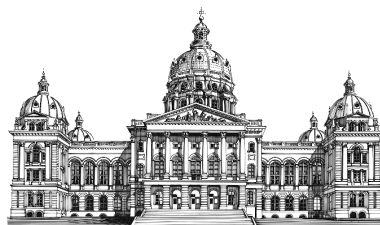

Iowa Legislative Fiscal Bureau

Dennis Prouty
(515) 281-5279
FAX 281-8451



State Capitol
Des Moines, IA 50319
June 30, 1993

Status Of Legislative Computer Models

ISSUE

The Legislative Fiscal Bureau (LFB) is currently refining and utilizing 2 economic models: the Legislative Tax Model and the Iowa Regional Econometric Input/Output Model (IREIM).

BACKGROUND

In 1992, the LFB acquired an updated Legislative Tax Model from Peat Marwick's Policy Economics Group (PEG). The model is capable of providing fiscal estimates of tax policy changes. There are 4 components to the model: Individual Income Tax, Sales Tax, Corporate Tax, and Property Tax. The Tax Model has had a series of refinements since its introduction in December 1992.

The Regional Economics Applications Laboratory (REAL) in Urbana, Illinois, began developing IREIM in 1991. The model was designed to simulate the interdependency between the various sectors of Iowa's economy, so that the impact of economic shocks could be reasonably ascertained. The IREIM is able to model 4 categories of economic shock: employment, output, income, and pure income, which simulates income changes that do not directly disturb employment and output. Like the tax model, IREIM has undergone a series of alterations that have improved both its performance and ease of use. The LFB released an *Issue Review* on December 8, 1992, that gave a detailed explanation of the capabilities of the model. The *Issue Review* is available upon request.

CURRENT SITUATION

Both the Legislative Tax Model and IREIM are in the final stages of development. The LFB has recently acquired the ability to include nonresident income tax returns in tax simulations, which was not previously possible. Consequently, the core of the tax model is complete and operational.

The initial contractual obligations of REAL have also been met, with 2 minor exceptions. The LFB has requested a minor improvement in the output capabilities of the model and a final version of a users' manual is required. These problems are expected to be rectified before June 30, 1993.

ALTERNATIVES

Both of the LFB's models require a degree of maintenance. The IREIM would be improved if it incorporated 1990 Census data, and the tax model will be more accurate when the returns are updated. The LFB is currently working out an agreement with REAL to update the data, and perhaps recalibrate the model. The LFB has been informed that PEG has contacted the Department of Revenue and Finance about updating the data for the tax model. In both cases, basic maintenance is necessary if the models are to have workable validity.

There are other options that the LFB is considering. The REAL is investigating the possibility of adding a revenue module to IREIM. This component would enable analysts to determine the impact to the State's revenues due to an economic shock. Currently, the effect that a specific plant closing or opening has on State revenue is undeterminable. There is also a possibility that such a module would enable analysts to determine the effect on the economy that results from a change in tax

structure. These capabilities would allow the LFB to provide the information necessary for legislators to consider the budgetary and economic consequences of a wide array of policy issues, from economic development to tax efficiency. REAL has indicated that creating a third model from the 2 existing models would be the most cost-effective alternative for model expansion.

BUDGET IMPACT

The cost of the annual update of IREIM is \$10,000. This price includes the following:

- Incorporation of all new annual data
- Current national forecasts
- Additional software and manual
- Access to new modules
- Written report and in-house seminar

The LFB is still corresponding with REAL to determine the scope of these benefits. Because REAL has not yet examined the Legislative Tax Model, it remains unclear whether "access to new modules" implies a complete linkage of the 2 models.

The cost of recalibrating the model would be an additional \$15,000, but REAL has indicated recalibration would not be necessary until 1995.

STAFF CONTACT: Jon Muller (Ext. 14611)