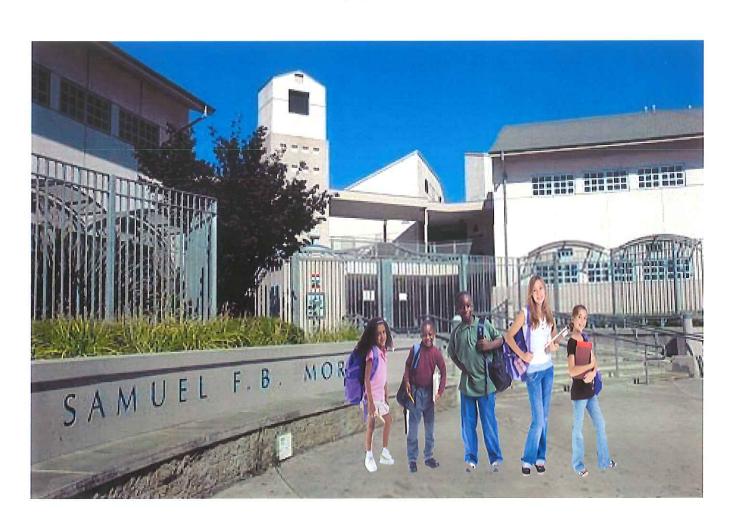


# SAN DIEGO UNIFIED SCHOOL DISTRICT

Facilities Planning and Construction & Physical Plant Operations

# 2014 ANNUAL UPDATE TO THE MAJOR REPAIR AND REPLACEMENT PLAN

May 22, 2014





# **Table of Contents**

| Item      | Topic   | Page |
|-----------|---|------|
| Section 1 | Executive Summary                                 | 3    |
| 1.1       | Summary of Findings                               | 3    |
| 1.2       | Conclusion  | 4    |
| 1.3       | Recommendations                                   | 4    |
| Section 2 | Facility Condition Assessments                    | 5    |
| 2.1       | FCA/FCI Methodology                               | 5    |
| 2.2       | FCA Report Findings                               | 5    |
| Section 3 | Current and Anticipated Long-Term Funding         | 6    |
| 3.1       | 2014 Major Repair Replacement Plan                | 6    |
| 3.2       | 2014 Major Repair Replacement Implementation Plan | 6    |
| Section 4 | Status & Adequacy of Annual Recurring Funding     | 6    |
| 4.1       | Adequacy Findings                                 | 6    |
| Section 5 | Status of Debt Mechanism to Finance MRR           | 8    |
| 5.1       | Debt Mechanism Findings                           | 8    |

# Section 1 EXECUTIVE SUMMARY

This document and the attachment herein, constitute the district's 2014 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.

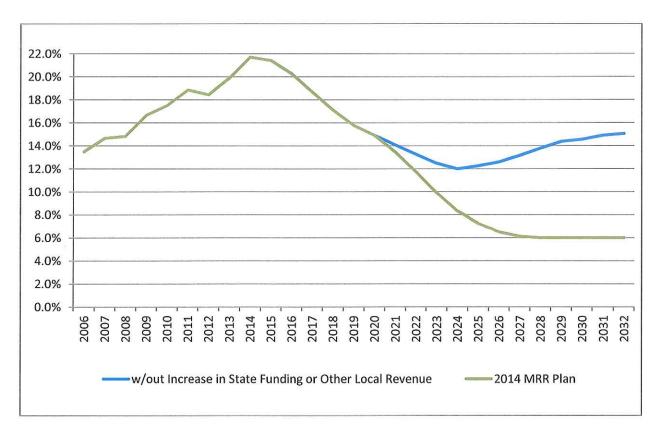
# 1.1 - Summary of Findings

The district's 2014 MRR Plan utilizes data gathered from comprehensive Facility Condition Assessments (FCA) completed at 77 school sites from 2008-2014. 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 21%.

The 2014 MRR Plan (Attachment B) addresses a plan to reduce the FCI to 15% in 6 years, and to 6% 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.

To meet the facility need outlined in the 2014 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.

2014 MRR Plan FCI Projections



#### 1.3 - Conclusion

Our current analysis suggests that the district will achieve a FCI of 6% 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 2014 MRR plan addresses this issue by incorporating a proposed future increase in state funding or other local revenue to stabilize the FCI at 6% through 2032.

#### 1.4 - Recommendations

Approve the revised 2014 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 Administers (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 \$1,165,177,600 and the current FCI calculated at 21.7%.

# Section 3 – CURRENT AND ANTICIPATED LONG-TERM FUNDING

# 3.1 – 2014 Major Repair Replacement Plan

The 2014 Major Repair Replacement plan (Attachment B) incorporates the 2012 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 2014 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 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.

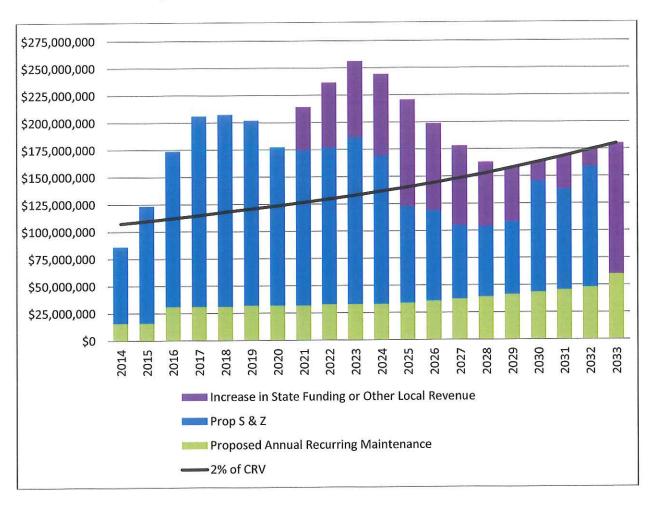
The 2% to 4% range is due to varied factors including climate, age of facilities, and type of construction. Based on these factors, and the mild climate in San Diego, it is recommended that the district apply the 2% deterioration rate.

The district's CRV (attachment A) is \$5 billion and equates to \$107 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** 

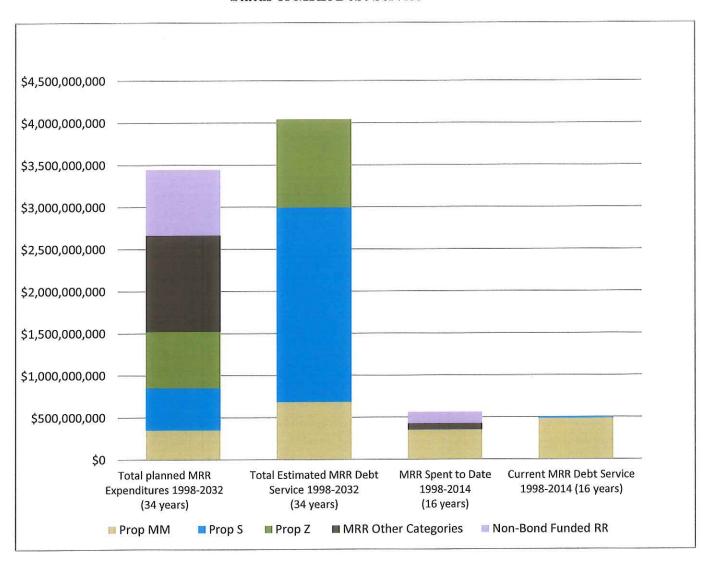


# Section 5 – STATUS OF DEBT MECHANISM TO FINANCE MRR

# 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. \$564 million has been spent to date on MRR, and the associated current MRR debt service is only \$504 million.

# Status of MRR Debt Service



Attachment A

Plant Growth & Current Replacement Value

| APP,                    | \$96,665,289    | \$93,572,000    | \$97,127,736    | \$97,224,864    | \$98,482,707    | \$100,213,079   | \$102,908,508   | \$104,878,361   | \$107,368,470   | \$109,667,509   | \$112,163,881   | \$114,791,233   | \$117,893,936   | \$120,609,427   | \$123,412,764   | \$126,498,083   | \$129,660,535   | \$132,902,048   | \$136,556,854   | \$140,312,168   | \$144,170,753   | \$148,495,875   | \$152,950,751   | \$157,921,651   | \$163,054,105   | \$168,353,363   | \$174,245,731   | \$180,000,000   |           |
|-------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------|
| Replacement Value       | \$4,833,264,463 | \$4,678,600,000 | \$4,856,386,800 | \$4,861,243,187 | \$4,924,135,328 | \$5,010,653,930 | \$5,145,425,404 | \$5,243,918,055 | \$5,368,423,500 | \$5,483,375,440 | \$5,608,194,060 | \$5,739,561,627 | \$5,894,696,805 | \$6,030,471,346 | \$6,170,638,181 | \$6,324,904,136 | \$6,483,026,739 | \$6,645,102,408 | \$6,827,842,724 | \$7,015,608,399 | \$7,208,537,630 | \$7,424,793,759 | \$7,647,537,572 | \$7,896,082,543 | \$8,152,705,225 | \$8,417,668,145 | \$8,712,286,530 | \$9,017,216,559 |           |
| Full Repl Cost<br>\$/SF | 324.38          | 314.00          | 325.93          | 326.26          | 331.80          | 337.78          | 346.90          | 353.83          | 360.91          | 368.13          | 375.49          | 383.94          | 392.58          | 401.41          | 410.44          | 420.71          | 431.22          | 442.00          | 454.16          | 466.65          | 479.48          | 493.87          | 508.68          | 525.21          | 542.28          | 559.91          | 579.50          | 599.79          |           |
| Total Sq. Ft.           | 14,900,000      | 14,900,000      | 14,900,000      | 14,840,480      | 14,834,216      | 14,832,728      | 14,820,248      | 14,874,630      | 14,895,230      | 14,935,580      | 14,949,080      | 15,015,296      | 15,023,128      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      |           |
| Sq. Ft. Reduced         | 0               | 0               | 0               | (59,520)        | (40,320)        | (21,120)        | (12,480)        | (83,135)        | 0               | 0               | (38,400)        | (65,280)        | (15,360)        | (23,040)        | 0               | 0               | 0               |                 | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | (358 655) |
| Sq. Ft. Added           | 0               | 0               | 0               | 0               | 34,056          | 19,632          | 0               | 137,517         | 20,600          | 40,350          | 51,900          | 131,496         | 23,192          | 33,958          | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 492 701   |
| SDUSD<br>Total SF       | 14,900,000      | 14,900,000      | 14,900,000      | 14,900,000      | 14,840,480      | 14,834,216      | 14,832,728      | 14,820,248      | 14,874,630      | 14,895,230      | 14,935,580      | 14,949,080      | 15,015,296      | 15,023,128      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      | 15,034,046      |           |
| End of Fiscal Year      | 2006            | 2007            | 2008            | 2009            | 2010            | 2011            | 2012            | 2013            | 2014            | 2015            | 2016            | 2017            | 2018            | 2019            | 2020            | 2021            | 2022            | 2023            | 2024            | 2025            | 2026            | 2027            | 2028            | 2029            | 2030            | 2031            | 2032            | 2033            |           |
| Year                    | -               | 2               | က               | 4               | 2               | ဖ               | _               | œ               | თ               | 10              | 7               | 12              | 13              | 4               | 15              | 16              | 17              | 18              | 9               | 20              | 21              | 22              | 23              | 24              | 25              | 26              | 27              | 28              |           |

Attachment B

# 2014 Major Repair Replacement Plan

| FCI<br>(at end<br>of year)  | 13.5%         | 14.6%         | 14.8%         | 16.6%         | 17.5%         | 18.8%           | 18.4%           | 19.9%           | 21.7%           | 21.4%           | 20.2%           | 18.7%           | 17.1%           | 15.8%           | 14.9%         | 13.4%         | 11.7%         | %6.6          | 8.4%          | 7.2%          | 6.5%          | 6.1%          | %0.9          | %0.9          | 6.0%          | 6.0%          | 8.0%          |
|---|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Adjusted<br>Backlog   | \$768,464,781 | \$797,029,118 | \$809,257,976 | \$861,374,008 | 8944,461,259  | \$1,032,481,369 | \$1,043,237,904 | \$1,123,100,388 | \$1,165,177,600 | \$1,173,862,614 | \$1,135,607,205 | \$1,070,828,472 | \$1,006,992,855 | \$949,821,548   | \$918,693,504 | \$849,103,787 | \$759,063,075 | \$60,099,095  | \$570,357,220 | \$508,218,930 | \$469,432,220 | \$455,231,026 | \$459,470,261 | \$474,265,269 | \$489,198,053 | \$504,611,675 | \$521,733,607 |
| PPO Non-Bond<br>Funded RR   |               |               | (33,400,000)  | (41,400,000)  | (15,600,000)  | (16,500,000)    | (16,000,000)    | (16,000,000)    | (16,000,000)    | (16,000,000)    | (31,100,000)    | (31,100,000)    | (31,100,000)    | (32,000,000)    | (32,000,000)  | (32,000,000)  | (33,000,000)  | (33,000,000)  | (33,000,000)  | (34,000,000)  | (35,700,000)  | (37,485,000)  | (39,359,250)  | (41,327,213)  | (43,393,573)  | (45,563,252)  | (47,841,414)  |
| Potential Future<br>Increase in State<br>Funding or Other<br>Local Revenue    |               |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 |                 |               | (40,000,000)  | (60,000,000)  | (70,000,000)  | (75,000,000)  | (98,000,000)  | (80,000,000)  | (73,000,000)  | (69,000,000)  | (49,653,905)  | (17,661,151)  | (30,262,268)  | (15,811,000)  |
| Prop Z Other<br>Categories of Work<br>that Contributes to<br>Reducing the FCI | 200           | (1.1)         |               | ı             |               |                 | (0)             |                 | (31,263,424)    | (44,501,469)    | (54,816,172)    | (70,249,716)    | (70,870,827)    | (67,853,708)    | (56,048,403)  | (51,883,568)  | (52,526,158)  | (51,524,457)  | (37,540,158)  | (12,505,386)  | (9,836,181)   | (3,864,181)   | (1,116,193)   | 31.           | 6.90          | •             |               |
| Prop Z Major<br>Repair &<br>Replacement<br>Expenditure Plan                   | ir (          | 33            |               | r.            |               | ā               | 6401            | 2903            | (34,083,421)    | (48,515,554)    | (59,760,655)    | (76,586,323)    | (77,263,458)    | (73,974,192)    | (61,104,034)  | (56,563,526)  | (57,264,079)  | (56,172,023)  | (40,926,324)  | (13,633,387)  | (10,723,415)  | (4,212,735)   | (1,216,874)   | (4)           | 3003          | 2.7           |               |
| Prop S Other<br>Categories of Work<br>that Contributes to<br>Reducing the FCI | 14            | X.0           | r             | (4,428,323)   | (13,552,841)  | (11,168,583)    | (17,020,020)    | (24,348,482)    | (2,309,151)     | (6,927,438)     | (15,545,833)    | (15,545,747)    | (15,546,032)    | (15,546,054)    | (15,545,686)  | (16,164,002)  | (16,164,124)  | (24,396,921)  | (30,505,765)  | (29,631,633)  | (29,632,007)  | (26,631,542)  | (27,501,905)  | (27,340,326)  | (44,174,034)  | (44,427,778)  | (47,845,772)  |
| Prop S Major Repair<br>& Replacement<br>Expenditure Plan                      | (ta           | (a)           | 30%           | II.           |               | (29,118)        | (509,358)       | (3,634,561)     | (2,500,020)     | (7,500,042)     | (12,500,182)    | (12,500,089)    | (12,500,398)    | (12,500,421)    | (12,500,023)  | (17,500,077)  | (17,500,209)  | (21,000,221)  | (27,200,719)  | (32,750,278)  | (32,750,683)  | (32,750,179)  | (34,600,262)  | (39,600,207)  | (57,825,346)  | (48,100,064)  | (62,747,544)  |
| Yearly Inflation on<br>Backlog  | \$20,830,992  | \$18,227,118  | \$26,038,740  | \$719,492     | \$13,757,386  | \$15,504,732    | \$25,500,454    | \$18,967,166    | \$20,864,758    | \$22,462,008    | \$23,303,552    | \$26,411,909    | \$25,551,162    | \$24,093,641    | \$22,657,339  | \$18,023,373  | \$16,753,324  | \$21,227,595  | \$20,874,235  | \$18,070,225  | \$15,684,824  | \$15,246,568  | \$14,082,967  | \$14,795,008  | \$14,932,783  | \$15,413,621  | \$17,121,932  |
| Yearly<br>Deterioration   | \$96,665,289  | \$93,572,000  | \$97,127,736  | \$97,224,864  | \$98,482,707  | \$100,213,079   | \$102,908,508   | \$104,878,361   | \$107,368,470   | \$109,667,509   | \$112,163,881   | \$114,791,233   | \$117,893,936   | \$120,609,427   | \$123,412,764 | \$126,498,083 | \$129,660,535 | \$132,902,048 | \$136,556,854 | \$140,312,168 | \$144,170,753 | \$148,495,875 | \$152,950,751 | \$157,921,651 | \$163,054,105 | \$168,353,363 | \$174,245,731 |
| Major Kepair & Replacement Backlog Total (Hard Construction, Soft & PMO Cost) | \$650,968,500 | \$685,230,000 | \$719,491,500 | \$809,257,976 | \$861,374,008 | \$944,461,259   | \$948,358,320   | \$1,043,237,904 | \$1,123,100,388 | \$1,165,177,600 | \$1,173,862,614 | \$1,135,607,205 | \$1,070,828,472 | \$1,006,992,855 | \$949,821,548 | \$918,693,504 | \$849,103,787 | \$759,063,075 | \$657,099,095 | \$570,357,220 | \$508,218,930 | \$469,432,220 | \$455,231,026 | \$459,470,261 | \$474,265,269 | \$489,198,053 | \$504,611,675 |
| End of Fiscal Year  | 2006          | 2007          | 2008          | 2009          | 2010          | 2011            | 2012            | 2013            | 2014            | 2015            | 2016            | 2017            | 2018            | 2019            | 2020          | 2021          | 2022          | 2023          | 2024          | 2025          | 2026          | 2027          | 2028          | 2029          | 2030          | 2031          | 2032          |
| Year  | -             | 2             | ო             | 4             | 2             | 9               | 7               | 8               | 6               | 10              | 7               | 12              | 13              | 14              | 15            | 16            | 17            | 18            | 19            | 20            | 21            | 22            | 23            | 24            | 25            | 56            | 27            |