



Approval of the Major Infrastructure Renovation & Replacement (MIRR) Fund Policy

Finance & Management Services Division
Board of Directors Meeting of November 19, 2019

EBRPD owns and maintains a vast and diverse array of assets across its ~125,000 acres:

One of our more *diverse* assets...



Tilden Park Merry-Go Round
c. 1958



Tilden Park Merry-Go-Round
c. 2019

	Park	Area in Park	Function	System Type	Description	Estimated Replacement Cost
1	Anthony Chabot	Loggers Loop Trail	Pressure Booster to fill tank	Potable Water	Water Booster Pump	\$16,000
2	Anthony Chabot	Service Yard	Wastewater ejection	Wastewater	Wastewater Pumping Station	\$80,000
3	Anthony Chabot	Wastewater Plant	Wastewater treatment	Wastewater	Sewage Treatment Plant	\$140,000
4	Anthony Chabot	Puma Point / RV dump station	Wastewater ejection	Wastewater	Wastewater Pumping Station	\$120,000
5	Antioch Pier	Service yard	Wastewater ejection	Wastewater	Wastewater Pumping Station	\$120,000
6	Ardenwood	Gazebo Restroom	Wastewater Pump	Wastewater	Wastewater Pumping Station	\$12,000
7	Ardenwood	Farm	Irrigate farm	Irrigation	Irrigation Pump	\$18,000
8	Arroyo Del Valle	Entrance	Wastewater Treatment System	Wastewater	Wastewater Pumping Station	\$120,000
9	Arroyo Del Valle	Pump House on Arroyo Rd.	Booster Pump to fill tank	Potable Water	Water Booster Pump	\$32,000
10	Arroyo Del Valle	Garden @ main entry	Fountain in pond	Non-Potable Water	Waterscape	\$4,800
11	Arroyo Del Valle	Pool	Filtration/chlorination	Non-Potable	Swimming Pool System	\$52,000
12	Big Break	Staging Area	Wastewater ejection	Wastewater	Wastewater Pumping Station	\$120,000
13	Black Diamond Mine	Service yard	Booster Pump	Potable Water	Water Booster Pump	\$6,300
14	Black Diamond Mine	Hazel Atlas Portal	Booster Pump	Potable Water	Water Booster Pump	\$4,200
15	Black Diamond Mine	Pole Barn	Well Pump	Water Well	Solar Water Well Pump	\$12,000
16	Black Diamond Mine	Pole Barn	Booster Pump	Non-Potable Water	Solar Water Booster Pump	\$6,300
17	Briones	Service Yard & Residence	Domestic Booster Pump	Potable Water	Water Booster Pump	\$6,800
18	Briones	Bear Creek	Drinking water	Potable Water	Water Booster	\$6,500
19	Briones	Spring collection tank	Water transfer	Non-Potable Water	Water Booster Pump	\$8,900
20	Briones	Bear Creek Staging Area	Irrigation	Non-Potable Water	Water Well Pump	\$23,000
21	Briones	Newt Hollow	Irrigation	Non-Potable Water	Water Well Pump	\$23,000
22	Brooks Island	Residence	Water for entire island	Non-Potable	Water System	\$12,000
23	Brushy Peak	Residence	Water for residence/staging	Non-Potable	Water System	\$21,000
24	Castle Rock	Lower Restroom	Irrigation	Non-Potable Water	Water Booster Pump	\$6,500
25	Castle Rock	Pool	Filtration/chlorination	Non-Potable	Swimming Pool System	\$23,000
26	Contra Loma	Lake (Main Entry)	Irrigation	Non-Potable Water	Submersible Pump #1	\$18,000
27	Contra Loma	Lake (Boat Ramp)	Irrigation	Non-Potable Water	Submersible Pump #4	\$18,000
28	Contra Loma	Lake (Island Area)	Irrigation	Non-Potable Water	Submersible Pump #3	\$18,000
29	Contra Loma	Lake (Main Lawn)	Irrigation	Non-Potable Water	Submersible Pump #2	\$18,000
30	Contra Loma	Service Yard	Wastewater ejection	Wastewater	Wastewater Pumping	\$120,000

...and a partial listing of our *vast* assets.

This is just the first page of a listing of all water utilities, from Anthony Chabot through Contra Loma.


With so much stuff, how can staff manage?

A brief history
of managing
infrastructure
at the East
Bay Regional
Park District:

MAST used an Access database for
many years



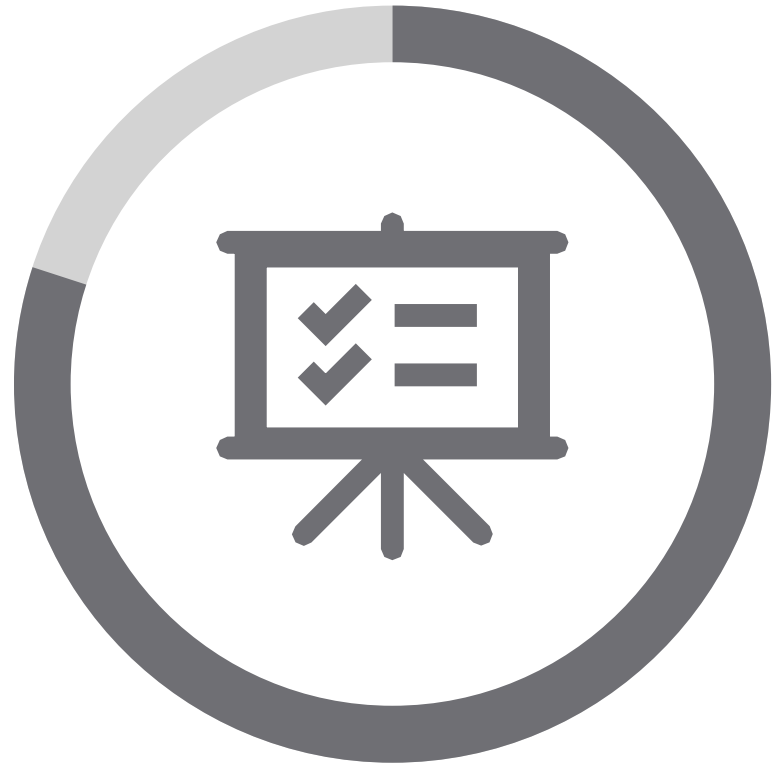
Pavement Condition measurement
begins in the mid-1990s using
“Streetsaver” and generating a
“Pavement Condition Index” (PCI)



“Cartegraph” work order system
implemented in 2001.

Implementing a Major Infrastructure Renovation & Replacement Fund

- MIRR Fund established in 2012.
- “Ad hoc” funding, based on available fund balance.
- In 2018, MAST Major Maintenance personnel costs, supplies and \$2.8 million budget for infrastructure repair moved from General Fund to MIRR.
- GOAL: to develop a Major Infrastructure Renovation & Replacement Fund that functions like our Major Equipment Replacement Fund.
 - Internal Service Fund
 - Costs to repair / replace assets projected over a multi-year timeline;
 - Asset repair & replacement projects scheduled, rather ad hoc, using available MIRR funding.



Step 1: Inventory all assets



VFA engaged in 2014 to inventory all Park District assets and infrastructure. Inventory is over 80% complete.



Inventory includes size, location, construction date, renovation date, estimated replacement cost and “Facilities Condition Index” (FCI) score.



Infrastructure: 171 bridges, 30 docks and piers, 11 wells, 6 swim lagoons and pools, sewer and water utilities.



Facilities: 33 service yards, 34 park offices, 25 administrative offices, 3 corporation yards, 88 concession buildings, 81 park residences, and more.

Step 2: Establish Performance Standards – what do we want to achieve?

Condition Standards:


- Determine current condition of assets
- Establish a target Paving Condition Index (PCI) Score
- Establish a target Facilities Condition Index (FCI) Score.

Funding Amount:


- Sufficient for necessary renovation and replacement as schedule dictates.
- Also, need funding for unexpected needs.
- Current fund balance is approximately \$14 million.

Step 3: Allocating Resources


Current practice is to transfer revenue to the MIRR Fund from the General Fund as funds are available.



Best practice: determine renovation and replacement schedule and set aside funding through “internal service charges” allocated to departments pro-rata.



This is the practice used in our Major Equipment Replacement Fund.



District has allocated approximately \$5 million per year to MIRR Fund for past 5 years.

Step 4: Monitor and Report on Progress

- Report on facilities and pavement assessment data at Board Workshops annually.
- Report on current PCI and FCI score.
- Discuss options for funding MIRR at a level to maintain assets in current condition or to improve the asset conditions to reach the established policy goals.
- **NEW: The MIRR Fund Policy!**

What's in the MIRR Fund Policy:

- Summary Statement – why we have this policy.
- Definitions – of PCI and FCI and CRV.
- MIRR Fund – definition of MIRR Fund purpose.
- Performance Standards - for pavement and facilities.
- Appropriating MIRR Funds – how funding can be used.
- Allocation of Sufficient Resources – how much funding to allocate to MIRR fund annually.
- MIRR Reserves & Calculation of Reserve Amount – what should fund balance be?
- Policy Administration – managing the policy and implementation.

Performance Standards:

Pavement Condition Index (PCI):

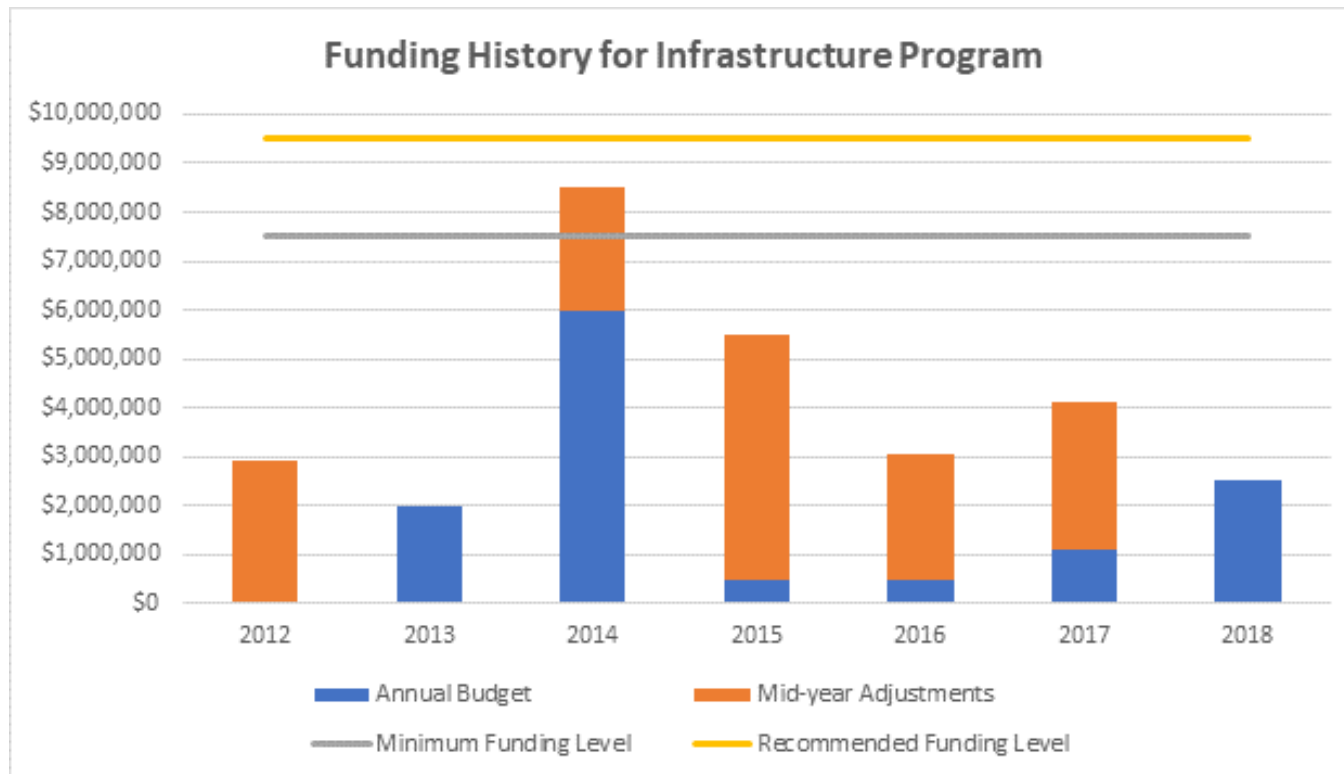
- PCI Score of 70 – 84 is considered good.
- Bay Area average PCI score is 67.
- MIRR Policy proposes maintaining an average score of 80.
- Score as of beginning of 2019 was 77.

Facilities Condition Index (FCI):

- International Facility Management Association standards indicate that a score of 90 is “good.”
- MIRR Policy proposes maintaining score of 72.
- Current FCI score is 67.5

What is funding target?

- Initial inventory indicates a need to fund and deliver between \$7.5 and \$9.5 million in infrastructure repair and replacement per year.
- In 2018 (at 80% completion), VFA predicted \$10 million per year to reach recommended performance standard.
- Funding history shown below:



How much to have in MIRR Reserves?

- Best practice is to set target reserves based on Current Replacement Value (CRV).
- Reserves intended to ensure financial stability for fund and prepare for unexpected infrastructure repair or replacement needs.
- In 2019, CRV was \$324 million. Maximum reserves would be \$32.4 million.
- Current fund balance is approximately \$14 million.

Administering the MIRR Policy

Annual reporting on FCI and PCI scores at Board Workshop.

MIRR Fund Policy brought to the Board Finance Committee for review and approval every five years.

Funding target, condition of assets, availability of funds, delivery and completion of projects, and other unfunded long-term liabilities will be considered.

What are
other entities
doing?

- City of Santa
Rosa

- Minnesota
Dept of Natural
Natural
Resources

- National Park
Service

First 10 years of City of Santa Rosa Plan

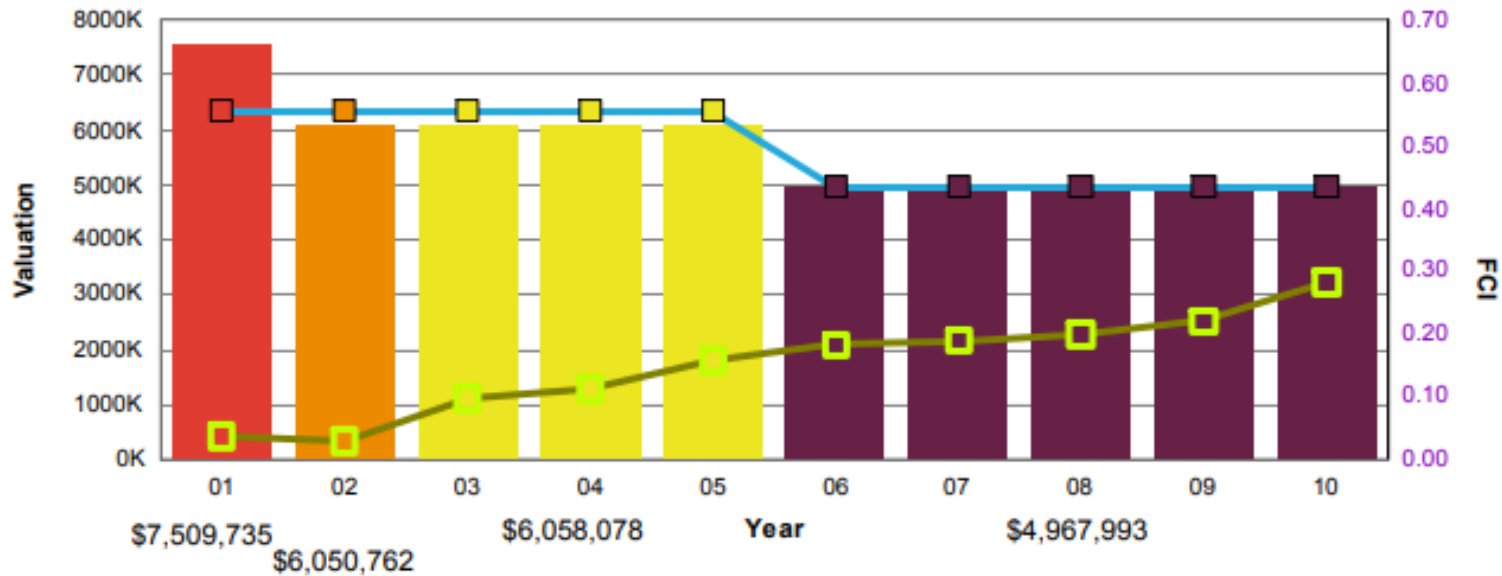
AVERAGE FUNDING:

The below graph shows the current assets FCI Trend line when the 5-year needs are averaged and spread over 5-years. Years 6 through 10 needs are handled in the same manner. This approach may be useful if funding is limited, or there are spikes in a single year cost.

AVERAGE FUNDING NEEDS

PRIORITY 1-3 (YEARS 1-5 = \$6,346,946)

PRIORITY 4 (YEARS 6-10 = \$4,967,993)



* Note: Park District FCI scores are reversed 0 = worst and 1.0 = best

Minnesota, Dept of Natural Resources

DNR 10-YEAR CAPITAL ASSET NEED:

TAKING CARE OF WHAT WE HAVE

January 2019

Even with recent bonding appropriations, Deferred Maintenance increased by \$75 million this year, or about 20% annually.



Photo 14: Jay Cooke State Park—water main break.

KEY MESSAGE

The Department of Natural Resources (DNR) requires \$169,000,000 annually over the next 10 years from all funds in order to maintain and renew the capital assets under its custodial control. The condition of capital assets will continue to decline and maintenance costs will increase each year this amount is not invested.

GOAL

Restore and maintain all capital assets as “average” or better condition within 10 years.

NPS Uses FCI Scores in CIP Requests:

National Park Service

FY 2019 Budget Justifications

DEPARTMENT OF THE INTERIOR DEFERRED MAINTENANCE AND CAPITAL IMPROVEMENT PLAN

NATIONAL PARK SERVICE Project Data Sheet

Total Project Score/Ranking:	91.10 / 3
Planned Funding FY:	2019
Funding Source: Line Item Construction	

Project Identification

Project Title: Repair Degrading Concrete at Meridian Hill Park		
Project Number: PMIS 185767A	Unit/Facility Name: Rock Creek Park	
Region/Area/District: National Capital	Congressional District: DCAL	State: DC

Project Justification

DOI Asset Code	FRPP Unique Id#	API:	FCI-Before:	FCI-Projected:
40750300	25952	100	0.36	0.12

Project Description:

This project will repair/replace integrated infrastructure servicing the fountains and make the lower reflecting pool fully operational. It will repair the exposed aggregate walls, walkways, and stairs to eliminate safety concerns and to preserve one of America's earliest examples of decorative exposed aggregate concrete. It will incorporate new ramps into the historic landscape, creating an accessible route to the lower plaza level and will restore the plantings in accordance with the park's historic landscape plan.

* Note: Park District FCI scores are reversed 0 = worst and 1.0 = best

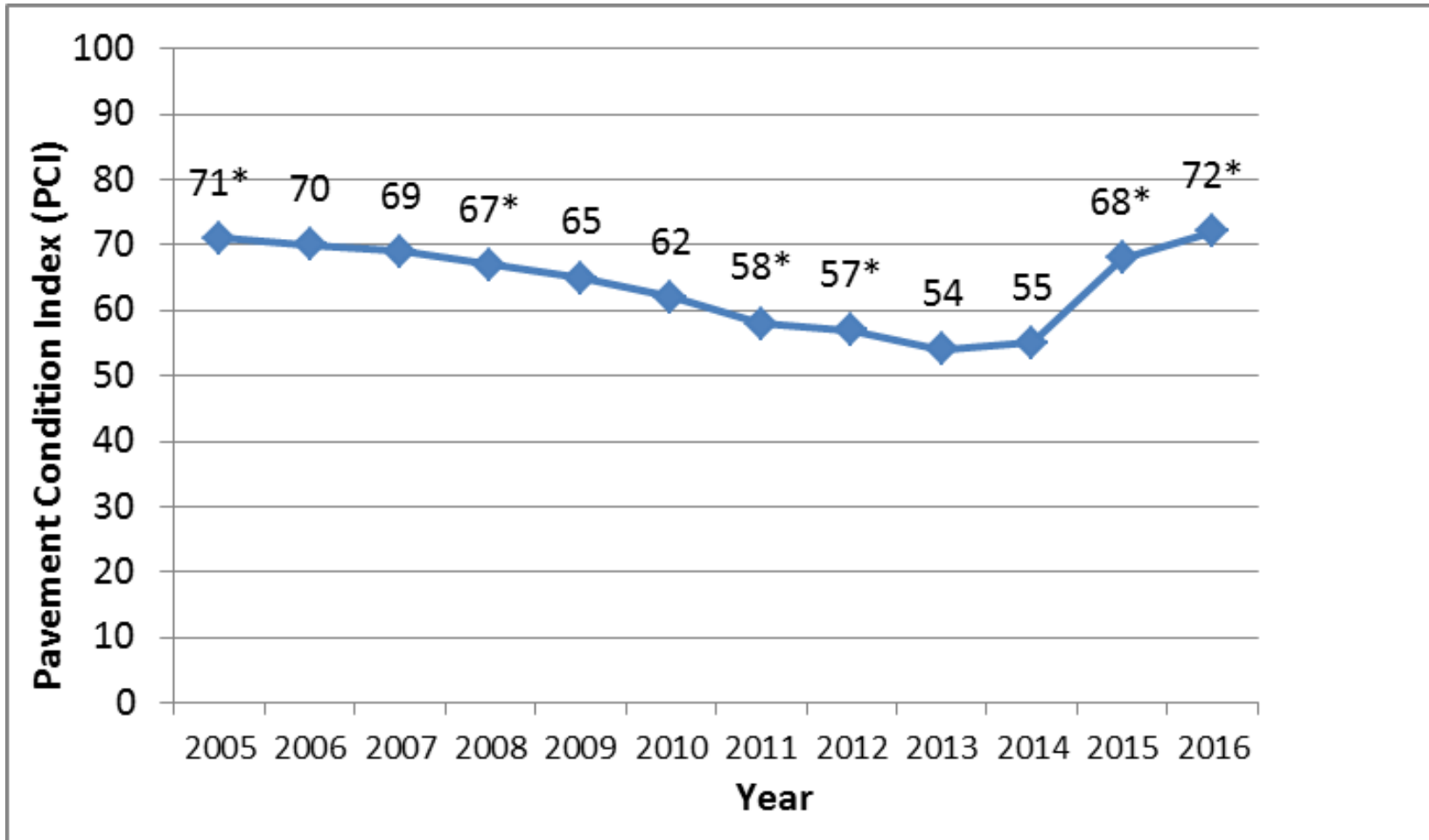
Park District FCI Scores 2014-2019 (not yet completed):

Park FCI Scores 2014-19			
(scores only for assets accessed, does not include all residences and all structures)			
Park Name	Ave FCI		
1 McLaughlin Eastshore (café)	9	poor	
2 Cull Canyon	23	poor	
3 Lake Chabot	30	poor	
4 Crockett Hills	40	poor	
5 Las Trampas	44	poor	
6 Anthony Chabot	49	poor	
7 Tilden	51	at risk	
8 Sibley	53	at risk	
9 Radke Martinez	54	at risk	
10 Redwood	55	at risk	
11 Roberts	55	at risk	
12 Ardenwood	58	at risk	
13 Brushy Peak	59	at risk	
14 Alameda County Trails	61	at risk	
15 Bay Point	62	at risk	
16 Brooks Island	62	at risk	
17 Morgan Territory	62	at risk	
18 Vargas Plateau	62	at risk	
19 Garin/Dry Creek Pioneer	65	at risk	
20 Coyote Hills	67	at risk	
21 Black Diamond Mines	68	at risk	
22 Wildcat Canyon	68	at risk	
23 Briones	69	at risk	
24 Miller/Knox	70	good	
25 Don Castro	73	good	
26 Peralta Oaks	73	good	
27 Martin Luther King, Jr.	74	good	

Park FCI Scores 2014-19			
(scores only for assets accessed, does not include all residences and all structures)			
Park Name	Ave FCI		
28 Contra Costa Trails	77	good	
29 Carquinez Strait	78	good	
30 Mission Peak	78	good	
31 East County Trails	79	good	
32 Temescal	79	good	
33 Diablo Foothills / Castle Rock	80	good	
34 Point Isabel	82	good	
35 Camp Arroyo	85	good	
36 Sunol / Ohlone Wilderness	85	good	
37 Crown Beach	86	good	
38 Pleasanton Ridge	86	good	
39 Deer Valley	87	good	
40 Shadow Cliffs	87	good	
41 Vasco Hills	90	excellent	
42 Del Valle	91	excellent	
43 Hayward Shoreline	91	excellent	
44 Contra Loma	92	excellent	
45 Kennedy Grove	92	excellent	
46 Round Valley	92	excellent	
47 Antioch/Oakley	95	excellent	
48 Quarry Lakes	95	excellent	
49 Vasco Caves	95	excellent	
50 Delta Access	97	excellent	
51 Point Pinole	97	excellent	
52 Big Break	100	excellent	
53 Dublin Hills	100	excellent	



Historical EBRPD PCI scores:



* PCI values are from field condition surveys

Examples of Park District facilities

“excellent” condition
(FCI score of 97)



Wildcat Canyon Restroom, Alvarado

“poor” condition
(FCI score of 28)



Tilden Lake Anza Swim Restrooms
and Lifeguard Office



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