

**APPENDIX C**  
(Revised November 2020)

**DISCOUNT RATES FOR COST-EFFECTIVENESS, LEASE PURCHASE,  
AND RELATED ANALYSES**

**Effective Dates.** This appendix is updated annually. This version of the appendix is valid for calendar year 2021. A copy of the updated appendix can be obtained in electronic form through the OMB home page at <https://www.whitehouse.gov/wp-content/uploads/2020/12/Appendix-C.pdf>. The text of the Circular is found at <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A94/a094.pdf>, and a table of past years' rates is located at <https://www.whitehouse.gov/wp-content/uploads/2020/12/discount-history.pdf>. Updates of the appendix are also available upon request from OMB's Office of Economic Policy (202-395-3585).

**Nominal Discount Rates.** A forecast of nominal or market interest rates for calendar year 2021 based on the economic assumptions for the 2022 Budget is presented below. These nominal rates are to be used for discounting nominal flows, which are often encountered in lease-purchase analysis.

**Nominal Interest Rates on Treasury Notes and Bonds  
of Specified Maturities (in percent)**

<u>3-Year</u>	<u>5-Year</u>	<u>7-Year</u>	<u>10-Year</u>	<u>20-Year</u>	<u>30-Year</u>
0.2	0.3	0.6	0.8	1.5	1.7

**Real Discount Rates.** A forecast of real interest rates from which the inflation premium has been removed and based on the economic assumptions from the 2022 Budget is presented below. These real rates are to be used for discounting constant-dollar flows, as is often required in cost-effectiveness analysis.

**Real Interest Rates on Treasury Notes and Bonds  
of Specified Maturities (in percent)**

<u>3-Year</u>	<u>5-Year</u>	<u>7-Year</u>	<u>10-Year</u>	<u>20-Year</u>	<u>30-Year</u>
-1.8	-1.6	-1.4	-1.1	-0.5	-0.3

Analyses of programs with terms different from those presented above may use a linear interpolation. For example, a four-year project can be evaluated with a rate equal to the average of the three-year and five-year rates. Programs with durations longer than 30 years may use the 30-year interest rate.