We selected 5 years as being a conservative estimate of the economic useful life of electronic data processing machines for purposes of making comparisons of lease costs with purchase costs. It should be noted that to the extent that this period is less than the actual useful life of the equipment, the computed savings are understated.

Rentals

Each year since fiscal year 1958, the General Services Administration on behalf of the Federal Government has entered into contracts with equipment suppliers for the rental of EDP equipment. In fiscal year 1962, 17 rental contracts were in effect. Through January 15, 1963, 16 contracts had been written covering fiscal year 1963.

Basically these contracts are concerned with rental rates and the terms and conditions that bear upon the application of these rates. The rates are established by the supplier and are the same as those charged commercial users of this equipment. These rates are accepted by the General Services Administration for use through the Government without further negotiation. The terms and conditions, however, are negotiated. The rental rates appearing in these contracts for use of equipment are the rates used in our computations.

Purchase price

For fiscal year 1962, for the first time, two of these contracts contained purchase and maintenance sections as well as sections on rental arrangements. In fiscal year 1963, 14 contracts containing purchase sections and 13 containing maintenance sections had been written through January 15, 1963. As in the case of rental prices, purchase prices are set by the suppliers and are not further negotiated by the General Services Administration. Terms and conditions relating to purchasing are, however, negotiated.

Where purchase contracts had been established, the contract prices were used in our computations. In those cases where no purchase contract was in effect, purchase price information was obtained directly from the supplier.

Purchase price data used in our computations relate to new equipment. Most installed equipment is offered for sale to users at reduced prices, usually depending on the length of time that the equipment has been installed. On the other hand, in almost all cases, rental prices do not decrease with the aging of the equipment. To the extent that used equipment was included in our determinations of projected savings, the cost of purchasing is overstated and estimated savings from purchasing are understated.

Maintenance costs

As mentioned previously, contracts providing for the maintenance of purchased equipment have been written with equipment suppliers for fiscal years 1962 and 1963. For these contracts, as for the rental and purchase contracts, rates proposed by the suppliers are accepted and the terms and conditions are negotiated.

Interest

It is our position that interest is a cost which is related to all Government expenditures. In our calculations of applicable interest costs, we used the average rate of marketable obligations of the outstanding public debt as of December 31, 1961 (3.146 percent).

SIGNIFICANCE OF COMPUTED SAVINGS ON INDIVIDUAL SYSTEMS

As indicated in the condensed summary on page 14, 14 of the 18 systems compared for the 5-year base period show a purchase advantage on a one-shift basis. All 18 systems show a purchase advantage on a two- and three-shift basis. These comparisons show clearly that purchase, rather than lease, of electronic data processing equipment can result in substantial savings. Some widely used models of electronic data processing equipment offer the greatest purchase advantages.

For example, the purchase of a representative IBM 7090 system could result in savings of $644,000 if operated on a one-shift basis, $2.184,000 if operated on a full two-shift basis, and $3.724.000 if operated on a three-shift basis. Continued use of the system past the 5-year period would produce additional savings of from $772,000 to $1,512,000 annually depending upon the extent of use. (These additional savings are measured by equipment rentals not paid less estimated maintenance costs.)