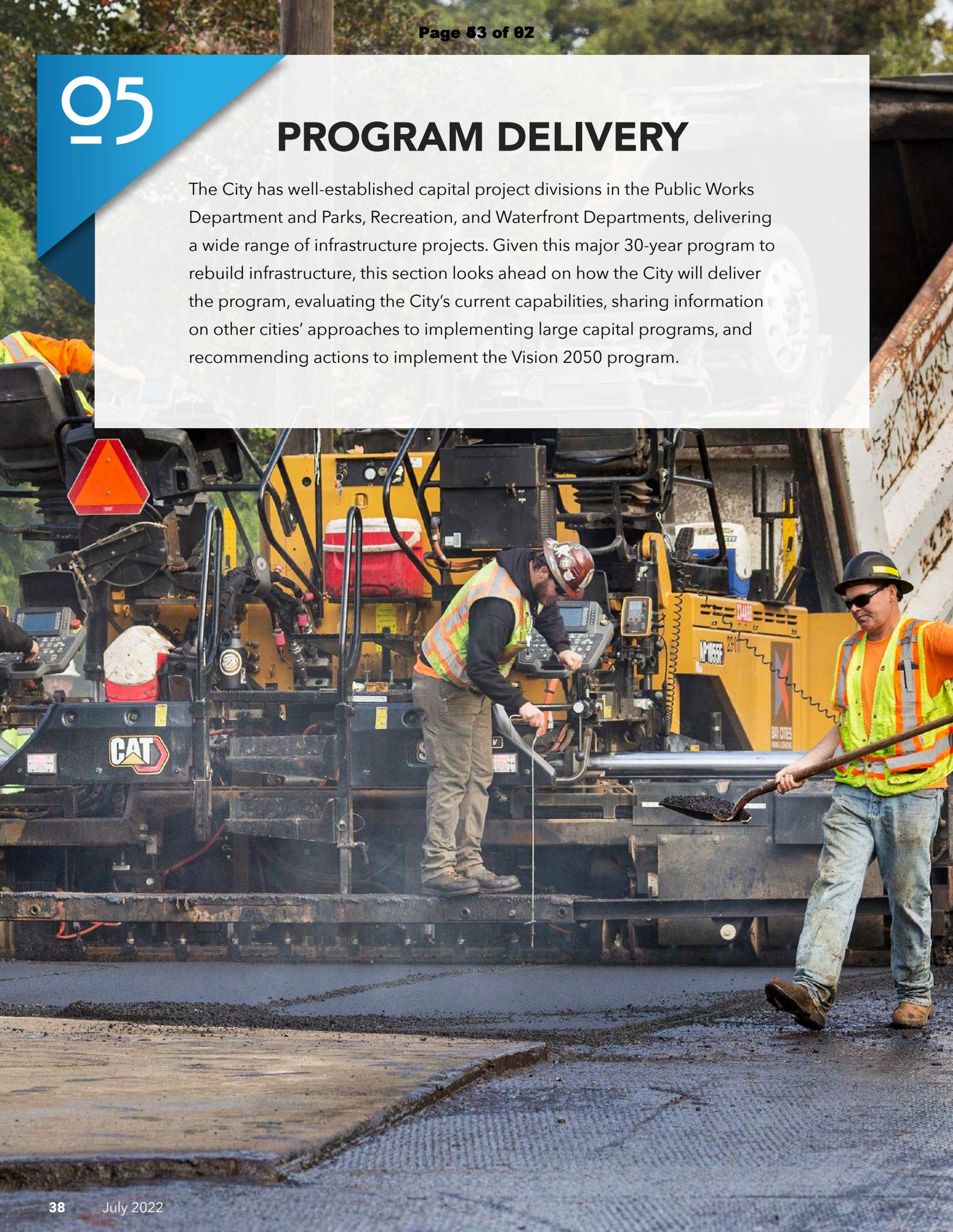
5.1 Current Organization and Measure T1 Implementation

Capital projects are delivered by the Engineering and Transportation Divisions in the Public Works Department, and Capital Projects Division of the Parks, Recreation and Waterfront Department. Most of this work is based on regular, annual contributions from special funds, including ratepayer funds (sewer, stormwater, and streetlight) and a parks-focused parcel tax.

As shown in the table below, capital investments have more than doubled in the last decade.

Year	Capital Program
2010	$41.6 million
2020	$114.5 million

This growth has largely been driven by Measure T1 and the large project to rebuild Tuolumne Camp. In November of 2016, Berkeley voters passed Measure T1, authorizing the city to sell $100 million of General Obligation Bonds to repair, renovate, replace, or reconstruct portions of the city's aging infrastructure.

The City of Berkeley has managed all T1 projects internally with a team that includes administrative, financial, and project management staff from the Public Works and Parks, Recreation, and Waterfront Departments. Five full-time equivalent positions were allocated across 11 staff within PW and PRW. One of the five FTEs is a T1 Associate Management Analyst. While projects are managed by city staff, the planning, design, and construction management of projects are largely completed by consultants.

As a part of preparing this Program Plan, interviews were conducted with the T1 Management Team and project managers to learn what has worked well and how things can be done better in the future.

Positive outcomes of T1 implementation:

› The City has completed nearly all of the 39 projects in Phase 1. Phase 2 projects are approved and are on track to be completed by 2026

› Interdepartmental collaboration has been very effective with regular meetings and open communications

› Community messaging has been regular and recurring, with ongoing updates to the website and email distribution lists, periodic reporting to Council, and a January 2022 informational brochure mailed to residents

› The program team has been able to staff up and retain staff during the program

› Staff costs have been kept to a minimum, i.e., less than 12% of project costs

› Meetings are held at the conclusion of each project to discuss challenges, successes, and lessons learned

› The project teams have largely been able to keep up with the project schedules

Ideas for future improvements:

› Reduce the time it takes to hire staff

› Increase IT and legal support to match the program size

› Add consultants to help with certain tasks in project management

› Improve tools to aid in project management

› Streamline contracting policies, including bid protest procedures and purchasing policies

It is important to note there will be overlap with the T1 team completing the Phase 2 projects and the Vision 2050 team ramping up. The future organization will need to account for this to ensure the success of both programs.

5.2 Research on Other Programs

The City and its consultants conducted interviews with three cities implementing large capital programs. Interview topics included organization, tools, implementation, and accountability.

Successes, challenges, and lessons learned were discussed with each group, too. Table 8 summarizes the cities and their programs.

TABLE 8		
CITIES INTERVIEWED AND THEIR CAPITAL PROGRAMS		
City	**Program Description**	**Budget and Staff**
City of Oakland › Measure KK's funding allocations are a) $350 million for streets and roads, b) $150 million for facilities and c) $100 million for anti-displacement and affordable housing › CIP projects are delivered through Public Works (PW) and Transportation (OakDOT). PW delivers non-transportation projects, such as sewer, drainage, and parks. OakDOT delivers transportation projects through two divisions: a) Great Streets (large projects) and b) Safe Streets (street repairs) › Program management is primarily done with City staff with some consultant support. There are about 20 dedicated staff members for program management › Staffing vacancies have been as high as 25%		$87M / 20 employees = ~$4.4M per employee.

City of Oakland (cont.) › Oakland's PCI was 53 in 2019 and increased to 58 in 2021. They are using $100 M of Measure KK funds over 3 years to improve 350 miles of street surface › Measure KK has a 9 member Public Oversight Committee. The members were appointed by the Mayor and report to the City Council	
City of Sunnyvale › The Public Works Engineering Division delivers all capital projects through four groups: a) special projects, b) project design, c) construction management, and d) land development › The special projects group manages very large capital projects, e.g., $1 billion wastewater treatment plant re-build. Consultants handle the day-to-day project management but do not have monetary authority › There are 8 staff in the project design group, who manage the smaller on-going capital projects › The City uses e-Builder software › Staffing vacancies are a problem › City Council's target PCI is 80. Their current PCI is about 76	$176.5M / 30 employees = ~$5.9M per employee.
City of San Diego › The City delivers capital projects through two departments: a) Capital Projects and b) Strategic Capital Projects. Capital Projects perform projects that are $5 to 20 million in size, the work is long-term and they have about 700 staff. The Strategic Capital department works on projects over $100 million in size, the work requires special expertise, there are about 50 staff and there is a high reliance on consultants › The current 5-year CIP has a funding need of $8.4 billion › The City uses OCI (overall condition index) instead of PCI. The City's target for OCI is 70 › Staff vacancies range from 15 – 20% › A State of CIP Report is provided to City Council twice per year › San Diego is a participant is a California multi-agency benchmarking group	$830M / 750 employees = ~$1.1M per employee

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While Berkeley uses City staff for project management and consultants for planning, design, and construction management, by comparison, the larger programs are managed by a combination of City staff and consultants. Berkeley's 5 full time equivalent employees are handling $45 million projects at present, a higher ratio than these other cities. City staff make all financial decisions, manage City processes, and complete repeatable tasks. Consultants assist City staff with a wide variety of tasks involving project planning, design, construction management, and execution, and provide necessary specialized expertise and knowledge. Some program teams include a

dedicated group who administer grant funding. Challenges experienced during large program implementation include difficulty in recruiting and retaining a talented workforce, having sufficient administrative and support services, and having effective and efficient hiring and on-boarding processes, including a continuous recruitment process.

These issues could be addressed in part by including dedicated financial and recruiting staff that are funded through the revenue measure, and developing program-specific hiring policies and procedures.

5.3 Recommendations for Vision 2050 Implementation

The recommendations presented in the section below build off the successes and lessons learned from implementation of Measure T1 and the City's regular capital program, and from the three cities we interviewed and researched. These recommendations will help in delivering a more significant investment in the city's infrastructure:

› **Responsible organization –** A Vision 2050 program management team should be formed and report to the Public Works Director for the first phase of improvements, given this phase's focus is likely within the right of way, which is Public Works' responsibility. This team would be multi-discipline, meaning the team would be responsible for implementing all aspects of the Vision 2050 program, including projects outside of the normal purview of Public Works. In future phases, as determined by future Vision 2050 priorities, this program management team could report either to Directors of Public Works or Parks, Recreation, and Waterfront, a Deputy City Manager, or the City Manager.

› **Multiple Benefits –** The Vision 2050 Framework recommended infrastructure improvements that have multiple benefits. Given this Plan's initial focus on streets and traffic safety, the program management team will ensure projects are delivered that, to the extent feasible, combine paving, traffic safety, and green infrastructure improvements. Recent annual paving projects demonstrated progress in this regard, as they have included paving, green infrastructure, and various traffic safety features such as traffic circles, traffic diverters, and pedestrian islands. Given this plan prioritizes the co-benefits of street paving and traffic safety, staff have modeled how to meet both goals simultaneously. By dedicating two-thirds of streets-focused investments to paving and one-third to traffic safety, this Plan's goals can be met in ten years or so.

› **Program management team and staffing –** The City should initiate a recruitment for a new full-time position, Vision 2050

Program Manager. The manager should have an administrative support person and project managers (the number to be determined prior to implementation). The City team would ideally include dedicated staff in lieu of 3-year limited term positions, given the duration of the work. In addition, the city team should include both an in-house construction inspector and a project coordinator to assist with time-intensive tasks such as compiling budget data, preparing public outreach materials, and coordinating meetings. Outreach support should be included on this team as well. The Program Manager should also have a mix of staff and consultant support in a blended team. Consultant support may include: a) preparation of a project management manual, b) project cost tracking, c) performance indicator tracking, and d) management of special projects.

› **Engineering functions –** As discussed above, the engineering and capital delivery divisions in the Public Works and Parks, Recreation and Waterfront Departments will continue to deliver ongoing projects. These include aspects of street paving, sidewalk repairs, sewer rehabilitation, and park and playground improvements.

› **Special projects –** Projects that are not normally handled by the City's engineering divisions should be managed by the program management team or assigned to a consultant. Examples of these projects may include utility undergrounding, seismic improvement to public buildings, public realm projects, etc

› **Supporting departments –** Advanced planning needs to be held with the City's procurement, legal, human resources and information technology departments. Challenges experienced during large program implementation include difficulty in recruiting and retaining a talented workforce and having effective on-boarding processes. In addition, the City's procurement procedures need updating and improvement. The ideal Vision 2050 organization may include dedicated recruitment and financial staff, as well as new policies that are developed specifically for the program. For example, the City of Oakland cut 500 staff hours and months from project timelines by reducing the number of project and procurement approvals.

› **Tools, software and procedures –** An evaluation of current and new tools will be made for delivering the program. This will include: a) procurement tools for goods and services, b) project scheduling and tracking software, c) document management, and d) reporting.

06

SUPPORTING STRATEGIES

This section describes the performance monitoring, oversight and reporting and on-going maintenance that will be a part of implementing a successful Vision 2050 program.

6.1 Performance Indicators

A large complex program like Vision 2050 can benefit from identifying Key Performance Indicators (KPIs) to track progress. An initial list of KPIs is shown on Table 9 and are organized around the four Vision 2050 outcome objectives. The indicators go beyond the traditional tracking of cost and schedule progress and incorporate indicators that reflect sustainability and resilience goals.

It will be important to update these KPIs at the beginning of each phase of this thirty-year program, and more frequently in some areas, in order to incorporate changing conditions, new technologies, and new priorities.

TABLE 9
VISION 2050 KEY PROGRAM PERFORMANCE INDICATORS

1. Streets are Safer, More Sustainable, Improved to a Good Condition, and Maintained	
Paving condition	% of sidewalks in safe condition
Three year average of severe injuries/fatalities	% of Bicycle, Pedestrian, and ADA Transition Plans implemented
% of 2020 pavement surface converted to pervious surface	Public satisfaction with right of way
% of commute trips by solo occupant vehicle	% of trips by walking, micro mobility or transit

2. Infrastructure is Resilient, Protects the Environment, and is Adapted to Climate Change Impacts	
Citywide GHG reductions	% of public buildings fossil-fuel free
Citywide natural gas consumption	% of automobiles that are EV citywide
% of Stormwater and GI plans implemented	% of sea level rise, undergrounding, and evacuation route projects completed
% of target acres treated by Green Infrastructure	% of 2022 vacant street tree sites planted
% of public buildings seismically retrofitted	

3. Open Space, Parks, and Recreation Improve our Quality of Life	
% of Backlog Addressed Annually	Diversity of the Urban Forest
# of Street Trees/Tree Canopy Ratio	Public satisfaction at Parks and open spaces

4. Public Facilities are Safe and Provide Community Placemaking	
% of public realm/placemaking opportunities implemented	% of Backlog Addressed
% of ADA Transition Plan implemented in buildings	Public satisfaction in public spaces
% of public buildings with battery storage	

6.2 Equity

Incorporating equity into infrastructure is a core value of the Vision 2050 Framework, and is something Berkeley residents want. Three-fourths of voters said an infrastructure measure should incorporate equity.

Poorly maintained infrastructure is inherently inequitable, as it is more detrimental to Berkeley's most vulnerable residents. Those with mobility impairments can find potholes, deficient sidewalks, failing hand rails, or out-of-service elevators as insurmountable challenges. Those on bikes or walking, instead of in vehicles, are more at risk of death or serious injury on streets with potholes, failing pavement markings, and lacking traffic safety controls. As reported by the city auditor, low-income residents who depend on their automobile to get to work face greater risk from the estimated annual $1,049 repair bill attributable to poorly maintained streets. The state of our parks, recreation and senior centers has a serious impact on the programs and services delivered to children of color and lower income seniors.

In implementing equity into Vision 2050, Berkeley will build on recent progress. The City's transportation plans prioritize projects in historically underinvested neighborhoods in Berkeley, including improvements like bus bulbouts and dedicated bus lanes which help lower income residents more likely to use transit. Many capital projects approved in Measure T1 implementation advanced equity. These projects include the African American Holistic Resource Center, South Berkeley Senior Center, the Martin Luther King Jr. Youth Services Center, and public restrooms citywide approved as part of Measure T1, Phase 2. In addition, Phase 1 projects such as paving and park improvements at San Pablo Park and 10 play structures in West Berkeley also advance equity.

6.3 Reporting and Oversight

A Vision 2050 program team will prepare a Program Management Manual. The manual will include the performance indicators and a format for reporting progress. Typically, performance monitoring reports are prepared on a semi-annual basis. The reports will be provided to Council and will be available to the public via the Vision 2050 website.

To ensure accountability, independent oversight for the revenue measures will be provided by two of the City's Commissions: Transportation and Infrastructure, and Parks, Recreation, and Waterfront. These Commissions will review expenditures for conformance with the measure's purposes, propose how future revenue measures proceeds are spent, and monitor progress toward Vision 2050's outcomes and performance indicators.

6.4 Lifecycle Maintenance

Asset Management is an important concept in which the city's infrastructure systems are managed throughout the life cycle from 'cradle to grave.' Taking an asset management approach was a key part of the City Council adopted Vision 2050 recommendations.

A Strategic Asset Management Plan (SAMP) was recently submitted to City Council and the Council adopted an Asset Management Policy. The SAMP develops policy guidance, reviews the city's current maintenance practices, and prepares a roadmap of key initiatives for implementing a full Asset Management Program (AMP) in Berkeley's Public Works and Parks, Recreation & Waterfront Departments. Critical systems that we depend on every day are simply wearing out. Recent budgets were inadequate for infrastructure capital and maintenance needs, let alone modernizing them. An AMP is needed to manage our infrastructure assets throughout their useful life.

The city retained a consultant to assess the city's current asset management practices against a global standard benchmark on Asset Management in six areas: asset strategy and planning, asset management decision-making, lifecycle delivery, asset information, organization and people, and risk assessment. Based on the benchmark, Berkeley's average assessment was in the 'developing' level of asset management implementation and comparable to many U.S. cities, but not nearly good enough. The consultant worked with city staff to develop a 'Roadmap' of key initiatives in the next two

years to implement an effective AMP. The components include:

› Prepare an Asset Management policy for City Council's adoption

› Form an Asset Management team, consisting of a team leader and two program staff

› Form an AM Steering Committee to guide the program implementation

› Provide consultant support

› Prepare the strategies, procedures and analyses to implement an AMP

The SAMP conducted an asset-by-asset review of annual infrastructure maintenance funding and found that some asset categories such as streets and city buildings had insufficient maintenance funding by a wide margin, while other assets like sewer and streetlights had adequate maintenance funding. Assets such as stormwater have sufficient maintenance funding now. However, climate change and green infrastructure might make current funding commitments insufficient in future years.

STRATEGIC ASSET MANAGEMENT PLAN
City of Berkeley

APRIL 2022
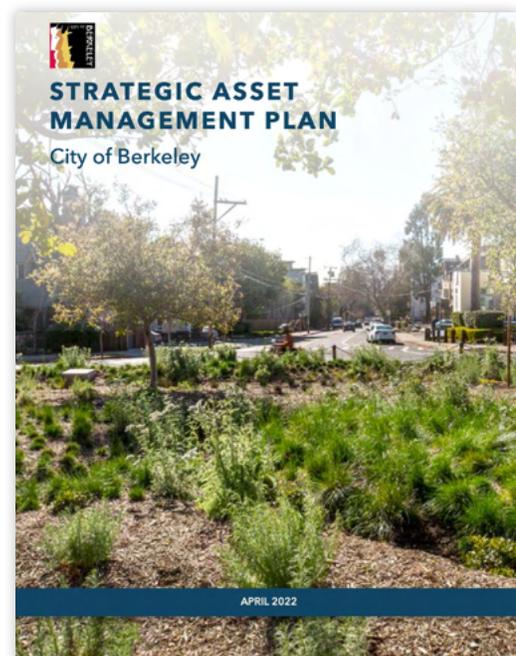
6.5 General Fund Support for Infrastructure Maintenance

The level of General Fund contribution for public infrastructure in the last 12 years has remained flat in nominal terms. Given escalating annual costs, this led to a decline in General Fund support for infrastructure. A common theme from community engagement has been to grow General Fund support for infrastructure and, at the very least, that revenue from any new measures not replace existing General Fund commitments to infrastructure.

In recognition of the need for more infrastructure funding, the City Council has revamped its capital budget and allocated an additional $14M+ for street maintenance, $5M+ for the Waterfront and Parks, and $4M+ for other infrastructure. If these investments become a new "floor" for the City's infrastructure, the City will be on track to achieve a resilient and sustainable infrastructure by 2050.
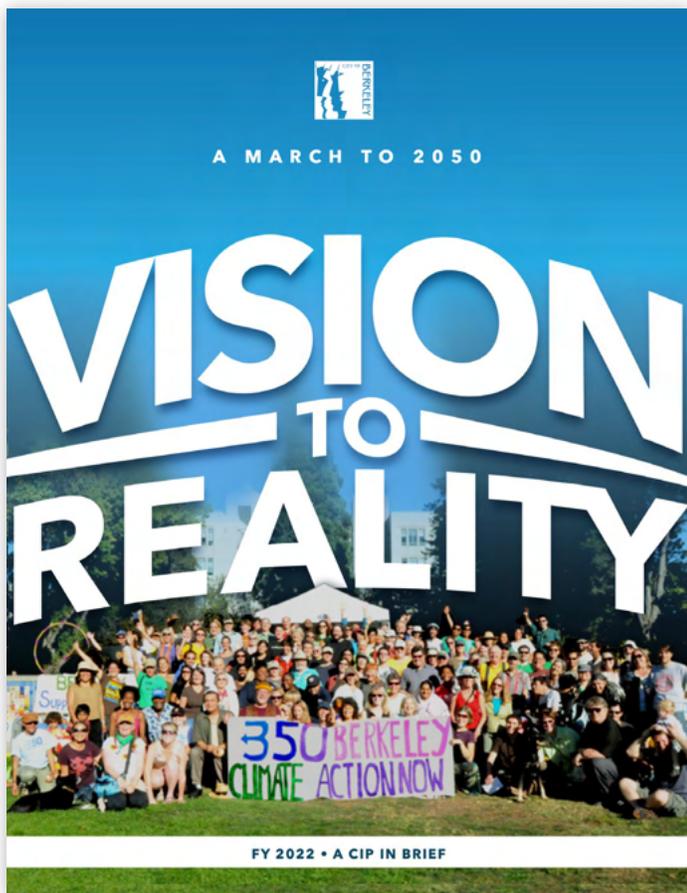
The FY 2022 CIP in Brief was the beginning of melding Vision 2050 into the City's capital budget

07

APPENDICES

A. Acknowledgements

City of Berkeley

Paul Buddenhagen, Deputy City Manager

Liam Garland, Director, Public Works

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Ray Yep, Vision 2050 Implementation Team Member (volunteer)

Margo Schueler, Vision 2050 Implementation Team Member (volunteer)

Gordon Wozniak, Vision 2050 Implementation Team Member (volunteer)

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Christina Erickson, Deputy Director, Parks, Recreation and Waterfront

Farid Javandel, Deputy Director, Public Works

Joe Enke, Manager of Engineering, Public Works

Input from the Leadership Teams in the Public Works and Parks, Recreation and Waterfront Departments

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Woodward & Curran: Dave Richardson, Principal

Daniel Windsor

Josh Uecker

Stephanie Hubli

B. GLOSSARY OF TERMS AND ABBREVIATIONS

Terminology	Definition
ADA	Americans with Disabilities Act
AMP	Asset Management Program
Asset categories	A logical grouping of similar assets or equipment types used to categorize, organize, and manage the asset portfolio.
Asset management	Data driven planning that improves operational, maintenance and capital forecasting of potential needs, and optimization of investments to realize the greatest value from assets while operating over their lifecycle.
CEQA	California Environmental Quality Act
CIP	Capital Improvement Program
City	City of Berkeley
Council	City Council of Berkeley
EBMUD	East Bay Municipal Utility District
Envision	Developed by the Institute for Sustainable Infrastructure and Harvard University, Envision provides industry-wide sustainability metrics for all types and sizes of infrastructure to help users assess and measure the extent to which their project contributes to conditions of sustainability across the full range of social, economic, and environmental indicators.
KPI	Key Performance Indicator
General obligation bond	A General Obligation bond is a common type of municipal bond that is secured by a government's pledge to use legally-available resources, including tax revenues, to repay bondholders.
Parcel tax	The parcel tax is a tax on parcels of real property collected as part of a property tax bill. Unlike the property tax, the parcel tax cannot be based on property value. To impose a parcel tax, governments must win support from two-thirds of voters.
PCI	Pavement Condition Index, which is a scale of 0 to 100 (with 100 being the best) that indicates the condition of an asphalt street surface.
Program plan	A structured approach to organizing a long term complex array of subcomponents. The plan typically describes the project components, schedule, outcomes, funding, and reporting.
SAMP	Strategic Asset Management Plan. This is a high level plan that reviews an organization's policies, assesses its maturity on maintenance, and develops a roadmap to implement a lifecycle maintenance management program.
U.S. EPA	United States Environmental Protection Agency
Vision 2050	An initiative of Berkeley's Mayor Jesse Arreguin to take a long term approach to improving Berkeley's aging infrastructure. The approach incorporates sustainability and resiliency and anticipating a future world with climate impacts.
WMP	Watershed Management Plan

C. Reference Documents

1. Information on Vision 2050 can be found on its website: **BerkeleyVision2050.org**.

2. Reference documents referenced in this program plan can be found on the City of Berkeley website (**BerkeleyCA.gov**) using the search feature

3. Information on Berkeley's Measure T1 program can be found on its website: **BerkeleyCA.gov/your-government/our-work/ballot-measures/measure-t1**.

4. Information on the Envision process can be found on the Institute for Sustainable Infrastructure's website: **SustainableInfrastructure.org**.

MEET YOUR COUNCILMEMBERS

MAYOR
JESSE ARREGUIN

Term Expires 11/30/2024

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RASHI KESARWANI

Term Expires 11/30/2022

DISTRICT 2
TERRY TAPLIN

Term Expires 11/30/2024

DISTRICT 3
BEN BARTLETT

Term Expires 11/30/2024

DISTRICT 4
KATE HARRISON

Term Expires 11/30/2022

DISTRICT 5
SOPHIE HAHN

Term Expires 11/30/2024

DISTRICT 6
SUSAN WENGRAF

Term Expires 11/30/2024
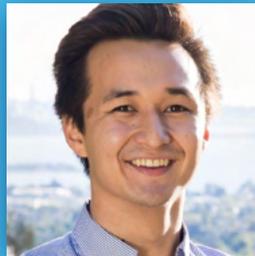
DISTRICT 7
RIGEL ROBINSON

Term Expires 11/30/2022

DISTRICT 8
LORI DROSTE

Term Expires 11/30/2022

Office of the City Manager

01

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Paul Buddenhagen, Deputy City Manager

Subject: Discuss Vision 2050, Infrastructure Priorities, Stakeholder and Community Engagement, and City's Bonding Capacity; and Seek Direction on November 2022 Revenue Measure(s)

SUMMARY
This report provides an update on Vision 2050 and its recommended exploration of an infrastructure-focused revenue measure or measures for the November 2022 ballot. It includes results of recent stakeholder and community engagement, comparisons of revenue measure options, and an update on the City's bonding capacity; and seeks City Council's direction on revenue measure options for the November 2022 ballot.

City Council adopted the principles, strategies, and actions laid out in the Vision 2050 Framework in September 2020, after a resident-led, volunteer effort to develop a long-term plan centered on resiliency and sustainability. Strategy Four of the Vision 2050 Framework identified inadequate funding of the City's infrastructure and recommended action to address this need through new revenue. The City Manager formed a Vision 2050 implementation team and, as a result of this team's work, City Council approved a project in FY 2022 to explore a significant revenue measure or measures focused on infrastructure, including affordable housing. In Fall and Winter 2020, staff hired a consulting team, conducted a scientific survey (topline results in Attachment 1), opened and closed an online community survey, held more than 20 stakeholder meetings, performed financial analysis on the measure alternatives, and made progress on the study of the City's bond capacity.

Staff seeks City Council's direction on several questions that will drive the next actions on the project:

1. Is the November 2022 election the right time to include an infrastructure-focused revenue measure or measures?

2. If yes, should it be *one* infrastructure-focused measure or *multiple* measures? And what should be the approximate dollar amount of the measure(s)?

3. What should the top infrastructure spending priorities be for the measure(s)? And should affordable housing and traditional infrastructure both be addressed in such measure(s)?

In addition, staff seeks to learn what City Council would like to see incorporated in the upcoming *Vision 2050 Program Plan* for which public input will be solicited in March and April.

With direction from City Council, staff will proceed to draft a *Vision 2050 Program Plan*, engage Commissions and the public on the draft *Program Plan*, conduct a follow-up scientific survey of voters in April, and return to City Council in May with a proposed *Program Plan* and language for revenue measure(s) for City Council to consider placing on the November 2022 ballot.

CURRENT SITUATION AND ITS EFFECTS
Most of Berkeley's streets, sidewalks, sewers, parks, playgrounds and public buildings were built over 75 years ago and need repair. However, local revenues have not kept pace with the need for investments to maintain and/or update aging infrastructure or promote sustainability and housing affordability. This underinvestment has led to an estimated $1.2 billion in deferred maintenance as shared with the City Council during the development of the FY 2022 budget.[1] (An updated estimate will will be reported to City Council as part of the *Program Plan* in May 2022.)

Studies show that $1 spent in early maintenance of infrastructure, such as streets, can save $7 in later, more expensive repairs. This explains why delays in addressing deferred maintenance in the City's streets will quadruple the cost of addressing these needs by 2050.

The $1.2 billion in citywide infrastructure needs is an undercount, as this estimate does not include significant affordable housing need, nor does it include many needs related to new or improved infrastructure, such as utility undergrounding, bicycle and pedestrian improvements recommended in adopted City plans, some improvements that make the City's infrastructure more sustainable and resilient, or costs to transform the City's public spaces and commons.

Nevertheless, this size and scale of these infrastructure needs is very important, as they show the challenge ahead. This challenge exists despite proactive steps taken to address these needs in the last decade. Local voters approved the first phase of upgrades to local infrastructure through the passage of Measure M ($30M) in 2012, the Parks Tax increase in 2014, Measure T1 in 2016 ($100M), and Measure O in 2018

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[1] Attachment 2 provides the infrastructure needs reported to City Council at the March 16, 2021 session on *Unfunded Liability Obligations and Unfunded Infrastructure Needs*. In response to questions raised in stakeholder meetings, staff have added a second page to explain how these infrastructure needs were derived.

($135M). Together, these measures have provided additional resources to address affordable housing and the repair and improvement of Berkeley's aging infrastructure, including sidewalks, storm drains, parks, streets, senior and recreation centers, watershed and other City facilities.

While marking important progress, these measures have not been large enough to address this size of the infrastructure and affordable housing need. A measure or measures on the November 2022 ballot would secure a dedicated funding source to support local infrastructure and affordable housing, and accelerate the City's path toward sustainability and resilience as envisioned in the Vision 2050 Framework.

Scientific Survey of Berkeley Voters. A random, representative sample of 500 Berkeley voters were surveyed regarding their infrastructure priorities in October 2021 via telephone and text-to-online technology using professional interviewers. The survey had a margin of error of +/- 4.4%, and top line survey results are found in Attachment 1. It elicited respondents' infrastructure priorities, and support or opposition to an infrastructure-focused general obligation (or "infrastructure") bond, parcel tax, or sales tax increase.

The survey found that voters' top priorities included:

- Increasing affordable housing for low-income and homeless residents (79% rated as "important"),
- Upgrading storm drains, green infrastructure, and watersheds to keep pollution from the Bay (79% important);
- Developing climate change resiliency, including protecting against sea level rise, wildfires and drought (78% important),
- Undergrounding utilities to reduce the risk of wildfire (73% important), and
- Repairing deteriorating streets (73% important).

This survey found broad support for an infrastructure-focused revenue measure, but support fell short of the two-thirds necessary to pass a revenue measure dedicated to infrastructure, whether an infrastructure bond, parcel tax, or sales tax. Voters' support and opposition did not differ much between the larger-sized measures and the smaller-sized measures. The "No" vote (between 27-32%) common to these measures is higher than previous pre-placement surveys, and the undecided vote is smaller than previous surveys.

The survey also found that three-fourths of this representative group of voters believe an infrastructure measure should address equity, and a majority support a definition of equity where infrastructure benefits are provided first (or more) to lower-income neighborhoods and communities of color that have been historically underfunded.

Revenue Measure Options. The survey tested three revenue measure options:

Discuss and Seek Direction on Potential November 2022 Revenue Measure(s)   WORKSESSION
January 20, 2022

- **General Obligation (or Infrastructure) Bond**: debt issued to fund capital improvements that is repaid over the bond duration by property tax revenues. Funds from a bond measure may only be used for capital investments and cannot be used for maintenance, operations, or services. Bond measures are generally considered among the most progressive forms of taxation since they are based on the assessed value of properties.

- **Parcel Tax**: a form of property tax typically based on the square footage of one parcel. Funds from a parcel tax measure are flexible and can be used for both capital, operations, maintenance, and services. The tax is based on the improved square footage of properties. It is generally considered a progressive form of taxation since larger properties pay more than smaller properties, and exemptions for seniors and low-income property owners are allowed.

OPTIONS FOR FUNDING MECHANISMS					
TYPE	Bond[2]		Parcel Tax[3]		Sales Tax[4]
AMOUNT	$27 per $100,000 AV	$54 per $100,000 AV	$0.15 per square foot	$0.30 per square foot	$0.05 per $1.00
ESTIMATED TOTAL FUNDING	$250 million	$500 million	$12M/yr or $250 million if bonded	$25M/yr or $500 million if bonded	$9M/yr, $110 million if bonded
AVG. ANNUAL PROPERTY OWNER COST	$200	$400	$300	$600	Varies
TAX BASIS	Assessed Value (AV)		Building square footage		Taxable purchases
USE OF FUNDS	Capital only		Capital + Maintenance		Capital + Maintenance
TAX PROGRESSIVITY	Progressive		Progressive		Least Progressive
EXEMPTIONS	None		Low income/senior		Essential purchases
PROS	Relative tax burden lessens as AV increases		Fixed payments, funds both operations/mtce and capital		Visitors pay share
CONS	Cannot pay for maintenance or operations		Relative tax burden stays flat if citywide square footage does not increase		Impact on low-income residents

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[2] These calculations assume four equal issuances over the first eight years and an interest rate of 4%. The average assessed value is for a single-family home of $647,972.

[3] These calculations assume 83,073,012 taxable square feet and an average single-family home of ~2,000 square feet.

[4] These calculations assume $6.5 million of the additional $9 million in revenue would be available for bonding.

- **Sales Tax**: this is a consumption tax on the sale of goods and services for which the City has State permission to raise one half-cent per dollar more. Funds from a sales tax measure are flexible and can be used for capital, maintenance, operations, and services. Sales taxes are generally considered a less progressive form of taxation since low-income residents spend a larger portion of their incomes on taxable purchases than higher income populations. However, essential purchases like groceries and prescription medicine are exempt from sales tax and the cost is paid by anyone who shops locally, not just residents.

Stakeholder and Community Engagement. Staff held meetings with 20+ community organizations and the following Commissions: Community Environmental Advisory, Disability, Disaster and Fire, Energy, Parks and Waterfront, Public Works, and Transportation. These meetings were an opportunity to share more about the City's infrastructure needs, solicit input on possible revenue measures, answer questions, and highlight an online community survey that was opened in October 2021 and closed on January 12, 2022.

From the 20+ meetings with various stakeholders, the following issues and themes emerged:

- Request for more explanation of the $1.2B in infrastructure need
- General belief that November 2022 was the right time for an infrastructure-focused measure
- Importance of trees, biodiversity, and green space in investment priorities
- Desire to see an integrated approach to infrastructure investments
- Some concern that a "fix-it-first" approach to infrastructure did not align well with ambition of Vision 2050 or the City's climate and resilience strategy
- Sales tax was not preferred given the impact on low-income residents
- Some concern over voters' (mis)trust of the City's financial management
- Varying opinions on whether affordable housing and traditional infrastructure should be included in one measure, split between two, or dealt with in different elections
- Support for equity in any measure
- Some concerns about the tax burden of an infrastructure bond versus parcel tax on new(er) property owners versus long-time owners
- Request for better understanding of results from affordable housing investments
- Request that federal, state, and regional grant funding be leveraged
- Some interest in a parcel tax given its ability to fund both capital improvements and ongoing maintenance
- Concern that ongoing maintenance be adequately funded to ensure whatever is constructed is properly maintained

For the online survey, a total of 1,024 responses were received. For the most part, the results from the online survey aligned with the scientific survey. However, the online survey afforded additional insight. For example, respondents were asked to rank their top three priorities for a potential measure from a list of infrastructure priorities. More so than the scientific survey, street repair stood out as a clear top priority followed by affordable housing. The top five ranked priorities are listed below, with percentages indicating the number of respondents who ranked the particular item as top priority:

1. 28.5% – Street Repair
2. 19.2% – Affordable Housing
3. 8.3% – Bike Lanes/Safety
4. 7.5% – Climate Change Resiliency
5. 6.8% – Pedestrian Safety

When respondents were asked to rank the urgency of various infrastructure priorities, repairing deteriorating streets stood out as a top priority, with housing and other infrastructure priorities considered urgent but less so. Respondents ranked the priorities on a five-point scale, with one the most urgent and five the least urgent, and the numbers in parentheses refer to the average rating of each item:

1. Repairing deteriorating streets (1.96)
2. Improving traffic safety (2.25)
3. Upgrading storm drains, green infrastructure, and our watersheds to keep pollution from the Bay (2.35)
4. Repairing sidewalks to improve pedestrian safety and ADA accessibility (2.37)
5. Undergrounding utilities to help reduce the risk of wildfire (2.40)
6. Climate change resiliency including protecting against sea level rise, wildfires, and drought (2.42)
7. Planting and caring for trees (2.52)
8. Increasing affordable housing for low-income and homeless residents (2.57)
9. Expanding bike lanes and improving bike safety (2.62)
10. Upgrading traffic signals, pavement markings, and street signs (2.66)

Bond Capacity Study. The Finance Department has engaged the Government Finance Officers Association to initiate a study of the City's bond capacity. Initial findings from that study will be shared during the staff presentation at the January 20th Work Session.

Vision 2050 Program Plan. After gaining City Council's direction, staff will develop a *Program Plan* and return to City Council for approval of this plan, along with proposed measure(s) for November 2022. The *Program Plan* will lay out a long-term program to address Berkeley's infrastructure needs through 2050, address this and future revenue measures, describe the impacts of infrastructure investments, identify an organizational approach to delivering on funded projects, and recommend a process for developing and approving projects funded by this and future revenue measures. While this plan will

Discuss and Seek Direction on Potential November 2022 Revenue Measure(s)   WORKSESSION
                                                                                  January 20, 2022

not be binding and will be flexible enough to adapt as infrastructure needs evolve, it will provide a blueprint for future action. Other issues the *Program Plan* may address include:

- Ensuring capital improvements are properly maintained, and where maintenance is not properly funded for a particular infrastructure asset, recommend actions to address the shortfall.

- Reconciling immediate repair needs in the City's infrastructure, especially the City's street condition, with the re-envisioning of the public commons/space suggested in Vision 2050.

- Explaining how these investments will promote sustainability, and address climate change and resilience.

- Exploring an approach where property owners' tax burden stays level between 2023 and 2050, while still addressing significant infrastructure need.

November 2022 Election and Measure Options
The November 2022 election may include state, county, school, special district or additional City measures. Staff believe the ballot will not include a Berkeley Unified School District measure. Staff will request City Council's placement of an Article 34 measure, which is required by the California Constitution in order to develop affordable housing projects with state or local public financing. Such an approval has occurred in at least four previous elections and has had strong support. More information about state, regional, and Alameda County measures will be available in the spring or summer. Needless to say, there is a lot of uncertainty leading up to the November 2022 election given ongoing challenges with inflation, employment, and the global pandemic.

With that context and the findings from community and stakeholder engagement to date, staff seek direction among four possible revenue measure options.

Option #1, $500M Infrastructure Bond. Such as measure could have the following investment priorities:

- $200 Million - Street repair and traffic safety
- $150 Million - Affordable housing for low-income and homeless residents
- $75 Million - Climate change, sea level rise, wildfire prevention and protection
- $75 Million - Other public infrastructure improvements[5]

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[5] *Other Public Infrastructure Improvements* could include one-time projects, e.g., Old City Hall, Veterans Memorial Building, Waterfront and Marina, etc.

Discuss and Seek Direction on Potential November 2022 Revenue Measure(s)   WORKSESSION
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This option funds voters' top priorities—affordable housing, street repair, and climate change—and invests most in street repair, as it is the top and most urgent need identified by online survey respondents. This option overall is large enough to address a significant portion of the City's infrastructure needs. Investments in affordable housing at this range would generate up to 660 new affordable units, pave more than 120 street miles, and improve traffic safety. If City Council direct staff to pursue a measure of this size and type, the *Program Plan* will provide more detail on how these funds may be spent and results attained.

Option #2, Multiple Measures. These measures could include:

- A parcel tax of $12M annually (or $250M if bonded against) to address street repair and traffic safety.
- An infrastructure bond of $150M to address affordable housing for low-income persons and the unhoused.
- An infrastructure bond of $100M to address climate change, wildfire prevention and protection, and other public infrastructure.

This option also funds voters' top priorities and provides more flexible sources of funding that could address maintenance needs. Results from these investments are likely to track the results from Option #1. However, each of these measures would have to separately meet the two-thirds threshold for approval, which is likely to be more difficult than one measure meeting the two-thirds threshold.

Options #3, Variants of the above options. City Council could direct staff to develop Options #1 or #2 but with different funding mechanisms, e.g. Option #1 but with a similarly-sized parcel tax in lieu of infrastructure bond, at different funding levels (lower or higher amounts), or with different investment priorities, e.g., more or less for affordable housing, street repair, etc.

Option #4, None of the above. City Council could choose to delay this discussion until a future election; ask for other measure options, such as the sales tax, to be developed further; or direct staff to consider an option not yet considered.

BACKGROUND
Vision 2050 is a City Council-supported, resident-engaged initiative to address Berkeley's $1.2+ billion in infrastructure needs. With voter approval of Measure R, Vision 2050 was defined as engaging residents and experts in developing a 30-year plan to identify and guide implementation of climate-smart, technologically-advanced, equitable and efficient infrastructure to support a safe, vibrant and resilient future for Berkeley.

On April 27, 2021, City Council approved a referral to the City Manager to "explore various options for a future city bond measure in November 2022 to support the growing

need for infrastructure investment, including street repaving, Complete Streets infrastructure that promotes bike and pedestrian safety, restoration of public buildings and facilities, and affordable housing citywide." The adopted FY 2022 budget included a $400,000 project to execute on this project after which the City Manager convened a working team of residents and City staff to assist with Vision 2050 implementation.

The table below summarizes activities both completed and anticipated for the potential revenue measure(s).

Month	Activities
Sep. 2021	• Begin various analyses and start drafting outreach materials. • Establish contracts with TBWBH Props and Measures and V.W. Housen & Associates for Vision 2050 Implementation Services.
Oct. 2021	• Conduct community survey #1. • Begin virtual stakeholder meetings.
Nov. 2021	• Continue virtual stakeholder meetings.
Dec. 2021	• Continue virtual stakeholder meetings.
Jan. 2022	• Hold January 20 work session to gain City Council direction.
Feb. 2022	• Informational mailer to residents with invitation for input at March and April public meetings.
Mar. 2022	• Present draft *Program Plan* to Commissions and large area public meetings for feedback.
Apr. 2022	• Continue *Program Plan* meetings.
May 2022	• Conduct community survey #2. • Present survey results and seek City Council's approval on Vision 2050 funding measure(s) and *Program Plan*.
Aug. 2022	• Last date to submit measure(s) to County Registrar of Voters.
Nov. 2022	• Election

After the January 20 work session, the interdepartmental team will incorporate City Council's direction. In March and April, the team will present a draft *Program Plan* to Commissions and obtain public feedback through five large area virtual meetings that combine two City Council districts per meeting, similar to the public meetings held during the T1, Phase 2 process. Then staff will return to City Council on May 31 with the results of this public engagement, a draft *Program Plan,* and proposed revenue measure(s) that have been reviewed by the City Manager, City Attorney, and City Clerk.

Progress on overall implementation of Vision 2050 has continued. This includes completion of short-term items, such as convening a Vision 2050 team, preparing an implementation plan, participating in Council workshops, and submitting a Vision 2050 budget. There are also a number of other items underway, including development of a

Strategic Asset Management Plan. This work is described in more detail in the
November 16, 2021, Council report.[6]

As indicated in this 16-page information guide, progress on implementation of T1
continues. During Phase 1 (2017-2022), $40M was spent on 39 different projects,
leveraging an additional $23M from grants and special funds to deliver $63M in
infrastructure improvements. T1, Phase 1 projects resulted in seismically safe, solar-
equipped, and accessible community buildings, repaving some of the City's most
neglected streets, new green infrastructure, replaced play structures, increased
resilience through improvements that reduce water consumption, a renovated Rose
Garden, and an Aquatic Park with much improved water quality. This phase's planning
projects included the San Pablo Park Community Center and new pool, the Willard
Clubhouse, citywide restrooms, and the community space/restroom at the Tom Bates
Sports Complex. Phase 2 (2021-2026) is currently underway and includes an additional
$60M on various projects, including South Berkeley buildings, citywide restrooms,
paving, and sidewalk repairs. The John Hinkel Park project, which includes repairs to
the creek, lower picnic area, play area and amphitheater, is the first T1, Phase 2 project
to be under construction and will be complete in late Spring of 2022.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS
Implementing Vision 2050 would result in more resilient public infrastructure that creates
fewer greenhouse gases, and reduces conflict between our built and natural
environment. More affordable housing in Berkeley would reduce greenhouse gas
emissions caused by employees finding lower cost housing farther away from
employment centers and requiring longer commutes.

FISCAL IMPACTS OF POSSIBLE FUTURE ACTION
If a potential revenue measure or measures are placed on the ballot and subsequently
approved by voters, the City would receive additional funds from increased tax
revenues. One goal for any potential revenue measure or measures is to ensure any
resulting increased tax burden is held steady over the long term.

CONTACT PERSON
Paul Buddenhagen, Deputy City Manager, (510) 981-7000
Liam Garland, Director, Public Works, (510) 981- 6300

Attachments:
1: Topline of October 2021 Scientific Survey Results
2: Prior Estimate of Infrastructure Need and Methodology

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[6] https://www.cityofberkeley.info/Clerk/City_Council/2021/11_Nov/Documents/2021-11-
16_Item_08_Vision_2050.aspx

LRP LAKE RESEARCH PARTNERS

Strategy • Precision • Impact

City of Berkeley Community Survey
Live Phone and Text-to-Online
October 12 – 17, 2021
FINAL WEIGHTED TOPLINES

N=500 Likely Nov 2022 General Election Voters
Splits: A/B, C/D, E/F

	TOTAL	MEN	WOMEN
N=	500	221	262

Region

Council District 5/6/8	42	46	41
Council District 3/4/7	29	27	27
Council District 1/2	29	26	32

Party Registration

Democrat	80	77	84
Republican	2	3	1
No Party Preference	16	19	12
Others	2	1	2

Q1. Before we begin, I need to know if I have reached you on a cell phone, and if so, are you in a place where you can talk safely?

Yes, cell and can talk safely	34	40	31
Yes, cell and cannot talk safely **[CALL BACK]**	0	0	0
No, not on cell, but own one.....................................	10	10	10
No, not on cell, and do not own one	2	2	2
(Don't know/refused) **[TERMINATE]**	0	0	0
Text to online	54	48	57

Q2. Could you please tell me your gender? **[DO NOT READ OPTIONS]**

Male...	44	100	0
Female..	52	0	100
Non-binary/other	4	0	0
(Refused) .... **[TERMINATE]**			

	TOTAL	MEN	WOMEN
N=	500	221	262

Q3. Although it is some time from now, what are the chances of you voting in the November 2022 general election for Governor, Congress, and other offices? Are you almost certain to vote, will you probably vote, are the chances about 50-50, are you probably not going to vote, or are you definitely not going to vote?

	TOTAL	MEN	WOMEN
Almost certain to vote	95	94	95
Probably will vote	5	6	5
50-50 [**TERMINATE**]	0	0	0
Probably not [**TERMINATE**]	0	0	0
Definitely not [**TERMINATE**]	0	0	0
Don't know [**TERMINATE**]	0	0	0

Q4. **[T]** Generally speaking, do you think that things in the city of Berkeley are going in the right direction, or do you feel things are off on the wrong track?

	TOTAL	MEN	WOMEN
Right direction	48	48	49
Wrong track	32	31	31
(Don't know)	21	21	20

Q5. **[T*]** How would you rate the job the city of Berkeley is doing in providing services to its residents — excellent, good, fair, or poor?

	TOTAL	MEN	WOMEN
Excellent	6	7	5
Good	45	45	48
Fair	30	31	29
Poor	15	15	14
(Don't know)	4	2	5
Excellent /good	51	52	52
Just fair /poor	45	46	43

Q6. [T] How much of an impact has the coronavirus pandemic had on you and your household – thinking about all of the effects, including financial concerns and physical and mental health, would you say the impact on your household has been very serious, fairly serious, moderate, minor, or no impact at all?

	TOTAL	MEN	WOMEN
Very serious	15	15	13
Fairly serious	23	22	23
Moderate	40	41	40
Minor	18	18	19
No impact	4	4	4
(Don't know)	0	0	0
Very /fairly serious	38	37	37
Moderate /minor /no impact	62	62	63

	TOTAL	MEN	WOMEN
N=	500	221	262

Q7. The next set of questions is about infrastructure needs in Berkeley. I am going to read you some areas that have been identified as types of infrastructure needing repair, investment, or improvement in the City of Berkeley. For each one, please tell me how important that is to you as a resident of Berkeley – extremely important, very important, somewhat important, not too important or not important at all: **[RANDOMIZE]**

Sorted by Extremely Important

	TOTAL	MEN	WOMEN
B7l. Increasing affordable housing for low-income and homeless residents	54	47	55
7p. Developing climate change resiliency including protecting against sea level rise, wildfires, and drought	48	39	54
A7k. Increasing affordable housing for low-income residents	42	31	47
7c. Undergrounding utilities to help reduce the risk of wildfire	40	31	45
7a. Repairing deteriorating streets	35	33	36
B7e. Repairing sidewalks to improve access for those with disabilities	34	19	45
7y. Providing free transit passes for low-income residents	34	25	37
A7u. Upgrading storm drains, green infrastructure, and our watersheds to keep pollution from the Bay	31	20	40
7j. Planting and caring for trees	30	19	38
7t. Increasing availability of solar energy, solar batteries, and electric vehicles and equipment	28	23	31
A7d. Repairing sidewalks to improve pedestrian safety	27	20	34
A7f. Improving traffic safety	27	22	32
B7g. Improving traffic safety and flow	26	14	37
B7v. Upgrading storm drains to reduce flooding and protect against sea level rise	25	13	33
7i. Expanding bike lanes and improving bike safety	25	21	27
7cc. Making public buildings, streets, and sidewalks more accessible to people with disabilities	25	18	27
B7aa. Upgrading City buildings to be energy efficient, seismically safe, and COVID-safe	23	14	30
7o. Decommissioning natural gas lines to reduce greenhouse gas emissions	21	14	25
7ee. Upgrading traffic signals, pavement markings, and street signs	18	19	17
7h. Improving streetlighting	17	12	22
7x. Providing more publicly available electric vehicle charging	16	13	19
7r. Repairing Berkeley Pier, including recreational and ferry upgrades	16	15	17
7s. Improving the Berkeley waterfront, including			

	TOTAL	MEN	WOMEN
N=	500	221	262
docks, pilings, streets, parking lots, pathways, and marina dredging	15	9	19
7w. Making improvements to recreational facilities	13	8	17
B7n. Renovating Berkeley's Civic Center Buildings and Park to include music and theatre performance spaces, a children's play area, café kiosk and seating, and enhancing green space	12	7	14
7q. Replacing the community center and building a public pool in San Pablo Park	12	7	15
7b. Expanding lanes, parking, and charging for e-bikes (electronic bikes), e-scooters, and app-based car, bike, and scooter-shares	11	9	14
A7m. Improving seismic safety of historic buildings in Civic Center, including Old City Hall and the Veterans Building	11	7	14
7bb. Upgrading playgrounds	11	7	14
7dd. Upgrading senior centers	11	6	14
A7z. Upgrading City buildings	4	6	3

a.   Repairing deteriorating streets

	TOTAL	MEN	WOMEN
Extremely important	35	33	36
Very important	38	36	40
Somewhat important	24	26	21
Not too important	3	4	1
Not important at all	0	0	1
(Don't know)	1	0	1
Important	73	69	76
Not important	27	31	23

b.   Expanding lanes, parking, and charging for e-bikes (electronic bikes), e-scooters, and app-based car, bike, and scooter-shares

	TOTAL	MEN	WOMEN
Extremely important	11	9	14
Very important	21	27	18
Somewhat important	32	27	37
Not too important	20	22	16
Not important at all	12	12	13
(Don't know)	3	3	3
Important	33	36	32
Not important	64	61	65

	TOTAL	MEN	WOMEN
N=	500	221	262

c. Undergrounding utilities to help reduce the risk of wildfire

	TOTAL	MEN	WOMEN
Extremely important	40	31	45
Very important	33	37	30
Somewhat important	16	17	16
Not too important	7	10	4
Not important at all	3	2	4
(Don't know)	2	3	1
Important	73	68	75
Not important	26	29	24

d. **SSA**: Repairing sidewalks to improve pedestrian safety

	TOTAL	MEN	WOMEN
Extremely important	27	20	34
Very important	39	41	37
Somewhat important	23	22	23
Not too important	9	14	5
Not important at all	2	3	1
(Don't know)	0	0	0
Important	66	61	71
Not important	34	39	29

e. **SSB**: Repairing sidewalks to improve access for those with disabilities

	TOTAL	MEN	WOMEN
Extremely important	34	19	45
Very important	33	40	27
Somewhat important	24	28	22
Not too important	5	7	4
Not important at all	3	6	1
(Don't know)	0	0	0
Important	67	59	72
Not important	33	41	28

f. **SSA**: Improving traffic safety

	TOTAL	MEN	WOMEN
Extremely important	27	22	32
Very important	37	36	38
Somewhat important	27	31	23
Not too important	5	6	5
Not important at all	2	2	2
(Don't know)	2	4	1
Important	64	57	70
Not important	34	39	30

		TOTAL	MEN	WOMEN
	N=	500	221	262

g. **SSB**: Improving traffic safety and flow

	TOTAL	MEN	WOMEN
Extremely important	26	14	37
Very important	37	41	32
Somewhat important	23	28	17
Not too important	10	12	9
Not important at all	2	4	1
(Don't know)	2	1	3
Important	63	55	69
Not important	35	44	27

h. Improving streetlighting

	TOTAL	MEN	WOMEN
Extremely important	17	12	22
Very important	29	27	32
Somewhat important	34	41	28
Not too important	16	18	14
Not important at all	3	2	4
(Don't know)	1	0	1
Important	46	39	54
Not important	53	60	45

i. Expanding bike lanes and improving bike safety

	TOTAL	MEN	WOMEN
Extremely important	25	21	27
Very important	26	25	29
Somewhat important	30	31	28
Not too important	12	16	8
Not important at all	6	6	7
(Don't know)	1	0	2
Important	51	46	56
Not important	48	54	42

j. Planting and caring for trees

	TOTAL	MEN	WOMEN
Extremely important	30	19	38
Very important	33	36	31
Somewhat important	29	32	26
Not too important	7	10	4
Not important at all	2	3	1
(Don't know)	0	0	0
Important	62	55	68
Not important	37	45	31

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	TOTAL	MEN	WOMEN
N=	500	221	262

k. **SSA**: Increasing affordable housing for low-income residents

	TOTAL	MEN	WOMEN
Extremely important	42	31	47
Very important	34	45	26
Somewhat important	14	11	16
Not too important	4	3	4
Not important at all	6	8	4
(Don't know)	1	1	2
Important	75	76	73
Not important	23	23	25

l. **SSB**: Increasing affordable housing for low-income and homeless residents

	TOTAL	MEN	WOMEN
Extremely important	54	47	55
Very important	26	24	30
Somewhat important	10	12	9
Not too important	6	10	4
Not important at all	3	5	2
(Don't know)	1	2	0
Important	79	71	85
Not important	19	27	14

m. **SSA**: Improving seismic safety of historic buildings in Civic Center, including Old City Hall and the Veterans Building

	TOTAL	MEN	WOMEN
Extremely important	11	7	14
Very important	31	32	32
Somewhat important	43	44	39
Not too important	10	9	10
Not important at all	4	5	3
(Don't know)	2	3	1
Important	42	39	46
Not important	56	58	53

	TOTAL	MEN	WOMEN
N=	500	221	262

n. **SSB**: Renovating Berkeley's Civic Center Buildings and Park to include music and theatre performance spaces, a children's play area, café kiosk and seating, and enhancing green space

	TOTAL	MEN	WOMEN
Extremely important	12	7	14
Very important	24	19	30
Somewhat important	34	44	28
Not too important	20	21	19
Not important at all	7	7	8
(Don't know)	2	2	2
Important	36	26	44
Not important	61	71	55

o. Decommissioning natural gas lines to reduce greenhouse gas emissions

	TOTAL	MEN	WOMEN
Extremely important	21	14	25
Very important	26	22	29
Somewhat important	25	27	24
Not too important	13	18	10
Not important at all	10	13	7
(Don't know)	5	6	4
Important	47	36	54
Not important	48	58	41

p. Developing climate change resiliency including protecting against sea level rise, wildfires, and drought

	TOTAL	MEN	WOMEN
Extremely important	48	39	54
Very important	30	31	30
Somewhat important	16	22	12
Not too important	3	4	2
Not important at all	2	3	2
(Don't know)	0	0	0
Important	78	70	84
Not important	21	30	16

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	TOTAL	MEN	WOMEN
N=	500	221	262

q.   Replacing the community center and building a public pool in San Pablo Park

	TOTAL	MEN	WOMEN
Extremely important	12	7	15
Very important	18	14	21
Somewhat important	28	27	29
Not too important	22	28	17
Not important at all	12	15	9
(Don't know)	9	9	9
Important	30	22	36
Not important	62	70	55

r.   Repairing Berkeley Pier, including recreational and ferry upgrades

	TOTAL	MEN	WOMEN
Extremely important	16	15	17
Very important	26	23	30
Somewhat important	31	31	31
Not too important	19	19	16
Not important at all	6	8	4
(Don't know)	3	3	3
Important	42	39	46
Not important	56	58	51

s.   Improving the Berkeley waterfront, including docks, pilings, streets, parking lots, pathways, and marina dredging

	TOTAL	MEN	WOMEN
Extremely important	15	9	19
Very important	28	30	29
Somewhat important	38	43	33
Not too important	15	14	14
Not important at all	2	2	2
(Don't know)	2	2	3
Important	43	40	48
Not important	55	58	49

t.   Increasing availability of solar energy, solar batteries, and electric vehicles and equipment

	TOTAL	MEN	WOMEN
Extremely important	28	23	31
Very important	32	32	33
Somewhat important	28	26	29
Not too important	8	13	4
Not important at all	4	5	3
(Don't know)	0	1	0
Important	60	55	64
Not important	40	44	36

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	TOTAL	MEN	WOMEN
N=	500	221	262

u. **SSA**: Upgrading storm drains, green infrastructure, and our watersheds to keep pollution from the Bay

	TOTAL	MEN	WOMEN
Extremely important	31	20	40
Very important	47	53	43
Somewhat important	16	21	11
Not too important	4	3	5
Not important at all	1	0	1
(Don't know)	1	3	0
Important	79	73	83
Not important	20	25	17

v. **SSB**: Upgrading storm drains to reduce flooding and protect against sea level rise

	TOTAL	MEN	WOMEN
Extremely important	25	13	33
Very important	37	32	40
Somewhat important	22	30	17
Not too important	10	17	5
Not important at all	2	4	1
(Don't know)	4	4	4
Important	62	45	73
Not important	34	51	23

w. Making improvements to recreational facilities

	TOTAL	MEN	WOMEN
Extremely important	13	8	17
Very important	28	27	29
Somewhat important	39	45	35
Not too important	13	11	14
Not important at all	3	5	2
(Don't know)	3	4	3
Important	41	35	46
Not important	56	61	51

	TOTAL	MEN	WOMEN
N=	500	221	262

x.   Providing more publicly available electric vehicle charging

	TOTAL	MEN	WOMEN
Extremely important	16	13	19
Very important	25	25	25
Somewhat important	32	29	35
Not too important	19	22	14
Not important at all	7	9	6
(Don't know)	1	1	1
Important	41	39	44
Not important	58	60	55

y.   Providing free transit passes for low-income residents

	TOTAL	MEN	WOMEN
Extremely important	34	25	37
Very important	33	35	33
Somewhat important	24	26	23
Not too important	5	6	3
Not important at all	5	7	3
(Don't know)	0	1	0
Important	67	60	70
Not important	33	39	30

z.   **SSA**: Upgrading City buildings

	TOTAL	MEN	WOMEN
Extremely important	4	6	3
Very important	18	11	25
Somewhat important	40	41	39
Not too important	23	24	21
Not important at all	5	6	5
(Don't know)	9	12	7
Important	23	17	28
Not important	68	71	65

aa. **SSB**: Upgrading City buildings to be energy efficient, seismically safe, and COVID-safe

	TOTAL	MEN	WOMEN
Extremely important	23	14	30
Very important	35	34	34
Somewhat important	30	39	24
Not too important	8	10	6
Not important at all	4	3	4
(Don't know)	1	0	2
Important	58	48	64
Not important	41	52	35

	N=	TOTAL 500	MEN 221	WOMEN 262

bb. Upgrading playgrounds

	TOTAL	MEN	WOMEN
Extremely important	11	7	14
Very important	29	27	33
Somewhat important	36	38	35
Not too important	17	21	12
Not important at all	4	5	4
(Don't know)	2	3	2
Important	40	34	47
Not important	57	63	51

cc. Making public buildings, streets, and sidewalks more accessible to people with disabilities

	TOTAL	MEN	WOMEN
Extremely important	25	18	27
Very important	36	38	36
Somewhat important	28	28	29
Not too important	8	11	5
Not important at all	3	5	2
(Don't know)	1	1	1
Important	60	55	63
Not important	39	43	37

dd. Upgrading senior centers

	TOTAL	MEN	WOMEN
Extremely important	11	6	14
Very important	30	28	33
Somewhat important	37	37	36
Not too important	14	14	13
Not important at all	3	5	1
(Don't know)	6	9	3
Important	40	34	47
Not important	54	57	50

ee. Upgrading traffic signals, pavement markings, and street signs

	TOTAL	MEN	WOMEN
Extremely important	18	19	17
Very important	30	29	32
Somewhat important	33	31	34
Not too important	15	17	13
Not important at all	4	4	4
(Don't know)	1	1	0
Important	47	48	49
Not important	52	51	51

	TOTAL	MEN	WOMEN
N=	500	221	262

Now, I'm going to read several versions of a ballot measure that may appear on the ballot in Berkeley next year. I am going to ask about different ways of funding the measure and different dollar amounts for each.

[RANDOMIZE Q8/9, 10/11, 12]

The [first/next] version of the ballot measure I'm going to ask you about is a bond measure.

Q8. **SSC** [**BOND MEASURE 27 CENTS**] To:
- improve aging infrastructure and facilities, including streets, sidewalks, bike lanes, parks, restrooms, senior and recreation centers, and
- provide affordable housing to prevent displacement of vulnerable populations, including low to middle-income households, veterans, artists, seniors, and people with disabilities and provide supportive housing for people experiencing homelessness;

Shall the City of Berkeley enact a measure issuing bonds of 250 million dollars, at rates of 27 cents per 100 dollars of assessed property value, on average, generating approximately 25 million dollars annually while bonds are outstanding and requiring independent oversight?

If the election were held today, would you vote yes or no on this measure, or are you undecided?

[IF YES/NO]: And is that Yes/No strongly or not so strongly?
[IF UNDECIDED]: Well, to which side do you lean?

	TOTAL	MEN	WOMEN
Yes - strongly	28	26	29
Yes - not so strongly	13	10	16
Lean yes	14	11	15
Yes	55	48	60
Undecided/DK	16	19	14
No	29	33	26
Lean no	9	10	9
No - not so strongly	4	4	3
No - strongly	16	19	14
(Refused)	0	0	0

	TOTAL	MEN	WOMEN
N=	500	221	262

The [first/next] version of the ballot measure I'm going to ask you about is a bond measure.

Q9. **SSD** [**BOND MEASURE 54 CENTS**] To:
- improve aging infrastructure and facilities, including streets, sidewalks, bike lanes, parks, restrooms, senior and recreation centers, and
- provide affordable housing to prevent displacement of vulnerable populations, including low to middle-income households, veterans, artists, seniors, and people with disabilities and provide supportive housing for people experiencing homelessness;

Shall the City of Berkeley enact a measure issuing bonds of 500 million dollars, at rates of 54 cents per 100 dollars of assessed property value, on average, generating approximately 50 million dollars annually while bonds are outstanding and requiring independent oversight?

If the election were held today, would you vote yes or no on this measure, or are you undecided?

[IF YES/NO]: And is that Yes/No strongly or not so strongly?
[IF UNDECIDED]: Well, to which side do you lean?

	TOTAL	MEN	WOMEN
Yes - strongly	35	35	36
Yes - not so strongly	11	16	8
Lean yes	12	6	16
Yes	58	57	59
Undecided/DK	12	7	18
No	29	37	23
Lean no	10	9	11
No - not so strongly	8	7	7
No - strongly	12	20	5
(Refused)	0	0	0

Q8/9. Combined Bond Measure

	TOTAL	MEN	WOMEN
Yes - strongly	32	31	32
Yes - not so strongly	12	13	12
Lean yes	13	8	15
Yes	57	52	59
Undecided/DK	14	13	16
No	29	35	25
Lean no	10	10	10
No - not so strongly	6	6	5
No - strongly	14	20	10
(Refused)	0	0	0

City of Berkeley – October 2021   15

	TOTAL	MEN	WOMEN
N=	500	221	262

The [first/next] version of the ballot measure I'm going to ask you about is a parcel tax.

Q10. **SSE** [**PARCEL TAX 15 CENTS**] To:
- improve aging infrastructure and facilities, including streets, sidewalks, bike lanes, parks, restrooms, senior and recreation centers, and
- provide affordable housing to prevent displacement of vulnerable populations, including low to middle-income households, veterans, artists, seniors, and people with disabilities and provide supportive housing for people experiencing homelessness;

Shall the City of Berkeley enact a measure levying 15 cents per building square foot, generating approximately 13 million dollars annually until ended by voters, with low-income exemptions, independent oversight and all funds staying local?

If the election were held today, would you vote yes or no on this measure, or are you undecided?

[IF YES/NO]: And is that Yes/No strongly or not so strongly?
[IF UNDECIDED]: Well, to which side do you lean?

	TOTAL	MEN	WOMEN
Yes - strongly	37	35	37
Yes - not so strongly	14	20	8
Lean yes	9	4	14
Yes	60	60	58
Undecided/DK	13	8	17
No	27	32	25
Lean no	8	5	11
No - not so strongly	4	5	3
No - strongly	15	22	11
(Refused)	0	0	0

	TOTAL	MEN	WOMEN
N=	500	221	262

The [first/next] version of the ballot measure I'm going to ask you about is a parcel tax.

Q11. **SSF** [**PARCEL TAX 30 CENTS**] To:
- improve aging infrastructure and facilities, including streets, sidewalks, bike lanes, parks, restrooms, senior and recreation centers; and
- provide affordable housing to prevent displacement of vulnerable populations, including low to middle-income households, veterans, artists, seniors, and people with disabilities and provide supportive housing for people experiencing homelessness;

Shall the City of Berkeley enact a measure levying 30 cents per building square foot, generating approximately 26 million dollars annually until ended by voters, with low-income exemptions, independent oversight and all funds staying local?

If the election were held today, would you vote yes or no on this measure, or are you undecided?

[IF YES/NO]: And is that Yes/No strongly strongly or not so strongly?
[IF UNDECIDED]: Well, to which side do you lean?

	TOTAL	MEN	WOMEN
Yes - strongly	35	34	37
Yes - not so strongly	14	12	13
Lean yes	11	7	15
Yes	61	53	65
Undecided/DK	12	13	12
No	27	33	22
Lean no	6	7	6
No - not so strongly	3	3	3
No - strongly	18	24	13
(Refused)	0	0	0

Q10/11. Combined Parcel Tax

	TOTAL	MEN	WOMEN
Yes - strongly	36	35	37
Yes - not so strongly	14	16	11
Lean yes	10	6	14
Yes	60	57	62
Undecided/DK	13	11	15
No	27	33	23
Lean no	7	6	8
No - not so strongly	3	4	3
No - strongly	17	23	12
(Refused)	0	0	0

City of Berkeley – October 2021   17

	TOTAL	MEN	WOMEN
N=	500	221	262

The [first/next] version of the ballot measure I'm going to ask you about is a sales tax.

Q12. [SALES TAX HALF CENT] To:
- Improve aging infrastructure/ facilities, including streets, sidewalks, bike lanes, parks, restrooms, senior/recreation centers; and
- Provide affordable housing to prevent displacement of vulnerable populations, including low to middle-income households, veterans, artists, seniors, people with disabilities and provide supportive housing for people experiencing homelessness;

Shall the City of Berkeley enact a measure increasing the local sales tax by one half cent, generating approximately 9 million dollars annually from residents and visitors until ended by voters, with exemptions for essential purchases like groceries/prescription medicine and requiring independent oversight?

If the election were held today, would you vote yes or no on this measure, or are you undecided?

[IF YES/NO]: And is that Yes/No strongly or not so strongly?
[IF UNDECIDED]: Well, to which side do you lean?

	TOTAL	MEN	WOMEN
Yes - strongly	34	34	35
Yes - not so strongly	17	20	16
Lean yes	8	7	8
Yes	59	60	59
Undecided/DK	9	6	12
No	32	34	29
Lean no	8	7	9
No - not so strongly	6	8	4
No - strongly	18	20	16
(Refused)	0	0	0

City of Berkeley – October 2021   18

	TOTAL	MEN	WOMEN
N=	500	221	262

Q13. In this survey I asked about three different ways to fund this measure: **[RANDOMIZE]**

_a sales tax increase
_a bond measure
and
_a parcel tax.

Note that the measures generate different amounts of revenue to invest in the city's infrastructure and housing needs. **[RANDOMIZE STATEMENTS]**

The *sales tax* would generate 9 million dollars annually for these investments.

The *bond measure* would generate **[SSC: 25 million dollars / SSD: 50 million dollars]** annually for these investments.

The *parcel tax* would generate **[SSE: 13 million dollars / SSF: 26 million dollars]** annually for these investments.

Which of these, if any, do you think is the most appropriate way to increase city funding for the infrastructure and affordable housing needs outlined in the ballot measure? You may choose as many as you like. **[ACCEPT MULTIPLE RESPONSES]**

	TOTAL	MEN	WOMEN
Bond measure	46	41	49
Parcel tax	32	34	29
Sales tax increase	28	29	25
(None)	10	13	8
(Don't know)	14	9	18
(Refused)	0	0	0

Q14. The measures I've read to you include different funding priorities for the City of Berkeley. If you had to choose, which one or two of these are the highest priorities for you personally? **[RANDOMIZE] [ACCEPT UP TO TWO]**

	TOTAL	MEN	WOMEN
Providing affordable housing for low-income people	53	49	55
Providing supportive housing for people experiencing homelessness	50	45	52
Improving streets	28	32	26
Improving traffic safety and expanding services for pedestrians and bicyclists	22	25	20
Improving parks and related facilities	11	12	10
Improving senior and recreation centers	5	2	8
(None)	3	4	3
(Don't know)	2	1	3
(Refused)	0	0	0

City of Berkeley – October 2021   19

	TOTAL	MEN	WOMEN
N=	500	221	262

Q15. Now thinking just about providing affordable housing in Berkeley, which of the following would be the highest priority for you personally? **[RANDOMIZE]**

	TOTAL	MEN	WOMEN
Acquiring and building affordable housing units	33	32	33
Providing supportive housing for people experiencing homelessness	29	29	29
Providing housing vouchers so low-income residents have better opportunities for affordable housing	15	15	16
Preserving existing affordable housing units	10	10	10
(None)...	7	9	6
(Don't know)..	6	5	6
(Refused)...	0	0	0

Q16. How important is it to you personally that a proposed infrastructure measure include an aspect of equity, whatever that means for you? Would you say it is very important, somewhat important, not too important, or not at all important?

	TOTAL	MEN	WOMEN
Very important	48	38	54
Somewhat important	28	32	27
Not too important	6	7	5
Not at all important..	7	13	3
(Don't know)...	10	9	11
(Refused)	1	1	1
Important..	76	69	80
Not important	13	20	8

Q17. **SSA**: Now I am going to read some ways that people have defined equity in Berkeley. Please tell me which definition is most in line with what equity means to you. **[RANDOMIZE]**

	TOTAL	MEN	WOMEN
Distributing more infrastructure benefits to lower-income neighborhoods and communities of color that have been historically underfunded.	55	51	56
Distributing more infrastructure benefits to the most vulnerable, like children, people with disabilities, and older Berkeleyans.	18	21	17
Distributing infrastructure benefits equally between Berkeley's eight City Council districts	9	13	6
Distributing infrastructure benefits to areas of Berkeley where there are fewer parks, open spaces, and trees..	9	8	9
(Don't know)...	9	7	10
(Refused)...	1	0	1

City of Berkeley – October 2021   20

	TOTAL	MEN	WOMEN
N=	500	221	262

Q18. **SSB**: Now I am going to read some ways that people have defined equity in Berkeley. Please tell me which definition is most in line with what equity means to you. **[RANDOMIZE]**

	TOTAL	MEN	WOMEN
Distributing infrastructure benefits first to lower-income neighborhoods and communities of color that have historically been underfunded	52	50	51
Distributing infrastructure benefits first to the most vulnerable, like children, people with disabilities, and older Berkeleyans	15	18	14
Distributing infrastructure benefits equally between Berkeley's eight City Council districts	13	15	12
Distributing infrastructure benefits to areas of Berkeley where there are fewer parks, open spaces, and trees	8	6	9
(Don't know)	10	7	14
(Refused)	2	3	0

Q17/18. Combined Equity Definition

	TOTAL	MEN	WOMEN
Distributing infrastructure benefits (first) to lower-income neighborhoods and communities of color that have historically been underfunded	54	50	54
Distributing infrastructure benefits first to the most vulnerable, like children, people with disabilities, and older Berkeleyans	17	19	15
Distributing infrastructure benefits equally between Berkeley's eight City Council districts	11	14	9
Distributing infrastructure benefits to areas of Berkeley where there are fewer parks, open spaces, and trees	8	7	9
(Don't know)	10	7	12
(Refused)	1	2	1

Q19. People in Berkeley have differing opinions about the amount of taxes we pay to fund city services. Some say the amount of taxes we currently pay is appropriate for the services the city provides, while some **[ROTATE]**

_think taxes are too high
and others
_would be willing to pay more in taxes in order to fund more services.

What about you?

	TOTAL	MEN	WOMEN
Taxes are too high	33	31	34
Would be willing to pay more in taxes	33	35	31
Current amount is appropriate	25	25	25
(Don't know)	9	8	10
(Refused)	1	1	1

	TOTAL	MEN	WOMEN
N=	500	221	262

Finally, I would like to ask you a few questions for statistical purposes only.

Q20. In terms of local politics, do you consider yourself progressive, liberal, moderate, or conservative?

	TOTAL	MEN	WOMEN
Progressive	43	40	43
Liberal	29	26	34
Moderate	19	24	16
Conservative	3	4	3
(Don't know)	3	4	2
(Refused)	2	2	2

Q21. What is the last year of schooling that you have completed?

	TOTAL	MEN	WOMEN
1 - 11th Grade	0	0	0
High School Graduate	2	3	3
Vocational or technical school	2	2	2
Some college but no degree	13	14	10
Associate degree	7	4	9
4-year college graduate or bachelor's degree	34	37	31
Graduate School or advanced degree	40	36	44
(Refused)	3	4	2
Non-college	24	23	23
College grad	74	74	75

Q22. Do you have any children 18 years of age or younger living at home with you?

	TOTAL	MEN	WOMEN
Yes	21	22	22
No	76	75	76
(Don't know/refused)	3	3	3

Q23. [IF Q22=YES] Are any of your children currently enrolled in Berkeley public schools?

	TOTAL	MEN	WOMEN
N=	106	49	57
Yes	67	63	70
No	32	37	28
(Don't know/refused)	1	0	2

Q24. Do you own your own home or do you rent?

	TOTAL	MEN	WOMEN
Own	50	51	53
Rent	45	43	44
(Other)	2	3	1
(Don't know/refused)	2	3	2

City of Berkeley – October 2021   22

	TOTAL	MEN	WOMEN
N=	500	221	262

Q25. How long have you lived in Berkeley? [**DO NOT READ, RECORD WITHIN RANGE**]

	TOTAL	MEN	WOMEN
Less than two years	6	7	3
Two to less than five years	13	13	12
Five to less than ten years	18	20	15
Ten to less than twenty years	19	18	20
Twenty years or more	33	29	38
All your life	8	8	9
(Don't know/refused)	4	5	3

Q26. **[T]** Just to make sure we have a representative sample, could you please tell me whether you are from a Latino, Hispanic, or Spanish-speaking background?
Q27. [ASK ALL] [T] And please tell me which one, or more than one, of these racial or ethnic groups you identify with.
[RANDOMIZE/READ CHOICES]
[ACCEPT MULTIPLE RESPONSES]
[IF "OTHER" OR "BIRACIAL" OR "MULTI-RACIAL":] Well which two or three of these do you identify with the most?

	TOTAL	MEN	WOMEN
White or Caucasian	58	60	60
Black or African American	10	9	11
Latino/Latina or Hispanic	9	9	9
Asian American or Pacific Islander	12	9	13
Native or Indigenous American	4	2	5
Middle Eastern	2	1	1
(Other)	3	4	2
(Don't know/Refused)	7	9	5

City of Berkeley – October 2021   23

		TOTAL	MEN	WOMEN
	N=	500	221	262

Age

	TOTAL	MEN	WOMEN
18 - 24	11	14	6
25 - 29	9	9	8
30 - 34	8	9	6
35 - 39	9	9	10
40 - 44	6	6	7
45 - 49	9	9	9
50 - 54	8	6	9
55 - 59	5	8	4
60 - 64	8	6	11
65 - 69	6	5	8
70 - 74	8	7	10
75 & older	12	12	14
(don't know)	0	0	0
Under 30	20	23	14
30 - 39	17	19	16
40 - 49	15	15	16
50 - 64	21	20	24
65 & older	27	24	31

City Council District

	TOTAL	MEN	WOMEN
CCD 1	13	15	12
CCD 2	16	11	19
CCD 3	15	13	16
CCD 4	8	9	7
CCD 5	17	15	19
CCD 6	13	17	11
CCD 7	5	5	4
CCD 8	12	14	11

Infrastructure Need as Compiled Prior to FY 2022 Budget Adoption

		FY 2022 Year 1	FY 2023 Year 2	FY 2024 Year 3	FY 2025 Year 4	FY 2026 Year 5	Total Year 1- 5
Parks, Park Buildings, Pools, Waterfront, and Camps							
Available Funding[1]		$1,400,000	$1,400,000	$1,400,000	$1,400,000	$1,400,000	$7,000,000
Expenditures		$1,400,000	$1,400,000	$1,400,000	$1,400,000	$1,400,000	$7,000,000
Capital & Maint. Need [2]	$217,039,000						
Unfunded Liability		($219,951,780)	($222,922,816)	($225,953,272)	($229,044,337)	($232,197,224)	($232,197,224)
Public Buildings							
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						
Unfunded Liability		($287,130,000)	($292,056,600)	($297,081,732)	($302,207,367)	($307,435,514)	($307,435,514)
Sidewalks							
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						
Unfunded Liability		($10,628,400)	($10,126,968)	($9,615,507)	($9,093,818)	($8,561,694)	($8,561,694)
Streets & Roads							
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						
Unfunded Liability		($248,043,600)	($246,048,072)	($244,012,633)	($241,936,486)	($239,818,816)	($239,818,816)
Sewers							
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						
Unfunded Liability		($175,261,925)	($161,981,144)	($144,628,077)	($122,829,608)	($100,092,200)	($100,092,200)
Storm Water							
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						
Unfunded Liability		($249,410,400)	($253,072,608)	($256,808,060)	($260,618,221)	($264,504,586)	($264,504,586)
Traffic Signals & Parking Infrastructure							
Available Funding		$400,000	$400,000	$400,000	$400,000	$400,000	$2,000,000
Expenditures		$400,000	$400,000	$400,000	$400,000	$400,000	$2,000,000
Capital & Maint. Need	$14,838,800						
Unfunded Liability		($14,727,576)	($14,614,128)	($14,498,410)	($14,380,378)	($14,259,986)	($14,259,986)
TOTAL							
Available Funding		$33,394,583	$27,876,882	$31,608,912	$35,626,893	$36,120,000	$164,627,270
Expenditures		$33,394,583	$27,876,882	$31,608,912	$35,626,893	$36,120,000	$164,627,270
T1 Funding: $100M Infrastructure Bond[3]		$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						
Unfunded Liability		($1,194,290,681)	($1,179,649,613)	($1,160,983,693)	($1,137,926,474)	($1,113,915,004)	($1,113,915,004)

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

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

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

Methodology for Infrastructure Need By Asset Category
Parks, Park Buildings, Pools, Waterfront, and Camps
These costs include all infrastructure associated with the City's 52 parks such as irrigation, paths, recreation centers, restrooms, sports fields, and play structures; the waterfront including streets, buildings, paths, docks, parking lots and the pier; resident camps including structures, pools, bridges, pathways and water systems; and pools including locker room buildings, decking, mechanical systems and pool shells.
Public Buildings
This includes 50 Public Works-maintained buildings, including Public Safety Building, Fire Stations, 1947 Center, HHCS buildings, Animal Shelter, Corp Yard, and off-street parking garages. These are not included: Transfer Station, Old City Hall, Veterans Building, Libraries, all PRW buildings, and EV charging stations. Estimates are derived both from staff and from completed facility condition assessments.
Sidewalks
This includes the City's backlog of resident-requested sidewalk repairs at approximately 3600 properties. The ADA Transition Plan is underway and includes a proactive condition assessment of sidewalks. This assessment will likely result in approximately $50M in additional unfunded need not included in this calculation.
Streets and Roads
This represents the one-time cost to raise the City's pavement condition to excellent, as shown by the Metropolitan Transportation Commission's Street Saver Program. The Street Saver Program includes the City's entire street inventory and each street segment's condition, both of which are audited for accuracy biannually and reported through the City's Pavement Management Plan. Curb ramps are included in this estimate, but improvements from a variety of other plans/policies are not included: Bicycle, Complete Streets, Green Infrastructure, Pedestrian, Watershed Management, Strategic Transportation (BeST), and Vision Zero.
Sewers
This represents the one-time cost to rehabilitate 61 miles of the City's sewer pipes, which would complete the City's goal of rehabilitating all of the City's sewer pipes per the City's adopted plans. The amount declines over time as a result of the ongoing sewer program and its annually charged sewer fee. The sewer fee is adjusted after a Proposition 218 compliant process every five years, and if more revenue is needed for this asset category, the fee will adjust accordingly.
Storm Water
This represents the $204M of need as extrapolated from the cost estimates for the Potter/Codornices Creek watersheds identified in the Watershed Management Plan (2012). Staff projected an additional need of $37M for unfunded capital and maintenance needs in the City's inlets, pipes, cross drains, etc. Staff are initiating the process to adopt a comprehensive stormwater plan to update these needs.
Traffic Signals and Parking Infrastructure
Replacements of 2100 parking meters and 240 pay stations at or nearing the end of their useful life, and upgrades to existing traffic signals, including detection at 67 locations, ADA accessibility/pedestrian push buttons at 103 locations, and battery back-ups at 124 locations. New traffic signals, pedestrian hybrid beacons, and rectangular rapid flashing beacons are not included.