## LRB RESEARCH AND ANALYSIS SECTION MEMORANDUM

## TO: Ald. Robert Bauman

FROM: James Carroll, Legislative Fiscal Analyst
RE: Present Value Calculation

This memorandum is in response to your request to calculate the present value of receiving \$200,000 plus a Consumer Price Index increase for 20 years and comparing that value to the value of a one-time payment of $\$ 1.5$ million. Assuming a $5 \%$ discount rate and an annual CPI increase of $2.5 \%$., the table below shows the present value of receiving $\$ 200,000$ plus a $2.5 \% \mathrm{CPI}$ adjustment has a greater present value $(\$ 3,422,011)$ than a one-time payment of $\$ 1,500,000$.

| Year | Annual \$200,000 + CPI | One-Time Payment |
| :---: | :---: | :---: |
| 1 | $\$ 200,000$ | $\$ 1,500,000$ |
| 2 | $\$ 205,000$ | - |
| 3 | 210,125 | - |
| 4 | 215,378 | - |
| 5 | 220,763 | - |
| 6 | 226,282 | - |
| 7 | 231,939 |  |
| 8 | 237,737 |  |
| 9 | 243,681 |  |
| 10 | 249,773 |  |
| 11 | 256,017 |  |
| 12 | 262,417 |  |
| 13 | 268,978 |  |
| 14 | 275,702 |  |
| 15 | 282,595 |  |
| 16 | 289,660 |  |
| 17 | 296,901 |  |
| 18 | 304,324 |  |
| 19 | 311,932 |  |
| 20 | 319,730 |  |
| Present | $\$ 3,422,011$ |  |
| Value |  |  |

Cc: Marianne Walsh

