

Manlyland Coastal Zone Management Program

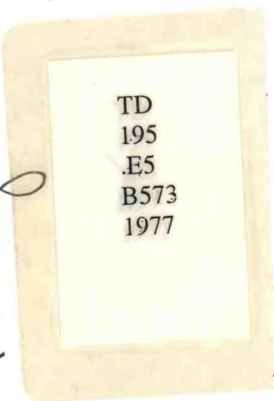
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CEIP IMPACT FORECAST REVIEW MATERIALS

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INFORMATION CENTER



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NOTE: The Review Questions have been prepared prior to development of the computer program or actual use of the model for forecasting. Consequently, the list of review questions is relatively short. The list will need to be supplemented after some experience with the operation of the model is obtained.

I. INTRODUCTION

Three kinds of reviews of CEIP Impact Models and forecasts can be made. First, data provided in schedules can be verified by checking alternative data sources as listed below. Second, some checks for internal consistency can be made; and third, forecasts can be examined to see if they are reasonable. Each of these review processes will be presented in turn. OCZM staff, however, should follow their own inclinations and also maintain a log of important questions or techniques for checking so that a more detailed, systematic review process can be developed after some experience with the program.

II. ALTERNATIVE DATA SOURCES

Recommended for CEIP-OCZM Special Library Collection

1. Advisory Commission on Intergovernmental Relations (ACIR). SIGNIFICANT FEATURES OF FISCAL FEDERALISM 1976-1977, Vol. II.
2. STATE AND COUNTY EMPLOYMENT AND UNEMPLOYMENT JANUARY-DECEMBER 1976. NTIS (Dept. of Commerce). Microfiche #3.00, paper-back \$28.75.
3. Bureau of the Census. "Population Estimates and Projections/ Estimates of the Population of Counties;" 1970, 71, 72, 73, 74, 75.
4. Bureau of the Census. "County Business Patterns."
5. Bureau of Economic Analysis. "Local Area Personal Income."
6. Bureau of the Census. "Finances of County Governments." (GF series, Vol. 4, No. 3).
7. Bureau of the Census. "Finances of Municipality and Township Governments." (GF series, Vol. 4, No. 4).
8. Bureau of the Census. "Compendium of Government Finances."
9. Commerce Clearing House. STATE TAX REPORTER, Vol. I, II.

General Sources

1. Official state agencies who participate in federal-state cooperative program for local population estimates.
2. Directory of bureau members of the Association for University Business and Economic Research (see Appendix B, THE CEIP IMPACT MODEL: TECHNICAL ASSISTANCE MATERIALS).
3. Directory of local and state agency members of the Government Research Association, Inc. (see Appendix C, THE CEIP IMPACT MODEL: TECHNICAL ASSISTANCE MATERIALS).
4. RAND MCNALLY COMMERCIAL ATLAS.
5. Bureau of the Census. "State Reports on State and Local Government Finances." (GF series, Vol. 6, No. 2).
6. Bureau of the Census. "Government and Census Depository Libraries Holding Census Bureau Reports."

III. REVIEW QUESTIONS FOR SCHEDULES

Energy Facility (Schedules 1 and 2)

1. Check to see that the totals in column 4 of Schedule 1.2 are equal or slightly less than the cost of inputs, i.e. number of employees from 1.1 x an estimated wage (\$16,000 to \$20,000), plus the cost of land (1.2) and construction materials (1.3).
2. Be sure that 1.3 has been completed if the answer to 4.6b is yes. If 4.6b is no, Schedule 1.3 may be uncompleted.
3. Be sure that 2.2 is completed if the answer to 4.6a is yes. If 4.6a is no, Schedule 2.2 need not be completed.

Local Area Description

1. Check to see that the local government's population for the year given in 3.1 corresponds to the population data in 3.4.
2. Check to see that the sum of the number of residents employed and number of residents unemployed from 3.3 is one-third to one-half of the total population for the year of the data.
3. If population or school enrollments forecasts are provided (3.6 or 3.8), examine them for comparability to data for past 10 years (3.4 or 3.7).

Government Revenue and Expenditure

1. Compare data on revenue (4.1) with expenditure data (5.1). The way revenues and expenditures are defined, they should be very close to one another each year.

2. If expected tax rates in 4.2 are not increasing, check to see that either 1) revenues are not increasing very much; or 2) population is increasing rapidly.

IV. REVIEW QUESTIONS FOR FORECASTS

1. Calculate the per capita revenues for the current year by dividing total revenue (4.1) by population (3.4). Compare this with the value of coefficient \hat{c}_3 as estimated in Equation 3. \hat{c}_3 should be less than the average per capita revenues; if it is greater, the forecast is extremely suspect. (\hat{c}_3 is the marginal revenue or expenditure from an additional person historically, taking into account income and the previous year's revenues or expenditures.)
2. Examine the population and income data in Schedule 3.4 for any trends that would not be picked up in a linear equation. Compare the predicted population and income growth with historical experience.
3. Compare the taxes used with the changes in impact revenues.
 - a) Property taxes will build slowly and level off upon completion of facility and stabilization of population.
 - b) Sales taxes on construction materials will cause an early, sharp revenue rise followed by a decrease.
 - c) Sales taxes on operating inputs will parallel increases in production and then level off.
4. See if there is a boom effect on expenditures. If there is a sharp population increase followed by a population decrease, the expenditure forecast after the population decline may be a little low. This is because unless population has decreased in the past, the estimating coefficient for the effect of population on expenditures (\hat{c}_3) will be based on increases rather than decreases and decreases are likely to be less than increases.