



**SAN DIEGO UNIFIED SCHOOL DISTRICT**  
Facilities Planning and Construction & Physical Plant Operations  
**2013 ANNUAL UPDATE TO THE**  
**MAJOR REPAIR & REPLACEMENT (MRR) PLAN**

October 3, 2013 ICOC Construction Subcommittee



## Discussion Items:

- MRR Brief Background/History
- 2013 Annual Update to the Major Repair and Replacement (MRR) Plan
  - Update on the Facility Condition Assessment (FCA) Facility Condition Index (FCI)
  - Current and Anticipated Long-Term Funding Needs
  - Status and Adequacy of Annual Recurring Funding for Maintenance, Major Repair and Replacement and Repair Replacement
  - Status of Debt Mechanism used to Finance MRR Work
- Recommendations

## MRR Brief Background/History:

- 07/08/08 - Board approved the 2008 FCA & 10-Year MRR Plan.
- 11/04/08 - Voters approved Proposition S.
- 10/31/11 - Board directed Staff to Study the Feasibility of a New Capital Facilities Bond Measure.
- 07/03/12 - Staff Responded to the Board directive with the Proposed 2012 Capital facilities Bond Measure – FCA Study Results – Building Systems Repair and Replacement Plan.
- 11/06/12 - Voters approved Proposition Z.

## 2013 Annual Update to the MRR Plan:

- The 2013 MRR Plan is an update to the previously board approved “2012 Capital Facilities Bond Measure- Facilities Condition Assessment and Building Systems Repair and replacement Plan” and is consistent with Board policies E-2570, G-3250, E-1500, E-2500, and E-2550.
- This updated plan provides an assessment of costs associated with the ongoing MRR program and outlines a funding plan that will support a coordinated and comprehensive effort to achieve the district’s goal to create quality schools in every neighborhood.

## Update on the Facility Condition Assessment (FCA) & Facility Condition Index (FCI):

- DMJM Harris/AECOM were contracted by the district to deploy teams of Architects and engineers to provide on-site FCAs.
- The condition and lifecycle of major systems and components were assessed and documented using industry standard Uniformat II guidelines.
- Comprehensive Facility Condition Assessments have been completed at 74 school campuses totaling 7.8 million square feet of building area.
- The current district-wide facilities repair, replacement and renovation needs are estimated at \$1.1 billion with an FCI of 20.1%

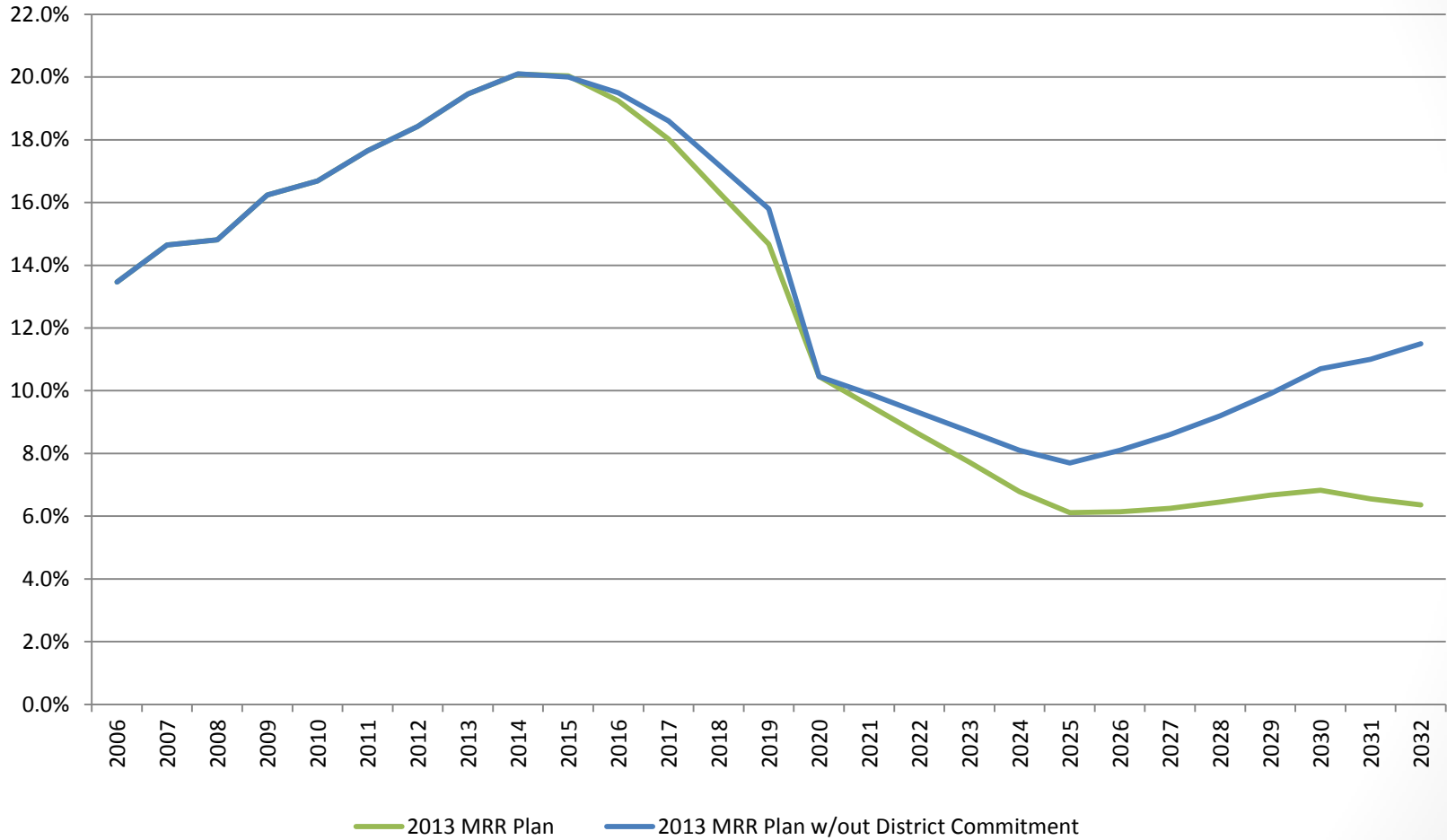
## Current and Anticipated Long-Term Funding:

- The 2013 Plan incorporates funding strategies for Proposition S and Z, and the districts non-bond funded commitment to reduce the FCI to 15% in 5-Years and 6% over the next 11-Years.
- As the bonds mature their contribution to the reduction of MRR will diminish and deterioration and inflation will play a more significant role.
- Absent a plan for annual recurring funding, the FCI will begin to increase as the bond programs sunset.
- Therefore the 2013 plan incorporates a proposed district commitment to the annual recurring funding for repair and replacement and MRR to support in reducing and stabilizing the FCI between the district target range of 5% to 7% through 2032.

## 2013 MRR Plan:

Year	End of Fiscal Year	Backlog Total (Hard, Soft & PMO Cost)	Yearly Deterioration	Yearly Inflation on Backlog	Prop S Bond Contribution	Prop S Other Categories	Prop Z Bond Contribution	Prop Z Other Categories	PPO Non-Bond Funded RR	Adjusted Backlog	FCI (at end of year)
1	2006	\$650,968,500	\$76,992,705	\$20,830,992	-	-	-	-		\$748,792,197	13.5%
2	2007	\$685,230,000	\$74,528,938	\$18,227,118	-	-	-	-		\$777,986,056	14.6%
3	2008	\$719,491,500	\$77,361,038	\$26,038,740	-	-	-	-	(33,400,000)	\$789,491,278	14.8%
4	2009	\$789,491,278	\$77,438,399	\$719,492	-	(4,428,323)	-	-	(41,400,000)	\$821,820,845	16.2%
5	2010	\$821,820,845	\$78,440,255	\$13,421,352	-	(13,552,841)	-	-	(15,600,000)	\$884,529,611	16.7%
6	2011	\$884,529,611	\$79,818,475	\$14,792,775	(29,118)	(11,168,583)	-	-	(16,500,000)	\$951,443,159	17.7%
7	2012	\$948,358,320	\$81,965,351	\$23,882,299	(509,358)	(17,020,020)	-	-	(16,000,000)	\$1,020,676,592	18.4%
8	2013	\$1,020,676,592	\$83,534,314	\$18,967,166	(3,634,561)	(24,348,482)	-	-	(16,000,000)	\$1,079,195,030	19.5%
9	2014	\$1,079,195,030	\$85,536,041	\$20,413,532	(2,500,020)	(2,309,151)	(34,083,421)	(31,263,424)	(16,000,000)	\$1,098,988,587	20.1%
10	2015	\$1,098,988,587	\$87,367,565	\$21,583,901	(7,500,042)	(6,927,438)	(48,515,554)	(44,501,469)	(16,000,000)	\$1,084,495,550	20.0%
11	2016	\$1,084,495,550	\$89,794,291	\$27,474,715	(12,500,182)	(15,545,833)	(59,760,655)	(54,816,172)	(16,800,000)	\$1,042,341,713	19.2%
12	2017	\$1,042,341,713	\$92,122,323	\$27,112,389	(12,500,089)	(15,545,747)	(76,586,323)	(70,249,716)	(17,640,000)	\$969,054,550	18.0%
13	2018	\$969,054,550	\$94,513,262	\$26,058,543	(12,500,398)	(15,546,032)	(77,263,458)	(70,870,827)	(18,522,000)	\$894,923,639	16.3%
14	2019	\$894,923,639	\$97,163,197	\$26,649,000	(12,500,421)	(15,546,054)	(73,974,192)	(67,853,708)	(19,448,100)	\$655,395,378	14.7%
15	2020	\$655,395,378	\$99,907,977	\$24,610,400	(12,500,023)	(15,545,686)	(61,104,034)	(56,048,403)	(20,420,505)	\$614,295,103	10.4%
16	2021	\$614,295,103	\$102,655,447	\$18,023,373	(17,500,077)	(16,164,002)	(56,563,526)	(51,883,568)	(21,441,530)	\$571,421,221	9.5%
17	2022	\$571,421,221	\$105,735,110	\$16,753,324	(17,500,209)	(16,164,124)	(57,264,079)	(52,526,158)	(22,513,607)	\$527,941,477	8.6%
18	2023	\$527,941,477	\$108,907,163	\$17,142,637	(21,000,221)	(24,396,921)	(56,172,023)	(51,524,457)	(23,639,287)	\$477,258,368	7.7%
19	2024	\$477,258,368	\$112,174,378	\$15,838,244	(27,200,719)	(30,505,765)	(40,926,324)	(37,540,158)	(24,821,251)	\$444,276,775	6.8%
20	2025	\$444,276,775	\$115,820,046	\$15,510,897	(32,750,278)	(29,631,633)	(13,633,387)	(12,505,386)	(26,062,314)	\$461,024,720	6.1%
21	2026	\$461,024,720	\$119,584,197	\$14,438,995	(32,750,683)	(29,632,007)	(10,723,415)	(9,836,181)	(27,365,430)	\$484,740,196	6.1%
22	2027	\$484,740,196	\$123,470,684	\$14,983,303	(32,750,179)	(26,631,542)	(4,212,735)	(3,864,181)	(38,311,602)	\$517,423,945	6.3%
23	2028	\$517,423,945	\$127,792,157	\$16,965,907	(34,600,262)	(27,501,905)	(1,216,874)	(1,116,193)	(44,058,342)	\$553,688,434	6.4%
24	2029	\$553,688,434	\$132,264,883	\$18,109,838	(39,600,207)	(27,340,326)	-	-	(50,667,093)	\$586,455,529	6.7%
25	2030	\$586,455,529	\$136,894,154	\$19,379,095	(57,825,346)	(44,174,034)	-	-	(58,267,157)	\$582,462,241	6.8%
26	2031	\$582,462,241	\$141,685,449	\$20,525,944	(48,100,064)	(44,427,778)	-	-	(67,007,231)	\$585,138,561	6.5%
27	2032	\$585,138,561	\$146,644,440	\$20,386,178	(62,747,544)	(47,845,772)	-	-	(77,058,315)	\$564,517,548	6.4%
					(501,000,000)	(521,900,000)	(672,000,000)	(616,400,000)	(744,943,764)		

## 2013 MRR Plan FCI Projections:

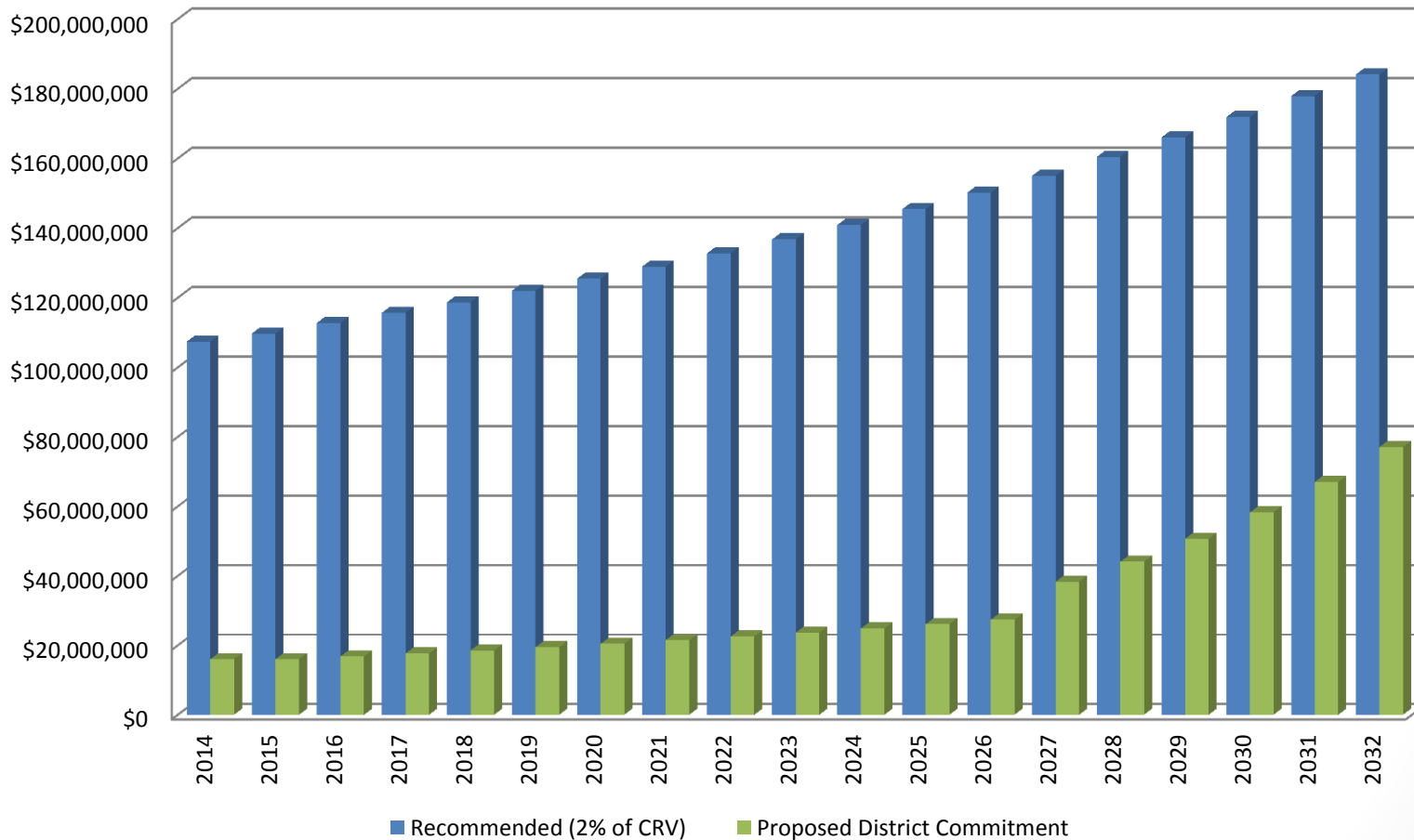




## Status & Adequacy of Annual Recurring Funding for Maintenance, Repair & Replacement & MRR:

- Association of Physical Plant Administrators (APPA) recommends 2% to 4% of the Districts total Current Replacement Value (CRV) be allocated annually. The range is due to varied factors including climate, age of facilities, and type of construction. Based on these factors and the mild climate in San Diego it is recommended that the district apply the 2% deterioration rate.
- The CRV is \$5.3 billion @ 2% = \$107 million.
- In 2014 the annual deterioration and inflation alone is \$106 million.
- Annual recurring funding for maintenance, repair and replacement work and MRR is currently being funded at 15% of the recommended level. Proposition S and Z are currently supplementing the need, however the district should begin a process to support the funding as proposed in the 2013 MRR Plan.

## Proposed Annual Recurring Maintenance Funding Plan:



## Status of Debt Mechanism to Finance MRR Work:

- The 2013 MRR plan reflects a total commitment of \$3 billion over 18 years to reduce the district-wide FCI to 6% through 2032.
- The proposed cumulative 18 year district non-bond funded contribution totals \$745 million or 24% of the total expenditures.
- The remaining 76% allocation will come from the issuance of Proposition S and Proposition Z general obligation bonds.

## Recommendations:

- The Board of Education approve the revised 2013 Major Repair Replacement Plan.
- The Board of Education approve a process to identify and allocate adequate funding for the annual recurring maintenance, major repair and replacement and repair replacement needs.

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Facilities Planning and Construction & Physical Plant Operations

## **2013 ANNUAL UPDATE TO THE MAJOR REPAIR AND REPLACEMENT PLAN**

October 3, 2013



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## **Section 1 EXECUTIVE SUMMARY**

This document and the attachment herein, constitute the district's 2013 Major Repair and Replacement (MRR) Plan. This plan is an update to the previous, Board approved, "2012 Capital Facilities Bond Measure-Facility Condition Assessment and Building Systems Repair and Replacement Plan" and is consistent with Board policies E-2570, G-3250, E-1500, E-2500, and E-2550.

This updated Plan provides an assessment of costs associated with the ongoing MRR program and outlines a funding plan that will support a coordinated and comprehensive effort to achieve the district's goal to create quality schools in every neighborhood.

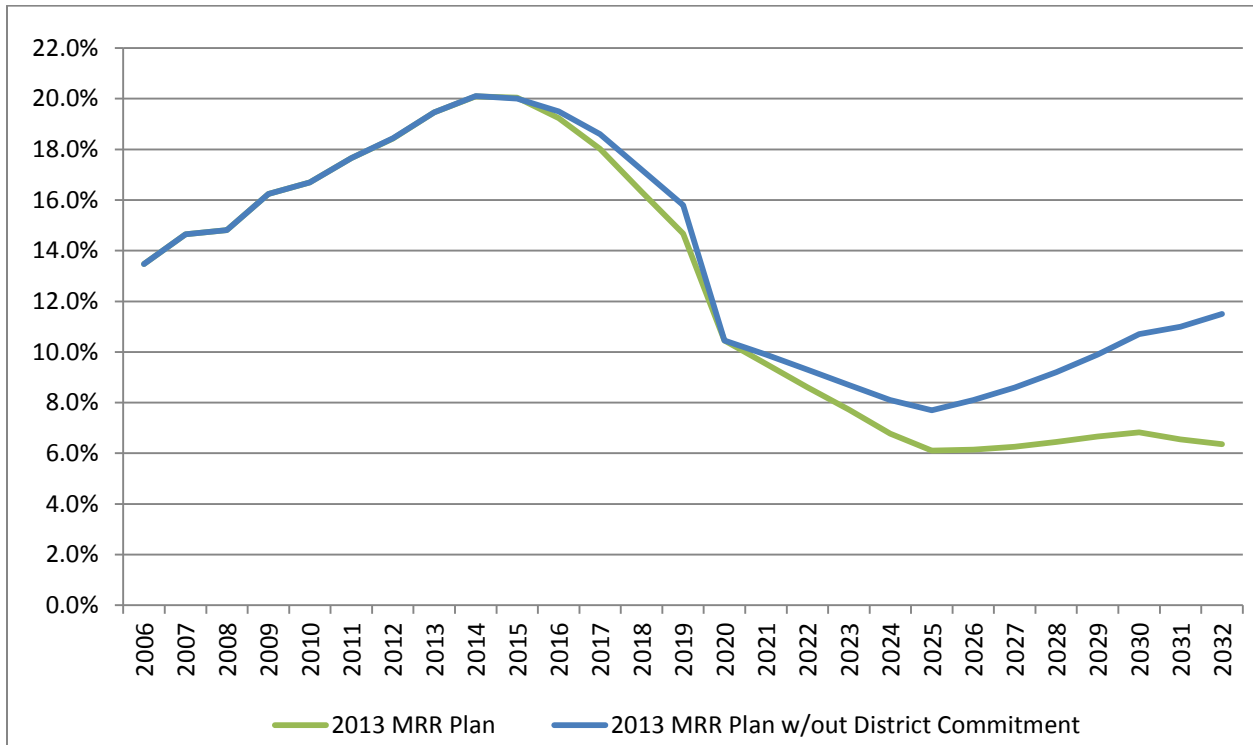
### **1.1 – Summary of Findings**

The district's 2013 MRR Plan utilizes data gathered from comprehensive Facility Condition Assessments (FCA) completed at 74 school sites from 2008-2013. The Plan also takes into consideration facility deterioration over time, escalation of needed repair costs (inflation) and reflects annual changes to the district's total building square footage. From this data the current district's facilities repair, replacement, and renovation needs were estimated at \$1.1 billion. To calculate the district's overall Facility Condition Index (FCI), the Current Replacement Value (CRV), as derived by multiplying the district's total building square footage by the current industry new construction cost per square foot is \$5.3 billion (Attachment A). The FCI is derived by dividing the total facilities repair, replacement, and renovation needs by the CRV. This produced a current district-wide total FCI of 20%.

The 2013 MRR Plan (Attachment B) addresses a plan to reduce the FCI to 15 % in 5 years, and to 6% over the next 11 years. With the passage of Proposition Z, funding is expected to stabilize. In the latter years, it is expected that Proposition S will also be a significant contributor to the reduction of the facilities repair, replacement, and renovation needs, thus positively affecting the FCI. As the two bond programs mature, their contribution to the reduction will begin to diminish.

To meet the facility need outlined in the 2013 MRR Plan, the district's current non-bond funded Repair Replacement (RR) commitment will need to be increased incrementally over the next 18 years. While bond funds will close the financial gap temporarily by using long term-debt, absent a plan to establish an annual recurring funding source for maintenance, repair and replacement (RR), and MRR needs the FCI will begin to increase as the bond programs sunset.

### 2013 MRR Plan FCI Projections



### 1.3 - Conclusion

Our current analysis suggests that the district will achieve a FCI of 6% over the next 11 years. However, absent a commitment from the district to establish a recurring funding source that will augment the bond programs and continue to provide adequate maintenance of district facilities as the bond programs wind down, the FCI will escalate over time. The 2013 MRR plan addresses the escalation issue by incorporating a proposed district non-bond funded commitment which would stabilize the FCI at the district’s target range of 5%-7% through 2032.

### 1.4 - Recommendations

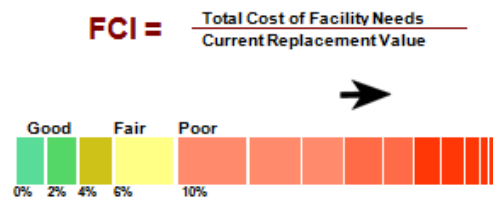
1. The Board of Education approve the revised 2013 Major Repair and Replacement Plan.
2. The Board of Education approve a process to identify and allocate adequate funding for the annual recurring maintenance, repair and replacement and major repair and replacement needs.



## Section 2 – FACILITY CONDITION ASSESSMENTS

### 2.1 FCA/FCI Methodology

A FCA and the identified needs resulting from the assessment, is based upon findings related to structures and/or equipment and specifically, their state of either disrepair; or in some cases, non-use because they have reached the end of their useful life. Failure to repair and/or replace these conditions could cause progressive, facility deterioration and/or significantly reduce the performance. To achieve a viable understanding of district assets, a comprehensive FCA of all building systems and components is performed at each site. Once the FCA is quantified in dollars, a numeric rating system is applied that translates the assessments into a rational measure of the facility needs, thereby providing a means to gauge the condition of the facility. This is known as a Facility Condition Index (FCI). A FCI is a national standard that uses the ratio, as a percentage of the total cost of facility repair needs, divided by the Current Replacement Value (CRV). The CRV is derived by multiplying the total building square footage with the current dollar per square foot cost for new construction. According to the Association for Physical Plant Administrators (APPA), an FCI of 5% is good; between 6% and 10% is fair; and greater than 10% is poor.



### 2.2 FCA Report Findings

Since 2008, DMJM Harris/AECOM has been contracted by the district to deploy teams of architects and engineers to provide on-site FCAs. Their work has been documented and quantified based on industry standard ASTM Uniformat II guidelines. The condition and life cycle of major systems and components were assessed, documented and prioritized as follows:

- Priority S - Items that were addressed in the Proposition S & Z bond language
- Priority 1 - Items that should be addressed in year 1
- Priority 2 - Items that should be addressed in year 2
- Priority 3 - Items that should be addressed in 3-5 years
- Priority 4 - Items that should be addressed in years 6-10
- Priority 5 - Items that should be address after 10 years

Since 2008, 74 FCAs have been completed. The CRV was also revised to reflect the current construction value. Utilizing this information, the total facilities repair, replacement, and renovation need has been estimated at \$1,098,988,586 and the current FCI calculated at 20.1%.

## **Section 3 – CURRENT AND ANTICIPATED LONG-TERM FUNDING**

### **3.1 – 2013 Major Repair Replacement Plan**

The 2013 Major Repair Replacement plan (Attachment B) incorporates the 2012 actuals, the current 2-Year Capital Improvement Plan, funding strategies for Proposition S, Proposition Z and the district commitment to reducing the FCI. The strategies considered Proposition Z funding playing a more significant role initially; and, Proposition S funds contributing significantly in the later years, thus positively affecting the FCI. As the bond programs mature, their contribution to the reduction of the facilities repair, replacement, and renovation needs will begin to diminish as the effects of inflation and continued deterioration of the facilities will have a more significant effect on the FCI. However, absent a plan to establish an annual recurring funding source for maintenance, RR and MRR needs the FCI will begin to increase as the bond programs sunset. The 2013 plan incorporates the proposed district's commitment to the annual recurring funding.

### **3.2 – 2014 Major Repair Replacement Implementation Plan**

The 2014 Major Repair Replacement Implementation Plan reflects planned expenditures of \$86,156,016. The plan incorporates Physical Plant Operations (PPO) Annual Plan which reflects 932 projects at 193 district sites for an estimated amount of \$32 million in repair and replacement and major repair replacement work. Facility Planning and Construction (FPC) will be administering the remainder of the Major Repair and Replacement allocation, through Whole Site Modernizations (WSM) and MRR work that is specifically identified under other bond program categories.

## **Section 4 – STATUS & ADEQUACY OF RECURRING FUNDING**

### **4.1 – Adequacy Findings**

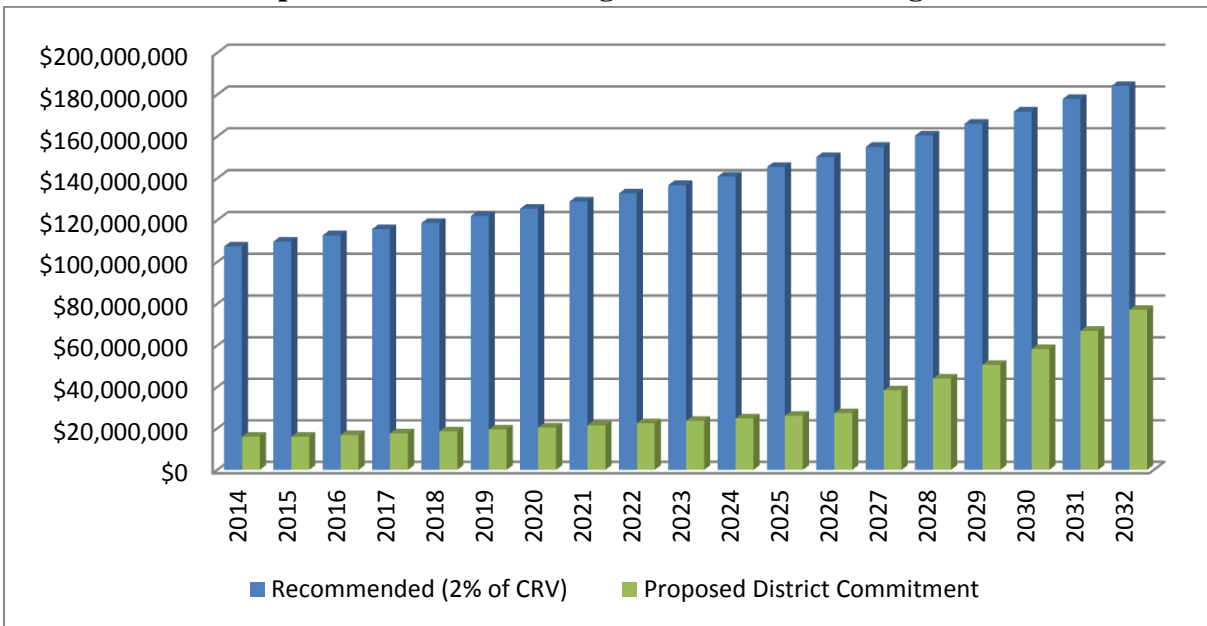
The Association of Physical Plant Administrators (APPA) recommends between 2% to 4% of the district's aggregate CRV be allocated annually for recurring funding for maintenance, RR and MRR. They further state that when a backlog of deferred maintenance has been allowed to accumulate, spending shall exceed this minimum level until the backlog has been eliminated.

The 2% to 4% range is due to varied factors including climate, age of facilities, and type of construction. Based on these factors, and the mild climate in San Diego, it is recommended that the district apply the 2% deterioration rate.

The district’s CRV (attachment B) is \$5,369,577,694 and equates to \$107,391,554 at 2%. Currently the district is allocating approximately \$16,000,000 of non-bond funds, or 15% of the APPA recommended allocation. Proposition S and Z are currently supplementing the need; however, the district should begin a process to address the inadequacy of the annual recurring funding for Maintenance, RR and MRR so that acceptable funding set-asides will occur.

The proposed annual recurring maintenance funding plan, extended over the life of the two (2) current bond programs, reflect APPA’s recommended funding level of 2% of the district’s CRV, as well as the proposed district’s commitment to steadily increase the funding allocations.

**Proposed Annual Recurring Maintenance Funding Plan**



## Section 5 – STATUS OF DEBT MECHANISM TO FINANCE MRR

### 5.1 – Debt Mechanism Findings

The 2013 MRR plan reflects a total commitment of \$3 billion over 18 years to reduce the district-wide FCI to 6% through 2032. The proposed cumulative 18 year district non-bond funded contribution totals \$745 million or 24% of the total expenditures. The remaining 76% allocation will come from the issuance of Proposition S and Proposition Z general obligation bonds.