II. FRINGE BENEFITS AND GENERAL ASSUMPTIONS

A. FRINGE BENEFITS

We have reviewed the Committee's list of fringe benefits provided in the public and private sectors and we have the following comments:

- 1. No significant form of fringe benefit has been omitted. Those items which have not been included (e.g. stock options in the private sector) are found so infrequently or are restricted to so few employees, that their exclusion will have no significant impact on the overall results.
- 2. The Committee concluded that death benefits should be excluded from pay level and pay trend surveys. Our advice is that they should be included and this is dealt with in detail in Appendix B.
- 3. The Committee concluded that personal loans, provided by some private sector employers, should be excluded from pay level and pay trend surveys. Where such loans are provided at an interest rate below that which the employee would pay on the open market, our advice is that they be included in pay level and pay trend surveys. For this purpose, they should be valued using the technique recommended for housing loans which have subsidized interest (see Appendix E).

B. GENERAL ASSUMPTIONS

We have reviewed the general principles and assumptions provisionally adopted by the Pay Research Advisory Committee and we have the following comments:

1. The Committee established the principle that "... once a benefit had been accepted as an entitlement and included in total packages, it should be valued on the assumption of maximum utilization without further regard to the actual rate of utilization ..."

For purposes of assessing total compensation, this principle is a sound one and we recommend that it be applied throughout, with one specific exception. We regard Overseas Education Allowances as a special case and our recommendations for dealing with this benefit are contained in Appendix C.

2. The Committee also established the principle that tax implications for benefits should be ignored. Our recommendation is that the assessment of total compensation include the effect of taxation. This is discussed in Section VI of this report.

III. VALUATION OF FRINGE BENEFITS IN TOTAL COMPENSATION ASSESSMENT

Total compensation is the sum of cash compensation (e.g. salary) and the dollar value of fringe benefits. Fringe benefits can be classified as those which are pay-related and those which are non-pay-related. For example, in many organizations, the amount of retirement benefits is related to pay by means of a formula; medical benefits are usually not related to pay, but the same benefits apply to broad classes of employees.

For a specific job, total compensation levels in two different organizations are compared as follows:

	ORGANIZATION	
	No. 1	No. 2
Salary	\$ W	\$ a
Benefit values		
 pay-related 	\$ x	\$ b
 non-pay-related 	\$ У	\$ c
Total compensation	\$ z	\$ d

The first component, salary, comes from the results of a pay level survey. Various techniques can be used to ensure that the jobs are comparable and, therefore, that the difference in salary is attributable to differences in the organizations' pay policies. If Organization No. 1 represents the public sector and Organization No. 2 the private sector, then the comparison of \$w and \$a is equivalent to answering the question:

"If private sector salary were provided to this position in the public sector, what salary would be paid?" Correspondingly, the value of benefits is derived using techniques which ensure that valid comparisons can be made. For example, the techniques used ensure that:

- -- if organizations have the same benefit plans, then the values of those plans are identical, and
- -- if organizations have different benefit plans, then differences in the values of those plans are attributable solely to differences in the specific plan provisions and not influenced by the actual age and other characteristics of the employees participating in the plans.

If these criteria are satisfied, then the total compensation comparison illustrated above will be valid. In comparing the public and private sectors, the technique for developing the benefit values is based upon answering the following question:

"If private sector benefits were provided to public sector employees, what impact would this have on their total compensation -- would it increase, decrease or remain the same?"

This question is answered by following the steps described below.

- 1. Data on the specific provisions of benefit plans is gathered from representative companies in the private sector.
- 2. One-by-one, each company's benefit plans are then "given" to public sector employees. The value of the plans to those employees is calculated.
- 3. Once all plans of all companies have been valued, the average benefit value of all plans is calculated.

In this process, public sector employees are used as the basis for calculating all benefit values in both the public and private sectors. By doing this, a controlled environment is established by which differences in benefit values are attributable solely to differences in benefit plan provisions. For this purpose, the public sector employees are called a Standard Population and the following points are pertinent:

- 1. Any rational way of valuing benefits will be some form of the Standard Population Method. Any other way will give invalid results since varying demographic factors will be introduced into the valuation and will distort the results. In other words, any approach which does not utilize a type of Standard Population will not satisfy the criteria identified earlier.
- 2. In general, the Standard Population can be designed in many ways. The key factor in its design will be how the pay level survey is designed. After it is designed, the composition of the Standard Population can be developed to be representative of the public sector employees under consideration.

Before any further discussion of the Standard Population Method, it will be useful to illustrate how it works. To do this, we will use very simplified numerical examples. As such, they have been designed to illustrate the basic concept. In practice, the method would be somewhat more refined. Specifically, we will describe and illustrate:

- -- the major steps which would be included in a total compensation comparability assessment; this sets the context within which the benefit valuation is performed
- -- how benefit values are actually derived for one employer's plans using the Standard Population

- -- how total private sector benefit values are determined
- how this information would be used to achieve total compensation equality between the public and private sectors.

A. MAJOR STEPS IN TOTAL COMPENSATION ASSESSMENT

Table III-1 is a diagramatic representation of the total compen-The left hand side represents the sation comparison process. derivation of total compensation in the public sector and the right hand side the corresponding process in the private sector. Because both sectors share the same benefit valuation process, the total compensation comparison is meaningful. More detailed comments on each sector follow.

Public Sector

- 1. The first step is to collect benefit plan data in a standardized format.
- 2. The next step is to calculate the benefit values per public sector employee. In theory, this could be done for each public sector employee whose job has been included in the pay level survey. In practice, this is neither necessary nor efficient. Instead, the employees whose jobs are included in the pay level survey are grouped according to characteristics such as age, length of service, etc. The result of this grouping is the Standard Population which will be used to assess the value of all benefits. (A simplified version of a Standard Population is used in the illustrations which follow).
- 3. The benefit values which are calculated in step 2 are expressed as a percentage of pay for pay-related benefits and as dollar amounts for non-pay-related benefits.

TABLE III-1

STANDARD POPULATION METHOD MAJOR STEPS

PUBLIC SECTOR

SELECT PRIVATE SECTOR COMPANIES FOR COMPARISON COLLECT BENEFIT COLLECT BENEFIT PLAN AND EMPLOYEE DATA PLAN DATA FROM FROM PRIVATE SECTOR PUBLIC SECTOR OBTAIN BENEFIT VALUE PER PARTICIPANT BY RUNNING EACH SET OF BENEFIT PLANS THROUGH BENEFIT PLAN MODEL USING THE STANDARD POPULATION CALCULATE STANDARDIZED BENEFIT VALUES WITHIN EACH INDUSTRY SEGMENT CALCULATE FINAL STANDARDIZED BENEFIT VALUES ADD BENEFIT VALUES ADD BENEFIT VALUES TO CASH COMPENSATION TO PUBLIC SECTOR FROM PAY LEVEL SURVEY CASH COMPENSATION TO DETERMINE TO DETERMINE TOTAL COMPENSATION TOTAL COMPENSATION COMPARE PUBLIC AND PRIVATE SECTOR

PRIVATE SECTOR

TOTAL COMPENSATION

ADJUST PUBLIC SECTOR TOTAL COMPENSATION IF APPROPRIATE

- 4. The results of the pay level survey are then used to calculate the dollar value of the total pay package by:
 - -- applying the percentage, representing the value of payrelated benefits, to the pay to calculate the dollar value of these benefits
 - -- adding to this the dollar value of non-pay-related benefits
 - -- adding the total value of benefits to pay.

Private Sector

- 1. Benefit plan and employee data is collected from the private sector sample companies.
- 2. Each company's benefit plans are then run through the benefit plan model, using the Standard Population. Since the Standard Population is based on the public sector employee population, this step is equivalent to calculating the benefit values of private sector benefits as if they were provided to public sector employees.
- 3. Private sector employee data is then used to weight the results of the benefit valuation. This is necessary to ensure, for example, that very generous plans with few participants are fairly represented in the final benefit values when compared with less generous plans with many participants. This is done for each industry classification and the result is a standardized set of benefit values in each industry.

- 4. The results by industry are then weighted, using census statistics of employment by industry, to calculate the final standardized benefit values.
- 5. These standardized benefit values are added to cash compensation, obtained from a pay level survey, to determine total compensation.

Public Sector vs. Private

- Having determined total compensation in each sector, the results can then be compared. Note that this comparison would also involve adjusting for differences in working hours.
- 2. It is then possible to determine the adjustment in pay required to achieve total compensation equality in the public and private sector, if it were decided to make such an adjustment.

B. DERIVING BENEFIT VALUES FOR AN EMPLOYER'S PLANS

Central to the Standard Population Method is the derivation of benefit values for each employer's benefit plans. This is calculated in terms of the Standard Population and the result is a standardized benefit value for each benefit plan. The steps involved in this process are:

- -- to select each employee in turn from the Standard Population
- -- using the employer's benefit plan, determine what benefit that employee would be entitled to and then calculate the value of the benefit

- -- repeat this procedure for each employee in the Standard Population, sum the benefit values for all employees and divide by:
 - the number of employees in the case of non-payrelated benefits
 - the total of employees' earnings in the case of pay-related benefits

To illustrate this process, consider a simplified example of deriving the benefit value per employee for retirement benefits. In this example, the employer's retirement plan provides a benefit based on salary and service. Table III-2 shows how the benefit value is calculated. Comments on this calculation are as follows:

- 1. The upper left section of the Table shows the Standard Population. The total employee population of 10 has total monthly basic salary of \$129,500. This population has been broken down into age/service groups. This is necessary since some benefits vary by age, some by service and some by age and service.
- 2. The upper right section of the Table shows the retirement benefit value factor. This factor increases with age and service. These factors are derived by the procedure described in Appendix A.
- 3. The bottom section of the Table shows the derivation of the benefit value per employee. The calculations are based on each age/service group. For instance,