Infrastructure2050

New Infrastructure

Climate Action Goals

Resilience Goals

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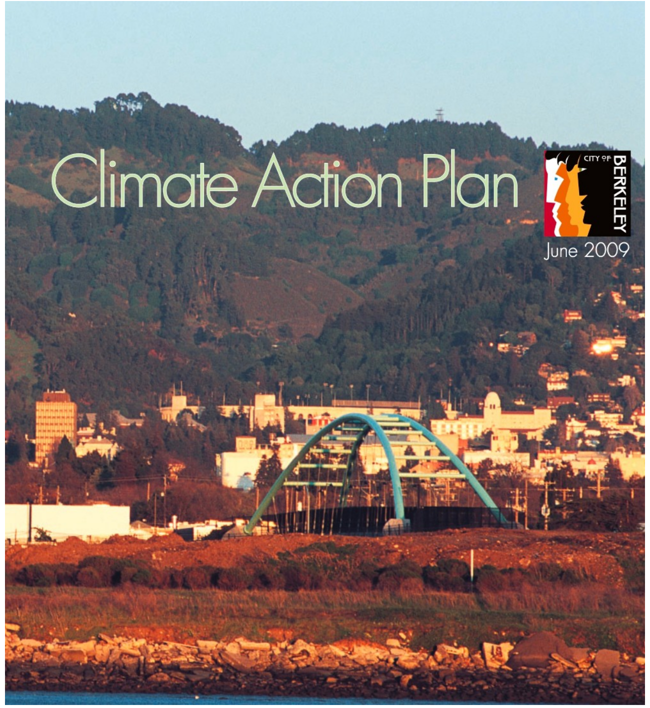
Climate Action

- 2050 Goal
  1. Reduce GHGs by 80%
- Progress
  1. Limited Funding



Berkeley Infrastructure

- No Goal
- No Plan

INFRASTRUCTURE NEEDS

> $1 Billion

Flooding &
Drought
>$200M

Transportation
$XXX M

Undergrounding Utilities
$740M

Parking
$36M

COB Identified Capital
Needs
~$400M

T1
$100M

Resilience
$XXX M

Think Long Term & Plan!

All Funds (in millions)	Adopted FY 2015	Adopted FY 2016	% Change	Adopted FY 2017	% Change
Operating Budget	$ 293.9	$ 303.0	3%	$ 301.6	2%
Capital Budget	$ 29.5	$ 36.1	22%	$ 32.9	12%
Total:	**$ 323.4**	**$ 339.1**	5%	**$ 334.5**	3%

FY2015 → FY2050

$30M/yr

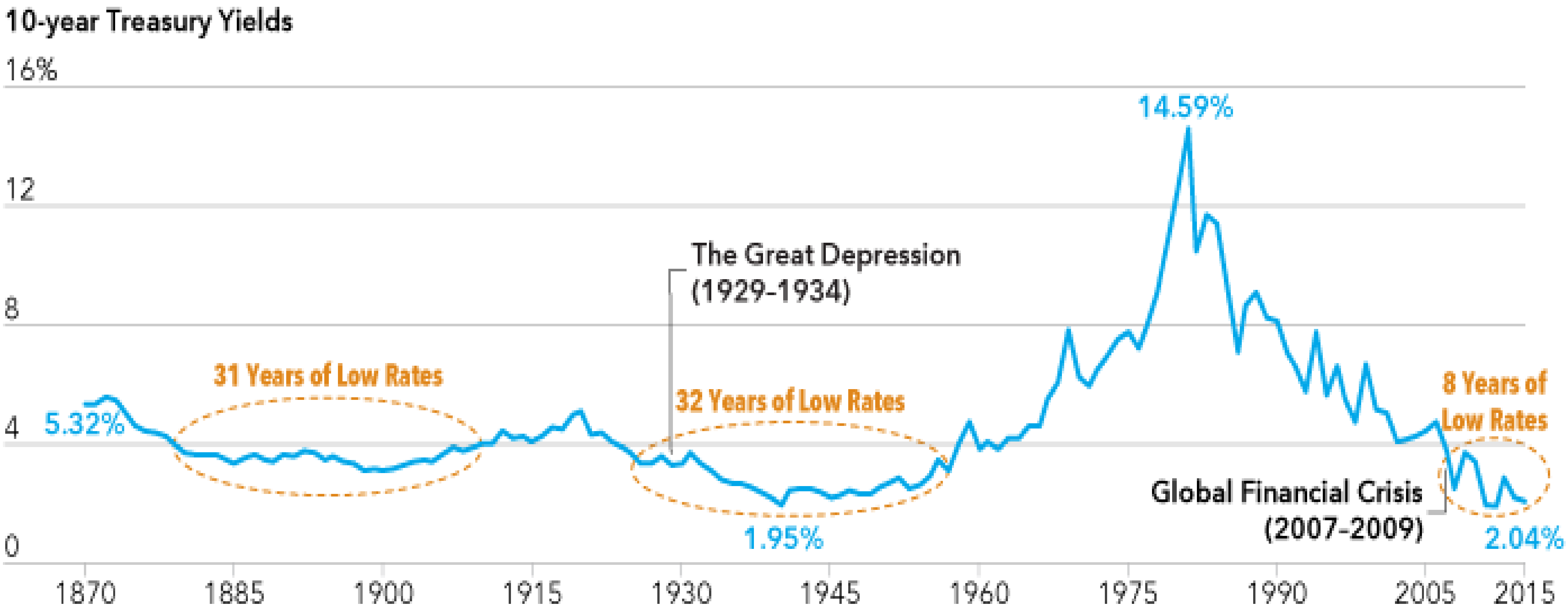
$1050 Million

How Does Berkeley Finance Capital Projects?

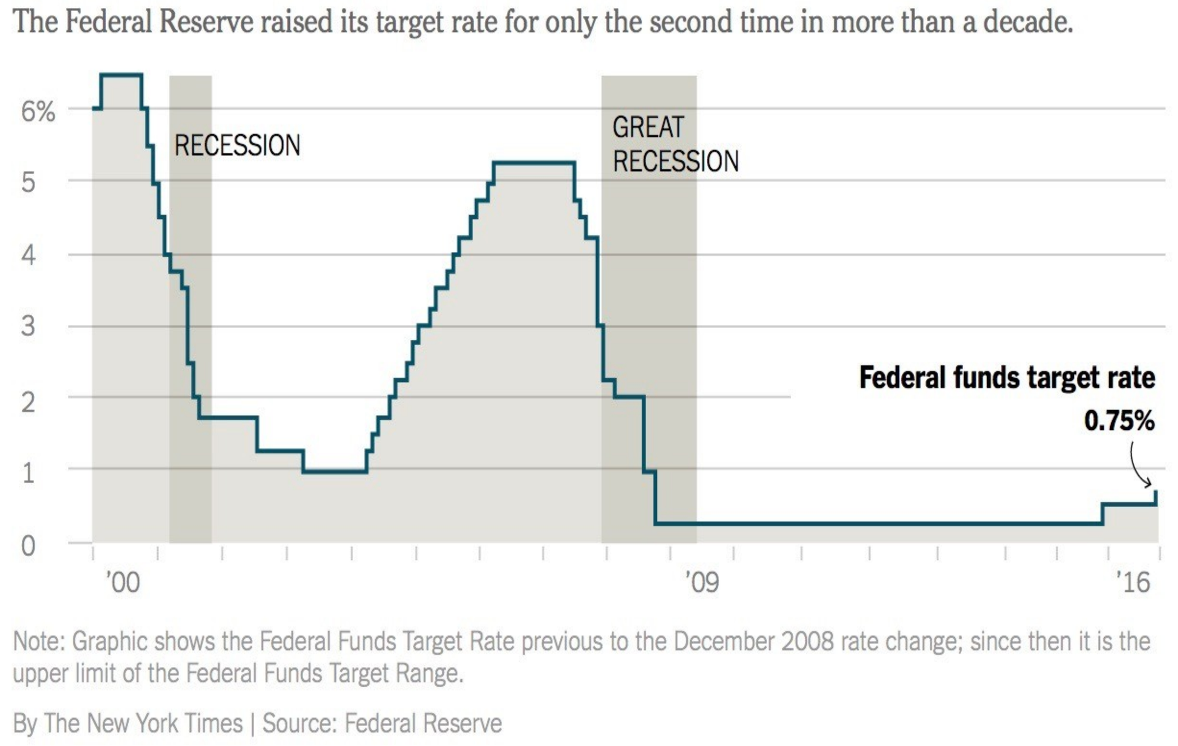
General Obligation Bonds – Tax on Property

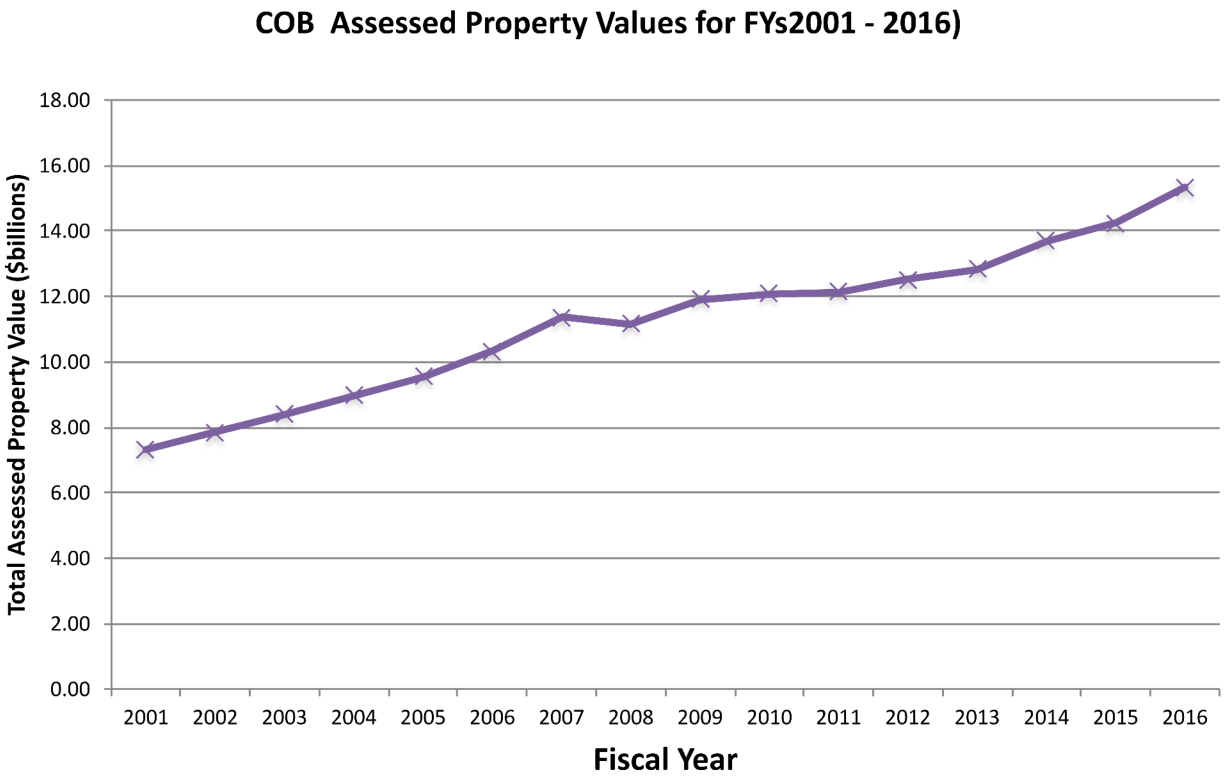
Revenue Bonds – revenue stream

To Bond or Not to Bond?



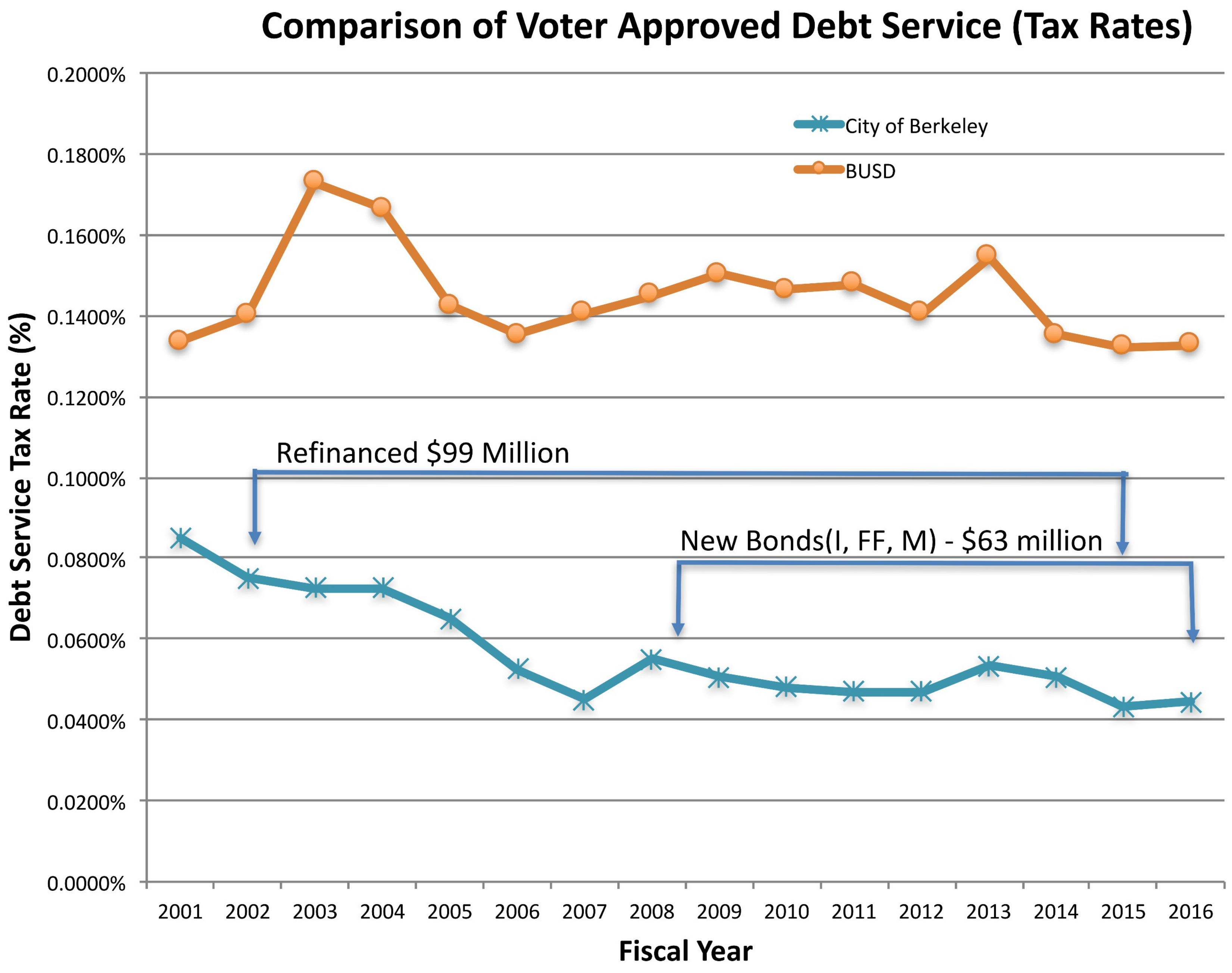
From 2000 – 2016, Berkeley issued $62 Million in New Bonds
Did its Debt Service Tax Rate go up or down?



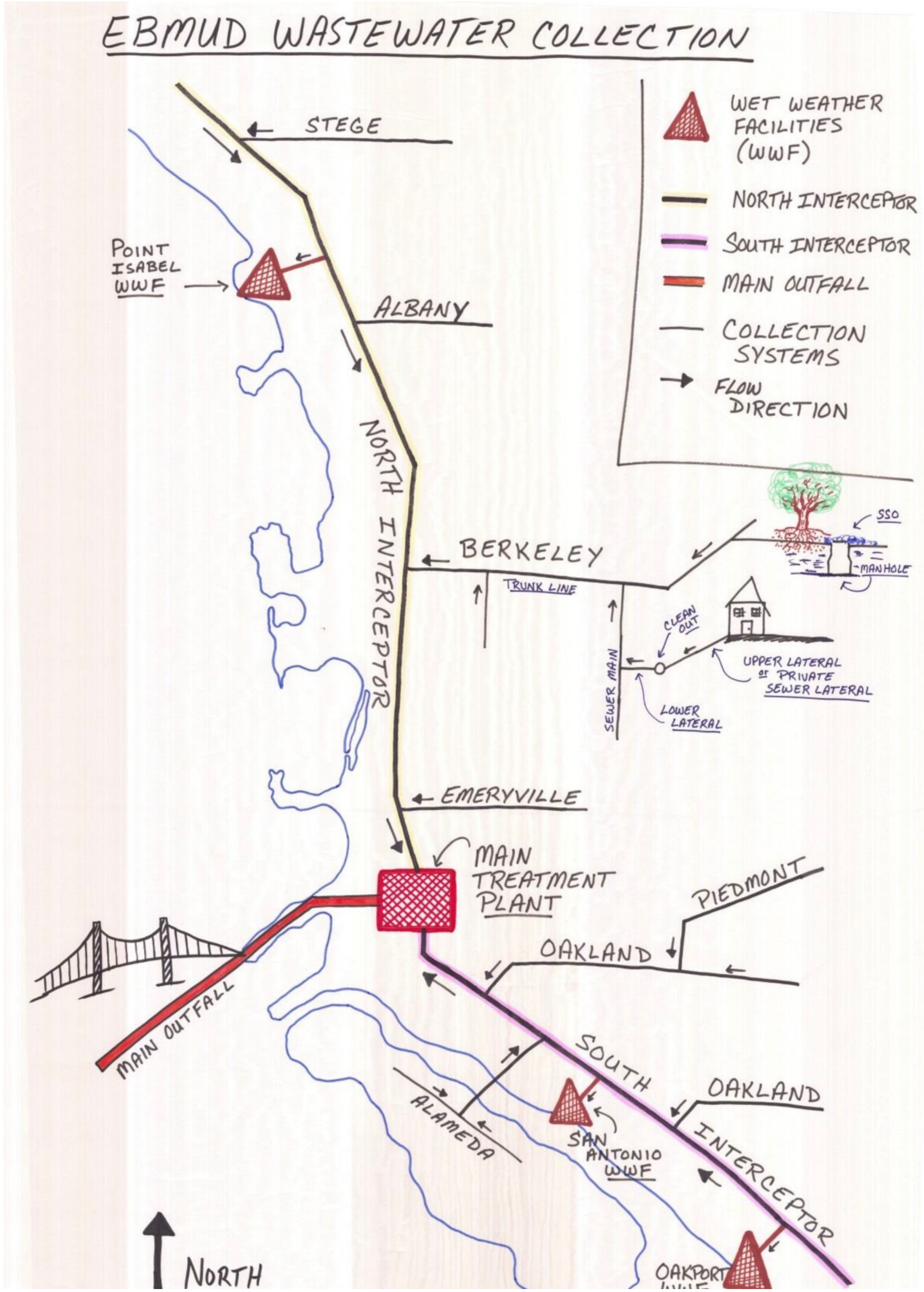


Comparison Taxes and Tax Rates for 2000/1 to 2016/17
(141 Parkside Drive)

Year	Countywide Property Tax based on AV ($)	COB Tax Rate (%)	COB Tax Amount ($)	BUSD Tax Rate (%)	BUSD Tax Amount ($)
2000/1	$5,369	0.0867%	$465	0.1250%	$671
2016/17	$6,991	0.0445	$311	0.1327%	$927
% Change	+30.2%	-48.7%	-33.1%	+6.2%	+38.2%



Comparison of Voter Approved Debt Service (Tax Rates)
0.2000%
0.1800%
0.1600%
0.1400%
0.1200%
0.1000%
0.0800%
0.0600%
0.0400%
0.0200%
0.0000%
Debt Service Tax Rate (%)
City of Berkeley
BUSD
Refinanced $99 Million
New Bonds(I, FF, M) - $63 million
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Fiscal Year



REVENUE BONDS?

Berkeley Violates Clean Water Act

2014 – Consent Decree requires COB

- Reduce inflow and infiltration
- Reduce sanitary sewer overflows
- Repair and replace aging sewer pipelines

2026

- Replace 50 miles of sewer pipeline -> $100M
- Replace all noncompliant manholes
- Perform annual assessment on 25 miles of sewers
- Increase maintenance activities

Capital Project: Sewer Pipeline Replacement

EPA Settlement

- Mandates 4.2 mi/y = $8.4 million

Operating Budget

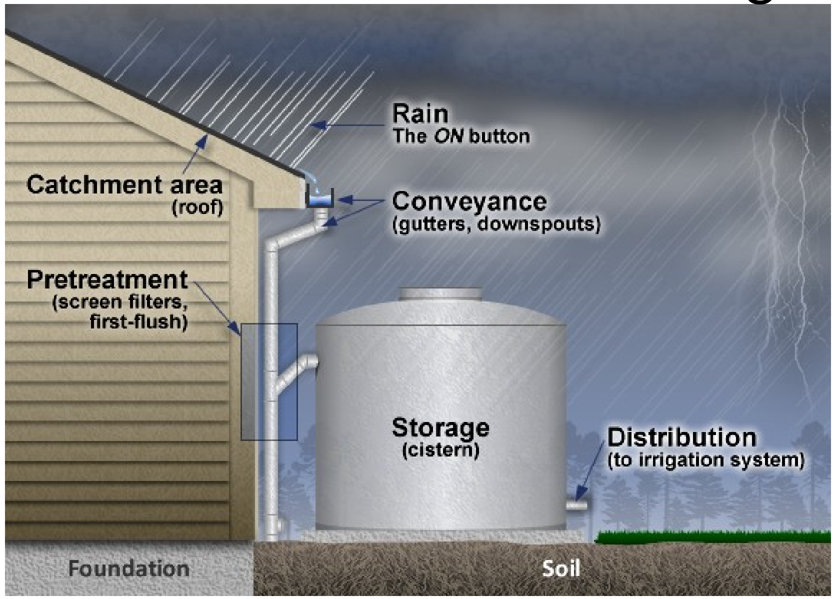
- ~5M/yr → 2.5 miles of pipeline replacement
- Shortfall = $3.4 M/yr

Two Options

- Raise sewer fees?
    1. Keep to original schedule
- $100M Revenue bond?
    1. Complete project faster
    2. Less pollution

FUTURE Drought/Flooding GO Bond

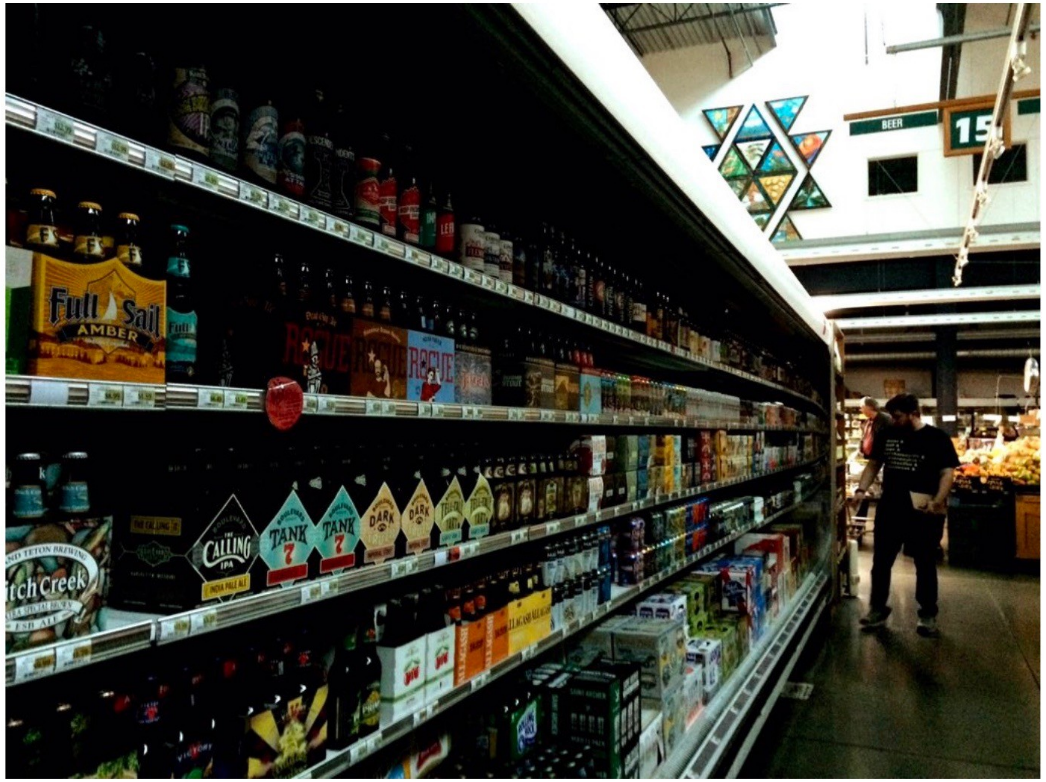
Rainwater Harvesting



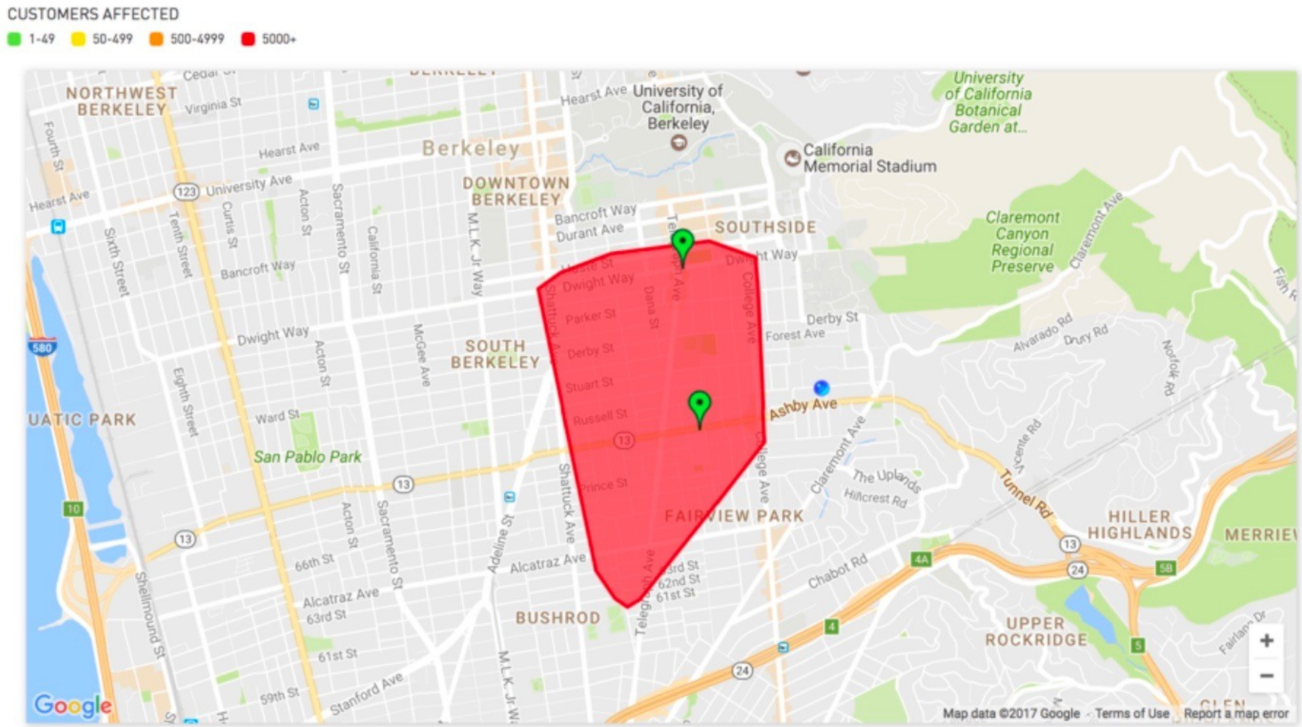
Permeable Surfaces

Undergrounding Utilities

Breaking: Power outages affect large swaths of Berkeley



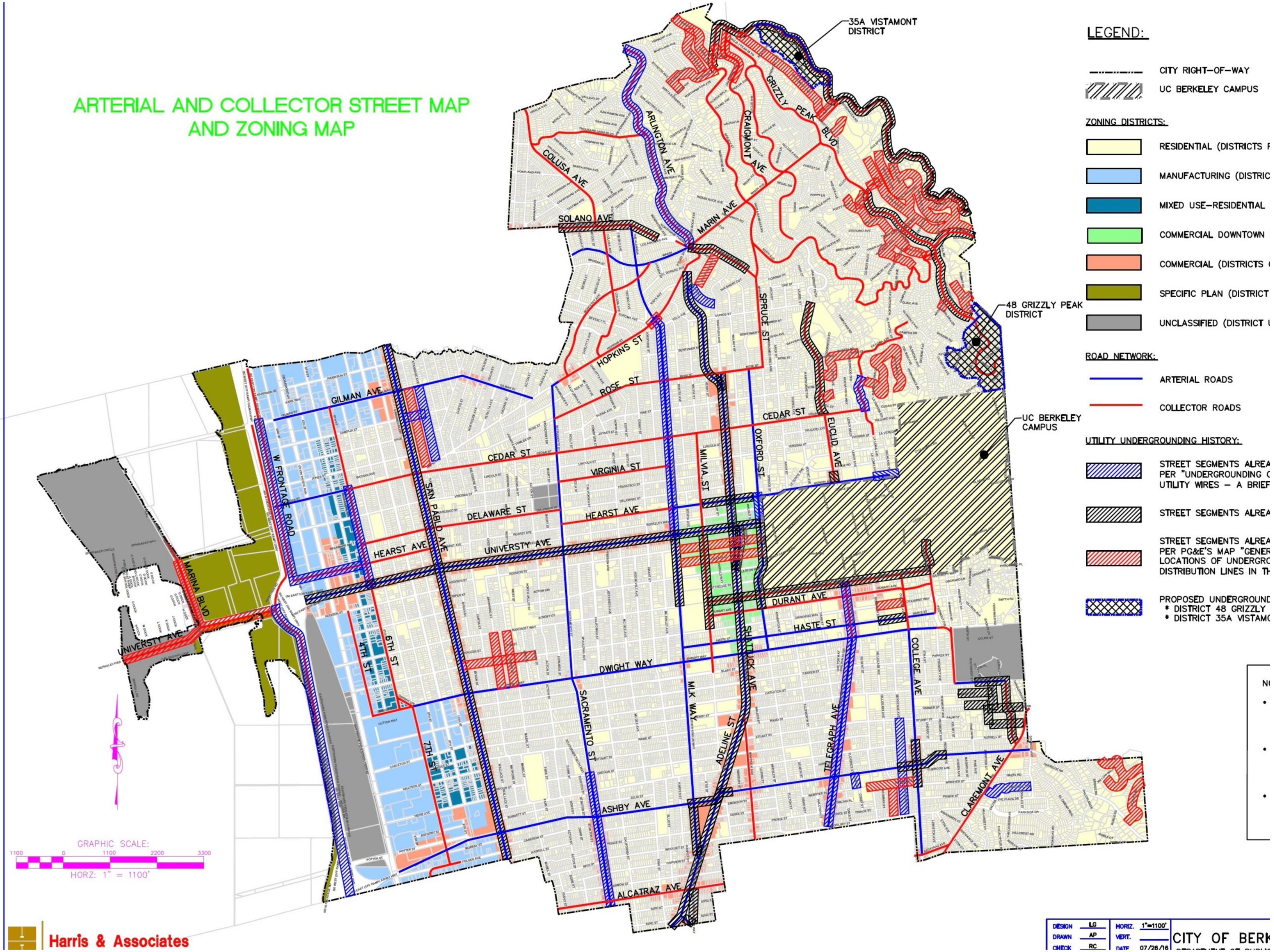
The power outage hit Berkeley Bowl West. Photo: Guillaume Pierre



At 9:45 p.m., PG&E's outage map was showing over 5,000 customers affected in an area stretching from the south campus neighborhood into North Oakland

Update 4:28 p.m. Despite what PG&E has told Berkeleyside, readers are saying their power is still out. According to the outage map, there are 18 outages still reported in Berkeley that are impacting 8,160 customers.

Underground Utilities?



Arterials/Collectors = $135M

- Increase UUT from 7.5% to 10.0%
- Issue $135M in Revenue Bonds

Residential streets = ~$600M

- Dedicate 2.5% of current UUT
- Issue $135M in Revenue Bonds
- Shortfall = $465M

Seismic Rebate – 1992 Transfer Tax

Very Successful

- Over 60% of private residences have participated
- Number of participates is declining

Expand Rebate to include Climate and Water Goals

- energy efficiency
- solar power
- water conservation, rainwater capture & reuse

Requires Ballot Measure

- No tax increase

30 Year Capital Financing Plan

($30M x 30 yrs = $900M)

GO Bonds

- Assessed Values → x4 - Measure T1
- Ask Voter to set Debt-Service Rate at FY2000 value of 0.0867%

Revenue Bonds

- Use $5M capital steam in sewer fund to issue Revenue bonds

UUT increase by 2.5% to 10%

- Use $4.7M increase to fund revenue bonds for undergrounding collectors & arterials
- Dedicate 1/3 of current UUT to undergrounding residential streets
- Ask Utility & Insurance Companies to subsidize residential undergrounding

Property Transfer Tax

- Broaden Seismic Exemption to include energy & water efficiency

Partnerships

- EBMUD, Utilities, Insurance Companies

City Council Takeaways

1. Adopt goal for Infrastructure2050
    - Modern
    - Durable
    - Green
    - sustainable
2. Develop Vision for Infrastructure2050
    - UCBerkeley
    - Berkeley Lab
3. Establish Planning Process
    - Citizen involvement

The End