REPORT TO: Chancellor's Advisory Committee on Computing

FROM: Subcommittee on Time Sharing

J. Morris  W. Kahan
W. Gwinn   E. Wilson

The Subcommittee met with Ken Hebert and time sharing project director Howard Sturgis on February 27, 1971. The status of the project was reviewed and the following objectives were defined:

1. After March 15 and before the start of the Spring Quarter, a time sharing system will be available to the general user from 2:00 to 6:00 PM each day. This system will be limited with respect to file protection.

2. Simple documentation will be developed on the use of standard time sharing languages such as BASIC, SNOBAL, and EDITOR.

3. Approximately ten teletypes will be made available to the users by the Computer Center on a first come-first served basis.

4. Additional users can have their own teletypes connected to the system.

5. During the first six weeks of operation there will be no charge for time sharing computing.

6. After the system is debugged and the file protect options are added a rate schedule will be developed and user priorities will be established.

Approximate Cost Analysis

Commercial time sharing systems cost from $5.00 to $10.00 per user hour. If one does not evaluate the increase in productivity of the user these rates are very high compared to batch computing.

The proposed time sharing system on the Berkeley Campus involves an investment of approximately $1,000,000.00 worth of equipment. If the equipment is depreciated over a 50-month period and if the cost of the
support programmers is approximated, the following monthly costs are estimated:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment depreciation</td>
<td>$20,000</td>
</tr>
<tr>
<td>Personal costs</td>
<td>$5,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$25,000</strong></td>
</tr>
</tbody>
</table>

per month

It is estimated that the proposed system for the Campus can support approximately 100 teletypes. If each teletype is used four hours a day, seven days a week, the estimated cost is $2.00 per user hour. Therefore, the proposed time sharing system appears to be very economical compared to commercial systems.

ELW:pip