

# SAN DIEGO UNIFIED SCHOOL DISTRICT

Facilities Planning and Construction & Physical Plant Operations

## MAJOR REPAIR AND REPLACEMENT PLAN QUARTERLY UPDATE

November 5, 2015



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## **Section 1 EXECUTIVE SUMMARY**

This document and the attachment herein, constitutes the district's November, 2015 quarterly update to the Major Repair and Replacement (MRR) Plan. The plan is consistent with Board policies E-2570, G-3250, E-1500, E-2500, and E-2550.

This quarterly update provides an assessment of status and costs associated with the ongoing MRR program

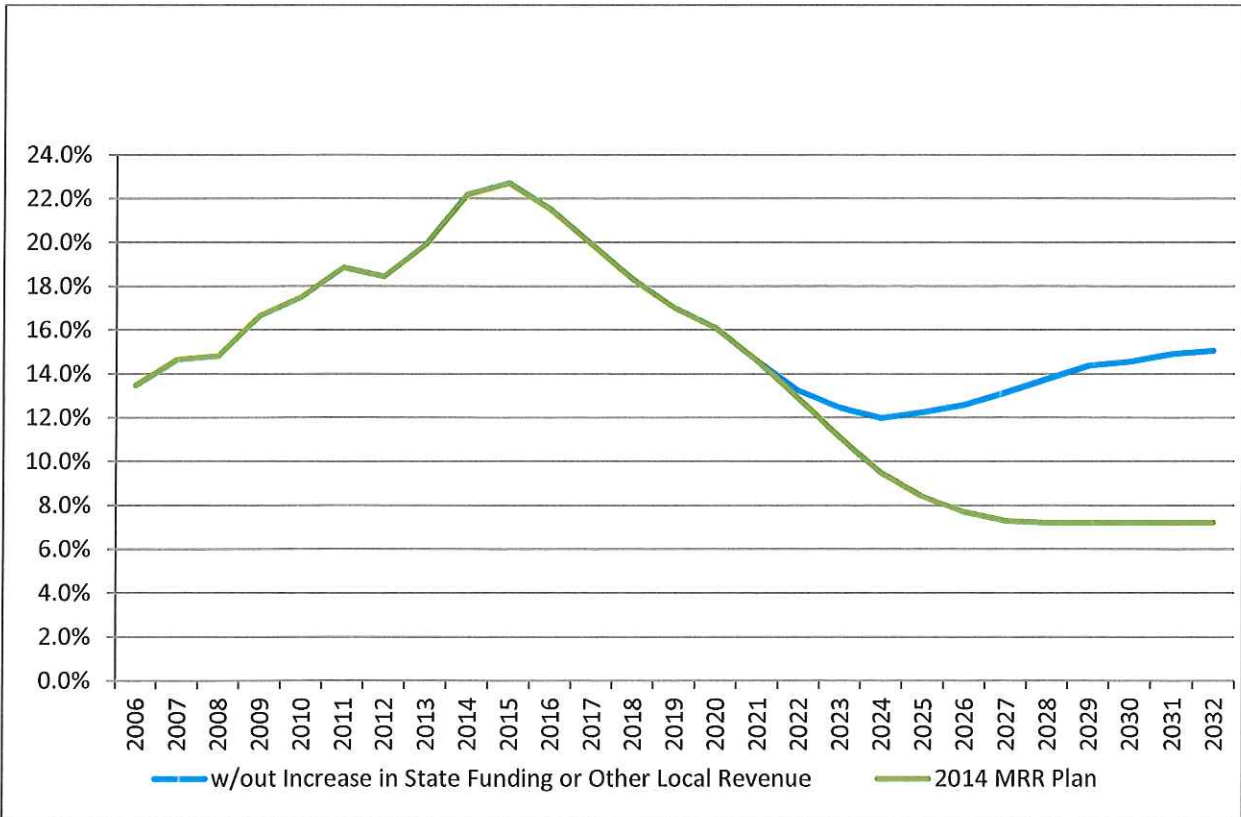
### **1.1 – Summary of Findings**

The MRR Plan utilized data gathered from comprehensive Facility Condition Assessments (FCA) completed at 89 school sites. The recent assessments have had minimal impact on the overall estimated need, as the plan took into consideration facility deterioration over time, escalation of needed repair costs (inflation) and annual changes to the district's total building square footage. Therefore the current district's facilities repair, replacement, and renovation need is \$1.25 billion (Attachment B). This is an increase from the 2014 plan reported figure of \$1.2 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 currently \$5.5 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 22.7%.

The MRR Plan (Attachment B) addresses a plan to reduce the FCI to 15% in 6 years, and to 7% over the next 13 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. The plan reflects actualized fiscal year 2014/2015 expenditures.

To meet the facility need outlined in the 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.

## 2015 MRR Plan FCI Projections



### 1.3 - Conclusion

Our current analysis suggest that the district will achieve a FCI of 7% over the next 13 years. Bond program funded MRR expenditures are scheduled to decline starting 2024. Consequently, FCI begins to escalate and continue trending upwards over time. The MRR plan addresses this issue by incorporating a proposed future increase in state funding or other local revenue to stabilize the FCI at 7% through 2032.

### 1.4 - Recommendations

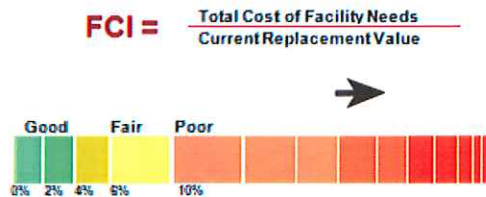
Approve the revised Major Repair and Replacement Plan, which includes adequate resources to address the annual recurring maintenance, repair and replacement and major repair and replacement needs.



## 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, 89 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 \$1,243,556,156 and the current FCI calculated at 22.7%.

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

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

The 2014 Major Repair Replacement plan (Attachment B) incorporates actuals, the current 2-Year Capital Improvement Plan, and funding strategies for Proposition S, Proposition Z, a potential future increase in state funding or other local revenue, 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 plan incorporates the proposed district's commitment to the annual recurring funding.

### **3.2 – 2015 Major Repair Replacement Implementation Plan**

The 2015 Major Repair Replacement Implementation Plan reflected planned expenditures of \$123,444,503. The end of fiscal year expenditures total \$77,187,860. The plan incorporates Physical Plant Operations (PPO) Annual Plan which reflects an estimated amount of \$32 million in repair and replacement and major repair replacement work. Facility Planning and Construction (FPC) continues to administer 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.

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## **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.

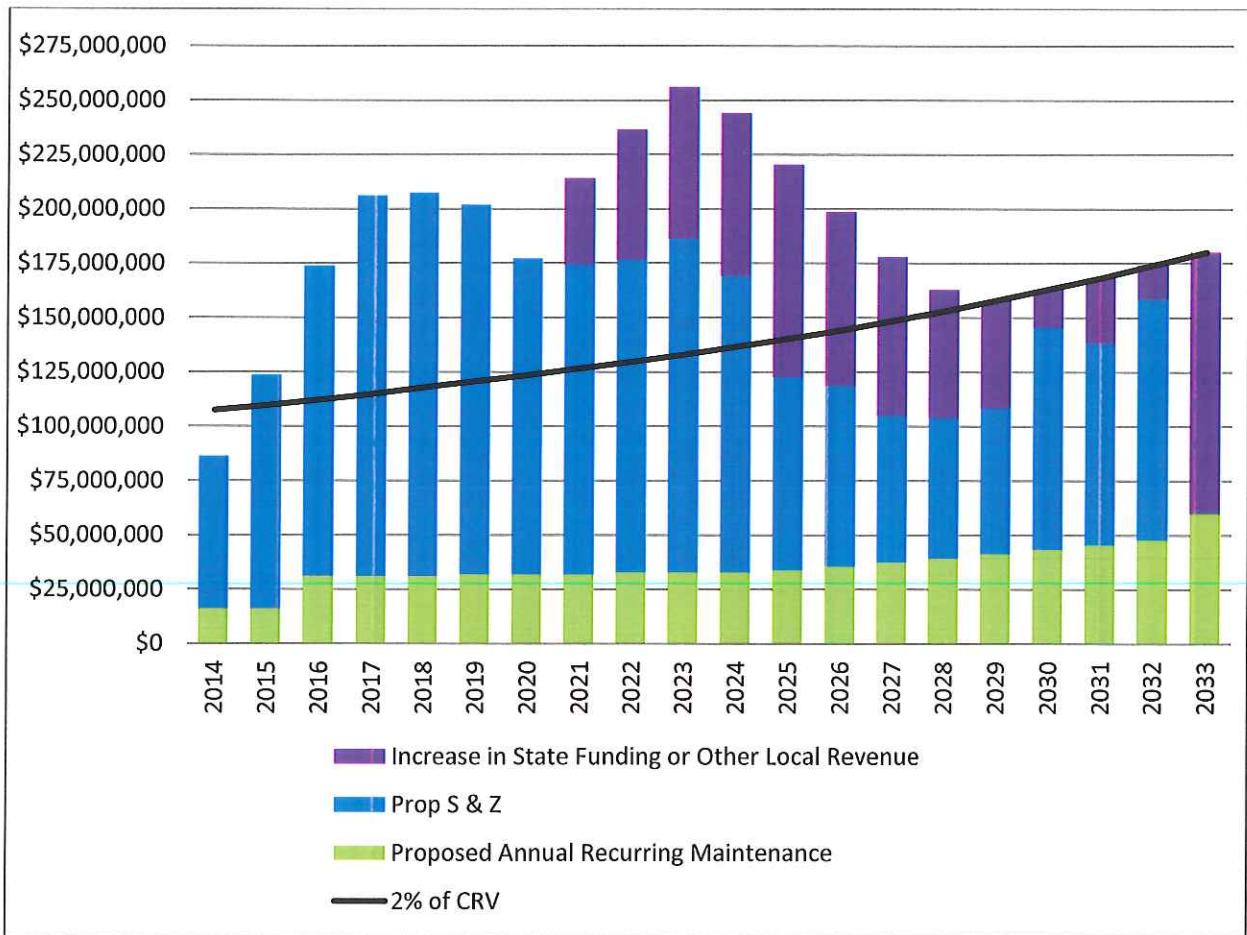
The 2% to 4% range is due to varied factors including climate, age of facilities, and type of construction. Based on these factors, and the mild climate in San Diego, it is recommended that the district apply the 2% deterioration rate.



The district's CRV (attachment A) is \$5.5 billion and equates to \$110 million at 2%. Currently the district is allocating approximately \$16 million 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 proposition S & Z funding, the proposed district's commitment to steadily increase the funding allocations and a potential future increase in state funding or other local revenue.

### Proposed Annual Recurring Maintenance Funding Plan

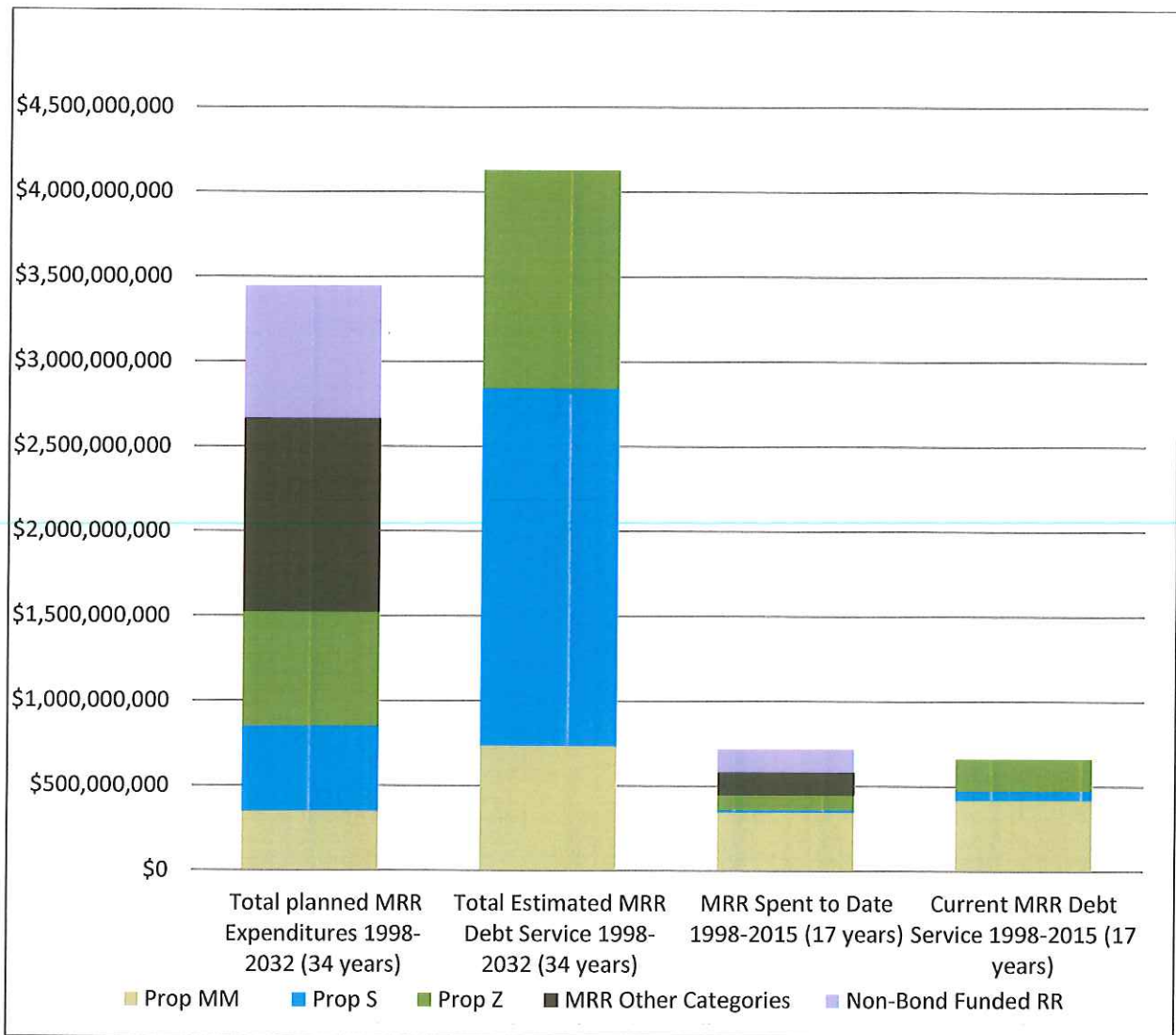


## Section 5 – STATUS OF DEBT MECHANISM TO FINANCE MRR

### 5.1 – Debt Mechanism Findings

MRR expenditures and financing mechanisms were analyzed over the entire duration of Proposition MM, S & Z. The total planned and actual MRR expenditures include school modernization and facility improvements that contribute to reducing the Facility Condition Index (FCI), and Non-Bond Funded Repair and Replacement (RR) work. The total planned MRR expenditures are \$3.5 billion. The estimated total debt service is \$4 billion. \$720 million has been spent to date on MRR, and the associated current MRR debt service is only \$665 million.

**Status of MRR Debt Service**





Attachment A

Plant Growth & Current Replacement Value

Year	End of Fiscal Year	SDUSD Total SF	Sq. Ft. Added	Sq. Ft. Reduced	Total Sq. Ft.	Full Repl Cost \$/SF	Replacement Value	APPA Recommended 2 to 4 %
1	2006	14,900,000	0	0	14,900,000	324.38	\$4,833,264,463	\$96,666,289
2	2007	14,900,000	0	0	14,900,000	314.00	\$4,678,600,000	\$93,572,000
3	2008	14,900,000	0	0	14,900,000	325.93	\$4,856,386,800	\$97,127,736
4	2009	14,900,000	0	(59,520)	14,840,480	326.26	\$4,861,243,187	\$97,224,864
5	2010	14,840,480	34,056	(40,320)	14,834,216	331.80	\$4,924,135,328	\$98,482,707
6	2011	14,834,216	19,632	(21,120)	14,832,728	337.78	\$5,010,653,930	\$100,213,079
7	2012	14,832,728	0	(12,480)	14,820,248	346.90	\$5,145,425,404	\$102,908,508
8	2013	14,820,248	137,517	(83,135)	14,874,630	353.83	\$5,243,918,055	\$104,878,361
9	2014	14,874,630	20,600	0	14,895,230	360.91	\$5,368,423,500	\$107,368,470
10	2015	14,895,230	40,350	0	14,935,580	368.13	\$5,483,375,440	\$109,667,509
11	2016	14,935,580	51,900	(38,400)	14,949,080	375.49	\$5,608,194,060	\$112,163,881
12	2017	14,949,080	131,496	(65,280)	15,015,296	383.94	\$5,739,561,627	\$114,791,233
13	2018	15,015,296	23,192	(15,360)	15,023,128	392.58	\$5,894,696,805	\$117,893,936
14	2019	15,023,128	33,958	(23,040)	15,034,046	401.41	\$6,030,471,346	\$120,609,427
15	2020	15,034,046	0	0	15,034,046	410.44	\$6,170,638,181	\$123,412,764
16	2021	15,034,046	0	0	15,034,046	420.71	\$6,324,904,136	\$126,498,083
17	2022	15,034,046	0	0	15,034,046	431.22	\$6,483,026,739	\$129,660,535
18	2023	15,034,046	0	0	15,034,046	442.00	\$6,645,102,408	\$132,902,048
19	2024	15,034,046	0	0	15,034,046	454.16	\$6,827,842,724	\$136,556,854
20	2025	15,034,046	0	0	15,034,046	466.65	\$7,015,608,399	\$140,312,168
21	2026	15,034,046	0	0	15,034,046	479.48	\$7,208,537,630	\$144,170,753
22	2027	15,034,046	0	0	15,034,046	493.87	\$7,424,793,759	\$148,495,875
23	2028	15,034,046	0	0	15,034,046	508.68	\$7,647,537,572	\$152,950,751
24	2029	15,034,046	0	0	15,034,046	525.21	\$7,896,082,543	\$157,921,651
25	2030	15,034,046	0	0	15,034,046	542.28	\$8,152,705,225	\$163,054,105
26	2031	15,034,046	0	0	15,034,046	559.91	\$8,417,668,145	\$168,353,363
27	2032	15,034,046	0	0	15,034,046	579.50	\$8,712,286,530	\$174,245,731
28	2033	15,034,046	492,701	(358,655)	15,034,046	599.79	\$9,017,216,559	\$180,000,000

Attachment B

Major Repair Replacement Plan

Year	End of Fiscal Year	Major Repair & Replacement Backlog Total (Hard Construction, Soft & PMO Cost)	Yearly Deterioration	Yearly Inflation on Backlog	Prop S Major Repair & Replacement Expenditure Plan	Prop S Other Categories of Work that Contributes to Reducing the FCI	Prop Z Major Repair & Replacement Expenditure Plan	Prop Z Other Categories of Work that Contributes to Reducing the FCI	Potential Future Increase in State Funding or Other Local Revenue	PPO Non-Bond Funded RR	Adjusted Backlog	FCI (at end of year)
1	2006	\$96,665,289	\$20,830,992	\$20,830,992	-	-	-	-	-	-	\$768,464,781	13.6%
2	2007	\$93,572,000	\$18,227,118	\$18,227,118	-	-	-	-	-	-	\$797,029,118	14.6%
3	2008	\$97,127,736	\$26,038,740	\$26,038,740	-	-	-	-	-	(33,400,000)	\$809,257,976	14.8%
4	2009	\$97,224,864	\$719,492	\$719,492	-	(4,428,323)	-	-	-	(41,400,000)	\$861,374,008	16.6%
5	2010	\$98,482,707	\$13,757,386	\$13,757,386	-	(13,552,841)	-	-	-	(15,600,000)	\$944,461,259	17.5%
6	2011	\$100,213,079	\$15,504,732	\$15,504,732	(29,118)	(11,168,563)	-	-	-	(16,500,000)	\$1,032,481,369	18.8%
7	2012	\$102,908,508	\$25,500,454	\$25,500,454	(508,356)	(17,020,020)	-	-	-	(16,000,000)	\$1,043,237,904	18.4%
8	2013	\$104,878,361	\$18,967,166	\$18,967,166	(3,634,561)	(24,348,482)	-	-	-	(16,000,000)	\$1,123,100,388	19.9%
9	2014	\$107,388,470	\$20,864,758	\$20,864,758	(1,976,472)	(9,452,397)	(13,111,125)	(20,179,123)	-	(16,000,000)	\$1,190,614,499	22.2%
10	2015	\$109,687,509	\$22,462,008	\$22,462,008	(6,650,020)	(4,506,010)	(36,263,449)	(29,658,381)	-	(2,000,000)	\$1,243,556,156	22.7%
11	2016	\$112,163,881	\$23,812,290	\$23,812,290	(12,500,182)	(15,545,833)	(59,760,655)	(54,816,172)	-	(31,100,000)	\$1,205,809,485	21.5%
12	2017	\$114,791,233	\$27,980,014	\$27,980,014	(12,500,089)	(15,545,747)	(76,586,323)	(70,249,716)	-	(31,100,000)	\$1,142,598,857	19.9%
13	2018	\$117,893,936	\$27,130,713	\$27,130,713	(12,500,398)	(15,546,032)	(77,263,458)	(70,870,827)	-	(31,100,000)	\$1,080,342,791	18.3%
14	2019	\$120,609,427	\$25,708,474	\$25,708,474	(12,500,421)	(15,546,054)	(73,974,192)	(67,853,708)	-	(32,000,000)	\$1,024,786,317	17.0%
15	2020	\$123,412,764	\$24,307,713	\$24,307,713	(12,500,023)	(15,545,686)	(61,104,034)	(56,048,403)	-	(32,000,000)	\$995,308,647	16.1%
16	2021	\$126,498,083	\$126,498,083	\$126,498,083	(17,500,077)	(16,164,002)	(56,563,526)	(51,883,568)	(40,000,000)	(32,000,000)	\$925,718,931	14.6%
17	2022	\$129,660,535	\$129,660,535	\$129,660,535	(17,500,209)	(16,164,124)	(57,264,079)	(52,526,158)	(60,000,000)	(33,000,000)	\$835,678,218	12.9%
18	2023	\$132,902,048	\$23,142,973	\$23,142,973	(21,000,221)	(24,396,921)	(56,172,023)	(51,524,457)	(70,000,000)	(33,000,000)	\$735,629,617	11.1%
19	2024	\$136,556,854	\$22,981,151	\$22,981,151	(27,200,719)	(30,505,765)	(40,326,324)	(37,540,158)	(75,000,000)	(33,000,000)	\$650,994,658	9.5%
20	2025	\$140,312,168	\$20,229,814	\$20,229,814	(32,750,278)	(29,631,633)	(13,633,387)	(12,505,386)	(96,000,000)	(34,000,000)	\$591,015,957	8.4%
21	2026	\$144,170,753	\$17,902,353	\$17,902,353	(32,750,663)	(29,632,007)	(10,723,415)	(9,836,181)	(80,000,000)	(35,700,000)	\$554,446,777	7.7%
22	2027	\$148,495,875	\$17,730,479	\$17,730,479	(32,750,179)	(26,631,542)	(4,212,735)	(3,864,181)	(73,000,000)	(37,485,000)	\$542,729,494	7.3%
23	2028	\$152,950,751	\$16,633,403	\$16,633,403	(34,600,262)	(27,501,905)	(1,216,874)	(1,116,193)	(59,000,000)	(39,359,250)	\$549,519,165	7.2%
24	2029	\$157,921,651	\$17,638,709	\$17,638,709	(39,600,207)	(27,340,326)	-	-	(49,653,905)	(41,327,213)	\$567,157,874	7.2%
25	2030	\$163,054,105	\$17,859,373	\$17,859,373	(57,825,346)	(44,174,034)	-	-	(17,661,151)	(43,393,673)	\$585,017,248	7.2%
26	2031	\$168,353,363	\$18,432,631	\$18,432,631	(48,100,064)	(44,427,778)	-	-	(30,262,268)	(45,563,252)	\$603,449,879	7.2%
27	2032	\$174,245,731	\$20,475,604	\$20,475,604	(62,747,544)	(47,845,772)	-	-	(15,811,000)	(47,841,414)	\$623,925,483	7.2%
					(499,636,430)	(526,721,818)	(638,775,599)	(590,472,811)	(668,386,324)	(769,869,702)		