ECONOMICS TECHNICAL NOTE NO. N4
200-VI

SUBJECT: ECN - ADJUSTMENT FACTORS TO ACCOUNT FOR CHANGES IN FUTURE VALUE

Purpose. To transmit Economics Technical Note No. N4 - Adjustment Factors to Account for Changes in Future Value - and cancel TSC Technical Note Watersheds UD-26 (Revisions 1 and 2).

Effective Date. When received.

Filing Instructions. File the enclosures with NENTC Economics Technical Notes. Remove and destroy TSC Technical Note Watersheds UD-26 and all revisions.

Scott Hoag, Jr.
Head, Economics, Social Sciences and Evaluation Staff

Enclosures
OBERS adjustment factors to account for changes in future values of residential content were used. This factor is based on the premise that the value of applicable types of goods and services will increase at essentially the same rate as per capital income. The factor used was based on the revised OBERS (series E population) per capita income projections for BEA economic area 52, dated April 1974 and are in 1967 constant dollars. Use of the factor is in accordance with NETSC Technical Note - Watersheds 26 (Rev. 2).
Advisory WS - 25

From: Norman A. Berg, Acting Assistant Administrator

Re: Income Adjustment Factors (OBERS)

It has been brought to our attention that the income adjustment factors (OBERS) are used inconsistently both within the Service and between various agencies. Guidelines for consistent and acceptable use of the factors will be developed for inclusion in the Economics Guide in the near future. Until such guidelines are published, the income adjustment factors are to be used to evaluate damages and damage reduction benefits to household contents only.

This procedure is to apply to all plans that are presently being developed using the principles and standards.

[Signature]
Acting
Norman A. Berg
Acting Assistant Administrator
WATERSHED OR PROJECT NAME? Any Watershed Any State
NUMBER OF YEAR-INCOME PAIRS? 4
INTEREST RATE IN DECIMAL FORM? .08625
NUMBER OF YEARS IN EVALUATION PERIOD? 100
ENTER YEAR AND OTHER POPULATION & INCOME PROJECTIONS
YEAR? 1985 POPULATION? 367319 INCOME? 1699211000
YEAR? 1990 POPULATION? 388788 INCOME? 2051854000
YEAR? 2030 POPULATION? 498429 INCOME? 5889008000

URBAN CONTENT VALUE ADJUSTMENT FACTOR
AT 8.625 PERCENT INTEREST - 100 EVALUATION PERIOD

ANY WATERSHED

YEAR INCOME
----- ------
1985  4626
1990  5278
2000  6613
2030  11815

TOTAL OF THE PV'S FOR 100 YEARS = 20377.
SUM OF THE AVERAGE ANNUAL CAPITAL VALUE AND THE CONSTANT VALUE = 6384
100 YEAR ADJUSTMENT FACTOR ------------------------> 1.38
A sample of the required input and the output based on the above data is attached. The program questions are capitalized. Your response is underlined.

Constraints on the use of this multiplier are found in the Principles and Guidelines, Chapter II, Section IV. Paragraph 2.4.11.c.2.i-v states that the use of the multiplier is for urban contents only and further that the upper limit on content value (excluding extenuating circumstances) is 75 percent of structure value.

Calculate the damage reduction benefits by:

1. Aggregate the without project urban damages from the URB-1 output or other damage calculations and multiply by the multiplier;

2. Aggregate the with project urban damages from the URB-1 output or other damage calculations and multiply by the multiplier;

3. Check to see that the without project content value is less than or equal to 75 percent of the estimated structure value;

4. Calculate the increased damage reduction by subtracting the value in 2. from the value in 1.

Call your NTC economist if you have questions, concerns or suggestions.