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## **Financial Cost Benefit Analysis**

| Costs                       |               |              |              |              |              |              |              |              |              |              |
|-----------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Cost                        | 2011          | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         |
| Cost 1                      | \$ 1,750,000  | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |
| Cost 2                      | \$ 2,521,881  | \$ 2,603,124 | \$ 2,678,900 | \$ 2,757,328 | \$ 2,838,501 | \$ 2,922,515 | \$ 3,009,469 | \$ 3,099,467 | \$ 3,192,615 | \$ 3,289,023 |
| Program Total Costs By Year | \$ 4,271,881  | \$ 2,603,124 | \$ 2,678,900 | \$ 2,757,328 | \$ 2,838,501 | \$ 2,922,515 | \$ 3,009,469 | \$ 3,099,467 | \$ 3,192,615 | \$ 3,289,023 |
| Program Grand Total Cost    | \$ 30,662,823 |              |              |              |              |              |              |              |              |              |

| Benefits                      |               |              |              |              |              |              |              |              |              |              |
|-------------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Benefit Sources               | 2011          | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         |
| Benefit 1                     | \$ 2,504,600  | \$ 2,930,396 | \$ 3,032,959 | \$ 3,139,113 | \$ 3,248,982 | \$ 3,362,696 | \$ 3,480,391 | \$ 3,602,204 | \$ 3,728,281 | \$ 3,858,771 |
| Benefit 2                     | \$ 1,806,006  | \$ 56,006    | \$ 60,055    | \$ 64,396    | \$ 69,051    | \$ 74,043    | \$ 79,396    | \$ 85,135    | \$ 91,290    | \$ 97,889    |
| Benefit 3                     | \$ 370,000    | \$ 382,950   | \$ 396,353   | \$ 410,226   | \$ 424,584   | \$ 439,444   | \$ 454,824   | \$ 470,743   | \$ 487,219   | \$ 504,272   |
| Benefit 4                     | \$ 306,000    | \$ 316,710   | \$ 327,795   | \$ 339,268   | \$ 351,142   | \$ 363,432   | \$ 376,152   | \$ 389,317   | \$ 402,944   | \$ 417,047   |
| Total Benefits Per Year       | \$ 4,986,606  | \$ 3,686,062 | \$ 3,817,162 | \$ 3,953,002 | \$ 4,093,759 | \$ 4,239,615 | \$ 4,390,763 | \$ 4,547,400 | \$ 4,709,734 | \$ 4,877,979 |
| Confidence Factor             | 100%          | 100%         | 100%         | 100%         | 100%         | 100%         | 100%         | 100%         | 100%         | 100%         |
| Benefits Claimed for Analysis | \$ 4,986,606  | \$ 3,686,062 | \$ 3,817,162 | \$ 3,953,002 | \$ 4,093,759 | \$ 4,239,615 | \$ 4,390,763 | \$ 4,547,400 | \$ 4,709,734 | \$ 4,877,979 |
| Program Grand Total Benefit   | \$ 43,302,083 |              |              |              |              |              |              |              |              |              |

| Results Calculation Page  |                |                |                |                |                |                |                |                |                |                |
|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                           | 2011           | 2012           | 2013           | 2014           | 2015           | 2016           | 2017           | 2018           | 2019           | 2020           |
| <b>Undiscounted Flows</b> |                |                |                |                |                |                |                |                |                |                |
| Costs                     | \$ (4,271,881) | \$ (2,603,124) | \$ (2,678,900) | \$ (2,757,328) | \$ (2,838,501) | \$ (2,922,515) | \$ (3,009,469) | \$ (3,099,467) | \$ (3,192,615) | \$ (3,289,023) |
| Benefits                  | \$ 4,986,606   | \$ 3,686,062   | \$ 3,817,162   | \$ 3,953,002   | \$ 4,093,759   | \$ 4,239,615   | \$ 4,390,763   | \$ 4,547,400   | \$ 4,709,734   | \$ 4,877,979   |
| Net Cash Flow             | \$ 714,725     | \$ 1,082,938   | \$ 1,138,263   | \$ 1,195,675   | \$ 1,255,258   | \$ 1,317,101   | \$ 1,381,294   | \$ 1,447,933   | \$ 1,517,119   | \$ 1,588,956   |
| <b>Discount Factors</b>   |                |                |                |                |                |                |                |                |                |                |
| Discount Rate             | 7.0%           |                |                |                |                |                |                |                |                |                |
| Base Year                 | 2010           |                |                |                |                |                |                |                |                |                |
| Year Index                | 1              | 2              | 3              | 4              | 5              | 6              | 7              | 8              | 9              | 10             |
| Discount Factor           | 0.9346         | 0.8734         | 0.8163         | 0.7629         | 0.7130         | 0.6663         | 0.6227         | 0.5820         | 0.5439         | 0.5083         |
| <b>Discounted Flows</b>   |                |                |                |                |                |                |                |                |                |                |
| Costs                     | \$ (3,992,412) | \$ (2,273,669) | \$ (2,186,780) | \$ (2,103,552) | \$ (2,023,812) | \$ (1,947,395) | \$ (1,874,146) | \$ (1,803,918) | \$ (1,736,571) | \$ (1,671,973) |
| Benefits                  | \$ 4,680,380   | \$ 3,219,549   | \$ 3,115,941   | \$ 3,015,727   | \$ 2,918,793   | \$ 2,825,035   | \$ 2,734,346   | \$ 2,646,628   | \$ 2,561,783   | \$ 2,479,717   |
| Net                       | \$ 687,967     | \$ 945,880     | \$ 929,161     | \$ 912,175     | \$ 894,982     | \$ 877,640     | \$ 860,200     | \$ 842,710     | \$ 825,212     | \$ 807,744     |
| Cumulative                | \$ 687,967     | \$ 1,613,847   | \$ 2,543,009   | \$ 3,455,183   | \$ 4,350,165   | \$ 5,227,805   | \$ 6,088,005   | \$ 6,930,715   | \$ 7,755,927   | \$ 8,563,671   |
| Net Present Value         | \$ 9,163,128   |                |                |                |                |                |                |                |                |                |

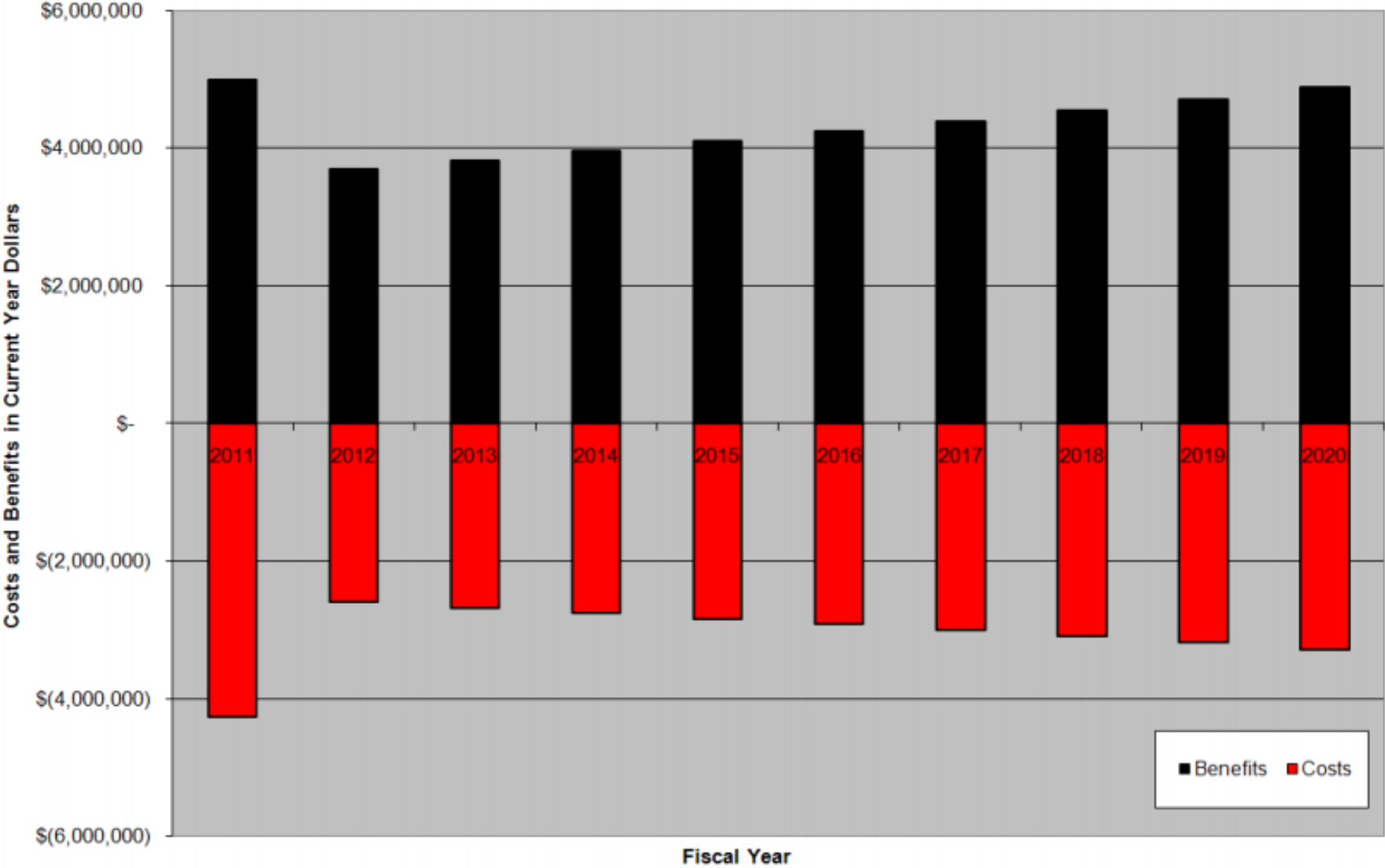
**Notes:**

Total Costs represent start-up costs + annual operating costs  
 Benefits represent total 10 year benefit  
 NPV of investment is equivalent of having this much cash on hand right now

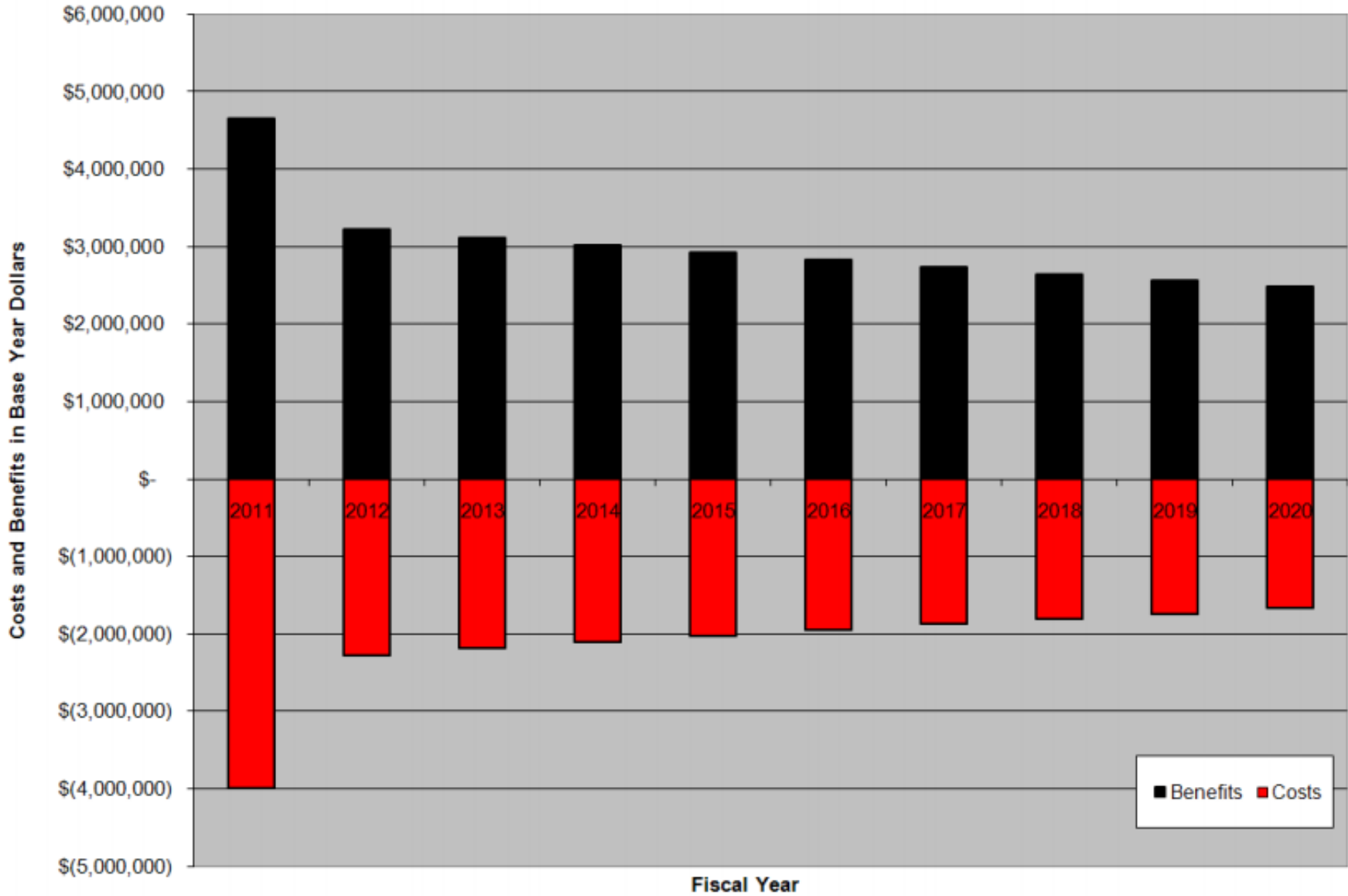
**Assumptions:**

Revenues and costs are assumed in accordance with the previously provided business plan  
 Product 1 Sales are not indexed; item quantities apportioned to each contract  
 Assumes 7% discount rate  
 Assumes first year facility efficiency at xx% and xx% efficiency for years 2-10  
 Assumes a full year of operation @ xx% efficiency in 2011

### Undiscounted Cash Flows



### Discounted Cash Flow



### Discounted Payback Schedule

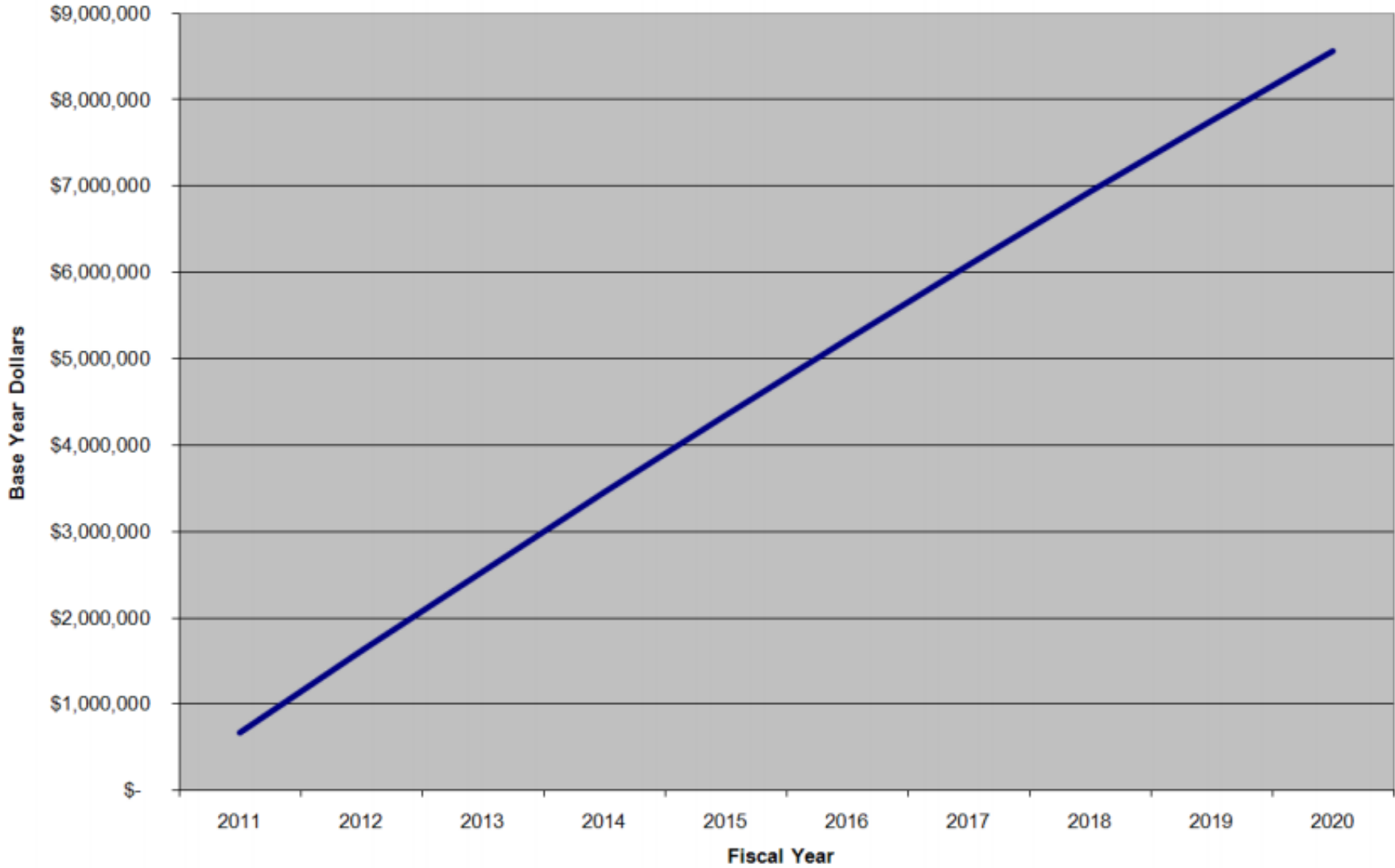


Table: Amortization (annually)

| Year # | principal    | interest     | remaining      | equity         |
|--------|--------------|--------------|----------------|----------------|
| 1      | \$52,230.40  | \$358,267.89 | \$5,089,519.60 | \$52,230.40    |
| 2      | \$56,006.14  | \$354,492.15 | \$5,033,513.46 | \$108,236.54   |
| 3      | \$60,054.83  | \$350,443.46 | \$4,973,458.63 | \$168,291.37   |
| 4      | \$64,396.20  | \$346,102.09 | \$4,909,062.43 | \$232,687.57   |
| 5      | \$69,051.41  | \$341,446.89 | \$4,840,011.02 | \$301,738.98   |
| 6      | \$74,043.14  | \$336,455.16 | \$4,765,967.88 | \$375,782.12   |
| 7      | \$79,395.72  | \$331,102.57 | \$4,686,572.16 | \$455,177.84   |
| 8      | \$85,135.24  | \$325,363.05 | \$4,601,436.92 | \$540,313.08   |
| 9      | \$91,289.68  | \$319,208.61 | \$4,510,147.24 | \$631,602.76   |
| 10     | \$97,889.02  | \$312,609.28 | \$4,412,258.22 | \$729,491.78   |
| 11     | \$104,965.42 | \$305,532.87 | \$4,307,292.80 | \$834,457.20   |
| 12     | \$112,553.38 | \$297,944.91 | \$4,194,739.42 | \$947,010.58   |
| 13     | \$120,689.87 | \$289,808.42 | \$4,074,049.55 | \$1,067,700.45 |
| 14     | \$129,414.55 | \$281,083.74 | \$3,944,635.00 | \$1,197,115.00 |
| 15     | \$138,769.94 | \$271,728.35 | \$3,805,865.05 | \$1,335,884.95 |
| 16     | \$148,801.63 | \$261,696.66 | \$3,657,063.42 | \$1,484,686.58 |
| 17     | \$159,558.51 | \$250,939.78 | \$3,497,504.91 | \$1,644,245.09 |
| 18     | \$171,093.01 | \$239,405.28 | \$3,326,411.89 | \$1,815,338.11 |
| 19     | \$183,461.34 | \$227,036.95 | \$3,142,950.55 | \$1,998,799.45 |
| 20     | \$196,723.78 | \$213,774.52 | \$2,946,226.78 | \$2,195,523.22 |
| 21     | \$210,944.95 | \$199,553.34 | \$2,735,281.82 | \$2,406,468.18 |
| 22     | \$226,194.18 | \$184,304.11 | \$2,509,087.64 | \$2,632,662.36 |
| 23     | \$242,545.78 | \$167,952.52 | \$2,266,541.87 | \$2,875,208.13 |
| 24     | \$260,079.43 | \$150,418.86 | \$2,006,462.44 | \$3,135,287.56 |
| 25     | \$278,880.59 | \$131,617.70 | \$1,727,581.84 | \$3,414,168.16 |
| 26     | \$299,040.89 | \$111,457.40 | \$1,428,540.95 | \$3,713,209.05 |
| 27     | \$320,658.58 | \$89,839.71  | \$1,107,882.36 | \$4,033,867.64 |
| 28     | \$343,839.02 | \$66,659.27  | \$764,043.34   | \$4,377,706.66 |
| 29     | \$368,695.17 | \$41,803.12  | \$395,348.17   | \$4,746,401.83 |
| 30     | \$395,348.17 | \$15,150.12  | \$0.00         | \$5,141,750.00 |