



**US Army Corps  
of Engineers**

Engineer Institute for  
Water Resources

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## **User Manual**

# **Regional Development Impacts Linear Programming- Economic Base Model (LPEB)**

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20. increases of output in the directly affected industries.

LINEAR PROGRAMMING/ECONOMIC BASE--  
EVALUATION MODEL FOR ESTIMATING THE REGIONAL  
DEVELOPMENT IMPACTS OF WATER RESOURCE PROJECTS:  
User Manual

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For the:

INSTITUTE OF WATER RESOURCES  
U.S. Army Corps of Engineers

## FOREWORD

This user manual is a product of IWR's Regional Economic Development Impact research work unit. It continues the methodological work begun in the Corps Appalachian Water Resources Survey and continued in the IWR-SWD research on Regional Impacts of the completed McClellan-Kerr Arkansas River Navigation Project. The purpose of regional economic development impact models is to estimate jobs, personal income and industrial output which would be due to implementation of a Corps water resource project. A fundamental attribute of these models is that they are evaluating the impacts of lowered delivered costs due to transportation savings, the expenditure stream generated by recreational users, or the expenditures associated with project construction and operation. Therefore, they are dependant on the data generated for user benefits as inputs. This linkage provides a logically consistent evaluation process.

The IWR models provide for regional accounts encompassing the United States and for as many as 100 sectors of each regional economy. Normally, division of the nation into 3 or 4 regions provides adequate regional detail. Depending on the project, about 10-30 sectors usually provides adequate sector detail. The region/sector configuration is the most important decision to be made early in the regional economic development analysis, since it also defines the required organization of input data. An overall regional input assessment manual under preparation, will present additional information on this issue. Meanwhile, each user manual contains a discussion of this issue from the model developers perspective.

Changes in income, output and employment are not necessarily national economic development benefits. Because, continuous full employment is assumed to be given in the NED analysis, user benefits (willingness to pay for project output) is the logical measure used for NED evaluation. Therefore, the estimates of changes in output, income and employment by region should be used solely in the regional economic development account.

Many economists have participated in the development and testing of these models. Corps economists from the Southwestern Division, South Atlantic Division and Lower Mississippi River Division have invested their time and skill in honing the design and evaluating tests conducted on Corps projects. Ed Cohn and Bob Daniel, as chief of the Economic and Social Analysis Branch, Planning Division, Office of the Chief of Engineers, invested their skill and energy as technical monitors to guide the development of these models. Finally, Dr. Neil Dikeman of the University of Oklahoma's Bureau of Business and Management Research and his staff provided splendid editorial and research coordination services to the model/user manual developers:

Multiregional variable Input-Output Model and User Manual.

Dr. Chong and Dr. Chung Liew, University of Oklahoma.

Multi-Regional - Multi-Industry Model User Manual.

Dr. Peter Hall, Urban System Research and Engineering Co. Inc.,  
Washington, D.C.

Linear Programming-Economic Base Model and User Manual.

Dr. W. Chris Lewis and Dr. Terry Glover, Lewis Associates and Utah State University.

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## CHAPTER 1

### DEFINITION OF OBJECTIVES FOR MANUAL

#### 1.1 Objectives

The overall objective of this manual is to outline a methodology which can be used to assess economic development impacts which may be generated from water development projects such as the construction and operation of waterways, recreational facilities, ports, and water impoundments. The methodology outlined is a mathematical programming/economic base modeling procedure that can be used to aid in the measurement of development impacts on a regional basis. Specifically, the modeling procedure used is a linear programming/economic base assessment model since competitive markets and fixed proportions in industrial production processes are assumed. Such a modeling system also can be used to delineate the benefits of development projects and to display the projected or engineering cost structures of proposed water projects.

Water development projects bring about both short-run direct impacts at the regional and/or national levels, and also induce indirect or secondary impacts on sectors of the economy which are not directly related to these projects. For example, the development of a waterway for barge transportation impact-specific industries whose specific bulk and long distance shipments are highly sensitive to lower transport costs as a direct result of the operation of the waterway. However, these basic sectors in turn impact other industries which sell their output to the basic and directly affected sectors. The output from the indirectly related industries is an intermediate input to the directly impacted industries. As the output of

the directly impacted industries changes, this, in turn, has indirect, or secondary, impact on the output of other industries. Similarly, employment, earnings, capital availability, and supply conditions are all altered by the same sequence of impacts.

Primarily, the linear programming procedure is used to derive the changes in output that result from implementation of a specific water development project. The procedure also could be used to estimate the cost savings of specific projects, such as the savings in transportation costs associated with a waterway. The economic base procedure is used to transform these output changes into output changes in those industries which are linked to those directly impacted. The economic base model also is used to derive direct and indirect employment, population, and earnings changes resulting from the original direct output changes. Thus, the manual outlines a direct evaluation module and a secondary effect module. The use of linear programming and economic base procedures for assessing regional and national growth from water resource investments is documented in Lewis et al. (1, 2), Leven (3), Leven and Reed (4), Howe et al. (5), and Glover and Keith (6).

## 1.2 Linear Programming and Water Resource Investment Evaluation

In general, linear programming has been used as an aid in deriving the cost savings associated with a particular water resource investment project. This kind of model is used to represent the cost and production structure of the industries affected by the project, and the objective function is used to establish the total bill associated with producing and shipping products from region to region. In fact, the model minimizes the cost of producing and shipping goods subject to production and resource availability

constraints. In this sense, optimal (minimum cost) production and commodity flows are derived from the solutions of such models. The cost savings associated with, for example, a waterway project can be imposed as changes in transport costs. A new solution to the model can then be obtained to derive the new optimal production and commodity flows from region to region.

A model of this type can be represented by the following relationships:

$$(1.1) \quad \text{Min } \sum_k w_{ik} x_{ik} + \sum_k T_{jklm} Q_{jklm} \quad (\text{objective to minimize the production and transport bill})$$

subject to: the constraint system.

$$(1.2) \quad Q_{jk} - \sum_i a_{ijk} x_{ik} = 0 \quad (\text{production function})$$

$$(1.3) \quad \sum_j x_{jk} \leq \bar{x}_k \quad (\text{resource availability})$$

$$(1.4) \quad \sum_l Q_{jklm} \leq \bar{Q}_{jkm} \quad (\text{supply-by-mode constraint})$$

$$(1.5) \quad \sum_k Q_{jklm} \leq \bar{Q}_{jlm} \quad (\text{demand-by-mode constraint})$$

$$(1.6) \quad Q_{jk}, x_{jk} > 0,$$

where  $w_{ik}$  = primary input cost of the  $j$ th primary input in region  $k$ .

$x_{ik}$  = primary input  $i$  used in production in region  $k$ .

$T_{jklm}$  = the per unit cost of transporting the  $j$ th output from supply region  $k$  to demand region  $l$  by transport mode  $m$ .

$Q_{jklm}$  = the amount of product  $j$  transported from supply region  $k$  to demand region  $l$  by transport mode  $m$ .

$a_{ijk}$  = primary input  $i$  used in the production of output  $j$  in region  $k$ , or production coefficient of the  $i$ th primary input.

$\bar{x}_k$  = total amount of primary input available in region  $k$ .

$\bar{Q}_{jkm}$  = mode transport constraint in terms of the maximum amount of product  $j$  that can be transported by mode  $m$  from region  $k$  to region  $l$ .

$\bar{Q}_{jlm}$  = demand constraint in terms of the amount of the  $j$ th product demanded in region  $l$  which can be shipped from region  $k$  by mode  $m$ .

$i$  = input delineation or index.

$j$  = output delineation or index.

$k$  = supply region delineation.

$l$  = demand region delineation.

$m$  = mode delineation.

A model of this type generates or determines, from the optimal solution, the following:

- 1) Product flows from one region to another, i.e.,  $Q_{jklm}$ .
- 2) Primary inputs used in production,  $x_{ik}$ .

These values are determined given that the following data or parameters are supplied by the user of the model:

- 1) Primary input prices,  $w_{ik}$ .
- 2) Transport costs per unit of output for movement of products from the  $k$ th supply region to the  $l$ th demand region by mode  $m$ .
- 3) Input/output coefficients in each supply region, i.e., the  $a_{ijk}$ .
- 4) Resource availability limits,  $\bar{x}_k$ .
- 5) Maximum mode capacities in terms of units of the products, i.e.,  $\bar{Q}_{jkm}$ .
- 6) Minimum demand requirements for each demand region, i.e.,  $\bar{Q}_{jlm}$ .

The above model is an appropriate framework for deriving the minimum cost of transporting goods between regions. One also can use the model, as mentioned above, to derive an estimate of the cost savings of introducing a new lower cost mode of transport such as barge transportation. However, public water investments also involve regional and national growth changes, such as output, employment, and earnings effects. These effects need to be projected in order to assess the regional development impacts of such projects. Again, the linear programming procedure can be used as a tool for derivation of an estimate of such development impacts, but the economic objective (as described by the objective function) needs to be changed; and

output levels, as well as the commodity movements from region to region, need to be determined.

A profit maximizing model is more appropriate for determining output levels endogenously given prices, costs, and production and transport constraints. The profit maximization representation within the linear programming framework is given by the following set of relationships.

$$(1.7) \quad \text{Max } \sum_{m} \sum_{k} \sum_{j} \sum_{l} (P_{jk} Q_{jkl} - \sum_i w_{ik} x_{ijk} - T_{jklm} Q_{jklm})$$

subject to:

$$(1.8) \quad \sum_j b_{jk} Q_{jkl} - \sum_i a_{ijk} x_{ijk} = 0 \quad (\text{production function})$$

$$(1.9) \quad \sum_{jkl} Q_{jklm} > \bar{C}_{jm} \quad (\text{mode capacity constraint})$$

$$(1.10) \quad \sum_j x_{ijk} < \bar{x}_{ik} \quad (\text{resource availability})$$

$$(1.11) \quad \sum_l Q_{jkl} < \bar{Q}_{jk} \quad (\text{supply constraint})$$

$$(1.12) \quad \sum_k Q_{jkl} > \bar{Q}_{jl} \quad (\text{demand constraint})$$

$$(1.13) \quad Q_{jkl}, x_{ijk} > 0,$$

where  $i, j, k, l, m$  are, respectively, the input, output, supply region, demand region, and mode delineations as subscript indexes.

$P_{jk}$  = the price of the  $j$ th product in supply region  $k$ .

$b_{jk}$  = the production coefficients, where  $b_{jk}$ , as introduced, delineates a transformation among outputs, whereas  $a_{ijk}$  is the input/output coefficient.

$\bar{C}_{jm}$  = the total transport capacity of mode  $m$  in terms of units of product  $j$ .

$x_{ijk}$  = the amount of input  $X_i$  used to produce product  $j$  in supply region  $k$ .

$\bar{x}_{ik}$  = the availability quantity of input  $i$  in supply region  $k$ .

$\bar{Q}_{jk}$  = the maximum production of output  $j$  in supply region  $k$ .

$\bar{Q}_{jl}$  = the minimum demand for output j required to be met in demand region l.

$Q_{jkl}$  = level of shipment of output j from region k to region l.

$w_{ik}$  = the price of the ith input in region k.

$T_{jklm}$  = the per unit transport cost of shipping output j from region k to l by mode m.

$Q_{jklm}$  = the level of shipment of output j from region k to region l by mode m.

It also is desirable, in the case of a water transportation project, to impose a limit on the capacity of the new development, or a limit in terms of units of output (tonnage, or other measures) for transportation on the waterway. This could be represented by:

$$(1.14) \sum_j Q_{j\bar{k}\bar{l}} \leq C_m^-$$

where  $\bar{k}$ ,  $\bar{l}$  delineate a particular regional routing using the specific mode m, whose traffic capacity is limited to  $C_m^-$  units of all j outputs.

It also is important to note that in this latter model (the profit maximization system), intermediate inputs can be incorporated. That is, some of the  $X_i$  (inputs) also can be  $Q_j$  or inflows  $Q_{jkl}$ . The model can be operated as simply a transformation of primary inputs into final output within supply region k and then final output transported to l demand regions, or both primary and intermediate goods can be used to produce final output, with both final and intermediate goods being able to be interregionally transported.

Operation of the profit-maximization model maximizes profit subject to the production function, input (resource) availability, production capacity, demand requirement nonnegativity, and specific mode capacity constraints.

The optimization of the model determines the following:

- 1) Output levels in the k regions,  $Q_{jk}$ .
- 2) Primary inputs used in production,  $X_{ik}$ .
- 3) Product flows from one region to another, i.e.,  $Q_{jklm}$ .

The levels of these above variables are determined for the following data or parameters supplied by the user of the model:

- 1) Product prices,  $P_{jk}$ , for each product j in each region k.
- 2) Primary or intermediate input prices,  $w_{ik}$ .
- 3) Transport costs per unit of output for transport of products from the k supply regions to the l demand regions by mode m, including the specific mode of interest,  $\bar{m}$ .
- 4) Input/output coefficients in each supply region, i.e.,  $a_{ijk}$ , and the output transformation coefficients,  $b_{jk}$ , if such are applicable.
- 5) Resource or input availability limits,  $\bar{x}_{ik}$ .
- 6) Maximum mode capacities in terms of units of the products, i.e.,  $\bar{C}_{jm}$  and the overall specific mode capacity  $C_m^-$ .
- 7) Demand requirements for each demand region, l.
- 8) Maximum supply region production levels,  $\bar{Q}_{jk}$ .

Sensitivity analysis can be performed using the modeling system to assess the impacts of alternative projections of constraint values on optimal output, input use, and product flow levels. For example, alternative input availabilities, production capacities, or transport mode capacities could be imposed on the model and a new optimal solution for these new constraint levels could be derived. Similarly, price and/or transport cost changes could be imposed and a new solution could be obtained.

Alternative transport costs and barge traffic capacity are of particular importance in carrying out an evaluation of a proposed waterway. A "with" and "without" analysis of impacts can be carried out using the model outlined by simply imposing a constraint system that is representative of

existing production and transport conditions to simulate the "without" project profit. Then a new mode and its associated transport cost and traffic capacity is introduced and the "with" project conditions are generated by a new solution to the model. Profit, output, impact commodity flow, and secondary impact conditions of the "without" or "existing" case can be compared with the "with" project case.

The industries whose cost and transport structures are represented in the linear programming system are water project, or specifically water-transport-oriented. These are termed the basic industries or sectors. There are other basic sectors representative of a significant part of any regional economic base, which are not sensitive to changes in the water input or water transportation. The output from these latter sectors is used as input in the basic and water-oriented sectors and are, therefore, indirectly affected by the water-oriented sectors. Their cost structure is not represented in the linear programming system, but the linkage between output changes in the water-oriented sectors and output changes in these industries is specified in the economic base system. Similarly, output change linkages are represented for the nonbasic sectors which include trade, finance, service, and government sectors.

### 1.3 The Secondary Effect Module

Industries fall into three classes: water-transport-oriented (these are all included in the set of basic industries); other basic sectors (these are industries that are a significant part of the regional economic base, but which are not directly sensitive to water transportation); and the nonbasic sectors (which include those in trade, finance, services, and government).

In the first phase of the secondary effect module, a set of baseline projections are developed. Baseline implies a no-water project alternative. That is, these projections are based on the assumption that the proposed waterway investment will not be implemented. Base year data for the primary study region include the following:

1. Population
2. Employment by industry
3. Earnings by industry
4. Total personal income
5. Per capita personal income

The output/earnings multipliers are necessary to transplate the output change as predicted by the linear programming model to the earnings changes which form the basis for projections in the secondary effect module.

Growth rates for each data item are determined using the OBERS (7) growth rates (discussed in more detail in section 2.4). Now, it is important to note that where more than one BEA economic area is used to define the primary study region, the OBERS data for particular BEA areas will have to be combined--this is not a serious problem. Then the OBERS growth rates are determined by the computer program and applied to the data for the base year to generate the "baseline" or no-project growth path. The OBERS data are reported projections for historic years 1969 and 1978 and projected to 1985, 1990, 2000, and 2030. The program developed herein has the advantage that the user can specify any base year and any two projection years. Necessarily, however, the OBERS growth rates are used to make those projections. From the projected data, the earnings/employment ratios are determined and stored in the computer program in order to translate earnings change to employment change in the water-oriented sectors.

The transition from the linear programming to the secondary effect module proceeds as follows: the linear programming model predicts output

change in each of a set of water-transport-oriented industries. It is assured that earnings in each sector will change in proportion to the output changes. Again, it is important to emphasize that this is done initially only for the water-transport-oriented sectors. The earnings/employment ratios, which have been stored, are then used to translate earnings change into employment change in the directly-affected sectors. Employment in the other basic sectors is assumed to be unaffected by the waterway investment. Thus, earnings and employment levels there are the same as under the baseline projection.

The ratio of nonbasic-basic activity is assumed to be the same before and after the waterway project is implemented. Thus, the change ( $\Delta$ ) in nonbasic earnings and employment is determined as:

$$\Delta E_{NB} = [E_{NB}/E_B]_{\text{Baseline}} \cdot \Delta E_B$$

where  $E_{NB}$  and  $E_B$  represent nonbasic activity and basic activity. This employment change is then allocated proportionally among the several nonbasic sectors. Thus, it is assumed that the ratio of nonbasic to basic activity, whether it be measured in terms of output, earnings, or employment, remains the same under the with-project alternative as it does under baseline projection.

The result is a set of projections for the same year using the same variables as made under the baseline case. The tables are set up in exactly the same format and facilitate the comparisons to be made below. That is, for each year being studied, the values of the projected variables on with- and without-basis are presented as are the actual change and the percentage change. This facilitates identifying the secondary impacts.

While it is clear that the economic effects of a waterway-type investment do not all occur immediately but are more likely to occur over a period of perhaps as long as ten years, the model uses a comparative static approach. That is, the model identifies equilibrium levels of activity on a with- and without-project basis. That is not to say that the impacts all occur instantaneously, but that the model only considers that point at which all the impacts, or at least most of them, have been captured. Efforts to model the secular phasing in of secondary benefits were determined to be outside the scope of the somewhat limited project. Therefore, the user must determine that year in which most of the economic effects will have occurred; this is defined as the implementation year.

## CHAPTER 2

### Input Data

Certain data requirements have to be met in order to operate the direct effects and secondary effects evaluation models. Data required which are representative of regional basic water-oriented industry cost, production, transportation, price, demand, and input available characteristics. These are used to initialize and parameterize the linear programming system. Also, certain base year and projection year data are required to initialize the economic base module. These data are specific to certain regional delineations and associated water-oriented basic and nonwater-oriented basic and nonbasic sectors. Therefore, the impact regions have to be defined and outlined, and the sectors comprising the regional economic base have to be identified. The steps in order to achieve this delineation and to obtain the necessary data for the evaluation model are outlined below.

#### 2.1 Criteria for Definition of Impact Regions

The identification of an appropriate study area is a critical first step in evaluating waterway and other Corps of Engineer's investments. The region defined should meet most or all of the following criteria:

1. The region should be sufficiently autonomous in economic terms (i.e., closed with respect to certain economic activities and flows) sufficient to distinguish it from neighboring regions.

2. The individual spatial units should be able to be aggregated with others to form regions large enough to capture the full economic effects of the investment.

3. Perhaps most important, current and historical data should be readily available from existing sources for the units as defined.

We recommend that the concept of a functional economic area (FEA) be adopted for project evaluation. The functional economic area is essentially a nodal region where attention is focused on the center, usually the largest city, and its interrelations with smaller cities and rural areas in the outlying parts of the region. These regions usually are composed of heterogeneous elements having strong functional linkages. For example, many multi-county regions are characterized by a central city where manufacturing is the dominant activity, a rural area where agriculture forms the industrial base, and a set of smaller cities that act as service centers for the population in the nearby rural areas. Generally, these regions are closed with respect to labor force commuting patterns, distribution of retail goods and services, and/or some communications media. In such a region, a more than proportionate share of the region's economic activity takes place at the center as flows of people, goods, and communications tend to focus in the focal or central city.

Labor markets are useful approximations to a nodal region or functional economic area. The commuting radius to the largest city in the region internalizes its home-to-work trips and captures most of the retail and services expenditures of the region's residents. Family income is largely earned and expended within the labor market, and this region contains most of the households that consume public services offered by the central city. A labor market often is the geographical basis for regional planning commissions concerned with coordinating the development of transportation facilities among the various counties. Also, it may provide an appropriate region for consolidating certain governmental services. For identifying and

measuring the economic impacts of public investment projects such as the construction or improvement of waterways, it is essential that functional linkages within and among regions be given explicit consideration. As the primary or first-round economic impacts of such an investment are usually manifest in a given geographical area, the nodal region (i.e., the functional economic area) or a variant thereof appear to be the logical basic unit for analysis.

The notion of a functional economic area is based on the following considerations: (a) essential services and a major share of regional employment often are found in the central city; (b) the perimeter of the functional economic area within which most "people movements" are made is defined by the maximum time a resident will spend commuting to work (estimated to be about 60 minutes each way); and (c) the existence of scale economies and minimum thresholds in the production of certain goods and services suggests the central city must meet a minimum population size in order to be viable.

Typically the functional economic area is a multicounty labor market (i.e., the area is closed with respect to commuting patterns) usually centered on a focal or dominant city with 25,000 or more inhabitants. In some more sparsely populated parts of the United States, it is found that smaller population centers, including some with populations of less than 10,000, serve as centers for multicounty areas. While the landscape characteristics of a typical functional economic area would differ from those usually associated with a large metropolitan area, the functional economic area should be considered as a spatially extended urban area. The low density rural area is merely the site of one of the export industries (agriculture) of this extended city, and the smaller peripheral towns act as service centers

for noncentral city residents in much the same way as do suburban shopping centers in the large metropolitan area.

The functional economic area concept is gaining wide acceptance. There are some indications that the Bureau of the Census may begin reporting some data on an FEA basis. State and other federal government agencies are using FEA-type areas for administration and other purposes. ZIP code areas used by the United States Postal Service tend to correspond with urban commuting fields and, therefore, with functional economic area delineations. Indeed, the economic areas defined by the Bureau of Economic Analysis have been developed using these same considerations and criteria and, as indicated below, are recommended for use in Corps of Engineer's project evaluations.

The functional economic area concept yields a set of relatively autonomous regions. The economic linkages among these areas generally are confined to a subset of the producing sectors and commuting across area boundaries is minimized. Thus, the functional economic area provides a reasonably stable and independent planning unit. Further, it provides a useful context for comparing development indicators because an essential part of its delineation criteria are based on resident access to employment and at least a minimal range of public and privately provided services.

As the focus of this manual is on the regional economic development implications of waterway and related investments, it is submitted that the use of the functional economic area concept provides the essential building block for constructing appropriate regions. As a region should be large enough so that virtually all of the area in which there are significant primary impacts will be included, a typical water investment project area would include several functional economic areas. By using such building blocks, the differential impacts on the component functional economic areas and the

project area easily can be identified and the total effects readily estimated by summing across all relevant functional economic areas. Identification of changes in economic flows is facilitated by the limited number of inter-FEA linkages. The advantages of the functional economic areas. Identification of changes in economic flows is facilitated by the limited number of inter-FEA linkages. The advantages of the functional economic area concept for economic analysis of this type clearly outweigh the few drawbacks.

The Bureau of Economic Analysis (BEA) in the U.S. Department of Commerce has used the area delineation concept to define 193 functional economic areas in the United States. These are commonly known as the Bureau of Economic Analysis, or BEA, economic areas. To facilitate data collection, these areas are based on combinations of existing county units and exhaust all counties in the United States (i.e., there is no county that is not included in a BEA area).

The definition of these areas is as follows:

The Bureau of Economic Analysis (BEA) economic areas are nodal functional areas delineated to facilitate regional economic analysis. Each area consists of an economic node--a standard metropolitan statistical area (SMSA), or similar area, that serves as a center of economic activity--and the surrounding counties that are economically related to the center. To the extent possible, each area includes the place-of-work and place-of-residence of its labor force. The areas cover the entire United States.

BEA economic areas were first delineated in 1969, based on data from the early 1960's. During the past decade, the regional distribution of economic activity changed. Some new centers developed and at the same time, some centers--particularly those in areas where agriculture was the basic industry--declined and were absorbed into other areas. Expanded transportation networks, by affecting patterns of travel, also led to changes in area boundaries. The Interstate Highway System was a major factor of this kind.

The 1977 delineation resulted in 133 areas--ten more than in 1969--and was based primarily on three sets of data: (1) journey-to-work data from the 1970 Census of Population; (2) newspaper circulation data for 1972; and (3) 1975 county commuting data developed from Social Security Administration and Internal Revenue Service Records.

#### Delineation of Boundaries

Delineation procedures were essentially the same as those used in 1969. As a first step, the SMSA containing the largest percentage of employment in an area identified as a potential economic area was usually chosen as the principal center. In some economic areas, smaller SMSA's were added as secondary centers. Where an SMSA was an integral part of a larger metropolitan complex, a multi-SMSA center was chosen. For example, the Jersey City, Newark, Patterson-Clinton-Passaic, Stamford, Norwalk, Bridgeport, and Nassau-Suffolk SMSA's are all part of the New York City metropolitan area complex, which constitutes the center of the New York economic area. In sections of the country with no SMSA's, cities with population of 25,000, and functioning as economic nodes, were identified as area centers.

After the centers were identified, each of the approximately 2,600 counties that did not fall within a center was examined to determine the center to which it was most closely related. For the bulk of these counties, the primary data source used was journey-to-work information from the 1970 Census of Population. These data showed the gross commuting of workers from each county of residence to as many as 13 counties of work. Counties were assigned to centers in accordance with commuting patterns.

In many instances, the association between a county and a particular area was not based on direct commuting ties to the central city or county, but rather on commuting ties to a non-central county, which, in turn, was tied to the center.

The assignment of counties to centers was more difficult in urban areas of the United States because of the insufficiency of commuting data. This problem was overcome through the use of supplemental data, such as metropolitan newspaper circulation figures in rural areas, and the advice of people such as state planning agents, who were familiar with the geography and economies of the areas.

The 1970 journey-to-work data were compared with the 1975 county commuting data developed from the Social Security Administration's 10-Percent Continuous Work History Sample and from place-of-residence data from Internal Revenue Service Records. This comparison, however, did not result in substantial changes in the delineations.

Preliminary delineations of economic areas were circulated for review and comment to the above-mentioned people and to other authorities in state planning offices, university bureaus of business and economic research, and field offices of federal agencies involved in water resources planning. Final delineations took these comments into account (Bureau of Economic Analysis (8)).

A detailed listing of the BEA areas and their component counties is found in the Bureau of Economic Analysis publication (8).

For the Utah State University Foundation study of the economic benefits of the proposed Red River Waterway (Lewis et al. (2)), the BEA economic areas centered on Shreveport, Louisiana; Texarkana, Texas; and Tyler-Longview, Texas were selected as the primary study area. The counties comprising each of these areas are listed in Table 2.1. Note that the counties are identified by proximity to the waterway as shown graphically in Figure 2.1. For example, Tier 1 counties include those located adjacent to the waterway; Tier 2 includes those counties one county removed from the waterway; and Tier 3 includes all other counties. While this distinction is not critical to the linear programming model outlined in this report, it can be useful in the presentation and analysis of data for the region. For example, Table 2.2 reports population levels and percentage changes for the component parts of BEA economic areas 120 (Tyler-Longview, Texas). Relative population growth for groups of counties in each tier might aid in understanding the potential effects of waterway development on population and other measures of growth.

TABLE 2.1

## Red River Impact Region

BEA Area	Tier 1 Counties <sup>a</sup>	Tier 2 Counties <sup>b</sup>	Tier 3 Counties <sup>c</sup>
117 Shreveport, LA (13 counties)	Avoyelles, LA Rapides, LA <sup>d</sup> Grant, LA Natchitoches, LA Red River, LA De Soto, LA Caddo, LA <sup>d</sup> Bossier, LA	Sabine, LA Winn, LA Bienville, LA Webster, LA	Claiborne, LA
119 Texarkana, TX (16 counties)	Miller, AR <sup>d</sup> Lafayette, AR Little River, AR Sevier, AR Hempstead, AR Camp, TX	Columbia, AR Cass, TX Bowie, TX <sup>d</sup> Nevada, AR Howard, AR Morris, TX Titus, TX	Pike, AR Lamar, TX Red River, TX
120 Tyler-Longview, TX (16 counties)	Harrison, TX Marion, TX Upshur, TX	Greg, TX Wood, TX Panola, TX	Smith, TX <sup>d</sup> Rusk, TX Shelby, TX San Augustine, TX Angelina, TX Nacogdoches, TX Cherokee, TX Houston, TX Anderson, TX Henderson, TX

<sup>a</sup>Tier 1 refers to counties adjacent to waterway.

<sup>b</sup>Tier 2 refers to counties one county removed from waterway.

<sup>c</sup>Tier 3 refers to all counties more than one county removed from waterway.

<sup>d</sup>Indicates SMSA or central city counties.

SOURCE: Bureau of Economic Analysis (7).

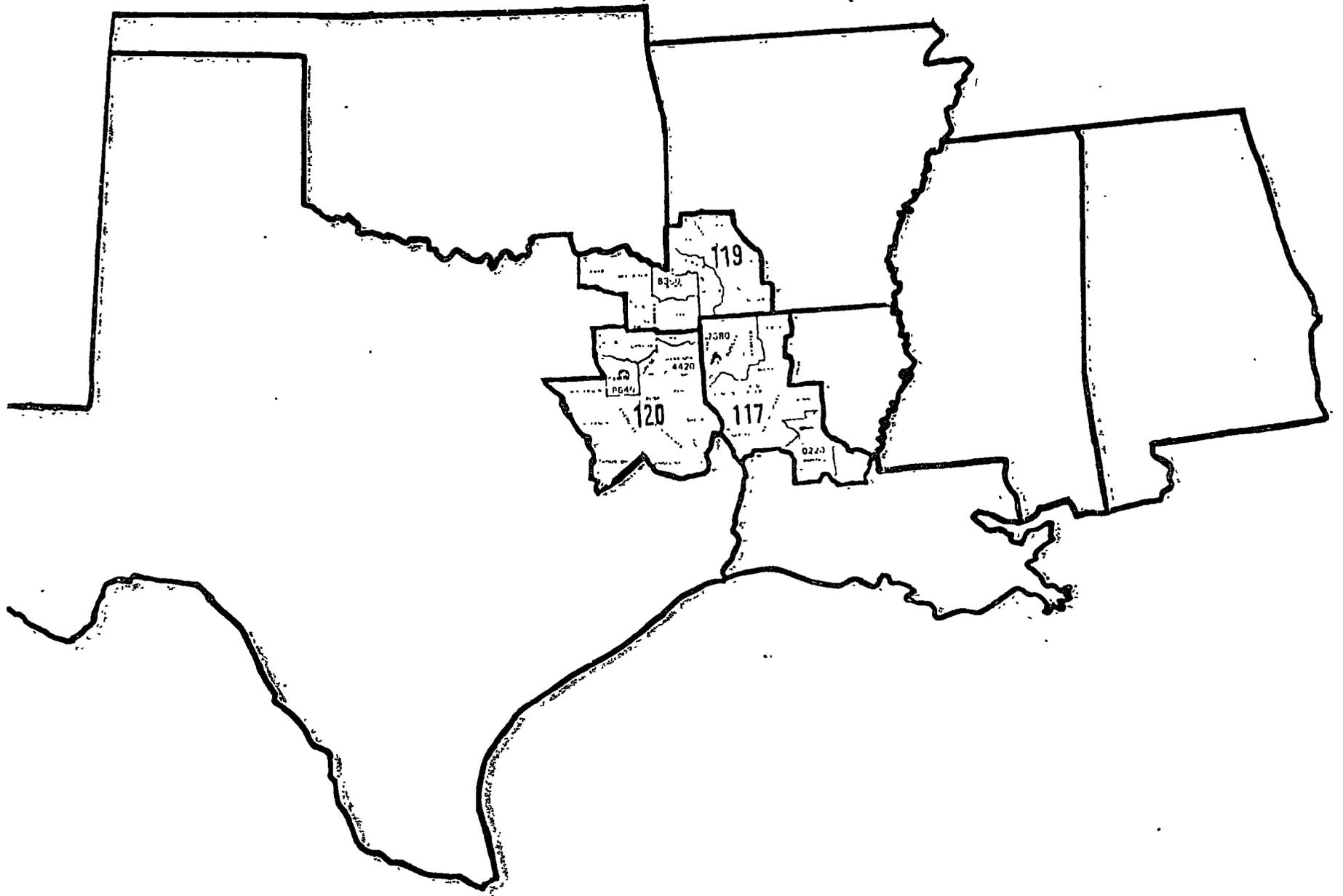


FIGURE 2. 1: The Red River Waterway Study Region

TABLE 2.2

Population, Percentage Change, and Relative Percentage Change  
By County, Tier, and Region, 1972-1977

County	Tier	Population		%Δ	%Δ in Population Relative to:	
		1972	1977		Region	Nation
Harrison	1	44,700	45,800	2.5	0.342	0.631
Marion	1	7,800	8,500	9.0	1.251	2.302
Upshur	1	23,000	24,500	6.5	0.909	1.673
Gregg	2	77,000	85,400	10.9	1.520	2.799
Panola	2	16,600	18,100	9.0	1.259	2.318
Wood	2	20,300	22,000	8.4	1.167	2.148
Anderson	3	30,100	33,200	10.3	1.435	2.642
Angelina	3	52,500	56,600	7.8	1.088	2.003
Cherokee	3	33,700	32,400	-3.9	-0.538	-0.990
Henderson	3	28,800	33,100	14.9	2.081	3.830
Houston	3	18,800	18,700	-0.5	-0.074	-0.136
Nacogdoches	3	40,100	42,600	6.2	0.869	1.599
Rusk	3	35,200	37,600	6.8	0.950	1.749
San Augustine	3	8,100	8,500	4.9	0.688	1.267
Shelby	3	19,900	20,300	2.0	0.280	0.516
Smith	3	102,000	111,500	9.3	1.298	2.389
Tier 1	1	75,500	78,800	4.4	0.609	1.121
Tier 2	2	113,900	125,500	10.2	1.419	2.613
Tier 3	3	369,200	394,500	6.9	0.955	1.758
Region	0	558,800	598,900	7.2	1.000	1.841

## 2.2 Commodity and Sector Classification

To some extent, the identification and inclusion of the commodities to be studied necessarily will be region-specific. Our experience in this work suggest that the following commodity and sector classifications will cover most situations. This commodity list and sector classification are shown in Table 2.3. In some regions, some commodities are not being produced and, hence, would not be included in the model. There may be special cases where some commodity, not included in this list, would have to be added. But we regard this list as reasonably exhaustive. There are 19 broad sector classifications.

The linear programming model is set up to handle up to twenty commodities; there is no problem if the number of commodities is less than twenty--the program automatically adjusts for that.

## 2.3 Sources of Data for the Direct Effects Module: Linear Programming System

As indicated earlier, data are needed to develop the linear programming model. Parameters which have to be provided consist of the following:

1. Product prices in each region of interest.
2. Primary and/or intermediate input prices in each region of interest.
3. Transport costs per unit of output associated with the shipment of products from supply regions to demand regions.
4. Input per unit of output coefficients in each supply region.
5. Input availability limits for each region.
6. Maximum transport mode capacities in terms of units of the products. These can be specified for each route delineated for the problem of interest and/or overall capacities by mode. If the project being evaluated involves the introduction of a new mode of transportation, then the capacity of this specific mode over all interregional routes needs to be specified.

TABLE 2.3

Proposed Commodity and Sector Classifications  
For U.S. Army Engineer Linear Program Model

Commodity	Sector Classification
Corn	Grains
Wheat	
Milo	
Soybeans	
Oats	
Barley	
Iron ore	Iron ore
Barites	Other nonmetal minerals
Primary ash	
Other primary minerals	
Coal	Coal
Crude petroleum	Crude Petroleum
Sand	Aggregates
Gravel	
Crushed stone	
Bank stabilization stone	
Cement	Cement
Sugar	Sugar and molasses
Molasses	
Primary syrups	
Logs	Primary forest products
Chips	
Gums	
Lumber	Lumber and dimension stock
Dimension stock	
Wood frames	
Particle board	
Millwork	
Plywood	
Veneer	
Wood Containers	

TABLE 2.3 (Continued)

Commodity	Sector Classification
Paper	Paper and paper products
Newsprint	
Pulp	
Liner board	
Paper containers	
Paperboard products	
Hydrochloric acid	Industrial chemicals
Sulfuric acid	
Formaldehyde	
Caustic soda	
Sulfur	
Hexane	
Naptha chemicals	
Benzene	
Soda ash	
Superphosphate	
Other fertilizers	
Pesticides	
Coke	Coal and petroleum products
Tars	
Creosote	
Residual oil	
Lubricating oil	
Fuel oil	
Feed stock	
Asphalt	
Roof material	
Basic steel	
Steel bars	
Steel ingots	
Steel rods	
Plate steel	
Ferro-manganese	
Pipe	Pipe and castings
Castings	
Molds	
Silico-manganese	Nonferrous metals
Aluminum Ingots	
Other nonferrous metals	
Fabricated metal	Fabricated metal
Scrap metal	Scrap metal

7. Demand requirements for each demand region in terms of units of each product demanded.
8. Maximum production levels for each product in each supply region. If the project being evaluated involves the introduction of new products and their production in various regions, then these new sectors have to be specified; and the associated production capacities in each region involved have to be given.

In obtaining the data to develop each of the above parameters, it is important to keep in mind the "without" project versus the "with" project evaluation concept. The "without" project data should represent existing or past interindustry and/or transportation production and cost conditions. The "with" project data will involve existing plus projected or otherwise assumed values of some parameters based on survey, forecast, or previous project experience and procedures. For example, the "without" project evaluation views the optimum routing of products in and out of a particular region of interest under existing transport cost conditions for existing modes of production and transport. However, to evaluate a project that is proposed, some projection of new routes, new modes of transport, and associated costs have to be made and imposed on the evaluation model. Public resource managers have developed several procedures to project new or alternative production, transport, input, and mode conditions as various projects progress from design through the benefit/cost evaluation stage prior to being presented to legislatures for funding. These procedures and the projections arising from them should be fully utilized to provide both "without" or existing condition data and estimates of changes to be associated with a new project. The example used in this manual to illustrate the use of the evaluation tool relies heavily on this data source. Data requirements and sources in addition to public project survey or projections are outlined below.

### 2.3.1 Product Price Data

Regional product prices are seldom recorded except in specific commodity research studies, manufacturing cost studies, and certain interindustry studies. For certain industries, such as the iron and steel industry, the chemical industry, and petroleum refining, for example, regional prices are reported in trade journal such as Iron Age (9), Oil and Gas Journal (10), Chemical Weekly (11), etc. The main national source of product prices comes from Producers Prices and Price Indexes (12). Some regional prices are reported in Producers Prices also.

In order to provide data for benefit/cost calculations for project justification, Corps of Engineer District Offices do survey industries involved in proposed projects. Limited price data come from these surveys, but these data can be used along with the regularly published sources to arrive at regional price differentials that exist. For many products, mill-based pricing is the case, so that location differentials can be readily obtained. The Mineral Yearbook (13) and Minerals Commodity Profiles (14) series also publish regional price data for nonfuel minerals. The U.S. Department of Agriculture publishes Agricultural Statistics (15), Agricultural Prices (16), Changes in Farm Production and Efficiency (17), Farm Income Statistics (18), and the various commodity Situation reports, all of which have national and some limited regional price data. Various states publish state agricultural prices through their land-grant higher education institutions or through their respective state agricultural departments.

The coal prices used for the Red River Waterway example used in this manual are taken from the Minerals Yearbook (13) and the Battelle Columbus Laboratories (19) study of energy transport in the Red River region. Iron ore, sand and gravel, barite, and fertilizer prices were taken again from

Minerals Yearbook (13) and the Mineral Commodity Profiles (14) series provided by the U.S. Bureau of Mines. Grain prices were taken from Agricultural Prices (16) and prices reported from various Louisiana and Texas Agricultural Experiment Station bulletins. Prices of logs and various classes of lumber were taken from Producers Prices (12) and weighted to arrive at lumber sector prices for all the regions involved in the example. Likewise, sugar, paper, iron and steel articles, pipe, scrap, various chemicals, and specific nonferrous and fabricated metals prices were taken from Producers Prices (12), weighted; and sector prices for each region were developed using mill-base pricing schemes, information from Iron Age (9), and Chemical Weekly (11).

If industrial survey was to be done in conjunction with the effort to obtain estimates of shipments to and from a region by mode in the benefit/cost analysis by each district involved, considerable relative price information could be obtained. In some instances this has been done, such as in the case of the McClellan-Kerr Arkansas River Project and to a certain extent for the proposed Red River Waterway.

### 2.3.2 Primary Input Prices

Regional wage data for various industries can be obtained from the Census of Manufacturers (20), Annual Survey of Manufacturers (21), and Census of Minerals Industries (22) series. The U.S. Department of Labor published Employment and Earnings (23), which gives wage data for some industries in the manufacturing and other sectors on a national and SMSA basis. Regional farm wage data are obtained from the U.S. Department of Agriculture's Farm Labor (24) series. The Annual Survey of Manufacturers (21), Census of

Minerals Industries (22), and Farm Labor (24) series were used for the labor price series needed for the evaluation model example.

Capital prices and/or rental values, i.e., interest rates, are difficult to obtain on a regional basis. Rates which can be used for various industries are found in Moody's Standard and Poors or in occasional issues of the Citibank's Monthly Economic Letter (25). For purposes of illustration in this case, and we recommend its general use when using a linear programming framework, we used the assumption that one dollar's worth of capital is one dollar. That is, the price of capital is assumed to be unity. In using this assumption, one also has to assume that the capital coefficient (to be described later) is to be defined in terms of dollars of capital per unit of output.

### 2.3.3 Transportation Costs by Mode

There are several estimates of transportation costs associated with each mode of transportation and product to be moved. An agency also can obtain freight rate estimates from traffic and rate consultants. It is recommended that such rates be obtained from the rate estimates which are made in order to incorporate transport cost information into the project benefit/cost analysis. These rates have a common base and have been developed using known procedures within the U.S. Army Corps of Engineers. These rates are developed from consultants information, Waterborne Commerce files, and Office of the Chief of Engineers information on rates. The rates can be obtained from the original traffic analysis worksheets (26) developed for the benefit/cost analysis. By using these rates, any development evaluation similar to the evaluation illustrated in this manual can be related to the benefit/cost study. Indeed, the evaluation of output, earnings, and

employment changes is an integral part of the benefit/cost analysis for any project. Rate estimates for the illustration here are taken from the rate analysis completed for the evaluation of the Red River Waterway.

#### 2.3.4. Input/Output Coefficients

The model requires a set of labor per unit of output and capital per unit of output ratios to specify the production structure for each sector involved. As indicated above, the capital/output ratio is specified in terms of dollars of capital per unit of output. The labor coefficient is specified in terms of labor required per unit of output. Intermediate good coefficients, if used, can be specified in terms of units of intermediate goods per unit of final output.

Census of Minerals Industries (22) and the Mineral Commodity Profiles (14), and Minerals Yearbook (13) series are used to estimate primary input used and/or input required per unit of output for the minerals sectors. Annual Survey of Manufacturers (21) series is used for developing similar coefficients for the manufacturing sectors, and U.S. Department of Agriculture's Changes in Farm Production and Efficiency (17), Farm Income Statistics (18), Farm Labor (24), and Agricultural Statistics (15) series are used for the agricultural sectors.

For the minerals and manufacturing sectors, employment is obtained directly and then coefficients can be developed by the ratio of employment to output estimates by sector. Capital use was estimated by subtracting the wage bill (payroll) from the direct estimate of value-added (assuming constant returns to scale in production). Then the capital coefficient was estimated by taking the ratio of capital use to output produced by sector. These calculations have to be completed for each sector and region involved.

For the agricultural sectors involved, estimates of value-added have to be obtained from Changes in Farm Production and Efficiency (17), Farm Income Statistics (18), and Farm Labor (24) series. One obtains an estimate of capital by again assuming constant returns in production and finding capital used equal value-added minus the wage bill. Adjustments have to be applied to these estimates to account for the share of capital and/or labor for various enterprises such as grain production versus livestock production, etc. These shares are derived from the Changes in Farm Production and Efficiency (17) labor hour shares for broad regions. For smaller regions, the same share as the larger region has to be assumed. This assumption is not a bad one for grain production, but there are smaller region variations that do not necessarily coincide with broader region variations in sectors such as the dairy and other livestock sectors.

Value-added in agriculture can be estimated by subtracting farm operating expenses (net of hired labor and livestock expenses) and property taxes from the value of total agricultural output. All of these can be found in the U.S. Department of Agriculture's Changes in Farm Production and Efficiency (17), Farm Income Statistics (18), Farm Labor (24), and Economic Indicators of the Farm Sector (17) series.

If intermediate goods are assumed to be used in production for each sector and region, then the associated input/output coefficients can be developed as dollars of intermediate good per unit of final output. The associated price of such goods could be normalized to unity in a similar manner as done for capital. Note that proper accounting would have to be made for the value of intermediate goods coming into a particular region relative to the value of intermediate goods produced and used in final production within that region. Such accounting would also delineate the

minimum demand for intermediate goods in the region. Again, the Annual Survey of Manufacturers, Census of Minerals Industries, Minerals Yearbook, Changes in Farm Production and Efficiency, Farm Income Statistics, Farm Labor, and Mineral Commodity Profiles series would be the information source.

For some regions defined for specific evaluations, these above sources do not have an appropriately detailed breakdown of value-added, employment, payroll, capital, etc. In this case, the investigator has to rely on employment output ratios by BEA designation to make regional adjustments by sector for the manufacturing and minerals sectors. For the agricultural sectors one has to rely on Census of Agriculture estimates and then update these estimates for particular enterprises using farm budget data from state agricultural experiment station publications or from specific industry surveys. For the example used in this manual, information on the agricultural sectors involved was taken from publications of the Louisiana Crop and Livestock Reporting Service (27), Fielder and Guy (28), Garnick (29), Lewis et al. (2), and Texas Agricultural Experiment Station (30).

#### 2.3.5 Input Availability Limits

Once the data to develop the input coefficients are obtained, then the input limits for each region can be calculated. These limits are just the sum of the input use for each input for all sectors within a region. Note that one may want to adjust these limits when the linear programming model is used to generate output, input use, and commodity flows for the "with" project situation. Total employment (labor available) could be adjusted for current unemployment rates or rates of unemployment that are projected to exist with the project of interest in place. One could allow both capital and labor to be mobile between sectors if information on migration and wages

and returns to capital are known or projected. One also can specify the input limits for all regions totally instead of for each specific region, allowing the model to choose the optimal input use between regions and sectors. Of course, there also are production capacities which limit input use in the model. They are described later.

#### 2.3.6 Mode Capacity Limits

The limits of traffic by sector and over all sectors by mode are needed to constrain the possible interregional commodity flow that can exist both "without" the introduction of a water project such as barge transportation and "with" the project. These limits are required both for limits of flow by sector and by mode, and by mode for all sectors. Hence, the investigator specifies the traffic carrying capacity of each mode between regions including the capacity of the new waterway, for example. Notice that the capacity of the new waterway, for example, could be varied to assess changing regional development impacts and also to evaluate the sensitivity of the benefit/cost ratio to alternative project designs.

These limits are obtained from the traffic and rate analyses worksheets developed for the benefit/cost evaluation. In general, these limits should always be taken from the traffic and rate analyses data to be consistent with the benefit/cost evaluation and, particularly, if some sensitivity analysis (alteration of mode limits, input availability changes, production and/or demand requirement changes) is performed.

#### 2.3.7 Regional Demand Requirements

Regional demand requirements have to be imposed in the constraint system of the model. Since the model is designed to represent specific regional

delineations, i.e., region of interest, state or multistate region, and rest-of-U.S., then commodities are produced in each region but are transported from the rest-of-U.S. and larger state or multistate regions to the region of interest, and from that region to each of the other two larger regions and within the region of interest. Therefore, demand requirements need only be the existing units of output which flow from region to region for each sector, or the sum of the projected flows for the "with" project evaluation if some information on such projections exists. For the example used in this manual, existing and projected requirements were used which were obtained from the traffic and rate analysis worksheets (26). This is an available data source for most Corps of Engineer's projects and provides information which is consistent with the data used for the overall benefit/cost analysis for each project under evaluation.

#### 2.3.8 Maximum Supply Region Production Capacities

Demand and flow of commodities between regions cannot exceed the production capacity of all regions. Therefore, production capacities in terms of units of output produced in each region have to be imposed. These can be varied, of course, to assess the sensitivity of the impacts to such changes but are parameters for any given model solution.

These production limits are obtained directly for the minerals and agricultural sectors involved from the Minerals Yearbook, Agricultural Statistics, Mineral Commodity Profiles, and agricultural experiment station publications for each region. However, for the manufacturing sectors involved, the production levels are obtained by dividing the weighted producer prices for each sector into the value of shipments estimated for each sector which is obtained from Annual Survey of Manufacturers (21) series and

output information from the industry survey as part of the project benefit/cost evaluation. The latter source was used for the region of interest in the example used in this manual. Reliance on some regional industry survey will generally be the case for most evaluations using the modeling system here described unless the region of interest happens to coincide with state boundaries, in which case the Annual Survey of Manufacturers series is adequate.

A data file has been developed for the example project used to illustrate the use of the evaluation model described in the manual. The investigator may want to develop a data file prior to operating the evaluation model, or he/she may enter each parameter value as asked for on the terminal screen.

#### 2.4 Data Sources--Secondary Module

The secondary module requires that a set of data be entered on income in the primary study region by sector and employment by sector for the base year. The base year data is taken from tables available from the Regional Economic Information System developed by the:

Regional Economic Measurement Division  
Bureau of Economic Analysis  
U.S. Department of Commerce  
1401 K Street, N.W.  
Washington, D.C. 20230

Two tables are needed: (1) Table 5<sup>1</sup> --Personal Income by Place of Residence; and (2) Table 25--Employment by Place of Work. A copy of each of these tables are shown in Tables 2.4 and 2.5 below. These data are

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<sup>1</sup>These are the table numbers used by the Bureau of Economic Analysis; they do not correspond to table numbers in this report. They are reported to assist the user in requesting data.

published but more easily obtained at cost directly from the Bureau of Economic Analysis (telephone number 202/523-0926).

For the baseline projection (no-project projection) of income and employment, the OBERS projection series is used. For the BEA economic areas, the most current data is contained in the following volume:

Bureau of Economic Analysis. 1981. 1980 OBERS BEA Regional Projections: Economic Activity in the United States by State, Economic Area, SMSA, and State Portions of the Areas, Historical and Projected--1969-2030, Volume 2--Economic Areas. Washington, D.C.: U.S. Department of Commerce. July.

There are two tables that are relevant at the regional level of analysis:

Table 1--Population, Personal Income, and Labor and Proprietors' Income, 1969 and 1978, and Projected, 1985-2030

TABLE 2.4

## NUMBER OF FULL- AND PART-TIME JOBS (ECONOMIC AREA 117: SHREVEPORT, LOUISIANA)

	1974 2/	1975 2/	1976 2/	1977 2/	1978 2/	1979 2/
EMPLOYMENT BY PLACE OF WORK 3/						
TOTAL EMPLOYMENT 4/	260,289	260,127	270,125	274,740	281,371	283,204
BY TYPE						
WAGE AND SALARY EMPLOYMENT	232,974	232,819	242,830	246,805	252,941	253,978
PROPRIETORS' EMPLOYMENT	27,315	27,308	27,295	27,935	28,430	29,226
FARM	11,140	11,048	10,853	10,678	10,322	10,177
NONFARM	16,175	16,260	16,442	17,257	18,108	19,049
WAGE + SALARY EMPLOYMENT BY INDUSTRY						
FARM	3,433	2,905	3,222	2,695	2,695	2,588
NONFARM	22,977	20,914	23,623	24,110	25,046	25,130
PRIVATE	17,977	17,782	17,277	18,754	19,427	19,726
AGRIC. SERVICES, FORESTRY, FISHERIES + OTHER 5/	856	541	616	658	814	927
AGRICULTURAL SERVICES	809	468	552	589	708	803
FORESTRY	43	(D)	(D)	(D)	103	121
FISHERIES	(L)	(D)	(D)	(D)	(L)	(L)
OTHER 5/	0	0	0	0	0	0
MINING	5,538	5,839	6,132	6,569	6,959	7,254
ANTHRACITE MINING	0	0	0	0	0	0
BITUMINOUS COAL AND LIGNITE MINING	(D)	(L)	0	0	0	(D)
OIL AND GAS EXTRACTION	5,114	5,396	5,682	6,271	6,573	(D)
METAL MINING	0	0	0	0	0	0
NONMETALLIC MINERALS, EXCEPT FUELS	(D)	436	450	398	386	381
CONSTRUCTION	12,309	11,754	12,519	12,922	14,751	15,174
GENERAL BUILDING CONTRACTORS	4,192	3,344	3,840	3,971	2,903	4,429
HEAVY CONSTRUCTION CONTRACTORS	2,586	3,384	3,681	3,575	3,811	3,832
SPECIAL TRADE CONTRACTORS	5,531	5,026	5,198	5,376	8,037	6,913

TABLE 2.4 (Continued)

	1974 1/	1975 2/	1976 2/	1977 2/	1978 2/	1979 2/
MANUFACTURING	37,077	36,373	39,407	42,021	43,174	43,000
DURABLE GOODS	12,047	11,803	12,903	13,135	13,382	12,379
FOOD AND KINDRED PRODUCTS	4,012	3,810	4,061	3,770	4,221	4,504
TEXTILE MILL PRODUCTS	(D)	(D)	(D)	(D)	(D)	105
APPAREL AND OTHER TEXTILE PRODUCTS	2,112	1,776	2,470	2,355	2,906	2,770
PAPER AND ALLIED PRODUCTS	2,740	2,926	2,405	2,987	2,646	1,408
PRINTING AND PUBLISHING	1,545	1,515	1,710	1,593	1,564	1,024
CHEMICALS AND ALLIED PRODUCTS	728	705	723	770	750	751
PETROLEUM AND COAL PRODUCTS	704	650	715	751	793	796
TOBACCO MANUFACTURES	0	0	0	0	0	0
RUBBER AND MISC. PLASTICS PRODUCTS	(D)	(D)	365	362	407	411
LEATHER AND LEATHER PRODUCTS	0	0	(D)	(D)	(D)	(L)
NONDURABLE GOODS	25,030	24,570	26,504	28,886	29,792	30,621
LUMBER AND WOOD PRODUCTS	7,276	6,383	7,466	7,750	7,792	7,742
FURNITURE AND FIXTURES	(D)	504	486	513	536	502
PRIMARY METAL INDUSTRIES	1,593	1,722	1,532	1,478	1,834	1,730
FABRICATED METAL PRODUCTS	3,124	4,059	4,160	4,264	4,334	4,305
MACHINERY, EXCEPT ELECTRICAL	1,235	2,467	2,448	2,736	2,967	3,102
ELECTRIC AND ELECTRONIC EQUIPMENT	6,800	6,684	7,010	8,410	8,652	9,266
TRANSPORTATION EQUIPMENT EXC. MOTOR VEHICLES	1,032	290	323	374	444	317
MOTOR VEHICLES AND EQUIPMENT	634	484	422	561	307	692
ORDNANCE	(D)	0	0	0	0	0
STONE, CLAY, AND GLASS PRODUCTS	886	1,216	1,675	1,848	1,981	1,960
INSTRUMENTS AND RELATED PRODUCTS	78	185	262	334	410	349
MISCELLANEOUS MANUFACTURING INDUSTRIES	610	576	661	618	570	609
TRANSPORTATION AND PUBLIC UTILITIES	14,674	13,949	13,503	13,479	13,809	14,412
RAILROAD TRANSPORTATION	2,332	2,154	2,049	2,154	2,068	2,125
TRUCKING AND WAREHOUSING	3,388	3,133	3,412	3,487	3,823	4,042
WATER TRANSPORTATION	19	11	31	36	33	25
LOCAL AND INTERURBAN PASSENGER TRANSIT	428	417	364	348	346	366
TRANSPORTATION BY AIR	285	306	308	360	411	444
PIPELINE TRANSPORTATION	48	54	56	65	73	106
TRANSPORTATION SERVICES	118	56	77	104	136	181
COMMUNICATION	3,420	3,409	3,296	3,313	3,613	3,832
ELECTRIC, GAS, AND SANITARY SERVICES	4,636	4,389	4,910	4,612	4,286	4,271
WHOLESALE TRADE	11,893	12,292	12,881	13,425	14,053	14,203
RETAIL TRADE	33,364	33,324	33,356	37,185	36,197	37,634
BUILDING MATERIALS AND FARM EQUIPMENT	1,758	1,511	1,701	1,729	1,915	1,941
RETAIL GENERAL MERCHANDISE	6,488	6,084	6,373	6,513	6,696	6,252
FOOD STORES	5,242	5,395	5,636	6,039	6,088	6,291
AUTOMOTIVE DEALERS AND SERVICE STATIONS	5,506	5,403	5,638	5,786	5,824	5,484
APPAREL AND ACCESSORY STORES	2,723	2,624	2,837	2,829	2,923	2,668
FURNITURE AND HOME FURNISHINGS STORES	1,408	1,406	1,542	1,619	1,651	1,581
EATING AND DRINKING PLACES	6,423	6,905	7,276	8,150	8,675	8,811
MISCELLANEOUS RETAIL STORES	3,816	4,196	4,753	4,520	4,605	4,706

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TABLE 2.4 (Continued)

	1974 1/	1975 2/	1976 2/	1977 2/	1978 2/	1979 2/
FINANCE, INSURANCE, AND REAL ESTATE	8,453	8,909	9,114	9,424	10,044	10,475
BANKING	2,987	3,095	3,180	3,350	3,635	3,936
CREDIT AGENCIES OTHER THAN BANKS	1,455	1,620	1,615	1,647	1,704	1,672
SECURITY, COMMODITY BROKERS AND SERVICES	01	65	94	109	72	76
INSURANCE CARRIERS	1,293	1,219	1,232	1,105	1,169	1,276
INSURANCE AGENTS, BROKERS AND SERVICES	1,049	1,205	1,172	1,236	1,397	1,487
REAL ESTATE	1,475	1,476	1,592	1,722	1,750	1,757
COMBINED REAL ESTATE, INSURANCE, ETC.	61	113	78	42	41	43
HOLDING AND OTHER INVESTMENT COMPANIES	72	116	151	213	256	228
SERVICES	47,813	47,601	49,549	51,831	52,646	52,647
HOTELS AND OTHER LODGING PLACES	1,834	2,074	2,252	2,337	2,263	2,136
PERSONAL SERVICES	2,750	2,519	2,496	2,532	2,546	2,460
PRIVATE HOUSEHOLDS	17,315	16,899	16,910	17,377	17,034	15,759
MISCELLANEOUS BUSINESS SERVICES	3,177	3,502	3,707	4,066	4,482	4,727
AUTO REPAIR, SERVICES, AND GARAGES	1,150	1,197	1,305	1,269	1,394	1,421
MISCELLANEOUS REPAIR SERVICES	753	592	670	650	811	855
AMUSEMENT AND RECREATION SERVICES, NEC	666	1,062	1,022	1,067	1,119	1,125
MOTION PICTURES	398	392	464	449	431	340
MEDICAL AND OTHER HEALTH SERVICES	10,569	11,111	12,154	13,275	13,396	13,889
LEGAL SERVICES	677	663	697	783	881	895
PRIVATE EDUCATIONAL SERVICES	1,952	1,584	1,643	1,620	1,533	1,664
SOCIAL SERVICES	0	1,130	1,259	1,603	1,893	2,164
MUSEUMS	35	58	57	55	49	46
NONPROFIT MEMBERSHIP ORGANIZATION	5,336	3,757	3,634	3,494	3,349	3,335
MISCELLANEOUS SERVICES	1,201	1,061	1,079	1,274	1,465	1,611
GOVERNMENT AND GOVERNMENT ENTERPRISES	57,564	59,132	60,331	56,596	55,819	55,664
FEDERAL, CIVILIAN	7,482	7,184	7,290	7,345	7,436	7,544
FEDERAL, MILITARY	13,055	12,410	12,055	11,427	11,609	11,246
STATE AND LOCAL	37,027	39,538	40,986	37,824	36,774	36,874
TOTAL POPULATION (THOUSANDS)	653,305	659,594	669,889	674,168	678,559	682,240

(C) LESS THAN 10 WAGE AND SALARY JOBS.

(D) NOT SHOWN TO AVOID DISCLOSURE OF CONFIDENTIAL INFORMATION.

1/ ESTIMATES BASED ON 1967 STANDARD INDUSTRIAL CLASSIFICATION.

2/ ESTIMATES BASED ON 1972 STANDARD INDUSTRIAL CLASSIFICATION.

3/ CONSISTS OF FULL AND PART-TIME EMPLOYMENT.

4/ INCLUDES WAGE AND SALARY EMPLOYMENT PLUS NUMBER OF PROPRIETORS.

5/ INCLUDES THE NUMBER OF U.S. RESIDENTS EMPLOYED BY INTERNATIONAL ORGANIZATIONS.

TABLE 2.5

INCOME BY PLACE OF WORK, BY TYPE, AND BY INDUSTRY; AND DERIVATION OF PERSONAL INCOME BY PLACE OF RESIDENCE (ECONOMIC AREA 117: SHREVEPORT, LOUISIANA)

	1974 1/	1975 2/	1976 2/	1977 2/	1978 2/	1979 2/
	(THOUSANDS OF DOLLARS)					
INCOME BY PLACE OF WORK						
TOTAL LABOR AND PROPRIETORS INCOME 3/ 4/	1,973,403	2,142,677	2,468,077	2,699,207	3,040,151	3,418,611
BY TYPE						
WAGE AND SALARY DISBURSEMENTS	1,641,633	1,796,801	2,007,460	2,279,213	2,480,899	2,762,628
OTHER LABOR INCOME	126,231	153,727	187,014	216,746	254,954	241,232
PROPRIETORS INCOME 4/	205,539	191,949	273,603	271,243	304,258	364,551
FARM	49,805	29,950	51,296	40,408	60,429	92,131
NONFARM 4/	155,734	161,999	222,307	230,835	243,829	272,420
BY INDUSTRY						
FARM	59,473	39,553	61,113	50,643	71,649	104,418
NONFARM	1,913,930	2,103,124	2,406,964	2,648,564	2,968,502	3,314,193
PRIVATE	1,463,907	1,611,925	1,872,732	2,134,411	2,363,725	2,676,421
AGRIC. SERVICES, FORESTRY, FISHERIES + OTHER 5/	5,441	4,871	5,829	7,450	9,134	10,827
AGRICULTURAL SERVICES	4,886	4,375	5,140	6,316	7,531	8,950
FORESTRY	542	(0)	(0)	(0)	1,559	1,816
FISHERIES	(L)	(0)	(0)	(0)	c4	61
OTHER 5/	0	J	0	0	0	0
MINING	89,776	92,918	140,351	140,916	162,183	138,903
ANTHRACITE MINING	0	0	0	0	J	0
BITUMINOUS COAL AND LIGNITE MINING	(0)	95	(L)	(L)	(L)	(0)
OIL AND GAS EXTRACTION	84,744	88,169	135,225	135,535	156,243	(0)
METAL MINING	0	0	0	0	0	0
NONMETALLIC MINERALS, EXCEPT FUELS	(0)	4,654	5,156	5,320	5,938	6,550
CONSTRUCTION	132,408	142,133	166,531	194,392	219,419	243,836
GENERAL BUILDING CONTRACTORS	39,045	34,662	47,934	54,581	62,759	65,181
HEAVY CONSTRUCTION CONTRACTORS	24,653	39,695	42,195	43,455	52,380	56,460
SPECIAL TRADE CONTRACTORS	68,710	67,776	76,402	86,356	104,280	122,195

TABLE 2.5 (Continued)

	1974 1/	1975 2/	1976 2/	1977 2/	1978 2/	1979 2/
MANUFACTURING	351,847	392,275	461,819	545,223	614,466	670,910
NONDURABLE GOODS	114,222	123,751	144,915	165,525	181,760	178,062
FOOD AND KINDRED PRODUCTS	32,571	35,207	38,629	41,066	46,024	55,210
TEXTILE MILL PRODUCTS	(0)	(0)	(0)	(0)	(0)	1,322
APPAREL AND OTHER TEXTILE PRODUCTS	9,494	9,260	14,488	17,987	19,946	20,822
PAPER AND ALLIED PRODUCTS	37,295	40,949	47,509	56,745	58,517	38,333
PRINTING AND PUBLISHING	12,645	13,635	15,333	15,800	17,429	17,159
CHEMICALS AND ALLIED PRODUCTS	9,855	10,602	12,219	14,469	15,607	17,325
PETROLEUM AND COAL PRODUCTS	10,762	10,452	12,586	15,034	17,772	19,960
TOBACCO MANUFACTURES	0	0	0	0	0	0
RUBBER AND MISC. PLASTICS PRODUCTS	(0)	(0)	3,448	4,097	5,323	5,636
LEATHER AND LEATHER PRODUCTS	0	0	(0)	(0)	(0)	55
DURABLE GOODS	237,625	268,525	316,904	379,698	432,706	492,846
LUMBER AND WOOD PRODUCTS	58,459	57,584	79,111	58,528	93,048	109,929
FURNITURE AND FIXTURES	(0)	3,464	3,732	4,442	4,997	5,106
PRIMARY METAL INDUSTRIES	19,415	22,969	20,770	22,423	32,224	37,379
FABRICATED METAL PRODUCTS	34,615	50,079	55,210	61,664	67,815	71,932
MACHINERY, EXCEPT ELECTRICAL	12,899	27,127	29,556	37,497	44,349	50,641
ELECTRIC AND ELECTRONIC EQUIPMENT	70,233	81,012	94,263	123,492	139,780	161,177
TRANSPORTATION EQUIPMENT EXC. MOTOR VEHICLES	8,683	3,673	2,782	3,271	4,154	3,400
MOTOR VEHICLES AND EQUIPMENT	6,513	5,364	5,272	7,561	4,533	13,644
OTHER	(0)	0	0	0	0	0
STONE, CLAY, AND GLASS PRODUCTS	7,329	12,179	19,120	22,918	27,811	30,874
INSTRUMENTS AND RELATED PRODUCTS	793	2,013	2,389	3,013	4,551	5,411
MISCELLANEOUS MANUFACTURING INDUSTRIES	4,010	4,046	4,699	4,899	4,444	3,355
TRANSPORTATION AND PUBLIC UTILITIES	184,443	198,738	210,212	229,080	255,494	295,206
RAILROAD TRANSPORTATION	35,267	38,282	38,331	43,510	45,896	55,912
TRUCKING AND WAREHOUSING	40,504	39,486	46,400	52,659	62,416	74,956
WATER TRANSPORTATION	183	304	287	174	203	200
LOCAL AND INTERURBAN PASSENGER TRANSIT	3,532	4,197	4,165	4,327	4,834	5,477
TRANSPORTATION BY AIR	3,496	4,013	4,585	5,444	6,483	7,829
PIPELINE TRANSPORTATION	723	888	1,026	1,258	1,436	2,170
TRANSPORTATION SERVICES	557	564	881	1,744	2,316	2,956
COMMUNICATION	42,151	49,620	53,924	59,873	71,364	79,682
ELECTRIC, GAS, AND SANITARY SERVICES	58,030	63,384	60,413	60,071	60,546	66,024
WHOLESALE TRADE	128,059	138,888	156,285	174,196	195,953	221,505
RETAIL TRADE	222,079	240,484	274,071	299,784	331,215	366,869
BUILDING MATERIALS AND FARM EQUIPMENT	15,862	14,720	17,439	19,691	22,665	23,387
RETAIL GENERAL MERCHANDISE	38,332	38,380	43,925	47,030	51,679	53,687
FOOD STORES	36,793	42,490	45,950	51,937	56,053	64,284
AUTOMOTIVE DEALERS AND SERVICE STATIONS	10,395	31,619	38,118	63,535	70,613	77,065
APPAREL AND ACCESSORY STORES	10,395	16,037	17,217	18,927	20,966	21,611
FURNITURE AND HOME FURNISHINGS STORES	12,595	14,257	16,593	17,667	19,332	21,178
EATING AND DRINKING PLACES	25,917	29,917	30,260	41,931	46,910	52,289
MISCELLANEOUS RETAIL STORES	27,250	33,109	39,569	39,516	42,995	49,368

TABLE 2.5 (Continued)

	1974 1/	1975 2/	1976 2/	1977 2/	1978 2/	1979 2/
FINANCE, INSURANCE, AND REAL ESTATE	78,224	89,172	106,009	123,857	141,506	161,184
BANKING	27,241	30,797	34,206	38,160	44,544	52,460
CREDIT AGENCIES OTHER THAN BANKS	12,824	14,619	16,104	17,616	20,129	21,810
SECURITY, COMMODITY BROKERS AND SERVICES	1,623	2,927	3,914	3,797	4,703	5,924
INSURANCE CARRIERS	12,764	12,403	14,289	14,730	14,723	18,771
INSURANCE AGENTS, BROKERS, AND SERVICES	15,368	19,203	22,101	25,547	33,275	33,821
REAL ESTATE	6,499	6,101	11,974	19,041	21,411	22,424
COMBINED REAL ESTATE, INSURANCE, ETC.	1,429	1,893	1,523	1,257	1,340	1,435
HOLDING AND OTHER INVESTMENT COMPANIES	476	1,240	1,898	3,709	4,371	6,539
SERVICES	278,630	312,346	351,625	399,513	451,355	517,181
HOTELS AND OTHER LODGING PLACES	8,191	10,202	11,850	13,190	14,131	15,023
PERSONAL SERVICES	19,830	20,247	22,396	24,736	26,638	29,095
PRIVATE HOUSEHOLDS	34,999	36,373	40,274	42,942	47,270	51,629
MISCELLANEOUS BUSINESS SERVICES	24,489	29,736	36,004	39,885	45,916	52,750
AUTO REPAIR, SERVICES, AND GARAGES	10,372	12,624	14,611	16,507	19,671	22,698
MISCELLANEOUS REPAIR SERVICES	8,132	8,341	9,240	10,145	12,420	14,704
AMUSEMENT AND RECREATION SERVICES, NEC	3,910	6,682	6,265	7,455	8,644	9,482
MOTION PICTURES	1,354	1,410	1,665	1,833	1,712	2,147
MEDICAL AND OTHER HEALTH SERVICES	94,198	110,635	128,918	147,207	167,618	193,351
LEGAL SERVICES	17,579	20,386	22,091	26,156	28,669	31,773
PRIVATE EDUCATIONAL SERVICES	10,736	11,207	9,340	13,439	13,569	15,451
SOCIAL SERVICES	0	5,613	6,985	8,649	12,083	15,521
MUSEUMS	287	288	331	346	375	434
NONPROFIT MEMBERSHIP ORGANIZATION	23,751	17,633	17,525	18,025	19,364	20,793
MISCELLANEOUS SERVICES	20,802	21,372	24,220	28,748	33,175	37,330
GOVERNMENT AND GOVERNMENT ENTERPRISES	444,023	491,293	534,242	544,153	587,777	637,772
FEDERAL, CIVILIAN	88,194	97,883	108,438	116,264	125,134	133,722
FEDERAL, MILITARY	104,985	105,283	105,756	105,992	111,459	119,822
STATE AND LOCAL	250,844	288,127	320,048	321,897	347,664	384,199

TABLE 2.5 (Continued)

	1974 1/	1975 2/	1976 2/	1977 2/	1978 2/	1979 2/
DERIVATION OF PERSONAL INCOME BY PLACE OF RESIDENCE						
TOTAL LABOR AND PROPRIETORS INCOME BY PLACE OF WORK	1,773,403	2,142,677	2,468,077	2,679,207	3,040,151	3,418,611
LESS: PERSONAL CONTRIBUTIONS FOR SOCIAL INSURANCE BY PLACE OF WORK	99,442	110,806	126,181	137,947	150,590	180,237
NET LABOR AND PROPRIETORS INCOME BY PLACE OF WORK	1,873,961	2,031,871	2,341,896	2,561,260	2,889,561	3,238,374
PLUS: RESIDENCE ADJUSTMENT	14,252	15,474	14,101	21,238	29,237	35,809
NET LABOR AND PROPRIETORS INCOME BY PLACE OF RESIDENCE	1,888,213	2,047,345	2,355,997	2,582,498	2,918,798	3,274,183
PLUS: DIVIDENDS, INTEREST, AND RENT 7/	354,268	340,333	427,282	439,863	573,158	650,159
PLUS: TRANSFER PAYMENTS	419,733	514,273	567,106	613,795	663,240	750,428
PERSONAL INCOME BY PLACE OF RESIDENCE	2,672,214	2,942,501	3,350,385	3,636,156	4,146,196	4,674,770
PER CAPITA INCOME (DOLLARS)	4,090	4,661	5,001	5,468	6,110	6,852
TOTAL POPULATION (THOUSANDS)	653,305	659,594	669,889	674,168	678,559	682,240

(L) LESS THAN \$50,000

(D) NOT SHOWN TO AVOID DISCLOSURE OF CONFIDENTIAL INFORMATION

1/ ESTIMATES BASED ON 1967 STANDARD INDUSTRIAL CLASSIFICATION.

2/ ESTIMATES BASED ON 1972 STANDARD INDUSTRIAL CLASSIFICATION.

3/ CONSISTS OF WAGE AND SALARY DISBURSEMENTS, OTHER LABOR INCOME, AND PROPRIETORS' INCOME.

4/ INCLUDES THE CAPITAL CONSUMPTION ADJUSTMENT FOR NONFARM PROPRIETORS.

5/ INCLUDES WAGES AND SALARIES OF U.S. RESIDENTS WORKING FOR INTERNATIONAL ORGANIZATIONS IN THE U.S.

6/ ADJUSTMENT FOR BORDER WORKERS: INCOME OF U.S. RESIDENTS WORKING ACROSS U.S. BORDERS LESS INCOME OF FOREIGN RESIDENTS WORKING

7/ INCLUDES THE CAPITAL CONSUMPTION ADJUSTMENT FOR RENTAL INCOME OF PERSONS.

APRIL 1981

REGIONAL ECONOMIC INFORMATION SYSTEM  
BUREAU OF ECONOMIC ANALYSIS

Table 2--Employment by Industry and by Place of Work,  
1969 and 1978, and Projected, 1985-2030.

Copies of these tables are shown in Tables 2.6 and 2.7 below.

Three projection series are reported. Their rationale and method for making the national projections have been outlined by the Bureau of Economic Analysis (4) and for the regional projections approach for the substate projections:

As noted above, resource limitations prevented individual analyses of projections of employment by industry for each substate area. Accordingly, for substate areas, it was decided to provide three alternative sets of projections, each of which was based entirely on a precise mathematical procedure relating historical and future trends. For each of the industries, the projections were made in terms of the substate area's share of the State's employment.

- (1) In the no-change-in-share procedure, for each industry, the substate area's share of the State's employment was held constant throughout the projections period. A substate area's projected share of total (all-industry) State employment, therefore, will change only to the extent that the substate area has a disproportionate share of the State's fast-or slow-growth industries.
- (2) In the low-change-in-share procedure, for each industry, the substate area's share of the State's employment was projected to change from 1978 to 1980 at an annual rate of change equal to 75 percent of the annual rate of change in the share from 1969 to 1978; from 1980 to 1985, at an annual rate equal to 1/2 of the projected annual rate for 1978-80; and for each succeeding 5-year period, at 1/2 of the projected rate for the preceding 5-year period.
- (3) In the moderate-change-in-share procedure, for each industry, the substate area's share of the State's employment was projected to change from 1978 to 1980 at an annual rate of change equal to 85 percent of the annual rate of change in the share from 1969 to 1978; from 1980 to 1985, at an annual rate for 1978-80; and for each succeeding 5-year period, at 2/3's of the projected rate for the preceding 5-year period.

TABLE 2.6

POPULATION, PERSONAL INCOME, AND LABOR AND PROPRIETORS' INCOME, 1969 AND 1978, AND PROJECTED, 1985-2030 (ECONOMIC AREA 117: SHREVEPORT, LOUISIANA)

	Historical		No-change-in share				Low change in share				Moderate change in share			
	1969 <sup>1</sup>	1978 <sup>1</sup>	1985	1996	2000	2030	1985	1990	2000	2030	1985	1990	2000	2030
Population (July 1)	636 676	675 820	735 836	782 370	953 576	1,019,032	717,487	756 835	820 243	975,463	712 877	746 895	800 498	841 555
Thousands of 1972 dollars														
Total personal income (place of residence)	1,832 244	2,772,108	3,850 815	4,754,874	6,687,165	14 807,920	3,750 212	4 581 728	6,412,028	13,064,358	3,724 873	4,526,349	6 250 057	13 448 372
By place of work														
Total labor and proprietors' income <sup>2</sup>	1 481,153	2 944,358	2,874,178	3,552 968	9 019 432	10 968 974	2,782 328	3,420 314	4 794,373	10 448 062	2,771,530	3 368 326	4,681 255	10 024 035
Agricultural production	64 237	41 385	48 673	53 791	65 109	110 732	49 358	54 757	66 470	113 154	49 582	55 218	67 408	113 353
Nonfarm	1 438 916	2 902 971	2 825 505	3 499 177	4 953 323	10,857 942	2 742 972	3,365 557	4,727 903	10 332 909	2 721 948	3,313 107	4 593 847	9 908 680
Private	1,115 787	1,589 462	2 294 898	2 850 202	4,074 450	9 040 684	2,201 709	2 715 902	3,847 962	8 513 442	2 180 567	2 663 236	3,713 502	8 088 152
Agricultural services, forestry, fisheries, and other <sup>3</sup>	4,113	6 091	8 424	10 182	13 766	28 185	7 734	8 133	12 138	24,890	7 810	8 833	11 428	22 848
Mining	65 851	108 124	133 830	136 442	137 400	160 377	125 414	125 290	124 263	144 342	122 553	118 981	115 051	129 445
Construction	85 405	146 665	194 318	207,389	236 528	500 423	178 990	201 148	248 475	482 084	178 548	196,150	243 164	485 248
Manufacturing	304 887	410,180	634 833	842 938	1,302 779	3 076 007	811 869	801 462	1 254 374	2 877 608	609 265	791 443	1,189 210	2 745 429
Nondurable goods	85 848	122 084	176 848	226 586	334 911	766 486	183 463	237 541	353 890	815 913	185 808	243 498	369 224	865 207
Durable goods	219 041	288 096	457 987	616 353	968 167	2 307 541	426 206	563 841	970 484	2 062 595	423 457	547 945	819 986	1 880 131
Transportation and public utilities	124 047	170 734	236 773	298 520	418 644	893 096	228 350	279 938	389 492	832 177	224 885	271 969	370 622	776 245
Wholesale trade	85 459	130 735	180 845	217 468	295 218	611 810	176 201	210 366	283 688	586 398	175 734	208 575	278 181	566 191
Retail trade	170 755	221 421	300 786	383 550	496 922	1 043 025	290 314	347 385	471 237	886 643	266 673	339 758	453 553	836 529
Finance, insurance, and real estate Services	82 017	94 357	143 393	182 280	287 883	821 428	140 514	177 469	259 548	601 088	139 475	174 882	252 808	578 818
Government	213,133	301,135	459,595	593 456	885 303	2,108 755	441 522	563 691	833,730	1,978 438	435,622	548 764	799 168	1 865 613
Federal civilian	321,148	413 520	540 806	646 975	876 872	1 917 059	341 263	449 655	678 941	1 819 486	341 382	449 872	680 345	1,820 529
Federal military	59 240	82 912	109,708	132 552	181 091	374 412	109 035	151 485	179 359	370 639	106,787	130 893	177 915	366 377
State and local	79 595	78 030	86 327	96 113	120 898	224 554	88 327	99 113	120 896	224 554	86 327	99 113	120 896	224 554
State and local	182 314	254,567	342,773	417,310	576 885	1 218 093	343 901	419 057	578 666	1 224 274	344 267	419 866	581 533	1 229 597

TABLE 2.7

EMPLOYMENT BY INDUSTRY BY PLACE OF WORK, 1969 AND 1978, AND PROJECTED, 1985-2030  
(ECONOMIC AREA 117: SHREVEPORT, LOUISIANA) (Total Number of Jobs)

	Historical		No-change-in share				Low change in share				Moderate-change-in-share			
	1969 <sup>1</sup>	1978 <sup>2</sup>	1985	1990	2000	2030	1985	1990	2000	2030	1985	1990	2000	2030
Total employment .....	236 811	278,843	331,783	362 228	408 188	474 015	323,110	349 942	391,537	453,401	320,806	344 851	381 488	436 657
Agricultural production .....	8 897	8 118	9 131	4,792	4 267	3 373	8 201	4 878	4,333	3 444	8 224	4 819	4 413	3 408
Nonfarm .....	227 814	273 728	328 652	357 436	483 921	470 642	317 908	344 966	387,184	449 958	315 582	339 935	377 086	433 147
Private .....	175 278	213 287	256,718	285 185	325 454	383 325	249 834	272 537	308,492	362 375	247 467	267 431	298 263	345 371
Agricultural services, forestry, fisheries, and other <sup>3</sup> .....	1,338	1,390	1,742	1 849	2 293	2 788	1,605	1,758	2 032	2 438	1 580	1 701	1 818	2 245
Mining .....	5 890	7,321	7 303	6 541	5 181	3 113	6 848	8 015	4 695	2 807	6 693	5 781	4 356	2 526
Construction .....	12 099	17,885	20 281	20 324	18 468	17 523	18 799	18 731	18 804	18 900	19 648	19 446	18 347	16 331
Manufacturing .....	40 058	44 503	58 515	85 447	80 284	101,112	54 748	82 682	78 151	95 571	54 812	82 096	74 445	82 138
Nondurable goods .....	10 735	13 834	18 881	19 023	22 657	28 258	17 743	20 283	24 423	30 571	18 043	20 933	25 778	32 958
Durable goods .....	29 323	30 569	38 634	48 424	57 626	72 854	37 005	42 399	51 728	65 000	36 569	41 163	48 670	58 178
Transportation and public utilities .....	13 383	14 520	18 478	17 650	19 349	21 559	15 742	16 640	18 058	20 053	15 488	16 158	17 166	18 681
Wholesale trade .....	10 487	14 584	17 438	18 778	20 701	23 374	17 012	18 170	19,002	22 423	18 970	18 025	18 539	21 769
Retail trade .....	33 396	42 975	51 586	58 799	64 437	74 753	48 789	54 271	61 103	70 708	49 198	53 078	58 846	67 112
Finance, insurance, and real estate .....	7,582	10 968	14 825	18 574	19 623	24 523	14 299	18 091	18 948	23 638	14 182	15 835	18 414	22 690
Services .....	81,043	58,330	72 787	81,122	84,111	114 602	89 995	77 160	88 800	187 839	69 089	75 332	85 232	101 879
Government .....	52 635	60 441	87,844	72 251	78 466	87 317	66 075	72 429	78 882	87,581	86,115	72 504	78 823	97 777
Federal civilian .....	8,875	7 296	8 041	8,375	8 436	18 819	8 011	8 531	8,378	10 740	7,899	8 504	8 322	10 647
Federal military .....	13 327	11 600	11 556	11 556	11 556	11 556	11 556	11 556	11 556	11,558	11 556	11 556	11 556	11 556
State and local .....	32 833	41 545	68 247	52 120	57,475	64,852	48,508	52 342	57,758	65 286	48 581	52 444	57 945	65 574

For a given industry, if the substate area's share of the State's employment increased from 1969 to 1978, the no-change-in-share projection will be less than the low-change-in-share projection and that, in turn, will be less than the moderate-change-in-share projection. If the substate area's share decreased from 1969 to 1978, the no-change-in-share projection will be more than the low-change-in-share projection and that, in turn, will be more than the moderate-change-in-share projection.

The projected reductions to the historical rate of change in the substate area's share assumed that self-limiting forces will tend to preclude a substate area from either growing or declining at unusually high rates for extended periods of time. After the low- and moderate-change-in-share procedures were applied, the projected results further were constrained so that (1) no substate area's share of State employment increased by more than 100 percent or declined by more than 50 percent from 1978 to 2030, and (2) for each State, the substate areas' shares summed to 100 percent. Then, for all three procedures, the projected shares were multiplied by State employment--already projected--to get substate area employment by industry.

The user will also need selected data for the OBERS projections for the United States. For example, when entering the "General data" for the secondary module, you will need to have computed a per capita income relative (i.e., per capita income in the study area divided by per capita income in the nation) and the employment/population ratio relative (i.e., the employment/population ratio for the region divided by the employment/population ratio for the nation). The data needed from the OBERS projections, which include total employment, per capita income, and population for the United States are reported in Tables 2.8, 2.9, and 2.10.

TABLE 2.8

EMPLOYMENT BY INDUSTRY BY PLACE OF WORK, 1969-1978, AND PROJECTED, 1985-2030  
(UNITED STATES) (Total Number of Jobs)

	1968 <sup>1</sup>	1973 <sup>1</sup>	1978 <sup>1</sup>	1985	1990	1995	2000	2010	2020	2030
<b>Total employment</b>	<b>65,415,994</b>	<b>61,026,995</b>	<b>101,118,003</b>	<b>114,965,000</b>	<b>121,988,000</b>	<b>126,094,000</b>	<b>130,843,000</b>	<b>137,994,000</b>	<b>139,133,000</b>	<b>140,825,000</b>
<b>Agricultural production</b>	<b>2,696,894</b>	<b>2,045,905</b>	<b>2,757,003</b>	<b>2,927,000</b>	<b>2,411,000</b>	<b>2,342,000</b>	<b>2,262,000</b>	<b>2,181,000</b>	<b>2,039,000</b>	<b>1,828,000</b>
Agricultural services, forestry, fisheries, and other	422,004	484,360	658,558	758,000	903,000	831,000	867,000	918,000	924,000	925,000
Agricultural services, forestry and fisheries	418,004	480,360	654,558	751,000	787,000	825,000	861,000	913,000	918,000	920,000
Other <sup>2</sup>	4,000	4,000	8,000	8,000	6,000	6,000	6,000	8,000	6,000	6,000
<b>Mining</b>	<b>638,353</b>	<b>651,028</b>	<b>900,634</b>	<b>1,091,000</b>	<b>1,133,000</b>	<b>1,125,000</b>	<b>1,108,000</b>	<b>1,071,000</b>	<b>1,051,000</b>	<b>1,023,000</b>
Coal mining	138,075	182,945	237,061	392,000	463,000	492,000	501,000	518,000	535,000	541,000
Oil and gas extraction	290,236	279,118	442,558	472,000	439,000	400,000	372,000	317,000	278,000	244,000
Metal mining	81,957	89,987	95,105	97,000	99,000	100,000	101,000	102,000	103,000	103,000
Nonmetallic mining excluding fuels	118,085	119,000	125,809	130,000	132,000	133,000	134,000	134,000	139,000	135,000
<b>Construction</b>	<b>4,320,387</b>	<b>4,860,532</b>	<b>6,387,181</b>	<b>6,878,000</b>	<b>6,589,000</b>	<b>6,787,000</b>	<b>6,878,000</b>	<b>7,298,000</b>	<b>7,326,000</b>	<b>7,381,000</b>
<b>Manufacturing</b>	<b>20,531,718</b>	<b>20,344,581</b>	<b>20,895,802</b>	<b>23,097,000</b>	<b>24,165,000</b>	<b>24,721,000</b>	<b>25,326,000</b>	<b>26,280,000</b>	<b>26,348,000</b>	<b>26,524,000</b>
<b>Nonurable goods</b>	<b>8,407,320</b>	<b>8,324,808</b>	<b>8,377,218</b>	<b>8,935,000</b>	<b>8,266,000</b>	<b>9,408,000</b>	<b>9,595,000</b>	<b>9,885,000</b>	<b>9,896,000</b>	<b>9,937,000</b>
Food and kindred products	1,918,767	1,739,019	1,758,233	1,717,000	1,800,000	1,972,000	1,853,000	1,817,000	1,814,000	1,806,000
Tobacco products	81,000	79,000	99,000	58,000	54,000	52,000	50,000	47,000	45,000	42,000
Textile mill products	1,015,948	1,036,104	913,136	906,000	800,000	895,000	951,000	884,000	883,000	882,000
Apparel and other fabricated textile products	1,428,748	1,423,088	1,358,269	1,468,000	1,545,000	1,592,000	1,820,000	1,695,000	1,702,000	1,717,000
Paper and allied products	714,285	701,270	701,093	745,000	765,000	773,000	760,000	820,000	821,000	824,000
Printing and publishing	1,149,247	1,145,268	1,245,345	1,405,000	1,505,000	1,532,000	1,568,000	1,624,000	1,624,000	1,635,000
Chemicals and allied products	1,068,048	1,041,836	1,102,065	1,244,000	1,321,000	1,359,000	1,414,000	1,491,000	1,498,000	1,513,000
Petroleum refining	187,000	185,000	205,003	223,000	229,000	232,000	235,000	240,000	241,000	242,000
Rubber and miscellaneous plastics products	598,291	679,030	760,210	939,000	1,041,000	1,103,000	1,184,000	1,286,000	1,296,000	1,316,000
Leather and leather products	344,956	296,994	284,862	230,000	216,000	208,000	200,000	185,000	172,000	160,000
<b>Durable goods</b>	<b>12,124,399</b>	<b>12,019,752</b>	<b>12,518,586</b>	<b>14,162,000</b>	<b>14,899,000</b>	<b>15,313,000</b>	<b>15,731,000</b>	<b>16,395,000</b>	<b>16,452,000</b>	<b>16,587,000</b>
Lumber products excluding furniture and fixtures	878,704	712,271	835,193	890,000	812,000	826,000	840,000	862,000	863,000	868,000
Furniture and fixtures	482,960	544,954	506,838	549,000	573,000	588,000	600,000	623,000	625,000	630,000
Stone, clay, and glass products	872,978	784,981	713,627	796,000	846,000	873,000	900,000	842,000	845,000	854,000
Primary metals	1,364,983	1,322,015	1,227,883	1,282,000	1,305,000	1,316,000	1,327,000	1,342,000	1,343,000	1,346,000
Fabricated metals	1,459,139	1,511,832	1,681,139	1,913,000	2,005,000	2,057,000	2,110,000	2,195,000	2,203,000	2,220,000
Machinery excluding electrical machinery	2,066,924	2,118,178	2,360,615	2,913,000	3,015,000	3,127,000	3,240,000	3,428,000	3,445,000	3,493,000
Electrical machinery	2,043,533	2,030,656	2,022,923	2,419,000	2,599,000	2,696,000	2,794,000	2,954,000	2,967,000	3,000,000
Transportation equipment excluding motor vehicles	1,164,187	954,326	1,009,279	1,084,000	1,098,000	1,106,000	1,114,000	1,121,000	1,122,000	1,123,000
Motor vehicles and equipment	919,622	969,014	1,009,608	1,094,000	1,140,000	1,168,000	1,195,000	1,238,000	1,242,000	1,250,000
Ordinance <sup>3</sup>	316,000	179,000	8	8	0	0	0	0	0	8
Instruments	483,518	498,538	855,559	790,000	851,000	890,000	930,000	990,000	955,000	1,007,000
Miscellaneous manufacturing	483,859	474,009	495,862	533,000	555,000	568,000	581,000	601,000	602,000	606,000
<b>Transportation, communication and public utilities</b>	<b>4,642,928</b>	<b>4,855,641</b>	<b>5,158,630</b>	<b>5,681,000</b>	<b>5,938,000</b>	<b>6,069,000</b>	<b>6,254,000</b>	<b>6,495,000</b>	<b>6,489,000</b>	<b>6,515,000</b>
Railroad transportation	842,993	572,000	521,000	452,000	414,000	392,000	366,000	327,000	296,000	258,000
Motor freight and warehousing	1,221,877	1,335,250	1,485,718	1,703,000	1,960,000	1,927,000	2,020,000	2,139,000	2,150,000	2,175,000
Local suburban and highway passenger transportation	317,154	302,463	292,258	281,000	277,000	274,000	271,000	266,000	259,000	252,000
Air transportation	358,038	370,975	413,244	510,000	554,900	578,000	610,000	655,000	659,000	668,000
Pipeline transportation	18,000	16,000	20,000	20,000	19,000	19,000	19,000	19,000	18,000	19,000
Transportation services	118,014	134,910	189,087	245,000	278,000	293,000	315,000	346,000	355,000	384,000
Water transportation	229,744	205,863	210,860	211,000	210,000	209,000	208,000	204,000	204,000	203,000
Communications	1,053,042	1,178,003	1,242,898	1,372,000	1,438,000	1,470,000	1,515,000	1,578,000	1,583,000	1,596,000
Electric gas and sanitary services	684,068	741,077	783,557	857,000	890,000	907,000	930,000	961,000	964,000	970,000
<b>Wholesale trade</b>	<b>3,980,978</b>	<b>4,350,743</b>	<b>5,248,102</b>	<b>6,079,000</b>	<b>6,410,000</b>	<b>6,585,000</b>	<b>6,822,000</b>	<b>7,144,000</b>	<b>7,173,000</b>	<b>7,239,000</b>
<b>Retail trade</b>	<b>12,662,018</b>	<b>14,084,223</b>	<b>18,188,088</b>	<b>18,820,000</b>	<b>20,195,000</b>	<b>21,048,000</b>	<b>21,880,000</b>	<b>23,362,000</b>	<b>23,486,000</b>	<b>23,787,000</b>
<b>Finance, insurance, and real estate</b>	<b>3,864,924</b>	<b>4,482,918</b>	<b>6,438,055</b>	<b>6,438,000</b>	<b>7,013,000</b>	<b>7,330,000</b>	<b>7,753,000</b>	<b>8,332,000</b>	<b>8,509,000</b>	<b>8,722,000</b>
Banking	889,021	1,185,000	1,423,000	1,808,000	2,177,000	2,308,000	2,481,000	2,720,000	2,481,000	2,910,000
Other credit and security agencies	669,681	698,371	835,621	1,004,000	1,083,000	1,125,000	1,179,000	1,258,000	1,316,000	1,378,000
Insurance	1,331,708	1,478,154	1,703,312	2,010,000	2,158,000	2,237,000	2,343,000	2,482,000	2,508,000	2,538,000
Real estate and combination offices	874,913	1,120,391	1,227,622	1,484,000	1,595,000	1,660,000	1,750,000	1,864,000	1,878,000	1,897,000
<b>Services</b>	<b>15,502,893</b>	<b>17,193,996</b>	<b>20,629,582</b>	<b>24,851,000</b>	<b>27,310,000</b>	<b>28,918,000</b>	<b>30,727,000</b>	<b>33,442,000</b>	<b>34,231,000</b>	<b>35,155,000</b>
Hotels and other lodging places	1,103,785	1,211,500	1,282,804	1,580,000	1,730,000	1,811,000	1,900,000	2,038,000	2,051,000	2,079,000
Personal and miscellaneous business and repair services	3,390,461	3,943,354	4,730,228	5,735,000	6,247,000	6,571,000	6,900,000	7,405,000	7,451,000	7,553,000
Auto repair services and garages	525,115	617,733	774,871	923,000	1,019,000	1,069,000	1,137,000	1,232,000	1,241,000	1,260,000
Amusement and recreation excluding motion pictures	498,022	617,233	765,272	958,000	1,057,000	1,110,000	1,180,000	1,279,000	1,288,000	1,308,000
Motion pictures	230,675	253,187	284,571	313,000	324,000	329,000	336,000	347,000	348,000	350,000
Private households	2,332,000	2,100,000	1,883,000	1,524,000	1,334,000	1,225,000	1,094,000	899,000	794,000	702,000
Medical and other health services	3,834,316	3,926,310	5,250,701	7,015,000	8,285,000	8,250,000	10,220,000	11,771,000	12,429,000	13,250,000
Private educational services	1,216,512	1,286,679	1,293,569	1,440,000	1,488,000	1,511,000	1,546,000	1,592,000	1,595,000	1,605,000
Nonprofit organizations	1,782,000	1,848,000	2,601,000	3,000,000	3,215,000	3,329,000	3,485,000	3,714,000	3,732,000	3,776,000
Miscellaneous professional services	1,209,807	1,450,000	1,762,018	2,363,000	2,615,000	2,751,000	2,929,000	3,165,000	3,301,000	3,458,000
<b>Government</b>	<b>15,883,000</b>	<b>18,873,000</b>	<b>18,094,000</b>	<b>18,352,000</b>	<b>20,019,000</b>	<b>20,700,000</b>	<b>20,855,000</b>	<b>21,500,000</b>	<b>21,557,000</b>	<b>21,860,000</b>
Federal Civilian	2,899,000	2,807,000	2,881,000	2,985,000	3,044,000	3,066,000	3,103,000	3,155,000	3,160,000	3,171,000
Federal military	3,297,000	2,669,000	2,351,000	2,342,000	2,342,000	2,342,000	2,342,000	2,342,000	2,342,000	2,342,000
State and local	8,887,000	11,397,000	12,862,000	14,025,000	14,633,000	14,990,000	15,420,000	16,003,000	16,055,000	16,173,000

TABLE 2.9

LABOR AND PROPRIETORS' INCOME BY INDUSTRY BY PLACE OF WORK, 1969-1978, AND PROJECTED, 1985-2030  
(UNITED STATES) (Thousands of 1972 Dollars)

	1969 <sup>a</sup>	1973 <sup>a</sup>	1978 <sup>a</sup>	1985	1990	1995	2000	2010	2020	2030
Total labor and proprietors income <sup>a</sup>	879 458 879	761 058 427	879 167 888	1 153 350 839	371 087 534	589 021 856	810 099 912	2 345 351 077	889 892 496	561 982 182
Agricultural production	19 647 331	34 052 237	22 125 384	24 058 989	25 751 489	27 804 377	29 921 224	35 205 348	41 161 054	48 157 350
Agricultural services, forestry, fisheries and other	2 351 397	2 797 184	3 838 671	4 798 269	6 648 208	6 416 982	7 371 450	8 484 607	11 622 368	14 386 198
Agricultural services, forestry, and fisheries	2 288 121	2 712 804	3 531 338	4 681 738	5 487 075	6 233 691	7 181 118	8 211 548	11 283 343	13 968 783
Other <sup>b</sup>	83 278	84 360	105 333	106 531	161 131	163 271	210 332	273 062	337 023	419 433
Mining	6 812 367	7 964 953	13 701 353	20 397 256	24 207 827	27 148 782	30 285 307	37 058 672	45 268 059	55 008 505
Coal mining	1 561 911	2 291 950	3 809 339	7 799 493	10 579 310	12 790 875	14 884 351	16 471 059	25 471 048	32 354 182
Oil and gas extraction	3 144 813	3 252 143	6 962 877	9 138 974	9 656 809	9 939 711	10 409 575	11 332 082	12 263 200	13 487 378
Metal mining	984 175	1 100 477	1 384 002	1 689 124	1 950 708	2 205 408	2 521 521	3 220 166	3 928 192	4 840 089
Nonmetallic mining excluding fuels	1 101 888	1 320 383	1 445 335	1 789 865	2 020 908	2 212 788	2 480 860	3 035 865	3 607 819	4 348 955
Construction	43 304 806	50 795 605	53 248 074	70 653 001	83 773 518	96 067 471	111 245 785	144 890 260	176 906 190	222 955 032
Manufacturing	185 225 858	208 116 370	230 514 314	298 824 775	351 397 868	397 879 948	455 749 447	583 607 767	713 367 677	880 967 608
Nondurable goods	71 421 007	75 218 372	81 064 777	91 064 777	100 587 758	117 087 593	131 068 178	148 660 235	187 695 838	227 652 715
Food and kindred products	15 628 148	18 096 731	17 487 357	20 108 203	22 298 852	24 286 868	26 718 278	32 130 322	37 602 838	44 877 853
Tobacco products	80 052	754 505	813 335	837 637	908 517	967 698	1 051 859	1 200 010	1 409 591	1 640 833
Textile mill products	8 768 318	7 319 506	6 698 678	7 602 692	8 477 229	9 360 378	10 400 864	12 777 344	15 654 337	19 178 318
Apparel and other fabricated textile products	8 257 574	8 256 897	7 946 811	9 284 116	10 511 665	11 544 874	12 880 665	15 631 459	18 814 233	22 677 774
Paper and allied products	6 993 175	7 666 374	8 542 012	10 669 100	12 415 721	13 643 763	15 717 067	18 856 051	24 041 777	29 455 049
Printing and publishing	10 654 168	11 206 669	11 724 882	15 087 303	18 004 680	20 228 744	22 910 165	28 916 305	34 990 095	42 643 708
Chemicals and allied products	12 078 758	12 718 628	14 886 020	20 029 482	24 307 458	28 170 920	32 961 808	43 562 034	54 279 112	66 138 964
Petroleum refining	2 875 689	2 813 279	3 724 672	4 771 209	5 499 375	6 156 660	6 892 807	8 092 112	10 674 628	12 993 828
Rubber and miscellaneous plastics products	5 553 638	6 518 503	7 638 877	10 629 747	13 022 118	14 858 081	17 328 380	22 780 108	28 252 017	35 354 178
Leather and leather products	2 143 489	1 868 252	1 625 335	1 629 263	1 813 773	1 648 213	1 898 844	1 808 093	1 904 008	2 168 508
Durable goods	123 804 851	132 898 928	149 449 537	186 237 017	234 340 278	266 813 770	307 089 212	395 911 920	485 714 982	601 843 897
Lumber products excluding furniture and fixtures	4 972 850	5 901 440	7 418 011	9 428 026	10 975 380	12 362 510	14 148 835	16 047 933	21 990 119	27 088 511
Furniture and fixtures	3 667 773	4 120 392	3 859 339	4 856 079	5 683 676	6 442 793	7 399 740	9 457 547	11 538 723	14 228 756
Stone, clay and glass products	8 306 174	7 318 508	7 932 877	10 560 866	12 557 172	14 365 287	16 610 055	21 573 146	26 979 889	33 079 889
Primary metals	15 595 380	17 239 862	19 725 358	24 270 557	28 499 333	32 301 294	37 003 619	47 400 896	57 812 563	71 506 831
Fabricated metals	14 291 433	15 917 844	18 786 892	25 318 524	30 060 215	34 318 508	39 583 271	51 558 578	62 881 803	78 048 873
Machinery excluding electrical machinery	22 451 311	24 295 952	28 642 773	35 842 528	43 562 425	48 313 508	55 313 508	68 533 586	85 333 586	108 173 113
Electrical machinery	18 556 938	20 732 784	22 045 363	29 876 403	35 370 168	40 394 758	48 455 018	59 853 819	73 400 847	90 818 881
Transportation equipment excluding motor vehicles	13 380 705	11 493 874	13 519 352	17 116 819	19 376 348	21 442 785	24 078 675	29 744 102	35 478 798	42 875 688
Motor vehicles and equipment	11 549 077	14 835 116	17 491 357	22 537 472	26 736 728	30 538 918	35 261 926	45 702 251	56 258 199	69 907 818
Ordnance <sup>c</sup>	3 590 936	2 108 063	0	0	0	0	0	0	0	0
Instruments	4 980 759	5 309 021	7 137 343	9 713 389	11 554 714	13 227 527	15 307 475	19 804 022	24 551 000	30 560 829
Miscellaneous manufacturing	3 460 934	3 632 236	3 690 672	4 383 756	4 864 320	5 483 385	6 126 680	7 547 341	8 983 992	10 841 308
Transportation, communication, and public utilities	47 899 127	58 430 508	67 186 092	89 244 607	106 866 957	122 818 957	142 581 526	186 064 845	230 027 860	288 558 118
Railroad transportation	7 044 022	7 778 223	7 464 677	8 207 857	8 769 971	9 259 515	9 879 440	11 261 872	12 659 263	14 456 148
Motor freight and warehousing	11 485 802	14 660 708	16 300 022	22 477 203	27 451 363	32 002 400	37 714 567	50 026 968	62 474 870	78 574 268
Local, suburban, and highway passenger transportation	2 253 093	2 201 902	2 197 326	2 421 890	2 648 211	2 886 833	3 177 116	3 624 101	4 478 466	5 323 483
Air transportation	4 448 559	5 453 097	6 516 678	8 570 708	11 927 407	14 086 075	16 781 348	22 680 155	28 665 383	36 404 606
Pipeline transportation	211 298	217 062	322 000	378 843	426 813	468 634	522 754	639 605	757 686	911 437
Transportation services	1 024 852	1 254 032	1 954 669	2 821 643	3 483 398	4 015 983	4 685 108	6 158 660	7 648 202	9 574 398
Water transportation	2 471 171	2 383 040	2 648 004	3 116 845	3 523 919	3 917 582	4 344 395	5 291 503	6 248 451	7 484 811
Communications	11 081 709	14 818 000	18 628 028	25 785 028	31 565 028	35 951 860	41 456 252	57 824 862	72 554 598	81 152 351
Electric, gas, and sanitary services	7 853 821	9 692 494	11 140 682	14 483 888	16 985 528	18 228 975	22 040 548	28 257 018	34 541 141	42 687 817
Wholesale trade	40 698 043	47 953 898	57 814 748	75 609 844	88 101 926	89 428 830	113 517 627	144 481 890	175 788 104	216 271 430
Retail trade	72 676 629	62 327 264	37 791 453	113 788 252	133 345 984	152 170 292	173 871 258	222 783 094	272 436 144	338 671 438
Finance, insurance, and real estate	36 476 601	41 150 838	50 804 735	70 800 603	85 911 278	99 652 948	116 804 208	154 437 596	192 498 564	241 711 725
Banking	8 301 641	10 425 824	12 678 017	18 114 355	23 768 253	27 896 257	33 318 051	44 878 916	58 564 470	71 878 832
Other credit and security agencies	7 516 598	7 262 487	6 176 880	13 393 576	16 069 781	18 525 190	21 844 884	26 225 039	34 060 858	43 716 538
Insurance	13 093 701	15 674 929	18 742 025	26 362 803	32 289 312	37 828 895	44 277 698	58 883 901	73 852 259	93 081 008
Real estate and combination offices	7 562 663	7 767 796	6 908 013	11 929 867	13 785 952	15 501 818	17 665 404	22 351 742	27 099 580	33 237 330
Services	102 547 360	120 898 945	147 967 535	210 858 149	262 246 739	310 618 115	368 579 869	498 161 424	629 098 445	798 467 135
Hotels and other lodging places	1 063 251	1 253 816	1 523 617	1 814 248	2 146 278	2 512 352	2 917 326	3 464 916	4 198 308	5 096 387
Personal and miscellaneous business and repair services	23 512 842	25 430 409	31 884 717	43 611 518	53 318 474	62 039 514	72 367 387	86 335 871	103 652 592	124 163 592
Auto repair services and garages	3 379 839	4 220 866	5 202 674	7 078 707	9 725 981	10 232 453	12 118 059	16 243 513	20 414 478	25 806 840
Amusement and recreation excluding motion pictures	2 961 563	3 817 073	4 362 673	6 088 548	8 452 800	8 640 820	10 146 353	13 477 219	18 844 867	21 199 222
Motion pictures	1 579 851	1 421 805	1 750 002	2 285 359	2 685 112	3 043 405	3 468 308	4 472 318	5 487 394	6 752 989
Private households	5 486 970	5 048 357	4 958 873	5 030 741	5 093 471	5 488 305	5 710 936	6 468 183	7 229 999	8 217 697
Medical and other health services	28 823 542	37 026 852	48 154 065	75 470 952	99 245 813	122 169 513	149 032 610	209 624 510	270 864 188	350 058 380
Private educational services	8 820 235	8 058 603	8 718 012	11 508 723	13 526 420	15 303 785	17 546 022	22 482 123	27 471 043	33 922 448
Nonprofit organizations	5 885 249	10 608 667	18 200 019	17 205 378	18 987 563	22 485 813	25 598 048	32 439 048	40 878 048	50 378 604
Miscellaneous professional services	18 334 358	20 784 897	23 866 698	35 168 875	43 496 844	51 008 515	60 333 220	80 064 177	101 822 888	128 798 808
Government	111 817 360	137 208 848	144 597 531	176 317 014	203 818 342	229 008 177	260 372 203	329 175 274	399 720 033	490 688 648
Federal civilian	28 875 520	32 031 380	42 741 617	48 928 106	54 490 874	61 490 874	61 410 710	78 700 961	92 158 727	112 149 853
Federal military	15 515 155	15 933 698	13 231 352	15 371 435	17 248 430	18 837 233	21 038 321	25 874 491	31 748 558	39 078 847
State and local	67 426 685	89 243 868	86 242 797	118 203 962	137 641 806	155 580 270	177 922 172	226 599 622	275 817 748	339 548 148

TABLE 2.10

POPULATION, PERSONAL INCOME, LABOR AND PROPRIETORS' INCOME, AND EMPLOYMENT BY PLACE OF RESIDENCE,  
1969-1978, AND PROJECTED, 1985-2030 (UNITED STATES)

	1969	1973	1978	1985	1990	1995	2000	2010	2020	2030
Total population (July 1)	201,298,090	208,845,856	218,050,814	232,346,000	242,979,000	252,218,000	258,845,000	274,803,000	289,583,000	299,817,000
Total personal income (thousands of 1972 dollars)	834,181,448	990,808,344	1,139,743,824	1,491,737,839	1,772,172,534	2,034,884,858	2,336,904,704	3,030,838,077	3,778,351,496	4,722,502,182
Total labor and proprietors income	879,283,808	781,432,840	878,893,744	1,155,350,839	1,371,067,534	1,569,021,856	1,810,099,812	2,345,351,077	2,889,892,496	3,591,982,182
Property income and transfer payments	184,350,254	239,140,248	306,955,272	401,200,000	479,682,000	555,259,000	641,893,000	834,214,000	1,069,248,000	1,357,162,000
Less: Personal contributions for social insurance	29,454,233	38,762,080	46,103,992	64,793,000	78,577,000	89,596,000	115,088,000	148,727,000	182,789,000	226,642,000
Per capita income (1972 dollars)	4,144	4,722	5,227	6,420	7,294	8,067	8,993	11,029	13,041	15,751
Per capita income relative (U.S. = 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total employment (job count)	85,415,994	91,026,995	101,118,003	114,965,000	121,988,000	126,094,000	130,843,000	137,994,000	139,133,000	140,925,000
Employment-population ratio	.42	.43	.48	.49	.50	.50	.50	.50	.48	.47
Employment-population ratio relative (U.S. = 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

## 2.5 Formatting Input Data

Instructions are given below for ordering and formatting data for input into computer files which are called by routines of the evaluation model. Also, worksheets are provided as guides in determining data needs and ordering the data for terminal input into the computer files. These worksheets should expedite the organization of the data which are called for interactively.

### 2.5.1 Data Ordering for the Direct Effects Module

Data can be prepared prior to entry into the file which organizes the data in vector and matrix form to be used by the linear programming/economic base modeling system, or each value can be entered interactively to the terminal as questions are asked on the terminal. The routine for generating output changes and associated employment, earnings, and population impacts are totally interactive from the point of input data entry to generation of these impacted values. However, regional designations and names, sector names, and the input data described in section 2.0 above need to be developed prior to operation of the model at the terminal. The names and parameter values which need to be imputed are as follows:

1. Region names. A 16-character name designation for each region needs to be specified. The evaluation model operates with three regions, viz., the region of interest, a larger state or multistate region in which the economy of the region of interest is imbedded, and the rest-of-U.S. region. Region 1 is defined as the region of interest.

2. Sector names. A 16-character name designation for each sector to be included in the basic set of sectors directly effected by the particular development project.

3. Price per unit of output for each sector output for each region.
4. Transport costs per unit of output for each interregional and intraregional route by sector. The regional routes in the evaluation model are defined for the region of interest shipping to other regions, shipping within the region of interest, and shipping from the other regions to the region of interest. The output from each sector defined must be either produced or consumed in the region of interest.
5. Production cost per unit of input for each sector in each region. There are three types of production costs, viz., capital, labor, and other or material costs (including intermediate goods). These are to be ordered by capital, labor, and other costs for each sector within each region.
6. Input/output coefficients. These are ordered by capital, labor, then other input coefficients by regions within sectors.
7. Demand requirements for output from each sector in each region.
8. Limits on the number of units that may be transported of each sector between regions by each mode. The modes defined in the evaluation model are barge, truck, rail, truck barge, and rail barge.
9. Limits on the number of units that may be transported of all sectors between regions by each mode. This specifies the total mode capacity by interregional route.
10. Maximum production or output that is possible from each sector in each region. These values can be defined for any production period or date of relevance to the evaluation
11. Maximum number of units of capital available in each region.
12. Maximum number of units of labor available in each region.
13. Maximum tonnage that may be transported by barge for all sectors and for all routes.

Inquiry will then be made as to whether any changes need to be made in any of the values above, and, if so, the investigator can make the appropriate changes in the same order as the values were originally given to the file. This inquiry and altering process can be done interactively as above and is useful in not only correcting inappropriate values given to the file, but also to enter values which change as a result of the implementation of a particular development project. Therefore, the original values entered into the file may represent conditions that exist "without" the project, and the alternative values entered later may represent the "with" project conditions. Then the two files are ready for use by the linear programming system of the evaluation model.

Sample worksheets, which can be used to organize the data collection and input into the computerized file, are provided below. Recall, separate worksheets would be required for "without" and "with" project conditions.

DATA INPUT WORKSHEET NO. 1: Regional and Sector Names and Sector Output Prices by Region

Sector Number and Name	Output Prices by Region and Sector		
	Region Number and Name		
	(1) (Region of Interest) Red River	(2) Name	(3) Name
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

DATA INPUT WORKSHEET NO. 2: Transport Costs by Interregional Route by Mode

Sector/Mode	Interregional Routes				
	1 to 1	1 to 2	1 to 3	2 to 1	3 to 1
1/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
2/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
3/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
4/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
5/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
6/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
7/Barge					
Truck					
Rail					
Truck barge					
Rail barge					

Sector/Mode	Interregional Routes				
	1 to 1	1 to 2	1 to 3	2 to 1	3 to 1
8/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
9/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
10/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
11/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
12/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
13/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
14/Barge					
Truck					
Rail					
Truck barge					
Rail barge					

Sector/Mode	Interregional Routes				
	1 to 1	1 to 2	1 to 3	2 to 1	3 to 1
15/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
16/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
17/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
18/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
19/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
20/Barge					
Truck					
Rail					
Truck barge					
Rail barge					

DATA INPUT WORKSHEET NO. 3: Per Unit Cost of Capital, Labor, and Other Inputs by Region by Sector

Region/Sector	Per Unit Input Costs		
	Capital (interest rate, or \$/ton, or \$/\$)	Labor (wage rate, or \$/\$)	Other Inputs (\$/ton, or \$/\$)
1/1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
2/1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Region/Sector	Per Unit Input Costs		
	Capital (interest rate, or \$/ton, or \$/\$)	Labor (wage rate, or \$/\$)	Other Inputs (\$/ton, or \$/\$)
3/1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

DATA INPUT WORKSHEET NO. 4: Capital, Labor and Other Inputs, Input Per Unit of Output Coefficients by Sector by Region

Sector/Region	Input Per Unit Output Coefficients		
	Capital (\$/ton)	Labor (employees/ton, or hours/ton, or \$/ton)	Other Inputs (\$/ton)
1/1			
2			
3			
2/1			
2			
3			
3/1			
2			
3			
4/1			
2			
3			
5/1			
2			
3			
6/1			
2			
3			
7/1			
2			
3			
8/1			
2			
3			
9/1			
2			
3			
10/1			
2			
3			

Sector/Region	Input Per Unit Output Coefficients		
	Capital (\$/ton)	Labor (employees/ton, or hours/ton, or \$/ton)	Other Inputs (\$/ton)
11/1			
2			
3			
12/1			
2			
3			
13/1			
2			
3			
14/1			
2			
3			
15/1			
2			
3			
16/1			
2			
3			
17/1			
2			
3			
18/1			
2			
3			
19/1			
2			
3			
20/1			
2			
3			

DATA INPUT WORKSHEET NO. 5: Maximum Number of Units that may be Transported Interregionally by Sector by Mode

Sector/Mode	Interregional Routes				
	1 to 1	1 to 2	1 to 3	2 to 1	3 to 1
1/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
2/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
3/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
4/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
5/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
6/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
7/Barge					
Truck					
Rail					
Truck barge					
Rail barge					

Sector/Mode	Interregional Routes				
	1 to 1	1 to 2	1 to 3	2 to 1	3 to 1
8/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
9/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
10/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
11/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
12/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
13/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
14/Barge					
Truck					
Rail					
Truck barge					
Rail barge					

Sector/Mode	Interregional Routes				
	1 to 1	1 to 2	1 to 3	2 to 1	3 to 1
15/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
16/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
17/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
18/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
19/Barge					
Truck					
Rail					
Truck barge					
Rail barge					
20/Barge					
Truck					
Rail					
Truck barge					
Rail barge					

21

DATA INPUT WORKSHEET NO. 6: Minimum Demand Requirement and Maximum Production by Sector by Region

Sector/Region	Minimum Demand Requirements (units such as tons)	Maximum Production (units such as tons)
1/1		
2		
3		
2/1		
2		
3		
3/1		
2		
3		
4/1		
2		
3		
5/1		
2		
3		
6/1		
2		
3		
7/1		
2		
3		
8/1		
2		
3		
9/1		
2		
3		
10/1		
2		
3		

Sector/Region	Minimum Demand Requirements (units such as tons)	Maximum Production (units such as tons)
11/1		
2		
3		
12/1		
2		
3		
13/1		
2		
3		
14/1		
2		
3		
15/1		
2		
3		
16/1		
2		
3		
17/1		
2		
3		
18/1		
2		
3		
19/1		
2		
3		
20/1		
2		
3		

DATA INPUT WORKSHEET NO. 7: Maximum Primary Input Availability by Region  
and Maximum Freight Projected to be Transported  
by Barge

Region	Input Availability	
	Capital (\$)	Labor (\$, empl., or hrs.)
1		
2		
3		

.....

Total Freight Transported by Barge over Projected  
New Transport Route (Projected) \_\_\_\_\_ tons

The complete interactive instructions are listed below. These instructions are given on the terminal screen or printout. Formats for entering the names and parameter values into the file are given in the interactive instructions. After the region and sector names have been called for, one notes that the succeeding instructions involve the example regional development case. That is, the sectors and regions for the Red River Waterway taken to input data to the evaluation file. Note also that in this case only 15 of the 20 water-oriented base sectors allowed for are used. The long list of instructions and intermediate listing of parameter values that follows is the actual interactive session at the terminal for inputting data and running the evaluation model for the "without" Red River Waterway project case. The "with" waterway case data are inputted as one is asked interactively the questions "...Do you want to check..." This latter section of instructions is at the end of the list.

REGION 1 IS THE STUDY REGION. THE OUTPUT FROM EACH SECTOR  
DEFINED BELOW MUST BE EITHER PRODUCED OR CONSUMED IN REGION 1

ENTER 16 CHARACTER NAME FOR REGION 1

ENTER 16 CHARACTER NAME FOR REGION 2

ENTER 16 CHARACTER NAME FOR REGION 3

ENTER 16 CHARACTER NAME FOR SECTOR 1

ENTER 16 CHARACTER NAME FOR SECTOR 2

ENTER 16 CHARACTER NAME FOR SECTOR 3

ENTER 16 CHARACTER NAME FOR SECTOR 4

ENTER 16 CHARACTER NAME FOR SECTOR 5

ENTER 16 CHARACTER NAME FOR SECTOR 6

ENTER 16 CHARACTER NAME FOR SECTOR 7

ENTER 16 CHARACTER NAME FOR SECTOR 8

ENTER 16 CHARACTER NAME FOR SECTOR 9

ENTER 16 CHARACTER NAME FOR SECTOR 10

ENTER 16 CHARACTER NAME FOR SECTOR 11

ENTER 16 CHARACTER NAME FOR SECTOR 12

ENTER 16 CHARACTER NAME FOR SECTOR 13

ENTER 16 CHARACTER NAME FOR SECTOR 14

ENTER 16 CHARACTER NAME FOR SECTOR 15

NOW ENTER PRICE PER UNIT OF OUTPUT

ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER PRICE FOR GRAINS PRODUCED AT RED RIVER

ENTER PRICE FOR GRAINS PRODUCED AT LOUISIANA

ENTER PRICE FOR GRAINS PRODUCED AT U. S.

ENTER PRICE FOR COAL PRODUCED AT RED RIVER

ENTER PRICE FOR COAL PRODUCED AT LOUISIANA

ENTER PRICE FOR COAL PRODUCED AT U. S.

ENTER PRICE FOR METALS PRODUCED AT RED RIVER

ENTER PRICE FOR METALS PRODUCED AT LOUISIANA

ENTER PRICE FOR METALS PRODUCED AT U. S.

ENTER PRICE FOR AGGREGATES PRODUCED AT RED RIVER

ENTER PRICE FOR AGGREGATES PRODUCED AT LOUISIANA

ENTER PRICE FOR AGGREGATES PRODUCED AT U. S.

ENTER PRICE FOR SUGAR PRODUCED AT RED RIVER

ENTER PRICE FOR SUGAR PRODUCED AT LOUISIANA

ENTER PRICE FOR SUGAR PRODUCED AT U. S.

ENTER PRICE FOR PAPER PRODUCED AT RED RIVER

ENTER PRICE FOR PAPER PRODUCED AT LOUISIANA

ENTER PRICE FOR PAPER PRODUCED AT U. S.

ENTER PRICE FOR CHEMICALS PRODUCED AT RED RIVER  
 ENTER PRICE FOR CHEMICALS PRODUCED AT LOUISIANA  
 ENTER PRICE FOR CHEMICALS PRODUCED AT U. S.  
 ENTER PRICE FOR COAL-PETROLEUM PRODUCED AT RED RIVER  
 ENTER PRICE FOR COAL-PETROLEUM PRODUCED AT LOUISIANA  
 ENTER PRICE FOR COAL-PETROLEUM PRODUCED AT U. S.  
 ENTER PRICE FOR PRIMARY FOREST PRODUCED AT RED RIVER  
 ENTER PRICE FOR PRIMARY FOREST PRODUCED AT LOUISIANA  
 ENTER PRICE FOR PRIMARY FOREST PRODUCED AT U. S.  
 ENTER PRICE FOR LUMBER PRODUCED AT RED RIVER  
 ENTER PRICE FOR LUMBER PRODUCED AT LOUISIANA  
 ENTER PRICE FOR LUMBER PRODUCED AT U. S.  
 ENTER PRICE FOR CEMENT PRODUCED AT RED RIVER  
 ENTER PRICE FOR CEMENT PRODUCED AT LOUISIANA  
 ENTER PRICE FOR CEMENT PRODUCED AT U. S.  
 ENTER PRICE FOR STEEL ARTICLES PRODUCED AT RED RIVER  
 ENTER PRICE FOR STEEL ARTICLES PRODUCED AT LOUISIANA  
 ENTER PRICE FOR STEEL ARTICLES PRODUCED AT U. S.  
 ENTER PRICE FOR PIPE-SCRAP PRODUCED AT RED RIVER  
 ENTER PRICE FOR PIPE-SCRAP PRODUCED AT LOUISIANA  
 ENTER PRICE FOR PIPE-SCRAP PRODUCED AT U. S.  
 ENTER PRICE FOR NONFERROUS PRODUCED AT RED RIVER  
 ENTER PRICE FOR NONFERROUS PRODUCED AT LOUISIANA  
 ENTER PRICE FOR NONFERROUS PRODUCED AT U. S.  
 ENTER PRICE FOR FABRICATED METAL PRODUCED AT RED RIVER  
 ENTER PRICE FOR FABRICATED METAL PRODUCED AT LOUISIANA  
 ENTER PRICE FOR FABRICATED METAL PRODUCED AT U. S.

NOW ENTER THE COST OF TRANSPORTING ONE UNIT OF OUTPUT  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

SECTOR	ORIGIN	DESTINATION	MODE	VALUE
GRAINS	RED RIVER	RED RIVER	BARCE -->	
GRAINS	RED RIVER	RED RIVER	TRUCK -->	
GRAINS	RED RIVER	RED RIVER	RAIL -->	
GRAINS	RED RIVER	RED RIVER	TRUCK BARCE -->	
GRAINS	RED RIVER	RED RIVER	RAIL BARCE -->	
GRAINS	RED RIVER	LOUISIANA	BARCE -->	
GRAINS	RED RIVER	LOUISIANA	TRUCK -->	
GRAINS	RED RIVER	LOUISIANA	RAIL -->	
GRAINS	RED RIVER	LOUISIANA	TRUCK BARCE -->	
GRAINS	RED RIVER	LOUISIANA	RAIL BARCE -->	
GRAINS	RED RIVER	U. S.	BARCE -->	
GRAINS	RED RIVER	U. S.	TRUCK -->	
GRAINS	RED RIVER	U. S.	RAIL -->	
GRAINS	RED RIVER	U. S.	TRUCK BARCE -->	
GRAINS	RED RIVER	U. S.	RAIL BARCE -->	

GRAINS	LOUISIANA	RED RIVER	BARGE	---	
GRAINS	LOUISIANA	RED RIVER	TRUCK	---	
GRAINS	LOUISIANA	RED RIVER	RAIL	---	
GRAINS	LOUISIANA	RED RIVER	TRUCK BARGE	---	
GRAINS	LOUISIANA	RED RIVER	RAIL BARGE	---	
GRAINS	U. S.	RED RIVER	BARGE	---	
GRAINS	U. S.	RED RIVER	TRUCK	---	
GRAINS	U. S.	RED RIVER	RAIL	---	
GRAINS	U. S.	RED RIVER	TRUCK BARGE	---	
GRAINS	U. S.	RED RIVER	RAIL BARGE	---	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
COAL	RED RIVER	RED RIVER	BARGE	---	
COAL	RED RIVER	RED RIVER	TRUCK	---	
COAL	RED RIVER	RED RIVER	RAIL	---	
COAL	RED RIVER	RED RIVER	TRUCK BARGE	---	
COAL	RED RIVER	RED RIVER	RAIL BARGE	---	
COAL	RED RIVER	LOUISIANA	BARGE	---	
COAL	RED RIVER	LOUISIANA	TRUCK	---	
COAL	RED RIVER	LOUISIANA	RAIL	---	
COAL	RED RIVER	LOUISIANA	TRUCK BARGE	---	
COAL	RED RIVER	LOUISIANA	RAIL BARGE	---	
COAL	RED RIVER	U. S.	BARGE	---	
COAL	RED RIVER	U. S.	TRUCK	---	
COAL	RED RIVER	U. S.	RAIL	---	
COAL	RED RIVER	U. S.	TRUCK BARGE	---	
COAL	RED RIVER	U. S.	RAIL BARGE	---	
COAL	LOUISIANA	RED RIVER	BARGE	---	
COAL	LOUISIANA	RED RIVER	TRUCK	---	
COAL	LOUISIANA	RED RIVER	RAIL	---	
COAL	LOUISIANA	RED RIVER	TRUCK BARGE	---	
COAL	LOUISIANA	RED RIVER	RAIL BARGE	---	
COAL	U. S.	RED RIVER	BARGE	---	
COAL	U. S.	RED RIVER	TRUCK	---	
COAL	U. S.	RED RIVER	RAIL	---	
COAL	U. S.	RED RIVER	TRUCK BARGE	---	
COAL	U. S.	RED RIVER	RAIL BARGE	---	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
METALS	RED RIVER	RED RIVER	BARGE	---	
METALS	RED RIVER	RED RIVER	TRUCK	---	
METALS	RED RIVER	RED RIVER	RAIL	---	
METALS	RED RIVER	RED RIVER	TRUCK BARGE	---	
METALS	RED RIVER	RED RIVER	RAIL BARGE	---	
METALS	RED RIVER	LOUISIANA	BARGE	---	
METALS	RED RIVER	LOUISIANA	TRUCK	---	
METALS	RED RIVER	LOUISIANA	RAIL	---	
METALS	RED RIVER	LOUISIANA	TRUCK BARGE	---	
METALS	RED RIVER	LOUISIANA	RAIL BARGE	---	
METALS	RED RIVER	U. S.	BARGE	---	
METALS	RED RIVER	U. S.	TRUCK	---	
METALS	RED RIVER	U. S.	RAIL	---	
METALS	RED RIVER	U. S.	TRUCK BARGE	---	
METALS	RED RIVER	U. S.	RAIL BARGE	---	
METALS	LOUISIANA	RED RIVER	BARGE	---	
METALS	LOUISIANA	RED RIVER	TRUCK	---	
METALS	LOUISIANA	RED RIVER	RAIL	---	
METALS	LOUISIANA	RED RIVER	TRUCK BARGE	---	
METALS	LOUISIANA	RED RIVER	RAIL BARGE	---	
METALS	U. S.	RED RIVER	BARGE	---	
METALS	U. S.	RED RIVER	TRUCK	---	
METALS	U. S.	RED RIVER	RAIL	---	
METALS	U. S.	RED RIVER	TRUCK BARGE	---	
METALS	U. S.	RED RIVER	RAIL BARGE	---	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
AGGREGATES	RED RIVER	RED RIVER	BARGE	---	
AGGREGATES	RED RIVER	RED RIVER	TRUCK	---	
AGGREGATES	RED RIVER	RED RIVER	RAIL	---	
AGGREGATES	RED RIVER	RED RIVER	TRUCK BARGE	---	
AGGREGATES	RED RIVER	RED RIVER	RAIL BARGE	---	
AGGREGATES	RED RIVER	LOUISIANA	BARGE	---	
AGGREGATES	RED RIVER	LOUISIANA	TRUCK	---	
AGGREGATES	RED RIVER	LOUISIANA	RAIL	---	
AGGREGATES	RED RIVER	LOUISIANA	TRUCK BARGE	---	
AGGREGATES	RED RIVER	LOUISIANA	RAIL BARGE	---	
AGGREGATES	RED RIVER	U. S.	BARGE	---	
AGGREGATES	RED RIVER	U. S.	TRUCK	---	
AGGREGATES	RED RIVER	U. S.	RAIL	---	
AGGREGATES	RED RIVER	U. S.	TRUCK BARGE	---	
AGGREGATES	RED RIVER	U. S.	RAIL BARGE	---	

AGGREGATES	LOUISIANA	RED RIVER	BARGE	-->	
AGGREGATES	LOUISIANA	RED RIVER	TRUCK	-->	
AGGREGATES	LOUISIANA	RED RIVER	RAIL	-->	
AGGREGATES	LOUISIANA	RED RIVER	TRUCK BARGE	-->	
AGGREGATES	LOUISIANA	RED RIVER	RAIL BARGE	-->	
AGGREGATES	U. S.	RED RIVER	BARGE	-->	
AGGREGATES	U. S.	RED RIVER	TRUCK	-->	
AGGREGATES	U. S.	RED RIVER	RAIL	-->	
AGGREGATES	U. S.	RED RIVER	TRUCK BARGE	-->	
AGGREGATES	U. S.	RED RIVER	RAIL BARGE	-->	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
SUGAR	RED RIVER	RED RIVER	BARGE	-->	
SUGAR	RED RIVER	RED RIVER	TRUCK	-->	
SUGAR	RED RIVER	RED RIVER	RAIL	-->	
SUGAR	RED RIVER	RED RIVER	TRUCK BARGE	-->	
SUGAR	RED RIVER	RED RIVER	RAIL BARGE	-->	
SUGAR	RED RIVER	LOUISIANA	BARGE	-->	
SUGAR	RED RIVER	LOUISIANA	TRUCK	-->	
SUGAR	RED RIVER	LOUISIANA	RAIL	-->	
SUGAR	RED RIVER	LOUISIANA	TRUCK BARGE	-->	
SUGAR	RED RIVER	LOUISIANA	RAIL BARGE	-->	
SUGAR	RED RIVER	U. S.	BARGE	-->	
SUGAR	RED RIVER	U. S.	TRUCK	-->	
SUGAR	RED RIVER	U. S.	RAIL	-->	
SUGAR	RED RIVER	U. S.	TRUCK BARGE	-->	
SUGAR	RED RIVER	U. S.	RAIL BARGE	-->	
SUGAR	LOUISIANA	RED RIVER	BARGE	-->	
SUGAR	LOUISIANA	RED RIVER	TRUCK	-->	
SUGAR	LOUISIANA	RED RIVER	RAIL	-->	
SUGAR	LOUISIANA	RED RIVER	TRUCK BARGE	-->	
SUGAR	LOUISIANA	RED RIVER	RAIL BARGE	-->	
SUGAR	U. S.	RED RIVER	BARGE	-->	
SUGAR	U. S.	RED RIVER	TRUCK	-->	
SUGAR	U. S.	RED RIVER	RAIL	-->	
SUGAR	U. S.	RED RIVER	TRUCK BARGE	-->	
SUGAR	U. S.	RED RIVER	RAIL BARGE	-->	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
PAPER	RED RIVER	RED RIVER	BARGE	-->	
PAPER	RED RIVER	RED RIVER	TRUCK	-->	
PAPER	RED RIVER	RED RIVER	RAIL	-->	
PAPER	RED RIVER	RED RIVER	TRUCK BARGE	-->	
PAPER	RED RIVER	RED RIVER	RAIL BARGE	-->	
PAPER	RED RIVER	LOUISIANA	BARGE	-->	
PAPER	RED RIVER	LOUISIANA	TRUCK	-->	
PAPER	RED RIVER	LOUISIANA	RAIL	-->	
PAPER	RED RIVER	LOUISIANA	TRUCK BARGE	-->	
PAPER	RED RIVER	LOUISIANA	RAIL BARGE	-->	
PAPER	RED RIVER	U. S.	BARGE	-->	
PAPER	RED RIVER	U. S.	TRUCK	-->	
PAPER	RED RIVER	U. S.	RAIL	-->	
PAPER	RED RIVER	U. S.	TRUCK BARGE	-->	
PAPER	RED RIVER	U. S.	RAIL BARGE	-->	
PAPER	LOUISIANA	RED RIVER	BARGE	-->	
PAPER	LOUISIANA	RED RIVER	TRUCK	-->	
PAPER	LOUISIANA	RED RIVER	RAIL	-->	
PAPER	LOUISIANA	RED RIVER	TRUCK BARGE	-->	
PAPER	LOUISIANA	RED RIVER	RAIL BARGE	-->	
PAPER	U. S.	RED RIVER	BARGE	-->	
PAPER	U. S.	RED RIVER	TRUCK	-->	
PAPER	U. S.	RED RIVER	RAIL	-->	
PAPER	U. S.	RED RIVER	TRUCK BARGE	-->	
PAPER	U. S.	RED RIVER	RAIL BARGE	-->	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
CHEMICALS	RED RIVER	RED RIVER	BARGE	-->	
CHEMICALS	RED RIVER	RED RIVER	TRUCK	-->	
CHEMICALS	RED RIVER	RED RIVER	RAIL	-->	
CHEMICALS	RED RIVER	RED RIVER	TRUCK BARGE	-->	
CHEMICALS	RED RIVER	RED RIVER	RAIL BARGE	-->	
CHEMICALS	RED RIVER	LOUISIANA	BARGE	-->	
CHEMICALS	RED RIVER	LOUISIANA	TRUCK	-->	
CHEMICALS	RED RIVER	LOUISIANA	RAIL	-->	
CHEMICALS	RED RIVER	LOUISIANA	TRUCK BARGE	-->	
CHEMICALS	RED RIVER	LOUISIANA	RAIL BARGE	-->	
CHEMICALS	RED RIVER	U. S.	BARGE	-->	
CHEMICALS	RED RIVER	U. S.	TRUCK	-->	
CHEMICALS	RED RIVER	U. S.	RAIL	-->	
CHEMICALS	RED RIVER	U. S.	TRUCK BARGE	-->	
CHEMICALS	RED RIVER	U. S.	RAIL BARGE	-->	

CHEMICALS	RED RIVER	U. S.	RAIL BARGE -->	
CHEMICALS	LOUISIANA	RED RIVER	BARGE -->	
CHEMICALS	LOUISIANA	RED RIVER	TRUCK -->	
CHEMICALS	LOUISIANA	RED RIVER	RAIL -->	
CHEMICALS	LOUISIANA	RED RIVER	TRUCK BARGE -->	
CHEMICALS	LOUISIANA	RED RIVER	RAIL BARGE -->	
CHEMICALS	U. S.	RED RIVER	BARGE -->	
CHEMICALS	U. S.	RED RIVER	TRUCK -->	
CHEMICALS	U. S.	RED RIVER	RAIL -->	
CHEMICALS	U. S.	RED RIVER	TRUCK BARGE -->	
CHEMICALS	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
COAL-PETROLEUM	RED RIVER	RED RIVER	BARGE -->	
COAL-PETROLEUM	RED RIVER	RED RIVER	TRUCK -->	
COAL-PETROLEUM	RED RIVER	RED RIVER	RAIL -->	
COAL-PETROLEUM	RED RIVER	RED RIVER	TRUCK BARGE -->	
COAL-PETROLEUM	RED RIVER	RED RIVER	RAIL BARGE -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	BARGE -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	TRUCK -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	RAIL -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	TRUCK BARGE -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	RAIL BARGE -->	
COAL-PETROLEUM	RED RIVER	U. S.	BARGE -->	
COAL-PETROLEUM	RED RIVER	U. S.	TRUCK -->	
COAL-PETROLEUM	RED RIVER	U. S.	RAIL -->	
COAL-PETROLEUM	RED RIVER	U. S.	TRUCK BARGE -->	
COAL-PETROLEUM	RED RIVER	U. S.	RAIL BARGE -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	BARGE -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	TRUCK -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	RAIL -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	TRUCK BARGE -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	RAIL BARGE -->	
COAL-PETROLEUM	U. S.	RED RIVER	BARGE -->	
COAL-PETROLEUM	U. S.	RED RIVER	TRUCK -->	
COAL-PETROLEUM	U. S.	RED RIVER	RAIL -->	
COAL-PETROLEUM	U. S.	RED RIVER	TRUCK BARGE -->	
COAL-PETROLEUM	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
PRIMARY FOREST	RED RIVER	RED RIVER	BARGE -->	
PRIMARY FOREST	RED RIVER	RED RIVER	TRUCK -->	
PRIMARY FOREST	RED RIVER	RED RIVER	RAIL -->	
PRIMARY FOREST	RED RIVER	RED RIVER	TRUCK BARGE -->	
PRIMARY FOREST	RED RIVER	RED RIVER	RAIL BARGE -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	BARGE -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	TRUCK -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	RAIL -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	TRUCK BARGE -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	RAIL BARGE -->	
PRIMARY FOREST	RED RIVER	U. S.	BARGE -->	
PRIMARY FOREST	RED RIVER	U. S.	TRUCK -->	
PRIMARY FOREST	RED RIVER	U. S.	RAIL -->	
PRIMARY FOREST	RED RIVER	U. S.	TRUCK BARGE -->	
PRIMARY FOREST	RED RIVER	U. S.	RAIL BARGE -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	BARGE -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	TRUCK -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	RAIL -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	TRUCK BARGE -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	RAIL BARGE -->	
PRIMARY FOREST	U. S.	RED RIVER	BARGE -->	
PRIMARY FOREST	U. S.	RED RIVER	TRUCK -->	
PRIMARY FOREST	U. S.	RED RIVER	RAIL -->	
PRIMARY FOREST	U. S.	RED RIVER	TRUCK BARGE -->	
PRIMARY FOREST	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
LUMBER	RED RIVER	RED RIVER	BARGE -->	
LUMBER	RED RIVER	RED RIVER	TRUCK -->	
LUMBER	RED RIVER	RED RIVER	RAIL -->	
LUMBER	RED RIVER	RED RIVER	TRUCK BARGE -->	
LUMBER	RED RIVER	RED RIVER	RAIL BARGE -->	
LUMBER	RED RIVER	LOUISIANA	BARGE -->	
LUMBER	RED RIVER	LOUISIANA	TRUCK -->	
LUMBER	RED RIVER	LOUISIANA	RAIL -->	
LUMBER	RED RIVER	LOUISIANA	TRUCK BARGE -->	
LUMBER	RED RIVER	LOUISIANA	RAIL BARGE -->	
LUMBER	RED RIVER	U. S.	BARGE -->	
LUMBER	RED RIVER	U. S.	TRUCK -->	
LUMBER	RED RIVER	U. S.	RAIL -->	
LUMBER	RED RIVER	U. S.	TRUCK BARGE -->	
LUMBER	RED RIVER	U. S.	RAIL BARGE -->	

LUMBER	LOUISIANA	RED RIVER	BARGE	---	
LUMBER	LOUISIANA	RED RIVER	TRUCK	---	
LUMBER	LOUISIANA	RED RIVER	RAIL	---	
LUMBER	LOUISIANA	RED RIVER	TRUCK BARGE	---	
LUMBER	LOUISIANA	RED RIVER	RAIL BARGE	---	
LUMBER	U. S.	RED RIVER	BARGE	---	
LUMBER	U. S.	RED RIVER	TRUCK	---	
LUMBER	U. S.	RED RIVER	RAIL	---	
LUMBER	U. S.	RED RIVER	TRUCK BARGE	---	
LUMBER	U. S.	RED RIVER	RAIL BARGE	---	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
CEMENT	RED RIVER	RED RIVER	BARGE	---	
CEMENT	RED RIVER	RED RIVER	TRUCK	---	
CEMENT	RED RIVER	RED RIVER	RAIL	---	
CEMENT	RED RIVER	RED RIVER	TRUCK BARGE	---	
CEMENT	RED RIVER	RED RIVER	RAIL BARGE	---	
CEMENT	RED RIVER	LOUISIANA	BARGE	---	
CEMENT	RED RIVER	LOUISIANA	TRUCK	---	
CEMENT	RED RIVER	LOUISIANA	RAIL	---	
CEMENT	RED RIVER	LOUISIANA	TRUCK BARGE	---	
CEMENT	RED RIVER	LOUISIANA	RAIL BARGE	---	
CEMENT	RED RIVER	U. S.	BARGE	---	
CEMENT	RED RIVER	U. S.	TRUCK	---	
CEMENT	RED RIVER	U. S.	RAIL	---	
CEMENT	RED RIVER	U. S.	TRUCK BARGE	---	
CEMENT	RED RIVER	U. S.	RAIL BARGE	---	
CEMENT	LOUISIANA	RED RIVER	BARGE	---	
CEMENT	LOUISIANA	RED RIVER	TRUCK	---	
CEMENT	LOUISIANA	RED RIVER	RAIL	---	
CEMENT	LOUISIANA	RED RIVER	TRUCK BARGE	---	
CEMENT	LOUISIANA	RED RIVER	RAIL BARGE	---	
CEMENT	U. S.	RED RIVER	BARGE	---	
CEMENT	U. S.	RED RIVER	TRUCK	---	
CEMENT	U. S.	RED RIVER	RAIL	---	
CEMENT	U. S.	RED RIVER	TRUCK BARGE	---	
CEMENT	U. S.	RED RIVER	RAIL BARGE	---	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
STEEL ARTICLES	RED RIVER	RED RIVER	BARGE	---	
STEEL ARTICLES	RED RIVER	RED RIVER	TRUCK	---	
STEEL ARTICLES	RED RIVER	RED RIVER	RAIL	---	
STEEL ARTICLES	RED RIVER	RED RIVER	TRUCK BARGE	---	
STEEL ARTICLES	RED RIVER	RED RIVER	RAIL BARGE	---	
STEEL ARTICLES	RED RIVER	LOUISIANA	BARGE	---	
STEEL ARTICLES	RED RIVER	LOUISIANA	TRUCK	---	
STEEL ARTICLES	RED RIVER	LOUISIANA	RAIL	---	
STEEL ARTICLES	RED RIVER	LOUISIANA	TRUCK BARGE	---	
STEEL ARTICLES	RED RIVER	LOUISIANA	RAIL BARGE	---	
STEEL ARTICLES	RED RIVER	U. S.	BARGE	---	
STEEL ARTICLES	RED RIVER	U. S.	TRUCK	---	
STEEL ARTICLES	RED RIVER	U. S.	RAIL	---	
STEEL ARTICLES	RED RIVER	U. S.	TRUCK BARGE	---	
STEEL ARTICLES	RED RIVER	U. S.	RAIL BARGE	---	
STEEL ARTICLES	LOUISIANA	RED RIVER	BARGE	---	
STEEL ARTICLES	LOUISIANA	RED RIVER	TRUCK	---	
STEEL ARTICLES	LOUISIANA	RED RIVER	RAIL	---	
STEEL ARTICLES	LOUISIANA	RED RIVER	TRUCK BARGE	---	
STEEL ARTICLES	LOUISIANA	RED RIVER	RAIL BARGE	---	
STEEL ARTICLES	U. S.	RED RIVER	BARGE	---	
STEEL ARTICLES	U. S.	RED RIVER	TRUCK	---	
STEEL ARTICLES	U. S.	RED RIVER	RAIL	---	
STEEL ARTICLES	U. S.	RED RIVER	TRUCK BARGE	---	
STEEL ARTICLES	U. S.	RED RIVER	RAIL BARGE	---	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
PIPE-SCRAP	RED RIVER	RED RIVER	BARGE	---	
PIPE-SCRAP	RED RIVER	RED RIVER	TRUCK	---	
PIPE-SCRAP	RED RIVER	RED RIVER	RAIL	---	
PIPE-SCRAP	RED RIVER	RED RIVER	TRUCK BARGE	---	
PIPE-SCRAP	RED RIVER	RED RIVER	RAIL BARGE	---	
PIPE-SCRAP	RED RIVER	LOUISIANA	BARGE	---	
PIPE-SCRAP	RED RIVER	LOUISIANA	TRUCK	---	
PIPE-SCRAP	RED RIVER	LOUISIANA	RAIL	---	
PIPE-SCRAP	RED RIVER	LOUISIANA	TRUCK BARGE	---	
PIPE-SCRAP	RED RIVER	LOUISIANA	RAIL BARGE	---	
PIPE-SCRAP	RED RIVER	U. S.	BARGE	---	
PIPE-SCRAP	RED RIVER	U. S.	TRUCK	---	
PIPE-SCRAP	RED RIVER	U. S.	RAIL	---	
PIPE-SCRAP	RED RIVER	U. S.	TRUCK BARGE	---	
PIPE-SCRAP	RED RIVER	U. S.	RAIL BARGE	---	

PIPE-SCRAP	LOUISIANA	RED RIVER	BARGE	-->	
PIPE-SCRAP	LOUISIANA	RED RIVER	TRUCK	-->	
PIPE-SCRAP	LOUISIANA	RED RIVER	RAIL	-->	
PIPE-SCRAP	LOUISIANA	RED RIVER	TRUCK BARGE	-->	
PIPE-SCRAP	LOUISIANA	RED RIVER	RAIL BARGE	-->	
PIPE-SCRAP	U. S.	RED RIVER	BARGE	-->	
PIPE-SCRAP	U. S.	RED RIVER	TRUCK	-->	
PIPE-SCRAP	U. S.	RED RIVER	RAIL	-->	
PIPE-SCRAP	U. S.	RED RIVER	TRUCK BARGE	-->	
PIPE-SCRAP	U. S.	RED RIVER	RAIL BARGE	-->	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
NONFERROUS	RED RIVER	RED RIVER	BARGE	-->	
NONFERROUS	RED RIVER	RED RIVER	TRUCK	-->	
NONFERROUS	RED RIVER	RED RIVER	RAIL	-->	
NONFERROUS	RED RIVER	RED RIVER	TRUCK BARGE	-->	
NONFERROUS	RED RIVER	RED RIVER	RAIL BARGE	-->	
NONFERROUS	RED RIVER	LOUISIANA	BARGE	-->	
NONFERROUS	RED RIVER	LOUISIANA	TRUCK	-->	
NONFERROUS	RED RIVER	LOUISIANA	RAIL	-->	
NONFERROUS	RED RIVER	LOUISIANA	TRUCK BARGE	-->	
NONFERROUS	RED RIVER	LOUISIANA	RAIL BARGE	-->	
NONFERROUS	RED RIVER	U. S.	BARGE	-->	
NONFERROUS	RED RIVER	U. S.	TRUCK	-->	
NONFERROUS	RED RIVER	U. S.	RAIL	-->	
NONFERROUS	RED RIVER	U. S.	TRUCK BARGE	-->	
NONFERROUS	RED RIVER	U. S.	RAIL BARGE	-->	
NONFERROUS	LOUISIANA	RED RIVER	BARGE	-->	
NONFERROUS	LOUISIANA	RED RIVER	TRUCK	-->	
NONFERROUS	LOUISIANA	RED RIVER	RAIL	-->	
NONFERROUS	LOUISIANA	RED RIVER	TRUCK BARGE	-->	
NONFERROUS	LOUISIANA	RED RIVER	RAIL BARGE	-->	
NONFERROUS	U. S.	RED RIVER	BARGE	-->	
NONFERROUS	U. S.	RED RIVER	TRUCK	-->	
NONFERROUS	U. S.	RED RIVER	RAIL	-->	
NONFERROUS	U. S.	RED RIVER	TRUCK BARGE	-->	
NONFERROUS	U. S.	RED RIVER	RAIL BARGE	-->	
SECTOR	ORIGIN	DESTINATION	MODE		VALUE
FABRICATED METEL	RED RIVER	RED RIVER	BARGE	-->	
FABRICATED METEL	RED RIVER	RED RIVER	TRUCK	-->	
FABRICATED METEL	RED RIVER	RED RIVER	RAIL	-->	
FABRICATED METEL	RED RIVER	RED RIVER	TRUCK BARGE	-->	
FABRICATED METEL	RED RIVER	RED RIVER	RAIL BARGE	-->	
FABRICATED METEL	RED RIVER	LOUISIANA	BARGE	-->	
FABRICATED METEL	RED RIVER	LOUISIANA	TRUCK	-->	
FABRICATED METEL	RED RIVER	LOUISIANA	RAIL	-->	
FABRICATED METEL	RED RIVER	LOUISIANA	TRUCK BARGE	-->	
FABRICATED METEL	RED RIVER	LOUISIANA	RAIL BARGE	-->	
FABRICATED METEL	RED RIVER	U. S.	BARGE	-->	
FABRICATED METEL	RED RIVER	U. S.	TRUCK	-->	
FABRICATED METEL	RED RIVER	U. S.	RAIL	-->	
FABRICATED METEL	RED RIVER	U. S.	TRUCK BARGE	-->	
FABRICATED METEL	RED RIVER	U. S.	RAIL BARGE	-->	
FABRICATED METEL	LOUISIANA	RED RIVER	BARGE	-->	
FABRICATED METEL	LOUISIANA	RED RIVER	TRUCK	-->	
FABRICATED METEL	LOUISIANA	RED RIVER	RAIL	-->	
FABRICATED METEL	LOUISIANA	RED RIVER	TRUCK BARGE	-->	
FABRICATED METEL	LOUISIANA	RED RIVER	RAIL BARGE	-->	
FABRICATED METEL	U. S.	RED RIVER	BARGE	-->	
FABRICATED METEL	U. S.	RED RIVER	TRUCK	-->	
FABRICATED METEL	U. S.	RED RIVER	RAIL	-->	
FABRICATED METEL	U. S.	RED RIVER	TRUCK BARGE	-->	
FABRICATED METEL	U. S.	RED RIVER	RAIL BARGE	-->	

NOW WE START INPUTING PRODUCTION COST, THERE ARE THREE TYPES, CAPITAL, LABOR, AND OTHER. IT IS SOMETIMES CONVENIENT TO DEFINE ONE UNIT OF CAPITAL AND LABOR AS ONE DOLLARS WORTH OF THE INPUT. THEN USE THE CAPITAL AND LABOR COEFFECENT TO DELINEATE HOW MANY DOLLARS WORTH OF INPUT PER UNIT OF OUTPUT, I.E. THE PRODUCTION COST IS NORMALIZED TO UNITY.  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER PER UNIT COST OF CAPITAL

REGION RED RIVER SECTOR GRAINS

REGION RED RIVER SECTOR COAL

REGION RED RIVER SECTOR METALS

REGION RED RIVER	SECTOR AGGREGATES
REGION RED RIVER	SECTOR SUGAR
REGION RED RIVER	SECTOR PAPER
REGION RED RIVER	SECTOR CHEMICALS
REGION RED RIVER	SECTOR COAL-PETROLEUM
REGION RED RIVER	SECTOR PRIMARY FOREST
REGION RED RIVER	SECTOR LUMBER
REGION RED RIVER	SECTOR CEMENT
REGION RED RIVER	SECTOR STEEL ARTICLES
REGION RED RIVER	SECTOR PIPE-SCRAP
REGION RED RIVER	SECTOR NONFERROUS
REGION RED RIVER	SECTOR FABRICATED METEL
ENTER PER UNIT COST OF	LABOR
REGION RED RIVER	SECTOR GRAINS
REGION RED RIVER	SECTOR COAL
REGION RED RIVER	SECTOR METALS
REGION RED RIVER	SECTOR AGGREGATES
REGION RED RIVER	SECTOR SUGAR
REGION RED RIVER	SECTOR PAPER
REGION RED RIVER	SECTOR CHEMICALS
REGION RED RIVER	SECTOR COAL-PETROLEUM
REGION RED RIVER	SECTOR PRIMARY FOREST
REGION RED RIVER	SECTOR LUMBER
REGION RED RIVER	SECTOR CEMENT
REGION RED RIVER	SECTOR STEEL ARTICLES
REGION RED RIVER	SECTOR PIPE-SCRAP
REGION RED RIVER	SECTOR NONFERROUS
REGION RED RIVER	SECTOR FABRICATED METEL
ENTER COST OF PRODUCTION THAT IS NOT COVERED BY CAPITAL OR LABOR	
REGION RED RIVER	SECTOR GRAINS
REGION RED RIVER	SECTOR COAL
REGION RED RIVER	SECTOR METALS
REGION RED RIVER	SECTOR AGGREGATES
REGION RED RIVER	SECTOR SUGAR
REGION RED RIVER	SECTOR PAPER
REGION RED RIVER	SECTOR CHEMICALS

REGION RED RIVER	SECTOR COAL-PETROLEUM
REGION RED RIVER	SECTOR PRIMARY FOREST
REGION RED RIVER	SECTOR LUMBER
REGION RED RIVER	SECTOR CEMENT
REGION RED RIVER	SECTOR STEEL ARTICLES
REGION RED RIVER	SECTOR PIPE-SCRAP
REGION RED RIVER	SECTOR NONFERROUS
REGION RED RIVER	SECTOR FABRICATED METEL

ENTER PER UNIT COST OF CAPITAL

REGION LOUISIANA	SECTOR GRAINS
REGION LOUISIANA	SECTOR COAL
REGION LOUISIANA	SECTOR METALS
REGION LOUISIANA	SECTOR AGGREGATES
REGION LOUISIANA	SECTOR SUGAR
REGION LOUISIANA	SECTOR PAPER
REGION LOUISIANA	SECTOR CHEMICALS
REGION LOUISIANA	SECTOR COAL-PETROLEUM
REGION LOUISIANA	SECTOR PRIMARY FOREST
REGION LOUISIANA	SECTOR LUMBER
REGION LOUISIANA	SECTOR CEMENT
REGION LOUISIANA	SECTOR STEEL ARTICLES
REGION LOUISIANA	SECTOR PIPE-SCRAP
REGION LOUISIANA	SECTOR NONFERROUS
REGION LOUISIANA	SECTOR FABRICATED METEL

ENTER PER UNIT COST OF LABOR

REGION LOUISIANA	SECTOR GRAINS
REGION LOUISIANA	SECTOR COAL
REGION LOUISIANA	SECTOR METALS
REGION LOUISIANA	SECTOR AGGREGATES
REGION LOUISIANA	SECTOR SUGAR
REGION LOUISIANA	SECTOR PAPER
REGION LOUISIANA	SECTOR CHEMICALS
REGION LOUISIANA	SECTOR COAL-PETROLEUM
REGION LOUISIANA	SECTOR PRIMARY FOREST
REGION LOUISIANA	SECTOR LUMBER
REGION LOUISIANA	SECTOR CEMENT
REGION LOUISIANA	SECTOR STEEL ARTICLES
REGION LOUISIANA	SECTOR PIPE-SCRAP
REGION LOUISIANA	SECTOR NONFERROUS
REGION LOUISIANA	SECTOR FABRICATED METEL

ENTER COST OF PRODUCTION THAT IS NOT COVERED BY CAPITAL OR LABOR  
REGION LOUISIANA

REGION LOUISIANA	SECTOR CHAINS
REGION LOUISIANA	SECTOR COAL
REGION LOUISIANA	SECTOR METALS
REGION LOUISIANA	SECTOR AGGREGATES
REGION LOUISIANA	SECTOR SUGAR
REGION LOUISIANA	SECTOR PAPER
REGION LOUISIANA	SECTOR CHEMICALS
REGION LOUISIANA	SECTOR COAL-PETROLEUM
REGION LOUISIANA	SECTOR PRIMARY FOREST
REGION LOUISIANA	SECTOR LUMBER
REGION LOUISIANA	SECTOR CEMENT
REGION LOUISIANA	SECTOR STEEL ARTICLES
REGION LOUISIANA	SECTOR PIPE-SCRAP
REGION LOUISIANA	SECTOR NONFERROUS
REGION LOUISIANA	SECTOR FABRICATED METEL

ENTER PER UNIT COST OF CAPITAL

REGION U. S.	SECTOR GRAINS
REGION U. S.	SECTOR COAL
REGION U. S.	SECTOR METALS
REGION U. S.	SECTOR AGGREGATES
REGION U. S.	SECTOR SUGAR
REGION U. S.	SECTOR PAPER
REGION U. S.	SECTOR CHEMICALS
REGION U. S.	SECTOR COAL-PETROLEUM
REGION U. S.	SECTOR PRIMARY FOREST
REGION U. S.	SECTOR LUMBER
REGION U. S.	SECTOR CEMENT
REGION U. S.	SECTOR STEEL ARTICLES
REGION U. S.	SECTOR PIPE-SCRAP
REGION U. S.	SECTOR NONFERROUS
REGION U. S.	SECTOR FABRICATED METEL

ENTER PER UNIT COST OF LABOR

REGION U. S.	SECTOR GRAINS
REGION U. S.	SECTOR COAL
REGION U. S.	SECTOR METALS
REGION U. S.	SECTOR AGGREGATES
REGION U. S.	SECTOR SUGAR
REGION U. S.	SECTOR PAPER
REGION U. S.	SECTOR CHEMICALS

REGION U. S. SECTOR COAL-PETROLEUM  
 REGION U. S. SECTOR PRIMARY FOREST  
 REGION U. S. SECTOR LUMBER  
 REGION U. S. SECTOR CEMENT  
 REGION U. S. SECTOR STEEL ARTICLES  
 REGION U. S. SECTOR PIPE-SCRAP  
 REGION U. S. SECTOR NONFERROUS  
 REGION U. S. SECTOR FABRICATED METEL

ENTER COST OF PRODUCTION THAT IS NOT COVERED BY CAPITAL OR LABOR  
 REGION U. S. SECTOR GRAINS

REGION U. S. SECTOR COAL  
 REGION U. S. SECTOR METALS  
 REGION U. S. SECTOR AGGREGATES  
 REGION U. S. SECTOR SUGAR  
 REGION U. S. SECTOR PAPER  
 REGION U. S. SECTOR CHEMICALS  
 REGION U. S. SECTOR COAL-PETROLEUM  
 REGION U. S. SECTOR PRIMARY FOREST  
 REGION U. S. SECTOR LUMBER  
 REGION U. S. SECTOR CEMENT  
 REGION U. S. SECTOR STEEL ARTICLES  
 REGION U. S. SECTOR PIPE-SCRAP  
 REGION U. S. SECTOR NONFERROUS  
 REGION U. S. SECTOR FABRICATED METEL

ENTER CAPITAL COEFFICIENTS  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

REGION	SECTOR	VALUE
RED RIVER	GRAINS	--)
LOUISIANA	GRAINS	--)
U. S.	GRAINS	--)
RED RIVER	COAL	--)
LOUISIANA	COAL	--)
U. S.	COAL	--)
RED RIVER	METALS	--)
LOUISIANA	METALS	--)
U. S.	METALS	--)
RED RIVER	AGGREGATES	--)
LOUISIANA	AGGREGATES	--)
U. S.	AGGREGATES	--)
RED RIVER	SUGAR	--)
LOUISIANA	SUGAR	--)
U. S.	SUGAR	--)
RED RIVER	PAPER	--)
LOUISIANA	PAPER	--)
U. S.	PAPER	--)
RED RIVER	CHEMICALS	--)
LOUISIANA	CHEMICALS	--)
U. S.	CHEMICALS	--)
RED RIVER	COAL-PETROLEUM	--)
LOUISIANA	COAL-PETROLEUM	--)
U. S.	COAL-PETROLEUM	--)
RED RIVER	PRIMARY FOREST	--)
LOUISIANA	PRIMARY FOREST	--)
U. S.	PRIMARY FOREST	--)

RED RIVER LUMBER ---)  
 LOUISIANA LUMBER ---)  
 U. S. LUMBER ---)  
 RED RIVER CEMENT ---)  
 LOUISIANA CEMENT ---)  
 U. S. CEMENT ---)  
 RED RIVER STEEL ARTICLES ---)  
 LOUISIANA STEEL ARTICLES ---)  
 U. S. STEEL ARTICLES ---)  
 RED RIVER PIPE-SCRAP ---)  
 LOUISIANA PIPE-SCRAP ---)  
 U. S. PIPE-SCRAP ---)  
 RED RIVER NONFERROUS ---)  
 LOUISIANA NONFERROUS ---)  
 U. S. NONFERROUS ---)  
 RED RIVER FABRICATED METEL---)  
 LOUISIANA FABRICATED METEL---)  
 U. S. FABRICATED METEL---)  
 ENTER LABOR COEFFICIENTS  
 ENTER ONE NUMBER PER LINE WITH DECIMAL. EXAMPLE (2020.0)

REGION	SECTOR	VALUE
RED RIVER	GRAINS	---
LOUISIANA	GRAINS	---
U. S.	GRAINS	---
RED RIVER	COAL	---
LOUISIANA	COAL	---
U. S.	COAL	---
RED RIVER	METALS	---
LOUISIANA	METALS	---
U. S.	METALS	---
RED RIVER	AGGREGATES	---
LOUISIANA	AGGREGATES	---
U. S.	AGGREGATES	---
RED RIVER	SUGAR	---
LOUISIANA	SUGAR	---
U. S.	SUGAR	---
RED RIVER	PAPER	---
LOUISIANA	PAPER	---
U. S.	PAPER	---
RED RIVER	CHEMICALS	---
LOUISIANA	CHEMICALS	---
U. S.	CHEMICALS	---
RED RIVER	COAL-PETROLEUM	---
LOUISIANA	COAL-PETROLEUM	---
U. S.	COAL-PETROLEUM	---
RED RIVER	PRIMARY FOREST	---
LOUISIANA	PRIMARY FOREST	---
U. S.	PRIMARY FOREST	---
RED RIVER	LUMBER	---
LOUISIANA	LUMBER	---
U. S.	LUMBER	---
RED RIVER	CEMENT	---
LOUISIANA	CEMENT	---
U. S.	CEMENT	---
RED RIVER	STEEL ARTICLES	---
LOUISIANA	STEEL ARTICLES	---
U. S.	STEEL ARTICLES	---
RED RIVER	PIPE-SCRAP	---
LOUISIANA	PIPE-SCRAP	---
U. S.	PIPE-SCRAP	---
RED RIVER	NONFERROUS	---
LOUISIANA	NONFERROUS	---
U. S.	NONFERROUS	---
RED RIVER	FABRICATED METEL	---
LOUISIANA	FABRICATED METEL	---
U. S.	FABRICATED METEL	---

ENTER DEMAND FOR COMMODITIES  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

REGION	SECTOR	VALUE
RED RIVER	GRAINS	-->
LOUISIANA	GRAINS	-->
U. S.	GRAINS	-->
RED RIVER	COAL	-->
LOUISIANA	COAL	-->
U. S.	COAL	-->
RED RIVER	METALS	-->
LOUISIANA	METALS	-->
U. S.	METALS	-->
RED RIVER	AGGREGATES	-->
LOUISIANA	AGGREGATES	-->
U. S.	AGGREGATES	-->
RED RIVER	SUGAR	-->
LOUISIANA	SUGAR	-->
U. S.	SUGAR	-->
RED RIVER	PAPER	-->
LOUISIANA	PAPER	-->
U. S.	PAPER	-->
RED RIVER	CHEMICALS	-->
LOUISIANA	CHEMICALS	-->
U. S.	CHEMICALS	-->
RED RIVER	COAL-PETROLEUM	-->
LOUISIANA	COAL-PETROLEUM	-->
U. S.	COAL-PETROLEUM	-->
RED RIVER	PRIMARY FOREST	-->
LOUISIANA	PRIMARY FOREST	-->
U. S.	PRIMARY FOREST	-->
RED RIVER	LUMBER	-->
LOUISIANA	LUMBER	-->
U. S.	LUMBER	-->
RED RIVER	CEMENT	-->
LOUISIANA	CEMENT	-->
U. S.	CEMENT	-->
RED RIVER	STEEL ARTICLES	-->
LOUISIANA	STEEL ARTICLES	-->
U. S.	STEEL ARTICLES	-->
RED RIVER	PIPE-SCRAP	-->
LOUISIANA	PIPE-SCRAP	-->
U. S.	PIPE-SCRAP	-->
RED RIVER	NONFERROUS	-->
LOUISIANA	NONFERROUS	-->
U. S.	NONFERROUS	-->
RED RIVER	FABRICATED METEL	-->
LOUISIANA	FABRICATED METEL	-->
U. S.	FABRICATED METEL	-->

ENTER MAXIMUM NUMBER OF UNITS THAT MAY BE TRANSPORTED IN EACH SECTOR  
 (NOTE: WE WILL LATER ASK FOR MAXIMUM NUMBER OF UNITS TRANSPORTED IN ALL SECTORS)  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

SECTOR	ORIGIN	DESTINATION	MODE	VALUE
GRAINS	RED RIVER	RED RIVER	BARGE	-->
GRAINS	RED RIVER	RED RIVER	TRUCK	-->
GRAINS	RED RIVER	RED RIVER	RAIL	-->
GRAINS	RED RIVER	RED RIVER	TRUCK BARGE	-->
GRAINS	RED RIVER	RED RIVER	RAIL BARGE	-->
GRAINS	RED RIVER	LOUISIANA	BARGE	-->
GRAINS	RED RIVER	LOUISIANA	TRUCK	-->
GRAINS	RED RIVER	LOUISIANA	RAIL	-->
GRAINS	RED RIVER	LOUISIANA	TRUCK BARGE	-->
GRAINS	RED RIVER	LOUISIANA	RAIL BARGE	-->
GRAINS	RED RIVER	U. S.	BARGE	-->
GRAINS	RED RIVER	U. S.	TRUCK	-->
GRAINS	RED RIVER	U. S.	RAIL	-->
GRAINS	RED RIVER	U. S.	TRUCK BARGE	-->
GRAINS	RED RIVER	U. S.	RAIL BARGE	-->
GRAINS	LOUISIANA	RED RIVER	BARGE	-->
GRAINS	LOUISIANA	RED RIVER	TRUCK	-->
GRAINS	LOUISIANA	RED RIVER	RAIL	-->
GRAINS	LOUISIANA	RED RIVER	TRUCK BARGE	-->
GRAINS	LOUISIANA	RED RIVER	RAIL BARGE	-->
GRAINS	U. S.	RED RIVER	BARGE	-->
GRAINS	U. S.	RED RIVER	TRUCK	-->
GRAINS	U. S.	RED RIVER	RAIL	-->
GRAINS	U. S.	RED RIVER	TRUCK BARGE	-->
GRAINS	U. S.	RED RIVER	RAIL BARGE	-->

SECTOR	ORIGIN	DESTINATION	MODE	VALUE
COAL	RED RIVER	RED RIVER	BARGE -->	
COAL	RED RIVER	RED RIVER	TRUCK -->	
COAL	RED RIVER	RED RIVER	RAIL -->	
COAL	RED RIVER	RED RIVER	TRUCK BARGE -->	
COAL	RED RIVER	RED RIVER	RAIL BARGE -->	
COAL	RED RIVER	LOUISIANA	BARGE -->	
COAL	RED RIVER	LOUISIANA	TRUCK -->	
COAL	RED RIVER	LOUISIANA	RAIL -->	
COAL	RED RIVER	LOUISIANA	TRUCK BARGE -->	
COAL	RED RIVER	LOUISIANA	RAIL BARGE -->	
COAL	RED RIVER	U. S.	BARGE -->	
COAL	RED RIVER	U. S.	TRUCK -->	
COAL	RED RIVER	U. S.	RAIL -->	
COAL	RED RIVER	U. S.	TRUCK BARGE -->	
COAL	RED RIVER	U. S.	RAIL BARGE -->	
COAL	LOUISIANA	RED RIVER	BARGE -->	
COAL	LOUISIANA	RED RIVER	TRUCK -->	
COAL	LOUISIANA	RED RIVER	RAIL -->	
COAL	LOUISIANA	RED RIVER	TRUCK BARGE -->	
COAL	LOUISIANA	RED RIVER	RAIL BARGE -->	
COAL	U. S.	RED RIVER	BARGE -->	
COAL	U. S.	RED RIVER	TRUCK -->	
COAL	U. S.	RED RIVER	RAIL -->	
COAL	U. S.	RED RIVER	TRUCK BARGE -->	
COAL	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
METALS	RED RIVER	RED RIVER	BARGE -->	
METALS	RED RIVER	RED RIVER	TRUCK -->	
METALS	RED RIVER	RED RIVER	RAIL -->	
METALS	RED RIVER	RED RIVER	TRUCK BARGE -->	
METALS	RED RIVER	RED RIVER	RAIL BARGE -->	
METALS	RED RIVER	LOUISIANA	BARGE -->	
METALS	RED RIVER	LOUISIANA	TRUCK -->	
METALS	RED RIVER	LOUISIANA	RAIL -->	
METALS	RED RIVER	LOUISIANA	TRUCK BARGE -->	
METALS	RED RIVER	LOUISIANA	RAIL BARGE -->	
METALS	RED RIVER	U. S.	BARGE -->	
METALS	RED RIVER	U. S.	TRUCK -->	
METALS	RED RIVER	U. S.	RAIL -->	
METALS	RED RIVER	U. S.	TRUCK BARGE -->	
METALS	RED RIVER	U. S.	RAIL BARGE -->	
METALS	LOUISIANA	RED RIVER	BARGE -->	
METALS	LOUISIANA	RED RIVER	TRUCK -->	
METALS	LOUISIANA	RED RIVER	RAIL -->	
METALS	LOUISIANA	RED RIVER	TRUCK BARGE -->	
METALS	LOUISIANA	RED RIVER	RAIL BARGE -->	
METALS	U. S.	RED RIVER	BARGE -->	
METALS	U. S.	RED RIVER	TRUCK -->	
METALS	U. S.	RED RIVER	RAIL -->	
METALS	U. S.	RED RIVER	TRUCK BARGE -->	
METALS	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
AGGREGATES	RED RIVER	RED RIVER	BARGE -->	
AGGREGATES	RED RIVER	RED RIVER	TRUCK -->	
AGGREGATES	RED RIVER	RED RIVER	RAIL -->	
AGGREGATES	RED RIVER	RED RIVER	TRUCK BARGE -->	
AGGREGATES	RED RIVER	RED RIVER	RAIL BARGE -->	
AGGREGATES	RED RIVER	LOUISIANA	BARGE -->	
AGGREGATES	RED RIVER	LOUISIANA	TRUCK -->	
AGGREGATES	RED RIVER	LOUISIANA	RAIL -->	
AGGREGATES	RED RIVER	LOUISIANA	TRUCK BARGE -->	
AGGREGATES	RED RIVER	LOUISIANA	RAIL BARGE -->	
AGGREGATES	RED RIVER	U. S.	BARGE -->	
AGGREGATES	RED RIVER	U. S.	TRUCK -->	
AGGREGATES	RED RIVER	U. S.	RAIL -->	
AGGREGATES	RED RIVER	U. S.	TRUCK BARGE -->	
AGGREGATES	RED RIVER	U. S.	RAIL BARGE -->	
AGGREGATES	LOUISIANA	RED RIVER	BARGE -->	
AGGREGATES	LOUISIANA	RED RIVER	TRUCK -->	
AGGREGATES	LOUISIANA	RED RIVER	RAIL -->	
AGGREGATES	LOUISIANA	RED RIVER	TRUCK BARGE -->	
AGGREGATES	LOUISIANA	RED RIVER	RAIL BARGE -->	
AGGREGATES	U. S.	RED RIVER	BARGE -->	
AGGREGATES	U. S.	RED RIVER	TRUCK -->	
AGGREGATES	U. S.	RED RIVER	RAIL -->	
AGGREGATES	U. S.	RED RIVER	TRUCK BARGE -->	
AGGREGATES	U. S.	RED RIVER	RAIL BARGE -->	

SECTOR	ORIGIN	DESTINATION	MODE	VALUE
SUGAR	RED RIVER	RED RIVER	BARGE -->	
SUGAR	RED RIVER	RED RIVER	TRUCK -->	
SUGAR	RED RIVER	RED RIVER	RAIL -->	
SUGAR	RED RIVER	RED RIVER	TRUCK BARGE -->	
SUGAR	RED RIVER	RED RIVER	RAIL BARGE -->	
SUGAR	RED RIVER	LOUISIANA	BARGE -->	
SUGAR	RED RIVER	LOUISIANA	TRUCK -->	
SUGAR	RED RIVER	LOUISIANA	RAIL -->	
SUGAR	RED RIVER	LOUISIANA	TRUCK BARGE -->	
SUGAR	RED RIVER	LOUISIANA	RAIL BARGE -->	
SUGAR	RED RIVER	U. S.	BARGE -->	
SUGAR	RED RIVER	U. S.	TRUCK -->	
SUGAR	RED RIVER	U. S.	RAIL -->	
SUGAR	RED RIVER	U. S.	TRUCK BARGE -->	
SUGAR	RED RIVER	U. S.	RAIL BARGE -->	
SUGAR	LOUISIANA	RED RIVER	BARGE -->	
SUGAR	LOUISIANA	RED RIVER	TRUCK -->	
SUGAR	LOUISIANA	RED RIVER	RAIL -->	
SUGAR	LOUISIANA	RED RIVER	TRUCK BARGE -->	
SUGAR	LOUISIANA	RED RIVER	RAIL BARGE -->	
SUGAR	U. S.	RED RIVER	BARGE -->	
SUGAR	U. S.	RED RIVER	TRUCK -->	
SUGAR	U. S.	RED RIVER	RAIL -->	
SUGAR	U. S.	RED RIVER	TRUCK BARGE -->	
SUGAR	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
PAPER	RED RIVER	RED RIVER	BARGE -->	
PAPER	RED RIVER	RED RIVER	TRUCK -->	
PAPER	RED RIVER	RED RIVER	RAIL -->	
PAPER	RED RIVER	RED RIVER	TRUCK BARGE -->	
PAPER	RED RIVER	RED RIVER	RAIL BARGE -->	
PAPER	RED RIVER	LOUISIANA	BARGE -->	
PAPER	RED RIVER	LOUISIANA	TRUCK -->	
PAPER	RED RIVER	LOUISIANA	RAIL -->	
PAPER	RED RIVER	LOUISIANA	TRUCK BARGE -->	
PAPER	RED RIVER	LOUISIANA	RAIL BARGE -->	
PAPER	RED RIVER	U. S.	BARGE -->	
PAPER	RED RIVER	U. S.	TRUCK -->	
PAPER	RED RIVER	U. S.	RAIL -->	
PAPER	RED RIVER	U. S.	TRUCK BARGE -->	
PAPER	RED RIVER	U. S.	RAIL BARGE -->	
PAPER	LOUISIANA	RED RIVER	BARGE -->	
PAPER	LOUISIANA	RED RIVER	TRUCK -->	
PAPER	LOUISIANA	RED RIVER	RAIL -->	
PAPER	LOUISIANA	RED RIVER	TRUCK BARGE -->	
PAPER	LOUISIANA	RED RIVER	RAIL BARGE -->	
PAPER	U. S.	RED RIVER	BARGE -->	
PAPER	U. S.	RED RIVER	TRUCK -->	
PAPER	U. S.	RED RIVER	RAIL -->	
PAPER	U. S.	RED RIVER	TRUCK BARGE -->	
PAPER	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
CHEMICALS	RED RIVER	RED RIVER	BARGE -->	
CHEMICALS	RED RIVER	RED RIVER	TRUCK -->	
CHEMICALS	RED RIVER	RED RIVER	RAIL -->	
CHEMICALS	RED RIVER	RED RIVER	TRUCK BARGE -->	
CHEMICALS	RED RIVER	RED RIVER	RAIL BARGE -->	
CHEMICALS	RED RIVER	LOUISIANA	BARGE -->	
CHEMICALS	RED RIVER	LOUISIANA	TRUCK -->	
CHEMICALS	RED RIVER	LOUISIANA	RAIL -->	
CHEMICALS	RED RIVER	LOUISIANA	TRUCK BARGE -->	
CHEMICALS	RED RIVER	LOUISIANA	RAIL BARGE -->	
CHEMICALS	RED RIVER	U. S.	BARGE -->	
CHEMICALS	RED RIVER	U. S.	TRUCK -->	
CHEMICALS	RED RIVER	U. S.	RAIL -->	
CHEMICALS	RED RIVER	U. S.	TRUCK BARGE -->	
CHEMICALS	RED RIVER	U. S.	RAIL BARGE -->	
CHEMICALS	LOUISIANA	RED RIVER	BARGE -->	
CHEMICALS	LOUISIANA	RED RIVER	TRUCK -->	
CHEMICALS	LOUISIANA	RED RIVER	RAIL -->	
CHEMICALS	LOUISIANA	RED RIVER	TRUCK BARGE -->	
CHEMICALS	LOUISIANA	RED RIVER	RAIL BARGE -->	
CHEMICALS	U. S.	RED RIVER	BARGE -->	
CHEMICALS	U. S.	RED RIVER	TRUCK -->	
CHEMICALS	U. S.	RED RIVER	RAIL -->	
CHEMICALS	U. S.	RED RIVER	TRUCK BARGE -->	
CHEMICALS	U. S.	RED RIVER	RAIL BARGE -->	

SECTOR	ORIGIN	DESTINATION	MODE	VALUE
COAL-PETROLEUM	RED RIVER	RED RIVER	BARGE -->	
COAL-PETROLEUM	RED RIVER	RED RIVER	TRUCK -->	
COAL-PETROLEUM	RED RIVER	RED RIVER	RAIL -->	
COAL-PETROLEUM	RED RIVER	RED RIVER	TRUCK BARGE -->	
COAL-PETROLEUM	RED RIVER	RED RIVER	RAIL BARGE -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	BARGE -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	TRUCK -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	RAIL -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	TRUCK BARGE -->	
COAL-PETROLEUM	RED RIVER	LOUISIANA	RAIL BARGE -->	
COAL-PETROLEUM	RED RIVER	U. S.	BARGE -->	
COAL-PETROLEUM	RED RIVER	U. S.	TRUCK -->	
COAL-PETROLEUM	RED RIVER	U. S.	RAIL -->	
COAL-PETROLEUM	RED RIVER	U. S.	TRUCK BARGE -->	
COAL-PETROLEUM	RED RIVER	U. S.	RAIL BARGE -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	BARGE -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	TRUCK -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	RAIL -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	TRUCK BARGE -->	
COAL-PETROLEUM	LOUISIANA	RED RIVER	RAIL BARGE -->	
COAL-PETROLEUM	U. S.	RED RIVER	BARGE -->	
COAL-PETROLEUM	U. S.	RED RIVER	TRUCK -->	
COAL-PETROLEUM	U. S.	RED RIVER	RAIL -->	
COAL-PETROLEUM	U. S.	RED RIVER	TRUCK BARGE -->	
COAL-PETROLEUM	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
PRIMARY FOREST	RED RIVER	RED RIVER	BARGE -->	
PRIMARY FOREST	RED RIVER	RED RIVER	TRUCK -->	
PRIMARY FOREST	RED RIVER	RED RIVER	RAIL -->	
PRIMARY FOREST	RED RIVER	RED RIVER	TRUCK BARGE -->	
PRIMARY FOREST	RED RIVER	RED RIVER	RAIL BARGE -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	BARGE -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	TRUCK -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	RAIL -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	TRUCK BARGE -->	
PRIMARY FOREST	RED RIVER	LOUISIANA	RAIL BARGE -->	
PRIMARY FOREST	RED RIVER	U. S.	BARGE -->	
PRIMARY FOREST	RED RIVER	U. S.	TRUCK -->	
PRIMARY FOREST	RED RIVER	U. S.	RAIL -->	
PRIMARY FOREST	RED RIVER	U. S.	TRUCK BARGE -->	
PRIMARY FOREST	RED RIVER	U. S.	RAIL BARGE -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	BARGE -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	TRUCK -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	RAIL -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	TRUCK BARGE -->	
PRIMARY FOREST	LOUISIANA	RED RIVER	RAIL BARGE -->	
PRIMARY FOREST	U. S.	RED RIVER	BARGE -->	
PRIMARY FOREST	U. S.	RED RIVER	TRUCK -->	
PRIMARY FOREST	U. S.	RED RIVER	RAIL -->	
PRIMARY FOREST	U. S.	RED RIVER	TRUCK BARGE -->	
PRIMARY FOREST	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
LUMBER	RED RIVER	RED RIVER	BARGE -->	
LUMBER	RED RIVER	RED RIVER	TRUCK -->	
LUMBER	RED RIVER	RED RIVER	RAIL -->	
LUMBER	RED RIVER	RED RIVER	TRUCK BARGE -->	
LUMBER	RED RIVER	RED RIVER	RAIL BARGE -->	
LUMBER	RED RIVER	LOUISIANA	BARGE -->	
LUMBER	RED RIVER	LOUISIANA	TRUCK -->	
LUMBER	RED RIVER	LOUISIANA	RAIL -->	
LUMBER	RED RIVER	LOUISIANA	TRUCK BARGE -->	
LUMBER	RED RIVER	LOUISIANA	RAIL BARGE -->	
LUMBER	RED RIVER	U. S.	BARGE -->	
LUMBER	RED RIVER	U. S.	TRUCK -->	
LUMBER	RED RIVER	U. S.	RAIL -->	
LUMBER	RED RIVER	U. S.	TRUCK BARGE -->	
LUMBER	RED RIVER	U. S.	RAIL BARGE -->	
LUMBER	LOUISIANA	RED RIVER	BARGE -->	
LUMBER	LOUISIANA	RED RIVER	TRUCK -->	
LUMBER	LOUISIANA	RED RIVER	RAIL -->	
LUMBER	LOUISIANA	RED RIVER	TRUCK BARGE -->	
LUMBER	LOUISIANA	RED RIVER	RAIL BARGE -->	
LUMBER	U. S.	RED RIVER	BARGE -->	
LUMBER	U. S.	RED RIVER	TRUCK -->	
LUMBER	U. S.	RED RIVER	RAIL -->	
LUMBER	U. S.	RED RIVER	TRUCK BARGE -->	
LUMBER	U. S.	RED RIVER	RAIL BARGE -->	

SECTOR	ORIGIN	DESTINATION	MODE	VALUE
CEMENT	RED RIVER	RED RIVER	BARGE -->	
CEMENT	RED RIVER	RED RIVER	TRUCK -->	
CEMENT	RED RIVER	RED RIVER	RAIL -->	
CEMENT	RED RIVER	RED RIVER	TRUCK BARGE -->	
CEMENT	RED RIVER	RED RIVER	RAIL BARGE -->	
CEMENT	RED RIVER	LOUISIANA	BARGE -->	
CEMENT	RED RIVER	LOUISIANA	TRUCK -->	
CEMENT	RED RIVER	LOUISIANA	RAIL -->	
CEMENT	RED RIVER	LOUISIANA	TRUCK BARGE -->	
CEMENT	RED RIVER	LOUISIANA	RAIL BARGE -->	
CEMENT	RED RIVER	U. S.	BARGE -->	
CEMENT	RED RIVER	U. S.	TRUCK -->	
CEMENT	RED RIVER	U. S.	RAIL -->	
CEMENT	RED RIVER	U. S.	TRUCK BARGE -->	
CEMENT	RED RIVER	U. S.	RAIL BARGE -->	
CEMENT	LOUISIANA	RED RIVER	BARGE -->	
CEMENT	LOUISIANA	RED RIVER	TRUCK -->	
CEMENT	LOUISIANA	RED RIVER	RAIL -->	
CEMENT	LOUISIANA	RED RIVER	TRUCK BARGE -->	
CEMENT	LOUISIANA	RED RIVER	RAIL BARGE -->	
CEMENT	U. S.	RED RIVER	BARGE -->	
CEMENT	U. S.	RED RIVER	TRUCK -->	
CEMENT	U. S.	RED RIVER	RAIL -->	
CEMENT	U. S.	RED RIVER	TRUCK BARGE -->	
CEMENT	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
STEEL ARTICLES	RED RIVER	RED RIVER	BARGE -->	
STEEL ARTICLES	RED RIVER	RED RIVER	TRUCK -->	
STEEL ARTICLES	RED RIVER	RED RIVER	RAIL -->	
STEEL ARTICLES	RED RIVER	RED RIVER	TRUCK BARGE -->	
STEEL ARTICLES	RED RIVER	RED RIVER	RAIL BARGE -->	
STEEL ARTICLES	RED RIVER	LOUISIANA	BARGE -->	
STEEL ARTICLES	RED RIVER	LOUISIANA	TRUCK -->	
STEEL ARTICLES	RED RIVER	LOUISIANA	RAIL -->	
STEEL ARTICLES	RED RIVER	LOUISIANA	TRUCK BARGE -->	
STEEL ARTICLES	RED RIVER	LOUISIANA	RAIL BARGE -->	
STEEL ARTICLES	RED RIVER	U. S.	BARGE -->	
STEEL ARTICLES	RED RIVER	U. S.	TRUCK -->	
STEEL ARTICLES	RED RIVER	U. S.	RAIL -->	
STEEL ARTICLES	RED RIVER	U. S.	TRUCK BARGE -->	
STEEL ARTICLES	RED RIVER	U. S.	RAIL BARGE -->	
STEEL ARTICLES	LOUISIANA	RED RIVER	BARGE -->	
STEEL ARTICLES	LOUISIANA	RED RIVER	TRUCK -->	
STEEL ARTICLES	LOUISIANA	RED RIVER	RAIL -->	
STEEL ARTICLES	LOUISIANA	RED RIVER	TRUCK BARGE -->	
STEEL ARTICLES	LOUISIANA	RED RIVER	RAIL BARGE -->	
STEEL ARTICLES	U. S.	RED RIVER	BARGE -->	
STEEL ARTICLES	U. S.	RED RIVER	TRUCK -->	
STEEL ARTICLES	U. S.	RED RIVER	RAIL -->	
STEEL ARTICLES	U. S.	RED RIVER	TRUCK BARGE -->	
STEEL ARTICLES	U. S.	RED RIVER	RAIL BARGE -->	
SECTOR	ORIGIN	DESTINATION	MODE	VALUE
PIPE-SCRAP	RED RIVER	RED RIVER	BARGE -->	
PIPE-SCRAP	RED RIVER	RED RIVER	TRUCK -->	
PIPE-SCRAP	RED RIVER	RED RIVER	RAIL -->	
PIPE-SCRAP	RED RIVER	RED RIVER	TRUCK BARGE -->	
PIPE-SCRAP	RED RIVER	RED RIVER	RAIL BARGE -->	
PIPE-SCRAP	RED RIVER	LOUISIANA	BARGE -->	
PIPE-SCRAP	RED RIVER	LOUISIANA	TRUCK -->	
PIPE-SCRAP	RED RIVER	LOUISIANA	RAIL -->	
PIPE-SCRAP	RED RIVER	LOUISIANA	TRUCK BARGE -->	
PIPE-SCRAP	RED RIVER	LOUISIANA	RAIL BARGE -->	
PIPE-SCRAP	RED RIVER	U. S.	BARGE -->	
PIPE-SCRAP	RED RIVER	U. S.	TRUCK -->	
PIPE-SCRAP	RED RIVER	U. S.	RAIL -->	
PIPE-SCRAP	RED RIVER	U. S.	TRUCK BARGE -->	
PIPE-SCRAP	RED RIVER	U. S.	RAIL BARGE -->	
PIPE-SCRAP	LOUISIANA	RED RIVER	BARGE -->	
PIPE-SCRAP	LOUISIANA	RED RIVER	TRUCK -->	
PIPE-SCRAP	LOUISIANA	RED RIVER	RAIL -->	
PIPE-SCRAP	LOUISIANA	RED RIVER	TRUCK BARGE -->	
PIPE-SCRAP	LOUISIANA	RED RIVER	RAIL BARGE -->	
PIPE-SCRAP	U. S.	RED RIVER	BARGE -->	
PIPE-SCRAP	U. S.	RED RIVER	TRUCK -->	
PIPE-SCRAP	U. S.	RED RIVER	RAIL -->	
PIPE-SCRAP	U. S.	RED RIVER	TRUCK BARGE -->	
PIPE-SCRAP	U. S.	RED RIVER	RAIL BARGE -->	

SECTOR	ORIGIN	DESTINATION	MODE	VALUE
NONFERROUS	RED RIVER	RED RIVER	BARGE ---)	
NONFERROUS	RED RIVER	RED RIVER	TRUCK ---)	
NONFERROUS	RED RIVER	RED RIVER	RAIL ---)	
NONFERROUS	RED RIVER	RED RIVER	TRUCK BARGE ---)	
NONFERROUS	RED RIVER	RED RIVER	RAIL BARGE ---)	
NONFERROUS	RED RIVER	LOUISIANA	BARGE ---)	
NONFERROUS	RED RIVER	LOUISIANA	TRUCK ---)	
NONFERROUS	RED RIVER	LOUISIANA	RAIL ---)	
NONFERROUS	RED RIVER	LOUISIANA	TRUCK BARGE ---)	
NONFERROUS	RED RIVER	LOUISIANA	RAIL BARGE ---)	
NONFERROUS	RED RIVER	U. S.	BARGE ---)	
NONFERROUS	RED RIVER	U. S.	TRUCK ---)	
NONFERROUS	RED RIVER	U. S.	RAIL ---)	
NONFERROUS	RED RIVER	U. S.	TRUCK BARGE ---)	
NONFERROUS	RED RIVER	U. S.	RAIL BARGE ---)	
NONFERROUS	LOUISIANA	RED RIVER	BARGE ---)	
NONFERROUS	LOUISIANA	RED RIVER	TRUCK ---)	
NONFERROUS	LOUISIANA	RED RIVER	RAIL ---)	
NONFERROUS	LOUISIANA	RED RIVER	TRUCK BARGE ---)	
NONFERROUS	LOUISIANA	RED RIVER	RAIL BARGE ---)	
NONFERROUS	U. S.	RED RIVER	BARGE ---)	
NONFERROUS	U. S.	RED RIVER	TRUCK ---)	
NONFERROUS	U. S.	RED RIVER	RAIL ---)	
NONFERROUS	U. S.	RED RIVER	TRUCK BARGE ---)	
NONFERROUS	U. S.	RED RIVER	RAIL BARGE ---)	

SECTOR	ORIGIN	DESTINATION	MODE	VALUE
FABRICATED METEL	RED RIVER	RED RIVER	BARGE ---)	
FABRICATED METEL	RED RIVER	RED RIVER	TRUCK ---)	
FABRICATED METEL	RED RIVER	RED RIVER	RAIL ---)	
FABRICATED METEL	RED RIVER	RED RIVER	TRUCK BARGE ---)	
FABRICATED METEL	RED RIVER	RED RIVER	RAIL BARGE ---)	
FABRICATED METEL	RED RIVER	LOUISIANA	BARGE ---)	
FABRICATED METEL	RED RIVER	LOUISIANA	TRUCK ---)	
FABRICATED METEL	RED RIVER	LOUISIANA	RAIL ---)	
FABRICATED METEL	RED RIVER	LOUISIANA	TRUCK BARGE ---)	
FABRICATED METEL	RED RIVER	LOUISIANA	RAIL BARGE ---)	
FABRICATED METEL	RED RIVER	U. S.	BARGE ---)	
FABRICATED METEL	RED RIVER	U. S.	TRUCK ---)	
FABRICATED METEL	RED RIVER	U. S.	RAIL ---)	
FABRICATED METEL	RED RIVER	U. S.	TRUCK BARGE ---)	
FABRICATED METEL	RED RIVER	U. S.	RAIL BARGE ---)	
FABRICATED METEL	LOUISIANA	RED RIVER	BARGE ---)	
FABRICATED METEL	LOUISIANA	RED RIVER	TPUCK ---)	
FABRICATED METEL	LOUISIANA	RED RIVER	RAIL ---)	
FABRICATED METEL	LOUISIANA	RED RIVER	TRUCK BARGE ---)	
FABRICATED METEL	LOUISIANA	RED RIVER	RAIL BARGE ---)	
FABRICATED METEL	U. S.	RED RIVER	BARGE ---)	
FABRICATED METEL	U. S.	RED RIVER	TRUCK ---)	
FABRICATED METEL	U. S.	RED RIVER	RAIL ---)	
FABRICATED METEL	U. S.	RED RIVER	TRUCK BARGE ---)	
FABRICATED METEL	U. S.	RED RIVER	RAIL BARGE ---)	

NOW ENTER THE MAXIMUM NUMBER OF UNITS TRANSPORTED IN ALL SECTORS  
 ENTER ONE NUMBER PER LINE WITH DECIMAL. EXAMPLE (2020.0)

SECTOR	ORIGIN	DESTINATION	MODE	VALUE
ALL SECTORS	RED RIVER	RED RIVER	BARGE ---)	
ALL SECTORS	RED RIVER	RED RIVER	TRUCK ---)	
ALL SECTORS	RED RIVER	RED RIVER	RAIL ---)	
ALL SECTORS	RED RIVER	RED RIVER	TRUCK BARGE ---)	
ALL SECTORS	RED RIVER	RED RIVER	RAIL BARGE ---)	
ALL SECTORS	RED RIVER	LOUISIANA	BARGE ---)	
ALL SECTORS	RED RIVER	LOUISIANA	TRUCK ---)	
ALL SECTORS	RED RIVER	LOUISIANA	RAIL ---)	
ALL SECTORS	RED RIVER	LOUISIANA	TRUCK BARGE ---)	
ALL SECTORS	RED RIVER	LOUISIANA	RAIL BARGE ---)	
ALL SECTORS	RED RIVER	U. S.	BARGE ---)	
ALL SECTORS	RED RIVER	U. S.	TRUCK ---)	
ALL SECTORS	RED RIVER	U. S.	RAIL ---)	
ALL SECTORS	RED RIVER	U. S.	TRUCK BARGE ---)	
ALL SECTORS	LOUISIANA	RED RIVER	BARGE ---)	
ALL SECTORS	LOUISIANA	RED RIVER	TRUCK ---)	
ALL SECTORS	LOUISIANA	RED RIVER	RAIL ---)	
ALL SECTORS	LOUISIANA	RED RIVER	TRUCK BARGE ---)	
ALL SECTORS	LOUISIANA	RED RIVER	RAIL BARGE ---)	
ALL SECTORS	U. S.	RED RIVER	BARGE ---)	
ALL SECTORS	U. S.	RED RIVER	TRUCK ---)	
ALL SECTORS	U. S.	RED RIVER	RAIL ---)	
ALL SECTORS	U. S.	RED RIVER	TRUCK BARGE ---)	
ALL SECTORS	U. S.	RED RIVER	RAIL BARGE ---)	

NOW ENTER THE MAXIMUM NUMBER OF UNITS THAT MAY BE PRODUCED  
 BY SECTOR BY REGION  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

REGION	SECTOR	VALUE
RED RIVER	GRAINS	--)
LOUISIANA	GRAINS	--)
U. S.	GRAINS	--)
RED RIVER	COAL	--)
LOUISIANA	COAL	--)
U. S.	COAL	--)
RED RIVER	METALS	--)
LOUISIANA	METALS	--)
U. S.	METALS	--)
RED RIVER	AGGREGATES	--)
LOUISIANA	AGGREGATES	--)
U. S.	AGGREGATES	--)
RED RIVER	SUGAR	--)
LOUISIANA	SUGAR	--)
U. S.	SUGAR	--)
RED RIVER	PAPER	--)
LOUISIANA	PAPER	--)
U. S.	PAPER	--)
RED RIVER	CHEMICALS	--)
LOUISIANA	CHEMICALS	--)
U. S.	CHEMICALS	--)
RED RIVER	COAL-PETROLEUM	--)
LOUISIANA	COAL-PETROLEUM	--)
U. S.	COAL-PETROLEUM	--)
RED RIVER	PRIMARY FOREST	--)
LOUISIANA	PRIMARY FOREST	--)
U. S.	PRIMARY FOREST	--)
RED RIVER	LUMBER	--)
LOUISIANA	LUMBER	--)
U. S.	LUMBER	--)
RED RIVER	CEMENT	--)
LOUISIANA	CEMENT	--)
U. S.	CEMENT	--)
RED RIVER	STEEL ARTICLES	--)
LOUISIANA	STEEL ARTICLES	--)
U. S.	STEEL ARTICLES	--)
RED RIVER	PIPE-SCRAP	--)
LOUISIANA	PIPE-SCRAP	--)
U. S.	PIPE-SCRAP	--)
RED RIVER	NONFERROUS	--)
LOUISIANA	NONFERROUS	--)
U. S.	NONFERROUS	--)
RED RIVER	FABRICATED METEL--)	
LOUISIANA	FABRICATED METEL--)	
U. S.	FABRICATED METEL--)	

ENTER MAXIMUM NUMBER OF UNITS OF CAPITAL  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

REGION RED RIVER

REGION LOUISIANA

REGION U. S.

ENTER MAXIMUM NUMBER OF UNITS OF LABOR  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

REGION RED RIVER

REGION LOUISIANA

REGION U. S.

ENTER TOTAL TONS THAT MAY BE TRANSPORTED BY BARGE, ALL SECTORS,  
 AND ALL ROUTES

DO YOU WANT TO CHECK REGION AND SECTOR NAMES  
 (Y/N)

REGION 1 IS STUDY REGION

ROW	VALUE	
1	RED RIVER	REGION
2	LOUISIANA	REGION
3	U. S.	REGION

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ROW	VALUE	
1	GRAINS	SECTOR
2	COAL	SECTOR
3	METALS	SECTOR
4	AGGREGATES	SECTOR
5	SUGAR	SECTOR
6	PAPER	SECTOR
7	CHEMICALS	SECTOR
8	COAL-PETROLEUM	SECTOR
9	PRIMARY FOREST	SECTOR
10	LUMBER	SECTOR
11	CEMENT	SECTOR
12	STEEL ARTICLES	SECTOR
13	PIPE-SCRAP	SECTOR
14	NONFERROUS	SECTOR
15	FABRICATED METEL	SECTOR

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK OUTPUT PRICE IN RED RIVER  
 (Y/N)

ROW	VALUE	
1	290.00000	GRAINS
2	0.00000000E+00	COAL
3	31.240000	METALS
4	2.9000001	AGGREGATES
5	154.00000	SUGAR
6	221.80000	PAPER
7	45.000000	CHEMICALS
8	97.000000	COAL-PETROLEUM
9	285.00000	PRIMARY FOREST
10	371.00000	LUMBER
11	0.00000000E+00	CEMENT
12	550.00000	STEEL ARTICLES
13	99.690002	PIPE-SCRAP
14	0.00000000E+00	NONFERROUS
15	628.00000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK OUTPUT PRICE IN LOUISIANA  
 (Y/N)

ROW	VALUE	
1	0.00000000E+00	GRAINS
2	0.00000000E+00	COAL
3	28.830000	METALS
4	0.00000000E+00	AGGREGATES
5	150.00000	SUGAR
6	0.00000000E+00	PAPER
7	82.000000	CHEMICALS
8	95.000000	COAL-PETROLEUM
9	277.00000	PRIMARY FOREST
10	0.00000000E+00	LUMBER
11	40.000000	CEMENT
12	356.00000	STEEL ARTICLES
13	307.00000	PIPE-SCRAP
14	1100.0000	NONFERROUS
15	628.00000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK OUTPUT PRICE IN U. S.  
 (Y/N)

ROW	VALUE	
1	67.800003	GRAINS
2	14.110000	COAL
3	0.00000000E+00	METALS
4	0.00000000E+00	AGGREGATES
5	0.00000000E+00	SUGAR
6	386.00000	PAPER
7	76.220001	CHEMICALS
8	102.00000	COAL-PETROLEUM
9	278.00000	PRIMARY FOREST

10 0.00000000E+00 LUMBER  
 11 0.00000000E+00 CEMENT  
 12 352.00000 STEEL ARTICLES  
 13 254.50000 PIPE-SCRAP  
 14 0.00000000E+00 NONFERROUS  
 15 624.00000 FABRICATED METEL  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
 BY BARGE  
 (Y/N)

ROW VALUE  
 1 1.2300000 GRAINS  
 2 0.00000000E+00 CDAL  
 3 0.00000000E+00 METALS  
 4 0.5500001 AGGREGATES  
 5 0.00000000E+00 SUGAR  
 6 0.00000000E+00 PAPER  
 7 4.5300002 CHEMICALS  
 8 4.5599999 CDAL-PETROLEUM  
 9 0.00000000E+00 PRIMARY FOREST  
 10 0.00000000E+00 LUMBER  
 11 0.00000000E+00 CEMENT  
 12 7.9000001 STEEL ARTICLES  
 13 3.0899999 PIPE-SCRAP  
 14 0.00000000E+00 NONFERRDUS  
 15 0.00000000E+00 FABRICATED METEL  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
 BY TRUCK  
 (Y/N)

ROW VALUE  
 1 3.5999999 GRAINS  
 2 0.00000000E+00 CDAL  
 3 3.0599999 METALS  
 4 1.1799999 AGGREGATES  
 5 0.00000000E+00 SUGAR  
 6 0.00000000E+00 PAPER  
 7 0.00000000E+00 CHEMICALS  
 8 5.0200000 CDAL-PETROLEUM  
 9 0.00000000E+00 PRIMARY FOREST  
 10 5.5000000 LUMBER  
 11 0.00000000E+00 CEMENT  
 12 8.3999996 STEEL ARTICLES  
 13 5.6300001 PIPE-SCRAP  
 14 0.00000000E+00 NONFERROUS  
 15 0.00000000E+00 FABRICATED METEL  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
 BY RAIL  
 (Y/N)

ROW VALUE  
 1 0.00000000E+00 GRAINS  
 2 0.00000000E+00 CDAL  
 3 2.1400001 METALS  
 4 0.00000000E+00 AGGREGATES  
 5 0.00000000E+00 SUGAR  
 6 0.00000000E+00 PAPER  
 7 5.1300001 CHEMICALS  
 8 0.00000000E+00 CDAL-PETROLEUM  
 9 0.00000000E+00 PRIMARY FOREST  
 10 0.00000000E+00 LUMBER  
 11 0.00000000E+00 CEMENT  
 12 0.00000000E+00 STEEL ARTICLES  
 13 4.8400002 PIPE-SCRAP  
 14 0.00000000E+00 NONFERROUS  
 15 0.00000000E+00 FABRICATED METEL  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
BY TRUCK BARGE

(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED. IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
BY RAIL BARGE

(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED. IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
BY BARGE

(Y/N)

ROW	VALUE	
1	1.3400000	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	1.0900000	AGGREGATES
5	3.9600000	SUGAR
6	2.8199999	PAPER
7	3.0899999	CHEMICALS
8	4.7800002	COAL-PETROLEUM
9	2.8099999	PRIMARY FOREST
10	5.5400000	LUMBER
11	0.0000000E+00	CEMENT
12	2.9600000	STEEL ARTICLES
13	3.4000001	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	7.4000001	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED. IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
BY TRUCK

(Y/N)

ROW	VALUE	
1	3.5999999	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	1.4000000	AGGREGATES
5	0.0000000E+00	SUGAR
6	4.7199998	PAPER
7	11.8900000	CHEMICALS

8	10.000000	COAL-PETROLEUM
9	3.2000000	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	15.200000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
 BY RAIL

(Y/N)

ROW	VALUE	
1	2.4900000	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	5.5400000	SUGAR
6	0.0000000E+00	PAPER
7	8.2299995	CHEMICALS
8	5.3299999	COAL-PETROLEUM
9	7.5900002	PRIMARY FOREST
10	10.800000	LUMBER
11	0.0000000E+00	CEMENT
12	5.3400002	STEEL ARTICLES
13	10.000000	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
 BY TRUCK BARGE

(Y/N)

ROW	VALUE	
1	3.8599999	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	15.060000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
 BY RAIL BARGE

(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
BY BARGE

(Y/N)

ROW	VALUE	
1	7.8600001	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	10.840000	PAPER
7	6.0000000	CHEMICALS
8	9.5299997	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	9.4200001	STEEL ARTICLES
13	8.3199997	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	26.400000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED. IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL. EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
BY TRUCK

(Y/N)

ROW	VALUE	
1	9.3500004	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	13.850000	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	27.850000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED. IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL. EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
BY RAIL

(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	12.100000	PAPER
7	10.000000	CHEMICALS
8	10.740000	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	21.620001	LUMBER
11	0.0000000E+00	CEMENT
12	12.600000	STEEL ARTICLES
13	14.200000	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	23.400000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED. IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL. EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
BY TRUCK BARGE

(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER

7	0.00000000E+00	CHEMICALS
8	0.00000000E+00	COAL-PETROLEUM
9	0.00000000E+00	PRIMARY FOREST
10	0.00000000E+00	LUMBER
11	0.00000000E+00	CEMENT
12	0.00000000E+00	STEEL ARTICLES
13	0.00000000E+00	PIPE-SCRAP
14	0.00000000E+00	NONFERROUS
15	21.379999	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
 BY RAIL BARGE  
 (Y/N)

ROW	VALUE	
1	0.00000000E+00	GRAINS
2	0.00000000E+00	COAL
3	0.00000000E+00	METALS
4	0.00000000E+00	AGGREGATES
5	0.00000000E+00	SUGAR
6	0.00000000E+00	PAPER
7	0.00000000E+00	CHEMICALS
8	0.00000000E+00	COAL-PETROLEUM
9	0.00000000E+00	PRIMARY FOREST
10	0.00000000E+00	LUMBER
11	0.00000000E+00	CEMENT
12	0.00000000E+00	STEEL ARTICLES
13	0.00000000E+00	PIPE-SCRAP
14	0.00000000E+00	NONFERROUS
15	0.00000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
 BY BARGE  
 (Y/N)

ROW	VALUE	
1	0.00000000E+00	GRAINS
2	0.00000000E+00	COAL
3	3.1300001	METALS
4	0.00000000E+00	AGGREGATES
5	4.0400000	SUGAR
6	0.00000000E+00	PAPER
7	7.4400001	CHEMICALS
8	2.0999999	COAL-PETROLEUM
9	3.0999999	PRIMARY FOREST
10	0.00000000E+00	LUMBER
11	2.7300000	CEMENT
12	5.9200001	STEEL ARTICLES
13	8.3000002	PIPE-SCRAP
14	7.3600001	NONFERROUS
15	7.8400002	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
 BY TRUCK  
 (Y/N)

ROW	VALUE	
1	0.00000000E+00	GRAINS
2	0.00000000E+00	COAL
3	0.00000000E+00	METALS
4	0.00000000E+00	AGGREGATES
5	0.00000000E+00	SUGAR
6	0.00000000E+00	PAPER
7	8.3999996	CHEMICALS
8	5.2199998	COAL-PETROLEUM
9	0.00000000E+00	PRIMARY FOREST
10	0.00000000E+00	LUMBER
11	0.00000000E+00	CEMENT
12	0.00000000E+00	STEEL ARTICLES
13	10.600000	PIPE-SCRAP
14	0.00000000E+00	NONFERROUS
15	0.00000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
BY RAIL

(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	5.5400000	METALS
4	0.0000000E+00	AGGREGATES
5	5.5400000	SUGAR
6	0.0000000E+00	PAPER
7	7.5300002	CHEMICALS
8	6.0999999	COAL-PETROLEUM
9	7.5900002	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	4.5100002	CEMENT
12	9.0200005	STEEL ARTICLES
13	16.4699999	PIPE-SCRAP
14	11.2800000	NONFERROUS
15	11.1700000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
BY TRUCK BARGE

(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	CDAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	11.3700000	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
BY RAIL BARGE

(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
BY BARGE

(Y/N)

ROW	VALUE	
1	7.5300002	GRAINS
2	2.1400001	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	8.9799999	PAPER
7	7.1999998	CHEMICALS

8	8.359997	COAL-PETROLEUM
9	8.920001	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	13.700000	STEEL ARTICLES
13	13.100000	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	18.809999	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
 TRUCK  
 (Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	9.6800003	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	8.3999996	STEEL ARTICLES
13	17.910000	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
 BY RAIL  
 (Y/N)

ROW	VALUE	
1	8.1000004	GRAINS
2	5.1199999	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	15.100000	PAPER
7	10.540000	CHEMICALS
8	8.8500004	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	17.730000	STEEL ARTICLES
13	24.830000	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	22.799999	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
 BY TRUCK BARGE  
 (Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	21.549999	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	14.930000	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
BY RAIL BARGE  
(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	16.600000	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COST OF CAPITAL RED RIVER  
(Y/N)

ROW	VALUE	
1	1.0000000	GRAINS
2	1.0000000	COAL
3	1.0000000	METALS
4	1.0000000	AGGREGATES
5	1.0000000	SUGAR
6	1.0000000	PAPER
7	1.0000000	CHEMICALS
8	1.0000000	COAL-PETROLEUM
9	1.0000000	PRIMARY FOREST
10	1.0000000	LUMBER
11	1.0000000	CEMENT
12	1.0000000	STEEL ARTICLES
13	1.0000000	PIPE-SCRAP
14	1.0000000	NONFERROUS
15	1.0000000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COST OF CAPITAL LOUISIANA  
(Y/N)

ROW	VALUE	
1	1.0000000	GRAINS
2	1.0000000	COAL
3	1.0000000	METALS
4	1.0000000	AGGREGATES
5	1.0000000	SUGAR
6	1.0000000	PAPER
7	1.0000000	CHEMICALS
8	1.0000000	COAL-PETROLEUM
9	1.0000000	PRIMARY FOREST
10	1.0000000	LUMBER
11	1.0000000	CEMENT
12	1.0000000	STEEL ARTICLES
13	1.0000000	PIPE-SCRAP
14	1.0000000	NONFERROUS
15	1.0000000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COST OF CAPITAL U. S.  
(Y/N)

ROW	VALUE	
1	1.0000000	GRAINS
2	1.0000000	COAL
3	1.0000000	METALS
4	1.0000000	AGGREGATES
5	1.0000000	SUGAR
6	1.0000000	PAPER

7	1.0000000	CHEMICALS
8	1.0000000	COAL-PETROLEUM
9	1.0000000	PRIMARY FOREST
10	1.0000000	LUMBER
11	1.0000000	CEMENT
12	1.0000000	STEEL ARTICLES
13	1.0000000	PIPE-SCRAP
14	1.0000000	NONFERROUS
15	1.0000000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COST OF LABOR RED RIVER  
(Y/N)

ROW	VALUE	
1	4863.0000	GRAINS
2	0.00000000E+00	COAL
3	17800.000	METALS
4	11138.000	AGGREGATES
5	10078.000	SUGAR
6	12986.000	PAPER
7	15432.000	CHEMICALS
8	16798.000	COAL-PETROLEUM
9	6826.0000	PRIMARY FOREST
10	10703.000	LUMBER
11	0.00000000E+00	CEMENT
12	13588.000	STEEL ARTICLES
13	10940.000	PIPE-SCRAP
14	0.00000000E+00	NONFERROUS
15	10927.000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COST OF LABOR LOUISIANA  
(Y/N)

ROW	VALUE	
1	4863.0000	GRAINS
2	0.00000000E+00	COAL
3	12096.000	METALS
4	12302.000	AGGREGATES
5	10078.000	SUGAR
6	12986.000	PAPER
7	16081.000	CHEMICALS
8	16863.000	COAL-PETROLEUM
9	6826.0000	PRIMARY FOREST
10	10612.000	LUMBER
11	16981.000	CEMENT
12	13608.000	STEEL ARTICLES
13	11889.000	PIPE-SCRAP
14	13458.000	NONFERROUS
15	10927.000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COST OF LABOR U. S.  
(Y/N)

ROW	VALUE	
1	4688.0000	GRAINS
2	10915.000	COAL
3	19030.000	METALS
4	13689.000	AGGREGATES
5	11444.000	SUGAR
6	8115.0000	PAPER
7	16054.000	CHEMICALS
8	18607.000	COAL-PETROLEUM
9	10591.000	PRIMARY FOREST
10	10711.000	LUMBER
11	17450.000	CEMENT
12	15060.000	STEEL ARTICLES
13	11829.000	PIPE-SCRAP
14	14275.000	NONFERROUS
15	13522.000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COST OF PRODUCTION IN RED RIVER  
(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COST OF PRODUCTION IN LOUISIANA  
(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COST OF PRODUCTION IN U. S.  
(Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	0.0000000E+00	PAPER
7	0.0000000E+00	CHEMICALS
8	0.0000000E+00	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	0.0000000E+00	STEEL ARTICLES
13	0.0000000E+00	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	0.0000000E+00	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK CAPITAL COEFFICIENT IN RED RIVER  
(Y/N)

ROW	VALUE	
1	12.220000	GRAINS
2	0.0000000E+00	COAL
3	10.470000	METALS
4	0.70999998	AGGREGATES
5	37.049999	SUGAR
6	59.310001	PAPER
7	25.000000	CHEMICALS
8	8.1099997	COAL-PETROLEUM
9	37.810001	PRIMARY FOREST

10	90.809998	LUMBER
11	0.00000000E+00	CEMENT
12	28.930000	STEEL ARTICLES
13	55.020000	PIPE-SCRAP
14	0.00000000E+00	NONFERROUS
15	140.61000	FABRICATED METEL

ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK CAPITAL COEFFICIENT IN LOUISIANA  
(Y/N)

ROW	VALUE	
1	54.480000	GRAINS
2	0.00000000E+00	COAL
3	13.960000	METALS
4	0.79000002	AGGREGATES
5	18.639999	SUGAR
6	58.070000	PAPER
7	23.219999	CHEMICALS
8	7.6100001	COAL-PETROLEUM
9	43.090000	PRIMARY FOREST
10	37.959999	LUMBER
11	28.000000	CEMENT
12	34.340000	STEEL ARTICLES
13	71.510002	PIPE-SCRAP
14	46.430000	NONFERROUS
15	142.63000	FABRICATED METEL

ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK CAPITAL COEFFICIENT IN U. S.  
(Y/N)

ROW	VALUE	
1	30.000000	GRAINS
2	2.6500001	COAL
3	9.7799997	METALS
4	0.87000000	AGGREGATES
5	17.680000	SUGAR
6	27.209999	PAPER
7	28.299999	CHEMICALS
8	11.830000	COAL-PETROLEUM
9	49.599998	PRIMARY FOREST
10	74.599998	LUMBER
11	26.000000	CEMENT
12	31.280001	STEEL ARTICLES
13	59.380001	PIPE-SCRAP
14	43.580002	NONFERROUS
15	139.70000	FABRICATED METEL

ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK LABOR COEFFICIENT IN RED RIVER  
(Y/N)

ROW	VALUE	
1	0.21700000E-02	GRAINS
2	0.00000000E+00	COAL
3	0.23000001E-03	METALS
4	0.29999999E-04	AGGREGATES
5	0.20000001E-02	SUGAR
6	0.35200000E-02	PAPER
7	0.16300000E-02	CHEMICALS
8	0.14000000E-02	COAL-PETROLEUM
9	0.22199999E-02	PRIMARY FOREST
10	0.23900000E-02	LUMBER
11	0.00000000E+00	CEMENT
12	0.12700000E-02	STEEL ARTICLES
13	0.19499999E-02	PIPE-SCRAP
14	0.00000000E+00	NONFERROUS
15	0.10360000E-01	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK LABOR COEFFICIENT IN LOUISIANA  
(Y/N)

ROW	VALUE	
1	0.96800001E-02	GRAINS
2	0.00000000E+00	COAL
3	0.39999999E-03	METALS
4	0.29999999E-04	AGGREGATES
5	0.96999999E-03	SUGAR
6	0.18700000E-02	PAPER

7 0.26000000E-03 CHEMICALS  
 8 0.79999998E-04 COAL-PETROLEUM  
 9 0.45099999E-02 PRIMARY FOREST  
 10 0.59000002E-02 LUMBER  
 11 0.36000001E-03 CEMENT  
 12 0.19000001E-03 STEEL ARTICLES  
 13 0.14800000E-02 PIPE-SCRAP  
 14 0.20500000E-02 NONFERROUS  
 15 0.10510000E-01 FABRICATED METEL  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK LABOR COEFFICIENT IN U. S.  
(Y/N)

ROW	VALUE	
1	0.29600000E-02	GRAINS
2	0.36999999E-03	COAL
3	0.23999999E-03	METALS
4	0.29999999E-04	AGGREGATES
5	0.14900001E-02	SUGAR
6	0.58300002E-02	PAPER
7	0.53000002E-03	CHEMICALS
8	0.16000000E-03	COAL-PETROLEUM
9	0.20099999E-02	PRIMARY FOREST
10	0.56500002E-02	LUMBER
11	0.34999999E-03	CEMENT
12	0.41600000E-02	STEEL ARTICLES
13	0.29300000E-02	PIPE-SCRAP
14	0.21700000E-02	NONFERROUS
15	0.10770000E-01	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK COMMODITY DEMAND  
(Y/N)

ROW	VALUE		
1	54992.000	RED RIVER	GRAINS
2	432160.00	LOUISIANA	GRAINS
3	27680.000	U. S.	GRAINS
4	90000.000	RED RIVER	COAL
5	0.00000000E+00	LOUISIANA	COAL
6	0.00000000E+00	U. S.	COAL
7	619343.00	RED RIVER	METALS
8	0.00000000E+00	LOUISIANA	METALS
9	0.00000000E+00	U. S.	METALS
10	1742100.0	RED RIVER	AGGREGATES
11	92000.000	LOUISIANA	AGGREGATES
12	0.00000000E+00	U. S.	AGGREGATES
13	13300.000	RED RIVER	SUGAR
14	12000.000	LOUISIANA	SUGAR
15	0.00000000E+00	U. S.	SUGAR
16	6200.0000	RED RIVER	PAPER
17	99600.000	LOUISIANA	PAPER
18	4800.0000	U. S.	PAPER
19	141780.00	RED RIVER	CHEMICALS
20	48000.000	LOUISIANA	CHEMICALS
21	438272.00	U. S.	CHEMICALS
22	294730.00	RED RIVER	COAL-PETROLEUM
23	71990.000	LOUISIANA	COAL-PETROLEUM
24	88550.000	U. S.	COAL-PETROLEUM
25	12000.000	RED RIVER	PRIMARY FOREST
26	18000.000	LOUISIANA	PRIMARY FOREST
27	0.00000000E+00	U. S.	PRIMARY FOREST
28	12000.000	RED RIVER	LUMBER
29	150000.00	LOUISIANA	LUMBER
30	2640.0000	U. S.	LUMBER
31	37600.000	RED RIVER	CEMENT
32	0.00000000E+00	LOUISIANA	CEMENT
33	0.00000000E+00	U. S.	CEMENT
34	285460.00	RED RIVER	STEEL ARTICLES
35	45000.000	LOUISIANA	STEEL ARTICLES
36	169930.00	U. S.	STEEL ARTICLES
37	111970.00	RED RIVER	PIPE-SCRAP
38	83270.000	LOUISIANA	PIPE-SCRAP
39	89360.000	U. S.	PIPE-SCRAP
40	5000.0000	RED RIVER	NONFERROUS

41	0.00000000E+00	LOUISIANA	NONFERROUS
42	0.00000000E+00	U. S.	NONFERROUS
43	8300.0000	RED RIVER	FABRICATED METEL
44	76300.0000	LOUISIANA	FABRICATED METEL
45	102500.00	U. S.	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR GRAINS  
 (Y/N)

ROW	VALUE			
46	20160.000	RED RIVER	TO RED RIVER	BY BARGE
47	20160.000	RED RIVER	TO RED RIVER	BY TRUCK
48	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
49	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
50	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
51	35080.000	RED RIVER	TO LOUISIANA	BY BARGE
52	20160.000	RED RIVER	TO LOUISIANA	BY TRUCK
53	432160.00	RED RIVER	TO LOUISIANA	BY RAIL
54	300000.00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
55	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
56	25000.000	RED RIVER	TO U. S.	BY BARGE
57	27680.000	RED RIVER	TO U. S.	BY TRUCK
58	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
59	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
60	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
61	0.00000000E+00	LOUISIANA	TO RED RIVER	BY BARGE
62	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
63	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL
64	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
65	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
66	40032.000	U. S.	TO RED RIVER	BY BARGE
67	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
68	34832.000	U. S.	TO RED RIVER	BY RAIL
69	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
70	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR COAL  
 (Y/N)

ROW	VALUE			
71	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
72	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
73	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
74	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
75	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
76	0.00000000E+00	RED RIVER	TO LOUISIANA	BY BARGE
77	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
78	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
79	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
80	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
81	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
82	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
83	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
84	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
85	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
86	0.00000000E+00	LOUISIANA	TO RED RIVER	BY BARGE
87	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
88	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL
89	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
90	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
91	504000.00	U. S.	TO RED RIVER	BY BARGE
92	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
93	90000.000	U. S.	TO RED RIVER	BY RAIL
94	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
95	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR METALS  
 (Y/N)

ROW	VALUE			
96	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
97	22000.000	RED RIVER	TO RED RIVER	BY TRUCK
98	500343.00	RED RIVER	TO RED RIVER	BY RAIL
99	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE

100	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
101	0.00000000E+00	RED RIVER	TO LOUISIANA	BY BARGE
102	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
103	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
104	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
105	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
106	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
107	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
108	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
109	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
110	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
111	104000.00	LOUISIANA	TO RED RIVER	BY BARGE
112	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
113	97000.000	LOUISIANA	TO RED RIVER	BY RAIL
114	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
115	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
116	0.00000000E+00	U. S.	TO RED RIVER	BY BARGE
117	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
118	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
119	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
120	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR AGGREGATES  
 (Y/N)

ROW	VALUE			
121	100000.00	RED RIVER	TO RED RIVER	BY BARGE
122	1742167.0	RED RIVER	TO RED RIVER	BY TRUCK
123	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
124	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
125	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
126	52000.000	RED RIVER	TO LOUISIANA	BY BARGE
127	92000.000	RED RIVER	TO LOUISIANA	BY TRUCK
128	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
129	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
130	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
131	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
132	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
133	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
134	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
135	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
136	0.00000000E+00	LOUISIANA	TO RED RIVER	BY BARGE
137	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
138	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL
139	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
140	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
141	0.00000000E+00	U. S.	TO RED RIVER	BY BARGE
142	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
143	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
144	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
145	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR SUGAR  
 (Y/N)

ROW	VALUE			
146	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
147	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
148	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
149	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
150	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
151	12000.000	RED RIVER	TO LOUISIANA	BY BARGE
152	12000.000	RED RIVER	TO LOUISIANA	BY TRUCK
153	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
154	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
155	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
156	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
157	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
158	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
159	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
160	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
161	16497.000	LOUISIANA	TO RED RIVER	BY BARGE
162	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
163	13300.000	LOUISIANA	TO RED RIVER	BY RAIL
164	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE

165	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
166	0.00000000E+00	U. S.	TO RED RIVER	BY BARGE
167	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
168	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
169	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
170	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0.  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR PAPER  
 (Y/N)

ROW	VALUE			
171	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
172	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
173	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
174	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
175	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
176	1115520.0	RED RIVER	TO LOUISIANA	BY BARGE
177	99600.000	RED RIVER	TO LOUISIANA	BY TRUCK
178	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
179	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
180	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
181	12125.000	RED RIVER	TO U. S.	BY BARGE
182	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
183	4800.0000	RED RIVER	TO U. S.	BY RAIL
184	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
185	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
186	0.00000000E+00	LOUISIANA	TO RED RIVER	BY BARGE
187	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
188	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL
189	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
190	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
191	12544.000	U. S.	TO RED RIVER	BY BARGE
192	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
193	6200.0000	U. S.	TO RED RIVER	BY RAIL
194	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
195	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR CHEMICALS  
 (Y/N)

ROW	VALUE			
196	58000.000	RED RIVER	TO RED RIVER	BY BARGE
197	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
198	64600.000	RED RIVER	TO RED RIVER	BY RAIL
199	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
200	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
201	84860.000	RED RIVER	TO LOUISIANA	BY BARGE
202	19000.000	RED RIVER	TO LOUISIANA	BY TRUCK
203	29000.000	RED RIVER	TO LOUISIANA	BY RAIL
204	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
205	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
206	146972.00	RED RIVER	TO U. S.	BY BARGE
207	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
208	438272.00	RED RIVER	TO U. S.	BY RAIL
209	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
210	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
211	51946.000	LOUISIANA	TO RED RIVER	BY BARGE
212	5800.0000	LOUISIANA	TO RED RIVER	BY TRUCK
213	49146.000	LOUISIANA	TO RED RIVER	BY RAIL
214	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
215	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
216	36400.000	U. S.	TO RED RIVER	BY BARGE
217	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
218	22240.000	U. S.	TO RED RIVER	BY RAIL
219	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
220	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR COAL-PETROLEUM  
 (Y/N)

ROW	VALUE			
221	116040.00	RED RIVER	TO RED RIVER	BY BARGE

222	16040.000	RED RIVER	TO RED RIVER	BY TRUCK
223	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
224	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
225	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
226	65700.000	RED RIVER	TO LOUISIANA	BY BARGE
227	16790.000	RED RIVER	TO LOUISIANA	BY TRUCK
228	55200.000	RED RIVER	TO LOUISIANA	BY RAIL
229	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
230	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
231	310800.00	RED RIVER	TO U. S.	BY BARGE
232	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
233	88550.000	RED RIVER	TO U. S.	BY RAIL
234	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
235	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
236	67390.000	LOUISIANA	TO RED RIVER	BY BARGE
237	50000.000	LOUISIANA	TO RED RIVER	BY TRUCK
238	16790.000	LOUISIANA	TO RED RIVER	BY RAIL
239	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
240	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
241	270480.00	U. S.	TO RED RIVER	BY BARGE
242	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
243	201700.00	U. S.	TO RED RIVER	BY RAIL
244	10200.000	U. S.	TO RED RIVER	BY TRUCK BARGE
245	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR PRIMARY FOREST (Y/N)

ROW	VALUE			
246	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
247	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
248	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
249	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
250	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
251	19620.000	RED RIVER	TO LOUISIANA	BY BARGE
252	15000.000	RED RIVER	TO LOUISIANA	BY TRUCK
253	3000.0000	RED RIVER	TO LOUISIANA	BY RAIL
254	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
255	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
256	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
257	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
258	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
259	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
260	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
261	6000.0000	LOUISIANA	TO RED RIVER	BY BARGE
262	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
263	6000.0000	LOUISIANA	TO RED RIVER	BY RAIL
264	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
265	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
266	6000.0000	U. S.	TO RED RIVER	BY BARGE
267	6000.0000	U. S.	TO RED RIVER	BY TRUCK
268	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
269	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
270	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR LUMBER (Y/N)

ROW	VALUE			
271	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
272	12000.000	RED RIVER	TO RED RIVER	BY TRUCK
273	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
274	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
275	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
276	155000.00	RED RIVER	TO LOUISIANA	BY BARGE
277	150000.00	RED RIVER	TO LOUISIANA	BY TRUCK
278	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
279	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
280	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
281	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
282	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
283	2640.0000	RED RIVER	TO U. S.	BY RAIL
284	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
285	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
286	0.00000000E+00	LOUISIANA	TO RED RIVER	BY BARGE
287	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK

288	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL
289	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
290	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
291	0.00000000E+00	U. S.	TO RED RIVER	BY BARGE
292	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
293	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
294	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
295	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR CEMENT  
(Y/N)

ROW	VALUE			
296	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
297	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
298	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
299	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
300	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
301	0.00000000E+00	RED RIVER	TO LOUISIANA	BY BARGE
302	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
303	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
304	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
305	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
306	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
307	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
308	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
309	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
310	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
311	41360.000	LOUISIANA	TO RED RIVER	BY BARGE
312	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
313	37600.000	LOUISIANA	TO RED RIVER	BY RAIL
314	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
315	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
316	0.00000000E+00	U. S.	TO RED RIVER	BY BARGE
317	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
318	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
319	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
320	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

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 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR STEEL ARTICLES  
(Y/N)

ROW	VALUE			
321	2300.0000	RED RIVER	TO RED RIVER	BY BARGE
322	2300.0000	RED RIVER	TO RED RIVER	BY TRUCK
323	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
324	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
325	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
326	49910.000	RED RIVER	TO LOUISIANA	BY BARGE
327	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
328	45000.000	RED RIVER	TO LOUISIANA	BY RAIL
329	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
330	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
331	142225.00	RED RIVER	TO U. S.	BY BARGE
332	22035.000	RED RIVER	TO U. S.	BY TRUCK
333	147900.00	RED RIVER	TO U. S.	BY RAIL
334	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
335	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
336	61916.000	LOUISIANA	TO RED RIVER	BY BARGE
337	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
338	61916.000	LOUISIANA	TO RED RIVER	BY RAIL
339	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
340	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
341	263926.00	U. S.	TO RED RIVER	BY BARGE
342	8120.0000	U. S.	TO RED RIVER	BY TRUCK
343	175925.00	U. S.	TO RED RIVER	BY RAIL
344	19750.000	U. S.	TO RED RIVER	BY TRUCK BARGE
345	17450.000	U. S.	TO RED RIVER	BY RAIL BARGE

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 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR PIPE-SCRAP  
(Y/N)

ROW	VALUE			
346	41200.000	RED RIVER	TO RED RIVER	BY BARGE
347	3200.0000	RED RIVER	TO RED RIVER	BY TRUCK
348	38000.000	RED RIVER	TO RED RIVER	BY RAIL
349	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
350	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
351	107270.00	RED RIVER	TO LOUISIANA	BY BARGE
352	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
353	83270.000	RED RIVER	TO LOUISIANA	BY RAIL
354	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
355	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
356	57000.000	RED RIVER	TO U. S.	BY BARGE
357	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
358	89360.000	RED RIVER	TO U. S.	BY RAIL
359	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
360	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
361	21300.000	LOUISIANA	TO RED RIVER	BY BARGE
362	9000.0000	LOUISIANA	TO RED RIVER	BY TRUCK
363	12300.000	LOUISIANA	TO RED RIVER	BY RAIL
364	10500.000	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
365	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
366	117656.00	U. S.	TO RED RIVER	BY BARGE
367	15276.000	U. S.	TO RED RIVER	BY TRUCK
368	23700.000	U. S.	TO RED RIVER	BY RAIL
369	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
370	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR NONFERROUS  
(Y/N)

ROW	VALUE			
371	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
372	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
373	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
374	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
375	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
376	0.00000000E+00	RED RIVER	TO LOUISIANA	BY BARGE
377	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
378	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
379	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
380	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
381	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
382	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
383	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
384	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
385	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
386	5500.0000	LOUISIANA	TO RED RIVER	BY BARGE
387	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
388	5000.0000	LOUISIANA	TO RED RIVER	BY RAIL
389	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
390	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
391	0.00000000E+00	U. S.	TO RED RIVER	BY BARGE
392	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
393	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
394	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
395	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

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ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR FABRICATED METEL  
(Y/N)

ROW	VALUE			
396	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
397	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
398	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
399	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
400	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
401	15000.000	RED RIVER	TO LOUISIANA	BY BARGE
402	32700.000	RED RIVER	TO LOUISIANA	BY TRUCK
403	12600.000	RED RIVER	TO LOUISIANA	BY RAIL
404	31000.000	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
405	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
406	15000.000	RED RIVER	TO U. S.	BY BARGE
407	15300.000	RED RIVER	TO U. S.	BY TRUCK
408	83500.000	RED RIVER	TO U. S.	BY RAIL
409	3700.0000	RED RIVER	TO U. S.	BY TRUCK BARGE

410	0.0000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
411	6500.0000	LOUISIANA	TO RED RIVER	BY BARGE
412	0.0000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
413	6500.0000	LOUISIANA	TO RED RIVER	BY RAIL
414	0.0000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
415	0.0000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
416	1800.0000	U. S.	TO RED RIVER	BY BARGE
417	0.0000000E+00	U. S.	TO RED RIVER	BY TRUCK
418	1800.0000	U. S.	TO RED RIVER	BY RAIL
419	0.0000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
420	0.0000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

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 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR COMBINED SECTORS  
 (Y/N)

ROW	VALUE			
421	337700.00	RED RIVER	TO RED RIVER	BY BARGE
422	1817967.0	RED RIVER	TO RED RIVER	BY TRUCK
423	606143.00	RED RIVER	TO RED RIVER	BY RAIL
424	0.0000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
425	0.0000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
426	4029000.0	RED RIVER	TO LOUISIANA	BY BARGE
427	450250.00	RED RIVER	TO LOUISIANA	BY TRUCK
428	862200.00	RED RIVER	TO LOUISIANA	BY RAIL
429	331000.00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
430	0.0000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
431	4029000.0	RED RIVER	TO U. S.	BY BARGE
432	65015.000	RED RIVER	TO U. S.	BY TRUCK
433	1082507.0	RED RIVER	TO U. S.	BY RAIL
434	3700.0000	RED RIVER	TO U. S.	BY TRUCK BARGE
435	0.0000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
436	4029000.0	LOUISIANA	TO RED RIVER	BY BARGE
437	64800.000	LOUISIANA	TO RED RIVER	BY TRUCK
438	366849.00	LOUISIANA	TO RED RIVER	BY RAIL
439	10500.000	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
440	0.0000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
441	4029000.0	U. S.	TO RED RIVER	BY BARGE
442	29396.000	U. S.	TO RED RIVER	BY TRUCK
443	1146538.0	U. S.	TO RED RIVER	BY RAIL
444	29950.000	U. S.	TO RED RIVER	BY TRUCK BARGE
445	17450.000	U. S.	TO RED RIVER	BY RAIL BARGE

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 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK MAXIMUM PRODUCTION LEVELS  
 (Y/N)

ROW	VALUE		
446	480000.00	RED RIVER	GRAINS
447	1435345.0	LOUISIANA	GRAINS
448	0.15890323E+09	U. S.	GRAINS
449	0.0000000E+00	RED RIVER	COAL
450	0.0000000E+00	LOUISIANA	COAL
451	0.65400000E+09	U. S.	COAL
452	522343.00	RED RIVER	METALS
453	117000.00	LOUISIANA	METALS
454	82303656.	U. S.	METALS
455	1834167.0	RED RIVER	AGGREGATES
456	20175834.	LOUISIANA	AGGREGATES
457	0.97419002E+09	U. S.	AGGREGATES
458	12000.000	RED RIVER	SUGAR
459	4650338.0	LOUISIANA	SUGAR
460	67585664.	U. S.	SUGAR
461	139000.00	RED RIVER	PAPER
462	7527163.0	LOUISIANA	PAPER
463	0.18455406E+09	U. S.	PAPER
464	812872.00	RED RIVER	CHEMICALS
465	0.10448044E+09	LOUISIANA	CHEMICALS
466	0.25177235E+09	U. S.	CHEMICALS
467	498850.00	RED RIVER	COAL-PETROLEUM
468	0.12019816E+09	LOUISIANA	COAL-PETROLEUM
469	0.83484390E+09	U. S.	COAL-PETROLEUM
470	167368.00	RED RIVER	PRIMARY FOREST
471	427018.00	LOUISIANA	PRIMARY FOREST
472	6927557.0	U. S.	PRIMARY FOREST

473	164740.00	RED RIVER	LUMBER
474	2294759.0	LOUISIANA	LUMBER
475	0.11962754E+09	U. S.	LUMBER
476	0.00000000E+00	RED RIVER	CEMENT
477	6609091.0	LOUISIANA	CEMENT
478	73400912.	U. S.	CEMENT
479	223000.00	RED RIVER	STEEL ARTICLES
480	8936698.0	LOUISIANA	STEEL ARTICLES
481	0.12692760E+09	U. S.	STEEL ARTICLES
482	241630.00	RED RIVER	PIPE-SCRAP
483	238284.00	LOUISIANA	PIPE-SCRAP
484	10493010.	U. S.	PIPE-SCRAP
485	0.00000000E+00	RED RIVER	NONFERROUS
486	1171566.0	LOUISIANA	NONFERROUS
487	25346346.	U. S.	NONFERROUS
488	193790.00	RED RIVER	FABRICATED METEL
489	1373089.0	LOUISIANA	FABRICATED METEL
490	0.14308914E+09	U. S.	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK MAXIMUM CAPITAL AND LABOR LEVELS  
 (Y/N)

ROW	VALUE		
491	95392616.	RED RIVER	CAPITAL
492	0.47950756E+10	LOUISIANA	CAPITAL
493	0.50236547E+11	U. S.	CAPITAL
494	7196.0000	RED RIVER	LABOR
495	105168.00	LOUISIANA	LABOR
496	5079722.0	U. S.	LABOR

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

THE TOTAL TONAGE THAT MAY FLOW BY BARGE, ALL SECTORS, AND ALL ROUTES IS  
 0.00000000E+00 IS THAT CORRECT  
 (Y/N)

THE WITHOUT MODEL HAS BEEN SOLVED, NOW WE WILL RETURN TO  
 THE DATA CORRECTION SECTION, ANY CHANGES MAY BE MADE THERE TO  
 ADJUST THE DATA FOR THE WITH MODEL

DO YOU WANT TO CHECK REGION AND SECTOR NAMES  
 (Y/N)

DO YOU WANT TO CHECK OUTPUT PRICE IN RED RIVER  
 (Y/N)

DO YOU WANT TO CHECK OUTPUT PRICE IN LOUISIANA  
 (Y/N)

ROW	VALUE	
1	0.00000000E+00	GRAINS
2	0.00000000E+00	COAL
3	28.830000	METALS
4	0.00000000E+00	AGGREGATES
5	150.00000	SUGAR
6	0.00000000E+00	PAPER
7	82.000000	CHEMICALS
8	95.000000	CDAL-PETROLEUM
9	277.00000	PRIMARY FOREST
10	0.00000000E+00	LUMBER
11	40.000000	CEMENT
12	356.00000	STEEL ARTICLES
13	307.00000	PIPE-SCRAP
14	1100.0000	NONFERROUS
15	628.00000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 4  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK OUTPUT PRICE IN U. S.  
 (Y/N)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
 BY BARGE

(Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
 BY TRUCK

(Y/N)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
 BY RAIL  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
 BY TRUCK BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO RED RIVER  
 BY RAIL BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
 BY BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
 BY TRUCK  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
 BY RAIL  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
 BY TRUCK BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO LOUISIANA  
 BY RAIL BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
 BY BARGE  
 (Y/N)

ROW	VALUE	
1	7.8600001	GRAINS
2	0.0000000E+00	COAL
3	0.0000000E+00	METALS
4	0.0000000E+00	AGGREGATES
5	0.0000000E+00	SUGAR
6	10.840000	PAPER
7	6.0000000	CHEMICALS
8	9.5299997	COAL-PETROLEUM
9	0.0000000E+00	PRIMARY FOREST
10	0.0000000E+00	LUMBER
11	0.0000000E+00	CEMENT
12	9.4200001	STEEL ARTICLES
13	8.3199997	PIPE-SCRAP
14	0.0000000E+00	NONFERROUS
15	26.400000	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0,0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 10  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0,0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
 BY TRUCK  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
 BY RAIL  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
 BY TRUCK BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST RED RIVER TO U. S.  
 BY RAIL BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
 BY BARGE  
 (Y/N)

ROW	VALUE	
1	0.0000000E+00	GRAINS
2	0.0000000E+00	COAL
3	3.1300001	METALS
4	0.0000000E+00	AGGREGATES
5	4.0400000	SUGAR
6	0.0000000E+00	PAPER
7	7.4400001	CHEMICALS
8	2.0999999	COAL-PETROLEUM
9	3.0999999	PRIMARY FOREST

10 0.0000000E+00 LUMBER  
 11 2.7300000 CEMENT  
 12 5.9200001 STEEL ARTICLES  
 13 8.3000002 PIPE-SCRAP  
 14 7.3600001 NONFERRROUS  
 15 7.8400002 FABRICATED MET'L

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 4  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
 BY TRUCK  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
 BY RAIL  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
 BY TRUCK BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST LOUISIANA TO RED RIVER  
 BY RAIL BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
 BY BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
 BY TRUCK  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
 BY RAIL  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
 BY TRUCK BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION COST U. S. TO RED RIVER  
 BY RAIL BARGE  
 (Y/N)  
 DO YOU WANT TO CHECK COST OF CAPITAL RED RIVER  
 (Y/N)  
 DO YOU WANT TO CHECK COST OF CAPITAL LOUISIANA  
 (Y/N)  
 DO YOU WANT TO CHECK COST OF CAPITAL U. S.  
 (Y/N)  
 DO YOU WANT TO CHECK COST OF LABOR RED RIVER  
 (Y/N)  
 DO YOU WANT TO CHECK COST OF LABOR LOUISIANA  
 (Y/N)  
 DO YOU WANT TO CHECK COST OF LABOR U. S.  
 (Y/N)  
 DO YOU WANT TO CHECK COST OF PRODUCTION IN RED RIVER  
 (Y/N)  
 DO YOU WANT TO CHECK COST OF PRODUCTION IN LOUISIANA  
 (Y/N)  
 DO YOU WANT TO CHECK COST OF PRODUCTION IN U. S.  
 (Y/N)  
 DO YOU WANT TO CHECK CAPITAL COEFFICIENT IN RED RIVER  
 (Y/N)  
 DO YOU WANT TO CHECK CAPITAL COEFFICIENT IN LOUISIANA  
 (Y/N)  
 DO YOU WANT TO CHECK CAPITAL COEFFICIENT IN U. S.  
 (Y/N)  
 DO YOU WANT TO CHECK LABOR COEFFICIENT IN RED RIVER  
 (Y/N)  
 DO YOU WANT TO CHECK LABOR COEFFICIENT IN LOUISIANA  
 (Y/N)  
 DO YOU WANT TO CHECK LABOR COEFFICIENT IN U. S.  
 (Y/N)  
 DO YOU WANT TO CHECK COMMODITY DEMAND  
 (Y/N)

ROW	VALUE		
1	54992.000	RED RIVER	GRAINS
2	432160.00	LOUISIANA	GRAINS
3	27680.000	U. S.	GRAINS
4	90000.000	RED RIVER	COAL
5	0.00000000E+00	LOUISIANA	COAL
6	0.00000000E+00	U. S.	COAL
7	619343.00	RED RIVER	METALS
8	0.00000000E+00	LOUISIANA	METALS
9	0.00000000E+00	U. S.	METALS
10	1742100.0	RED RIVER	AGGREGATES
11	92000.000	LOUISIANA	AGGREGATES
12	0.00000000E+00	U. S.	AGGREGATES
13	13300.000	RED RIVER	SUGAR
14	12000.000	LOUISIANA	SUGAR
15	0.00000000E+00	U. S.	SUGAR
16	6200.0000	RED RIVER	PAPER
17	99600.000	LOUISIANA	PAPER
18	4800.0000	U. S.	PAPER
19	141780.00	RED RIVER	CHEMICALS
20	48000.000	LOUISIANA	CHEMICALS
21	438272.00	U. S.	CHEMICALS
22	294730.00	RED RIVER	COAL-PETROLEUM
23	71990.000	LOUISIANA	COAL-PETROLEUM
24	88550.000	U. S.	COAL-PETROLEUM
25	12000.000	RED RIVER	PRIMARY FOREST
26	18000.000	LOUISIANA	PRIMARY FOREST
27	0.00000000E+00	U. S.	PRIMARY FOREST
28	12000.000	RED RIVER	LUMBER
29	150000.00	LOUISIANA	LUMBER
30	2640.0000	U. S.	LUMBER
31	37600.000	RED RIVER	CEMENT
32	0.00000000E+00	LOUISIANA	CEMENT
33	0.00000000E+00	U. S.	CEMENT
34	285460.00	RED RIVER	STEEL ARTICLES
35	45000.000	LOUISIANA	STEEL ARTICLES
36	169930.00	U. S.	STEEL ARTICLES
37	111970.00	RED RIVER	PIPE-SCRAP
38	83270.000	LOUISIANA	PIPE-SCRAP
39	89360.000	U. S.	PIPE-SCRAP
40	5000.0000	RED RIVER	NONFERROUS
41	0.00000000E+00	LOUISIANA	NONFERROUS
42	0.00000000E+00	U. S.	NONFERROUS
43	8300.0000	RED RIVER	FABRICATED METEL
44	76300.000	LOUISIANA	FABRICATED METEL
45	102500.00	U. S.	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 1  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 2  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 4  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 7  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 10  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 13  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 16  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 17  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 18  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 19  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 20  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 22  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 24  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 26  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 29  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 30  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 31  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 34  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 35  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 36  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 37  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 38  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 39  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 40  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR GRAINS  
(Y/N)

ROW	VALUE			
46	20160.000	RED RIVER	TO RED RIVER	BY BARGE
47	20160.000	RED RIVER	TO RED RIVER	BY TRUCK
48	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
49	0.00000000E+00	RED RIVER	TO PED RIVER	BY TRUCK BARGE
50	0.00000000E+00	RED RIVER	TO PED RIVER	BY RAIL BARGE

51.	35080.000	RED RIVER	TO LOUISIANA	BY BARGE
52	20160.000	RED RIVER	TO LOUISIANA	BY TRUCK
53	432160.00	RED RIVER	TO LOUISIANA	BY RAIL
54	300000.00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
55	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
56	25000.000	RED RIVER	TO U. S.	BY BARGE
57	27680.000	RED RIVER	TO U. S.	BY TRUCK
58	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
59	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
60	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
61	0.00000000E+00	LOUISIANA	TO RED RIVER	BY BARGE
62	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
63	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL
64	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
65	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
66	40032.000	U. S.	TO RED RIVER	BY BARGE
67	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
68	34832.000	U. S.	TO RED RIVER	BY RAIL
69	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
70	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 51  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 68  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR COAL (Y/N)  
 DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR METALS (Y/N)

ROW	VALUE			
96	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
97	22000.000	RED RIVER	TO RED RIVER	BY TRUCK
98	500343.00	RED RIVER	TO RED RIVER	BY RAIL
99	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
100	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
101	0.00000000E+00	RED RIVER	TO LOUISIANA	BY BARGE
102	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
103	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
104	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
105	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
106	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
107	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
108	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
109	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
110	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
111	104000.00	LOUISIANA	TO RED RIVER	BY BARGE
112	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
113	97000.000	LOUISIANA	TO RED RIVER	BY RAIL
114	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
115	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
116	0.00000000E+00	U. S.	TO RED RIVER	BY BARGE
117	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
118	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
119	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
120	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 113  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR AGGREGATES (Y/N)

ROW	VALUE			
121	100000.00	RED RIVER	TO RED RIVER	BY BARGE
122	1742167.0	RED RIVER	TO RED RIVER	BY TRUCK
123	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
124	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
125	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
126	52000.000	RED RIVER	TO LOUISIANA	BY BARGE

127	92000.000	REO RIVER	TO LOUISIANA	BY TRUCK
128	0.00000000E+00	REO RIVER	TO LOUISIANA	BY RAIL
129	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
130	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
131	0.00000000E+00	REO RIVER	TO U. S.	BY BARGE
132	0.00000000E+00	REO RIVER	TO U. S.	BY TRUCK
133	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
134	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
135	0.00000000E+00	REO RIVER	TO U. S.	BY RAIL BARGE
136	0.00000000E+00	LOUISIANA	TO RED RIVER	BY BARGE
137	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
138	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL
139	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
140	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
141	0.00000000E+00	U. S.	TO REO RIVER	BY BARGE
142	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
143	0.00000000E+00	U. S.	TO REO RIVER	BY RAIL
144	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
145	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 136

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR SUGAR  
 (Y/N)

ROW	VALUE			
146	0.00000000E+00	REO RIVER	TO RED RIVER	BY BARGE
147	0.00000000E+00	REO RIVER	TO RED RIVER	BY TRUCK
148	0.00000000E+00	REO RIVER	TO RED RIVER	BY RAIL
149	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
150	0.00000000E+00	REO RIVER	TO RED RIVER	BY RAIL BARGE
151	12000.000	REO RIVER	TO LOUISIANA	BY BARGE
152	12000.000	RED RIVER	TO LOUISIANA	BY TRUCK
153	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
154	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
155	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
156	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
157	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
158	0.00000000E+00	REO RIVER	TO U. S.	BY RAIL
159	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
160	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
161	16497.000	LOUISIANA	TO RED RIVER	BY BARGE
162	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
163	13300.000	LOUISIANA	TO RED RIVER	BY RAIL
164	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
165	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
166	0.00000000E+00	U. S.	TO REO RIVER	BY BARGE
167	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
168	0.00000000E+00	U. S.	TO REO RIVER	BY RAIL
169	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
170	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 163

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR PAPER  
 (Y/N)

ROW	VALUE			
171	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
172	0.00000000E+00	RED RIVER	TO REO RIVER	BY TRUCK
173	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
174	0.00000000E+00	RED RIVER	TO REO RIVER	BY TRUCK BARGE
175	0.00000000E+00	REO RIVER	TO REO RIVER	BY RAIL BARGE
176	1115520.0	RED RIVER	TO LOUISIANA	BY BARGE
177	99600.000	RED RIVER	TO LOUISIANA	BY TRUCK
178	0.00000000E+00	REO RIVER	TO LOUISIANA	BY RAIL
179	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
180	0.00000000E+00	REO RIVER	TO LOUISIANA	BY RAIL BARGE
181	12125.000	REO RIVER	TO U. S.	BY BARGE
182	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
183	4800.0000	REO RIVER	TO U. S.	BY RAIL
184	0.00000000E+00	REO RIVER	TO U. S.	BY TRUCK BARGE

185	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
186	0.00000000E+00	LOUISIANA	TO RED RIVER	BY BARGE
187	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
188	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL
189	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
190	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
191	12544.000	U. S.	TO RED RIVER	BY BARGE
192	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
193	6200.0000	U. S.	TO RED RIVER	BY RAIL
194	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
195	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 183  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR CHEMICALS (Y/N)

ROW	VALUE			
196	58000.000	RED RIVER	TO RED RIVER	BY BARGE
197	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
198	64600.000	RED RIVER	TO RED RIVER	BY RAIL
199	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
200	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
201	84860.000	RED RIVER	TO LOUISIANA	BY BARGE
202	19000.000	RED RIVER	TO LOUISIANA	BY TRUCK
203	29000.000	RED RIVER	TO LOUISIANA	BY RAIL
204	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
205	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
206	146972.00	RED RIVER	TO U. S.	BY BARGE
207	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
208	438272.00	RED RIVER	TO U. S.	BY RAIL
209	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
210	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
211	51946.000	LOUISIANA	TO RED RIVER	BY BARGE
212	5800.0000	LOUISIANA	TO RED RIVER	BY TRUCK
213	49146.000	LOUISIANA	TO RED RIVER	BY RAIL
214	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
215	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
216	36400.000	U. S.	TO RED RIVER	BY BARGE
217	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
218	22240.000	U. S.	TO RED RIVER	BY RAIL
219	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
220	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 203  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 218  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR COAL-PETROLEUM (Y/N)

ROW	VALUE			
221	116040.00	RED RIVER	TO RED RIVER	BY BARGE
222	16040.000	RED RIVER	TO RED RIVER	BY TRUCK
223	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
224	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
225	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
226	65780.000	RED RIVER	TO LOUISIANA	BY BARGE
227	16790.000	RED RIVER	TO LOUISIANA	BY TRUCK
228	55200.000	RED RIVER	TO LOUISIANA	BY RAIL
229	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
230	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
231	310000.00	RED RIVER	TO U. S.	BY BARGE
232	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
233	88550.000	RED RIVER	TO U. S.	BY RAIL
234	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
235	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
236	67390.000	LOUISIANA	TO RED RIVER	BY BARGE
237	50000.000	LOUISIANA	TO RED RIVER	BY TRUCK
238	16790.000	LOUISIANA	TO RED RIVER	BY RAIL
239	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE

240	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
241	270480.00	U. S.	TO RED RIVER	BY BARGE
242	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
243	201700.00	U. S.	TO RED RIVER	BY RAIL
244	10200.000	U. S.	TO RED RIVER	BY TRUCK BARGE
245	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 222  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 228  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 233  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 238  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 243  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR PRIMARY FOREST (Y/N)

ROW	VALUE			
246	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
247	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
248	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
249	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
250	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
251	19620.000	RED RIVER	TO LOUISIANA	BY BARGE
252	15000.000	RED RIVER	TO LOUISIANA	BY TRUCK
253	3000.0000	RED RIVER	TO LOUISIANA	BY RAIL
254	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
255	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
256	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
257	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
258	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
259	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
260	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
261	6000.0000	LOUISIANA	TO RED RIVER	BY BARGE
262	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
263	6000.0000	LOUISIANA	TO RED RIVER	BY RAIL
264	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
265	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
266	6000.0000	U. S.	TO RED RIVER	BY BARGE
267	6000.0000	U. S.	TO RED RIVER	BY TRUCK
268	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
269	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
270	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 251  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 253  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR LUMBER (Y/N)

ROW	VALUE			
271	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
272	12000.000	RED RIVER	TO RED RIVER	BY TRUCK
273	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
274	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
275	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
276	155000.00	RED RIVER	TO LOUISIANA	BY BARGE
277	150000.00	RED RIVER	TO LOUISIANA	BY TRUCK

278	0.0000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
279	0.0000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
280	0.0000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
281	0.0000000E+00	RED RIVER	TO U. S.	BY BARGE
282	0.0000000E+00	RED RIVER	TO U. S.	BY TRUCK
283	2640.0000	RED RIVER	TO U. S.	BY RAIL
284	0.0000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
285	0.0000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
286	0.0000000E+00	LOUISIANA	TO RED RIVER	BY BARGE
287	0.0000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
288	0.0000000E+00	LOUISIANA	TO RED RIVER	BY RAIL
289	0.0000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
290	0.0000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
291	0.0000000E+00	U. S.	TO RED RIVER	BY BARGE
292	0.0000000E+00	U. S.	TO RED RIVER	BY TRUCK
293	0.0000000E+00	U. S.	TO RED RIVER	BY RAIL
294	0.0000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
295	0.0000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 277

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 281

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 283

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR CEMENT

(Y/N)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR STEEL ARTICLES

(Y/N)

ROW	VALUE			
321	2300.0000	RED RIVER	TO RED RIVER	BY BARGE
322	2300.0000	RED RIVER	TO RED RIVER	BY TRUCK
323	0.0000000E+00	RED RIVER	TO RED RIVER	BY RAIL
324	0.0000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
325	0.0000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
326	49910.000	RED RIVER	TO LOUISIANA	BY BARGE
327	0.0000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
328	45000.000	RED RIVER	TO LOUISIANA	BY RAIL
329	0.0000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
330	0.0000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
331	142225.00	RED RIVER	TO U. S.	BY BARGE
332	22035.000	RED RIVER	TO U. S.	BY TRUCK
333	147900.00	RED RIVER	TO U. S.	BY RAIL
334	0.0000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
335	0.0000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
336	61916.000	LOUISIANA	TO RED RIVER	BY BARGE
337	0.0000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
338	61916.000	LOUISIANA	TO RED RIVER	BY RAIL
339	0.0000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
340	0.0000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
341	263926.00	U. S.	TO RED RIVER	BY BARGE
342	8120.0000	U. S.	TO RED RIVER	BY TRUCK
343	175925.00	U. S.	TO RED RIVER	BY RAIL
344	19750.000	U. S.	TO RED RIVER	BY TRUCK BARGE
345	17450.000	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 326

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 328

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 331

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 333  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 343  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR PIPE-SCRAP  
 (Y/N)

ROW	VALUE			
346	41200.000	RED RIVER	TO RED RIVER	BY BARGE
347	3200.0000	RED RIVER	TO RED RIVER	BY TRUCK
348	38000.000	RED RIVER	TO RED RIVER	BY RAIL
349	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
350	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
351	107270.00	RED RIVER	TO LOUISIANA	BY BARGE
352	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
353	83270.000	RED RIVER	TO LOUISIANA	BY RAIL
354	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
355	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
356	57000.000	RED RIVER	TO U. S.	BY BARGE
357	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
358	89360.000	RED RIVER	TO U. S.	BY RAIL
359	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
360	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
361	21300.000	LOUISIANA	TO RED RIVER	BY BARGE
362	9000.0000	LOUISIANA	TO RED RIVER	BY TRUCK
363	12300.000	LOUISIANA	TO RED RIVER	BY RAIL
364	10500.000	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
365	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
366	117656.00	U. S.	TO RED RIVER	BY BARGE
367	15276.000	U. S.	TO RED RIVER	BY TRUCK
368	23700.000	U. S.	TO RED RIVER	BY RAIL
369	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
370	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 348  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 356  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR NONFERROUS  
 (Y/N)

ROW	VALUE			
371	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
372	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
373	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
374	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
375	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
376	0.00000000E+00	RED RIVER	TO LOUISIANA	BY BARGE
377	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK
378	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL
379	0.00000000E+00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
380	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
381	0.00000000E+00	RED RIVER	TO U. S.	BY BARGE
382	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK
383	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL
384	0.00000000E+00	RED RIVER	TO U. S.	BY TRUCK BARGE
385	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
386	5500.0000	LOUISIANA	TO RED RIVER	BY BARGE
387	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
388	5000.0000	LOUISIANA	TO RED RIVER	BY RAIL
389	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
390	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
391	0.00000000E+00	U. S.	TO RED RIVER	BY BARGE
392	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
393	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL
394	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
395	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 388  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR FABRICATED METEL  
 (Y/N)

ROW	VALUE			
396	0.00000000E+00	RED RIVER	TO RED RIVER	BY BARGE
397	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK
398	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL
399	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
400	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
401	15000.000	RED RIVER	TO LOUISIANA	BY BARGE
402	32700.000	RED RIVER	TO LOUISIANA	BY TRUCK
403	12600.000	RED RIVER	TO LOUISIANA	BY RAIL
404	31000.000	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
405	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
406	15000.000	RED RIVER	TO U. S.	BY BARGE
407	15300.000	RED RIVER	TO U. S.	BY TRUCK
408	83500.000	RED RIVER	TO U. S.	BY RAIL
409	3700.0000	RED RIVER	TO U. S.	BY TRUCK BARGE
410	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
411	6500.0000	LOUISIANA	TO RED RIVER	BY BARGE
412	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK
413	6500.0000	LOUISIANA	TO RED RIVER	BY RAIL
414	0.00000000E+00	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
415	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
416	1800.0000	U. S.	TO RED RIVER	BY BARGE
417	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK
418	1800.0000	U. S.	TO RED RIVER	BY RAIL
419	0.00000000E+00	U. S.	TO RED RIVER	BY TRUCK BARGE
420	0.00000000E+00	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 403  
 ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK TRANSPORTATION LEVELS FOR COMBINED SECTORS  
 (Y/N)

ROW	VALUE			
421	337700.00	RED RIVER	TO RED RIVER	BY BARGE
422	1817967.0	RED RIVER	TO RED RIVER	BY TRUCK
423	606143.00	RED RIVER	TO RED RIVER	BY RAIL
424	0.00000000E+00	RED RIVER	TO RED RIVER	BY TRUCK BARGE
425	0.00000000E+00	RED RIVER	TO RED RIVER	BY RAIL BARGE
426	4029000.0	RED RIVER	TO LOUISIANA	BY BARGE
427	450250.00	RED RIVER	TO LOUISIANA	BY TRUCK
428	862200.00	RED RIVER	TO LOUISIANA	BY RAIL
429	331000.00	RED RIVER	TO LOUISIANA	BY TRUCK BARGE
430	0.00000000E+00	RED RIVER	TO LOUISIANA	BY RAIL BARGE
431	4029000.0	RED RIVER	TO U. S.	BY BARGE
432	65015.000	RED RIVER	TO U. S.	BY TRUCK
433	1082507.0	RED RIVER	TO U. S.	BY RAIL
434	3700.0000	RED RIVER	TO U. S.	BY TRUCK BARGE
435	0.00000000E+00	RED RIVER	TO U. S.	BY RAIL BARGE
436	4029000.0	LOUISIANA	TO RED RIVER	BY BARGE
437	64800.000	LOUISIANA	TO RED RIVER	BY TRUCK
438	366849.00	LOUISIANA	TO RED RIVER	BY RAIL
439	10500.000	LOUISIANA	TO RED RIVER	BY TRUCK BARGE
440	0.00000000E+00	LOUISIANA	TO RED RIVER	BY RAIL BARGE
441	4029000.0	U. S.	TO RED RIVER	BY BARGE
442	29396.000	U. S.	TO RED RIVER	BY TRUCK
443	1146538.0	U. S.	TO RED RIVER	BY RAIL
444	29950.000	U. S.	TO RED RIVER	BY TRUCK BARGE
445	17450.000	U. S.	TO RED RIVER	BY RAIL BARGE

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
 ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 426

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 428  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 431  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 433  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 436  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK MAXIMUM PRODUCTION LEVELS  
(Y/N)

ROW	VALUE		
446	480000.00	RED RIVER	GRAINS
447	1435345.0	LOUISIANA	GRAINS
448	0.15890323E+09	U. S.	GRAINS
449	0.00000000E+00	RED RIVER	COAL
450	0.00000000E+00	LOUISIANA	COAL
451	0.65400000E+09	U. S.	COAL
452	522343.00	RED RIVER	METALS
453	117000.00	LOUISIANA	METALS
454	82303656.	U. S.	METALS
455	1834167.0	RED RIVER	AGGREGATES
456	20175834.	LOUISIANA	AGGREGATES
457	0.97419002E+09	U. S.	AGGREGATES
458	12000.000	RED RIVER	SUGAR
459	4650338.0	LOUISIANA	SUGAR
460	67585664.	U. S.	SUGAR
461	139000.00	RED RIVER	PAPER
462	7527163.0	LOUISIANA	PAPER
463	0.18455406E+09	U. S.	PAPER
464	812872.00	RED RIVER	CHEMICALS
465	0.10448044E+09	LOUISIANA	CHEMICALS
466	0.25177235E+09	U. S.	CHEMICALS
467	498850.00	RED RIVER	COAL-PETROLEUM
468	0.12019816E+09	LOUISIANA	COAL-PETROLEUM
469	0.83484390E+09	U. S.	COAL-PETROLEUM
470	167368.00	RED RIVER	PRIMARY FOREST
471	427018.00	LOUISIANA	PRIMARY FOREST
472	6927557.0	U. S.	PRIMARY FOREST
473	164740.00	RED RIVER	LUMBER
474	2294759.0	LOUISIANA	LUMBER
475	0.11962754E+09	U. S.	LUMBER
476	0.00000000E+00	RED RIVER	CEMENT
477	6609091.0	LOUISIANA	CEMENT
478	73400912.	U. S.	CEMENT
479	223000.00	RED RIVER	STEEL ARTICLES
480	8936698.0	LOUISIANA	STEEL ARTICLES
481	0.12692760E+09	U. S.	STEEL ARTICLES
482	241630.00	RED RIVER	PIPE-SCRAP
483	238284.00	LOUISIANA	PIPE-SCRAP
484	10493010.	U. S.	PIPE-SCRAP
485	0.00000000E+00	RED RIVER	NONFERROUS
486	1171566.0	LOUISIANA	NONFERROUS
487	25346346.	U. S.	NONFERROUS
488	193790.00	RED RIVER	FABRICATED METEL
489	1373089.0	LOUISIANA	FABRICATED METEL
490	0.14308914E+09	U. S.	FABRICATED METEL

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 446  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 456  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 470  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 471  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 479  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 482  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

DO YOU WANT TO CHECK MAXIMUM CAPITAL AND LABOR LEVELS  
(Y/N)

ROW	VALUE		
491	95392616.	RED RIVER	CAPITAL
492	0.47950756E+10	LOUISIANA	CAPITAL
493	0.50236547E+11	U. S.	CAPITAL
494	7196.0000	RED RIVER	LABOR
495	105168.00	LOUISIANA	LABOR
496	5079722.0	U. S.	LABOR

ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 491  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 492  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 493  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 494  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 495  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

ENTER CORRECT VALUE FOR ROW 496  
ENTER ROW NUMBER OF ROW TO BE CORRECTED, IF ALL ARE CORRECT ENTER 0.0  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

THE TOTAL TONAGE THAT MAY FLOW BY BARGE, ALL SECTORS, AND ALL ROUTES IS  
0.0000000E+00 IS THAT CORRECT  
(Y/N)

ENTER CORRECT VALUE  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

FOLLOWING IS A LIST OF THE BASE SECTORS. YOU MUST SPECIFIE  
 WHERE AND TO WHAT DEGREE YOUR SECTORS MERGE INTO THEM

ROW	SECTOR	
5	COAL MINING	
6	OIL AND GAS EXTRACTION	
7	METAL MINING	
8	NONMETALLIC MINING EXCLUDING FUELS	
12	FOOD AND KINDRED PRODUCTS	
13	TOBACCO PRODUCTS	
14	TEXTILE MILL PRODUCTS	
15	APPAREL AND OTHER TEXTILE PRODUCTS	
16	PAPER AND ALLIED PRODUCTS	
17	PRINTING AND PUBLISHING	
18	CHEMICALS AND ALLIED PRODUCTS	
19	PETROLEUM REFINING	
20	RUBBER AND PLASTICS PRODUCTS	
21	LEATHER AND LEATHER PRODUCTS	
23	LUMBER PRODUCTS	
24	FURNITURE AND FIXTURES	
25	STONE, CLAY AND GLASS PRODUCTS	
26	PRIMARY METALS	
27	FABRICATED METALS	
28	Nonelectrical Machinery	
29	Electrical Machinery	
30	Transportation Equipment	
31	Motor Vehicles and Equipment	
32	Ordnance	
33	Instruments	
34	Miscellaneous Manufacturing	
	ENTER ROW NUMBER IN WHICH GRAINS	IS A PART, ENTER 0.0 WHEN FINISHED
	ENTER WITH DECIMAL EXAMPLE (2020.0)	
	ENTER RATIO OF AGRICULTURAL PRODUCTION	THAT IS EXPLAINED BY GRAINS
	ENTER WITH DECIMAL EXAMPLE (2020.0)	
	ENTER ROW NUMBER IN WHICH GRAINS	IS A PART, ENTER 0.0 WHEN FINISHED
	ENTER WITH DECIMAL EXAMPLE (2020.0)	
	ENTER ROW NUMBER IN WHICH COAL	IS A PART, ENTER 0.0 WHEN FINISHED
	ENTER WITH DECIMAL EXAMPLE (2020.0)	
	ENTER ROW NUMBER IN WHICH METALS	IS A PART, ENTER 0.0 WHEN FINISHED
	ENTER WITH DECIMAL EXAMPLE (2020.0)	
	ENTER RATIO OF METAL MINING	THAT IS EXPLAINED BY METALS
	ENTER WITH DECIMAL EXAMPLE (2020.0)	
	ENTER ROW NUMBER IN WHICH METALS	IS A PART, ENTER 0.0 WHEN FINISHED
	ENTER WITH DECIMAL EXAMPLE (2020.0)	
	ENTER ROW NUMBER IN WHICH AGGREGATES	IS A PART, ENTER 0.0 WHEN FINISHED
	ENTER WITH DECIMAL EXAMPLE (2020.0)	
	ENTER RATIO OF NONMETALLIC MINING EXCLUDING FUELS	THAT IS EXPLAINED BY AGGREGATES
	ENTER WITH DECIMAL EXAMPLE (2020.0)	

## 2.5.2 Data ordering for Secondary Effects Module

While the data can be entered directly into the program from the original two sources, errors will be minimized if the data is copied onto the worksheets shown as Data Worksheets Nos. 8, 9, and 10, and then entered into the computer. While the interactive program is easy to use, it is sometimes easy to lose one's place in the original data sources when entering the data. We suggest the data first be coded onto these forms and then entered directly into the computer program.

For the population, personal income, and employment data, certain calculations must be made; these are outlined in Data Input Worksheet No. 10a.

Data for the secondary impact module is entered directly following the data for the primary (i.e., linear programming module). For reasons that will be clear when the user actually implements this model, the use of the OBERS projections and the data sheets from the Regional Economic Information System of the Bureau of Economic Analysis makes the completion of the study much easier.

The interactive program first asks the question: Enter three years for which OBERS data is available. This means that data for the base year and for two projected years is to be entered, and the computer is asking you to tell it the years for which data input will be provided. For example, at this time, a 1978 base year is recommended. The OBERS publication provides data for 1978, but it is not sufficiently detailed at the BEA area level to be used. The Bureau of Economic Analysis data is provided for both 1978 and 1979, so that either year is adequate. Their data system is updated regularly so that in the future years later base year data would be available.

DATA INPUT WORKSHEET NO. 8: Labor and Proprietor's Income  
(thousands of 1972 dollars)

	Base Year	Projection Year	
	( )	No. 1 ( )	No. 2 ( )
<u>Total Labor &amp; Proprietor's Income</u>		OBERS	OBERS
<u>Agricultural Production (Farm)</u>		OBERS	OBERS
<u>Agricultural Services, Forestry, &amp; Fisheries</u>			
<u>Mining</u>		OBERS	OBERS
Coal			
Oil and gas extraction			
Metal mining			
Nonmetallic minerals, excl. fuels			
<u>Construction</u>		OBERS	OBERS
<u>Manufacturing</u>			
Nondurable goods		OBERS	OBERS
Food & kindred products			
Textile mill products			
Apparel & other textile prod.			
Paper & allied products			
Printing & publishing			
Chemicals & allied products			
Petroleum & coal products			
Tobacco manufacturers			
Rubber & misc. plastic prod.			
Leather & leather products			
Durable goods		OBERS	OBERS
Lumber & wood products			
Furniture & fixtures			
Primary metal industries			
Fabricated metal products			
Machinery, excl. electrical			
Electric & electronic equip.			
Transport. equip., excl. motor vehicles			
Motor vehicles & equipment			
Ordnance			
Stone, clay, & glass products			
Instruments & related products			
Misc. manufacturing industries			
<u>Transportation &amp; Public Utilities</u>		OBERS	OBERS
<u>Wholesale Trade</u>		OBERS	OBERS
<u>Retail Trade</u>		OBERS	OBERS
<u>Finance, Insurance, &amp; Real Estate Services</u>		OBERS	OBERS
<u>Government &amp; Government Enterprises</u>		OBERS	OBERS

DATA INPUT WORKSHEET NO. 9: Employment

	Base Year ( )	Projection Year No. 1 ( )	Projection Year No. 2 ( )
<u>Total Labor &amp; Proprietor's Income</u>		OBERS	OBERS
<u>Agricultural Production (Farm)</u>		OBERS	OBERS
<u>Agricultural Services, Forestry, &amp; Fisheries</u>		OBERS	OBERS
<u>Mining</u>		OBERS	OBERS
Coal			
Oil and gas extraction			
Metal mining			
Nonmetallic minerals, excl. fuels			
<u>Construction</u>		OBERS	OBERS
<u>Manufacturing</u>			
<u>Nondurable goods</u>		OBERS	OBERS
Food & kindred products			
Textile mill products			
Apparel & other textile prod.			
Paper & allied products			
Printing & publishing			
Chemicals & allied products			
Petroleum & coal products			
Tobacco manufacturers			
Rubber & misc. plastic prod.			
Leather & leather products			
<u>Durable goods</u>		OBERS	OBERS
Lumber & wood products			
Furniture & fixtures			
Primary metal industries			
Fabricated metal products			
Machinery, excl. electrical			
Electric & electronic equip.			
Transport. equip., excl. motor vehicles			
Motor vehicles & equipment			
Ordnance			
Stone, clay, & glass products			
Instruments & related products			
Misc. manufacturing industries			
<u>Transportation &amp; Public Utilities</u>		OBERS	OBERS
<u>Wholesale Trade</u>		OBERS	OBERS
<u>Retail Trade</u>		OBERS	OBERS
<u>Finance, Insurance, &amp; Real Estate</u>		OBERS	OBERS
<u>Services</u>		OBERS	OBERS
<u>Government &amp; Government Enterprises</u>		OBERS	OBERS

DATA INPUT WORKSHEET NO. 10: Population, Personal Income, and Employment

	Base Year ( )	Projection Year No. 1 ( )	Projection Year No. 2 ( )
POPULATION			
1. Total Personal Income			
2. Per Capita Income			
3. Per Capita Income Relative			
4. Total Employment			
5. Employment/Population Ratio			
6. Employment/Population Ratio Relative			

Years two and three in the projection series should correspond with the years for which the OBERS are published. These years are 1985, 1990, 2000, and 2030. Thus, the base year and two projected years might be 1978, 2000, and 2030, respectively.

The program then asks: Enter three years for which output is desired. These may be, but do not have to be, the three input years. For example, you may wish output for the years 1985, 1995, and 2025. The program handles this automatically. Next, the computer asks: Enter year in which project will be implemented. Here it is suggested that you enter that year for which the project will be largely complete and that, at least, most of the economic impacts would have been experienced. Clearly, projects of the type being discussed here are phased in over time, but, necessarily, the program is set up so that it is given a one-year point at which the project is operational.

At this stage, the user should refer to Data Input Worksheet No. 8 for income data for the base year and two projected years. The program then asks: Enter base year income data--total income, income in agricultural production, and income in each of the detailed sectors. The computer then asks: Enter income data for the second and third years for an abbreviated list of industries as reported in the OBERS publication. Then the computer asks: Enter base year employment data, again, for the detailed set of industries and then for employment data for the second and third projection years for the abbreviated list of industries (Data Input Worksheet No. 9).

At this stage, the user is asked: Enter general data (population, per capita income, total employment, etc.) for the base year and the two projection years (Data Input Worksheet No. 10).

The entire list of interactive questions is shown below as Table 2.11. If a mistake has been made after the date has been entered (i.e., after you have hit the return button on the terminal), this can be corrected at the next stage of the program.

The computer now enters the data correction routine. Here, all data that had been entered are printed out in sections and can be checked to insure they have been entered correctly. In each case, the computer indicates what is being printed out and assigns it a row number. Assume, for example, that you had entered 1990 as the second year but had intended to enter 1995. After the computer says: Enter row number to be corrected, you would enter 2.0 and return. The program will come back and print 2 and then you would enter the correct year, 1995. If the data input for that section is correct, you would enter 0.0 and return. This continues for all the data entered in the same fashion. It allows the user to check very carefully to see that each item has been entered correctly, and it provides an easy method for corrections of data.

The list of questions showing the correct data entries for the Shreveport, Louisiana BEA areas of the Red River Waterway case are reported below as Table 2.12.

Completed worksheets with data for the Shreveport-Red River study are shown below as items 8b, 9b, and 10b. Data Input Worksheet 10c shows the data sources and necessary computations.

TABLE 2.11

SECONDARY IMPACT MODULE: DATA INPUT ROUTINE

\* ENTER THREE YEARS FOR WHICH USERS DATA IS AVAILABLE.  
 THE FIRST YEAR ENTERED IS THE BASE YEAR.  
 ENTER ONE NUMBER PER LINE WITH DECIMAL. EXAMPLE <2020.0>

ENTER YEAR NUMBER 1

ENTER YEAR NUMBER 2

ENTER YEAR NUMBER 3

\* ENTER THREE YEARS FOR WHICH OUTPUT IS DESIRED  
 ENTER ONE NUMBER PER LINE WITH DECIMAL. EXAMPLE <2020.0>

ENTER YEAR NUMBER 1

ENTER YEAR NUMBER 2

ENTER YEAR NUMBER 3

\* ENTER YEAR IN WHICH PROJECT WILL BE IMPLEMENTED.  
 ENTER ONE NUMBER PER LINE WITH DECIMAL. EXAMPLE <2020.0>

ENTER BASE YEAR INCOME DATA. THAT YEAR HAS BEEN DESIGNATED AS [FIRST INPUT YEAR].  
 ENTER ONE NUMBER PER LINE WITH DECIMAL. EXAMPLE <2020.0>

TOTAL

AGRICULTURAL PRODUCTION

AGRICULTURAL SERVICES, FORESTRY, FISHERIES,

MINING

COAL MINING

OIL AND GAS EXTRACTION

METAL MINING

NONMETALLIC MINING, EXCLUDING FUELS

CONSTRUCTION

MANUFACTURING

NONDURABLE GOODS

FOOD AND KINDRED PRODUCTS

TOBACCO PRODUCTS

TEXTILE MILL PRODUCTS

APPAREL AND OTHER TEXTILE PRODUCTS

PAPER AND ALLIED PRODUCTS

PRINTING AND PUBLISHING

CHEMICALS AND ALLIED PRODUCTS

IN IPOLUUM REFINING

RUBBER AND PLASTICS PRODUCTS

LEATHER AND LEATHER PRODUCTS

DURABLE GOODS

LUMBER PRODUCTS

FURNITURE AND FIXTURES

STONE, CLAY AND GLASS PRODUCTS

PRIMARY METALS

FABRICATED METALS

NON-ELECTRICAL MACHINERY

ELECTRICAL MACHINERY

TRANSPORTATION EQUIPMENT

MOTOR VEHICLES AND EQUIPMENT

ORDNANCE

INSTRUMENTS

MISCELLANEOUS MANUFACTURING

TRANSPORTATION, COMMUNICATION AND UTILITIES

WHOLESALE TRADE

RETAIL TRADE

FINANCE, INSURANCE AND REAL ESTATE

SERVICES

GOVERNMENT

\* ENTER INCOME DATA FOR [SECOND INPUT YEAR]  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE (2020.0)

AGRICULTURAL PRODUCTION

AGRICULTURAL SERVICES, FORESTRY, FISHERIES

MINING

CONSTRUCTION

NONDURABLE GOODS

DURABLE GOODS

TRANSPORTATION, COMMUNICATION AND UTILITIES

WHOLESALE TRADE

RETAIL TRADE

FINANCE, INSURANCE AND REAL ESTATE

SERVICES

GOVERNMENT

\* ENTER INCOME DATA FOR [THIRD INPUT YEAR]  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE <2020.0>

AGRICULTURAL PRODUCTION  
AGRICULTURAL SERVICES, FORESTRY, FISHERIES  
MINING  
CONSTRUCTION  
NONDURABLE GOODS  
DURABLE GOODS  
TRANSPORTATION, COMMUNICATION AND UTILITIES  
WHOLESALE TRADE  
RETAIL TRADE  
FINANCE, INSURANCE AND REAL ESTATE  
SERVICES  
GOVERNMENT

\* ENTER BASE YEAR EMPLOYMENT DATA, THAT YEAR HAS BEEN DEFINED AS [FIRST INPUT YEAR]  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE <2020.0>

TOTAL  
AGRICULTURAL PRODUCTION  
AGRICULTURAL SERVICES, FORESTRY, FISHERIES  
MINING  
COAL MINING  
OIL AND GAS EXTRACTION  
METAL MINING  
NONMETALLIC MINING EXCLUDING FUELS  
CONSTRUCTION  
MANUFACTURING  
NONDURABLE GOODS  
FOOD AND KINDRED PRODUCTS  
TOBACCO PRODUCTS  
TEXTILE MILL PRODUCTS  
APPAREL AND OTHER TEXTILE PRODUCTS  
PAPER AND ALLIED PRODUCTS  
PRINTING AND PUBLISHING  
CHEMICALS AND ALLIED PRODUCTS

PETROLEUM REFINING  
RUBBER AND PLASTICS PRODUCTS  
LEATHER AND LEATHER PRODUCTS  
DURABLE GOODS  
LUMBER PRODUCTS  
FURNITURE AND FIXTURES  
STONE, CLAY AND GLASS PRODUCTS  
PRIMARY METALS  
FABRICATED METALS  
NONELECTRICAL MACHINERY  
ELECTRICAL MACHINERY  
TRANSPORTATION EQUIPMENT  
MOTOR VEHICLES AND EQUIPMENT  
ORDNANCE  
INSTRUMENTS  
MISCELLANEOUS MANUFACTURING  
TRANSPORTATION, COMMUNICATION AND UTILITIES  
WHOLESALE TRADE  
RETAIL TRADE  
FINANCE, INSURANCE AND REAL ESTATE  
SERVICES  
GOVERNMENT

\* ENTER EMPLOYMENT DATA FOR [SECOND INPUT YEAR]  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE <2020.0>

AGRICULTURAL PRODUCTION

AGRICULTURAL SERVICES, FORESTRY, FISHERIES

MINING

CONSTRUCTION

NONDURABLE GOODS

DURABLE GOODS

TRANSPORTATION, COMMUNICATION AND UTILITIES

WHOLESALE TRADE

RETAIL TRADE

FINANCE, INSURANCE AND REAL ESTATE

SERVICES

GOVERNMENT

\* ENTER EMPLOYMENT DATA FOR [THIRD INPUT YEAR]  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE <2020.0>

AGRICULTURAL PRODUCTION

AGRICULTURAL SERVICES, FORESTRY, FISHERIES

MINING

CONSTRUCTION

NONDURABLE GOODS

DURABLE GOODS

TRANSPORTATION, COMMUNICATION AND UTILITIES

WHOLESALE TRADE

RETAIL TRADE

FINANCE, INSURANCE AND REAL ESTATE

SERVICES

GOVERNMENT

\*ENTER GENERAL DATA FOR [FIRST INPUT YEAR]  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE <2020.0>

TOTAL POPULATION (JULY 1)

TOTAL PERSONAL INCOME(1000 OF 1972 DOLLARS)

PER CAPITA INCOME (1972 DOLLARS)

PER CAPITA INCOME RELATIVE (U.S. = 1.00)

TOTAL EMPLOYMENT (JOB COUNT)

EMPLOYMENT/POPULATION RATIO

EMPLOYMENT/POPULATION RATIO RELATIVE

\*ENTER GENERAL DATA FOR [SECOND INPUT YEAR]  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE <2020.0>

TOTAL POPULATION (JULY 1)

TOTAL PERSONAL INCOME(1000 OF 1972 DOLLARS)

PER CAPITA INCOME (1972 DOLLARS)

PER CAPITA INCOME RELATIVE (U.S. = 1.00)

TOTAL EMPLOYMENT (JOB COUNT)

EMPLOYMENT/POPULATION RATIO

EMPLOYMENT/POPULATION RATIO RELATIVE

\*ENTER GENERAL DATA FOR [THIRD INPUT YEAR]  
ENTER ONE NUMBER PER LINE WITH DECIMAL, EXAMPLE <2020.0>

TOTAL POPULATION (JULY 1)

TOTAL PERSONAL INCOME(1000 OF 1972 DOLLARS)

PER CAPITA INCOME (1972 DOLLARS)

PER CAPITA INCOME RELATIVE (U.S. = 1.00)

TOTAL EMPLOYMENT (JOB COUNT)

EMPLOYMENT/POPULATION RATIO

EMPLOYMENT/POPULATION RATIO RELATIVE

TABLE 2.12

SECONDARY IMPACT MODULE: DATA CORRECTION ROUTINE

WE NOW ENTER THE DATA CORRECTION SECTION.  
 THE COMPUTER WILL LIST THE ROW NUMBER AND THE DATA VALUES.  
 IF THERE ARE TO BE ANY CORRECTIONS YOU WILL LIST THE ROW NUMBER.  
 ENTER A RETURN THEN ENTER THE CORRECT VALUE.  
 IF ALL ARE CORRECT SIMPLY ENTER A ZERO (0) FOR THE ROW NUMBER.  
 THE YEARS FOR WHICH OBER'S DATA IS AVAILABLE ARE AS FOLLOWS.  
 THE FIRST YEAR IS THE BASE YEAR.

ROW	VALUE
1	1978
2	1996
3	2030

ENTER ROW NUMBER TO BE CORRECTED < 1.0 TO 3.0 >  
 ENTER 0.0 IF ALL ARE CORRECT

THE YEARS FOR WHICH OUTPUT IS DESIRED ARE AS FOLLOWS

ROW	VALUE
1	1978
2	1995
3	2030

ENTER ROW NUMBER TO BE CORRECTED < 1.0 TO 3.0 >  
 ENTER 0.0 IF ALL ARE CORRECT

BASE YEAR INCOME FOR 1978 IS AS FOLLOWS

ROW	VALUE	
1	2044356.00	TOTAL
2	48181.00	AGRICULTURAL PRODUCTION
3	6142.00	AGRICULTURAL SERVICES, FORESTRY, FISHERIES
4	109060.00	MINING
5	0.00	COAL MINING
6	105066.00	OIL AND GAS EXTRACTION
7	0.00	METAL MINING
8	3993.00	NONMETALLIC MINING EXCLUDING FUELS
9	147549.00	CONSTRUCTION
10	413199.00	MANUFACTURING
11	122225.00	NONDURABLE GOODS
12	30952.00	FOOD AND KINDRED PRODUCTS
13	0.00	TOBACCO PRODUCTS
14	696.00	TEXTILE MILL PRODUCTS
15	13413.00	APPAREL AND OTHER TEXTILE PRODUCTS
16	39350.00	PAPER AND ALLIED PRODUCTS
17	11761.00	PRINTING AND PUBLISHING
18	10495.00	CHEMICALS AND ALLIED PRODUCTS
19	11951.00	PETROLEUM REFINING
20	3579.00	RUBBER AND PLASTICS PRODUCTS
21	29.00	LEATHER AND LEATHER PRODUCTS
22	290974.00	DURABLE GOODS
23	65933.00	LUMBER PRODUCTS
24	3360.00	FURNITURE AND FIXTURES
25	18702.00	STONE, CLAY AND GLASS PRODUCTS
26	21669.00	PRIMARY METALS
27	45602.00	FABRICATED METALS
28	29622.00	Nonelectrical Machinery
29	93595.00	Electrical Machinery
30	2793.00	TRANSPORTATION EQUIPMENT
31	3048.00	MOTOR VEHICLES AND EQUIPMENT
32	0.00	ORDNANCE
33	3060.00	INSTRUMENTS
34	2988.00	MISCELLANEOUS MANUFACTURING
35	171807.00	TRANSPORTATION, COMMUNICATION AND UTILITIES
36	131769.00	WHOLESALE TRADE
37	222726.00	RETAIL TRADE
38	95156.00	FINANCE, INSURANCE AND REAL ESTATE
39	303515.00	SERVICES
40	393292.00	GOVERNMENT

ENTER ROW NUMBER TO BE CORRECTED < 1.0 TO 40.0 >  
 ENTER 0.0 IF ALL ARE CORRECT

INCOME DATA FOR YEAR 1990 IS AS FOLLOWS

ROW	VALUE	
1	53791.00	AGRICULTURAL PRODUCTION
2	10182.00	AGRICULTURAL SERVICES, FORESTRY, FISHERIES
3	136442.00	MINING
4	207388.00	CONSTRUCTION
5	226586.00	NONDURABLE GOODS
6	616353.00	DURABLE GOODS
7	296520.00	TRANSPORTATION, COMMUNICATION AND UTILITIES
8	217468.00	WHOLESALE TRADE
9	363550.00	RETAIL TRADE
10	182260.00	FINANCE, INSURANCE AND REAL ESTATE
11	593456.00	SERVICES
12	648975.00	GOVERNMENT

ENTER ROW NUMBER TO BE CORRECTED < 1.0 TO 12.0 >  
 ENTER 0.0 IF ALL ARE CORRECT

INCOME DATA FOR YEAR 2030 IS AS FOLLOWS

ROW	VALUE	
1	110732.00	AGRICULTURAL PRODUCTION
2	28165.00	AGRICULTURAL SERVICES, FORESTRY, FISHERIES
3	160377.00	MINING
4	500423.00	CONSTRUCTION
5	768466.00	NONDURABLE GOODS
6	2307341.00	DURABLE GOODS
7	893096.00	TRANSPORTATION, COMMUNICATION AND UTILITIES
8	611610.00	WHOLESALE TRADE
9	1043025.00	RETAIL TRADE
10	621426.00	FINANCE, INSURANCE AND REAL ESTATE
11	2106755.00	SERVICES
12	1817059.00	GOVERNMENT

ENTER ROW NUMBER TO BE CORRECTED < 1.0 TO 12.0 >  
 ENTER 0.0 IF ALL ARE CORRECT

BASE YEAR EMPLOYMENT FOR 1978 IS AS FOLLOWS

ROW	VALUE	
1	281371.00	TOTAL
2	13017.00	AGRICULTURAL PRODUCTION
3	866.00	AGRICULTURAL SERVICES, FORESTRY, FISHERIES
4	7407.00	MINING
5	0.00	COAL MINING
6	6996.00	OIL AND GAS EXTRACTION
7	0.00	METAL MINING
8	411.00	NONMETALLIC MINING EXCLUDING FUELS
9	15679.00	CONSTRUCTION
10	45953.00	MANUFACTURING
11	14243.00	NONDURABLE GOODS
12	4493.00	FOOD AND KINDRED PRODUCTS
13	0.00	TOBACCO PRODUCTS
14	97.00	TEXTILE MILL PRODUCTS
15	3093.00	APPAREL AND OTHER TEXTILE PRODUCTS
16	2816.00	PAPER AND ALLIED PRODUCTS
17	1665.00	PRINTING AND PUBLISHING
18	798.00	CHEMICALS AND ALLIED PRODUCTS
19	844.00	PETROLEUM REFINING
20	433.00	RUBBER AND PLASTICS PRODUCTS
21	4.00	LEATHER AND LEATHER PRODUCTS
22	31709.00	DURABLE GOODS
23	8236.00	LUMBER PRODUCTS
24	570.00	FURNITURE AND FIXTURES
25	2108.00	STONE, CLAY AND GLASS PRODUCTS
26	1952.00	PRIMARY METALS
27	4613.00	FABRICATED METALS
28	3158.00	Nonelectrical Machinery
29	9209.00	ELECTRICAL MACHINERY
30	473.00	TRANSPORTATION EQUIPMENT
31	327.00	MOTOR VEHICLES AND EQUIPMENT
32	0.00	ORDNANCE
33	436.00	INSTRUMENTS
34	607.00	MISCELLANEOUS MANUFACTURING
35	14698.00	TRANSPORTATION, COMMUNICATION AND UTILITIES
36	14957.00	WHOLESALE TRADE
37	40655.00	RETAIL TRADE
38	10690.00	FINANCE, INSURANCE AND REAL ESTATE
39	56034.00	SERVICES
40	59411.00	GOVERNMENT

ENTER ROW NUMBER TO BE CORRECTED < 1 0 TO 40.0 >  
 ENTER 0.0 IF ALL ARE CORRECT

EMPLOYMENT DATA FOR YEAR 1990 IS AS FOLLOWS

ROW	VALUE	
1	4793.00	AGRICULTURAL PRODUCTION
2	1949.00	AGRICULTURAL SERVICES, FORESTRY, FISHERIES
3	6541.00	MINING
4	20324.00	CONSTRUCTION
5	19023.00	NONDURABLE GOODS
6	46424.00	DURABLE GOODS
7	17630.00	TRANSPORTATION, COMMUNICATION AND UTILITIES
8	18778.00	WHOLESALE TRADE
9	56799.00	RETAIL TRADE
10	16574.00	FINANCE, INSURANCE AND REAL ESTATE
11	81122.00	SERVICES
12	72251.00	GOVERNMENT

ENTER ROW NUMBER TO BE CORRECTED < 1.0 TO 12.0 >  
 ENTER 0.0 IF ALL ARE CORRECT

EMPLOYMENT DATA FOR YEAR 2030 IS AS FOLLOWS

ROW	VALUE	
1	3373.00	AGRICULTURAL PRODUCTION
2	2766.00	AGRICULTURAL SERVICES, FORESTRY, FISHERIES
3	3113.00	MINING
4	17523.00	CONSTRUCTION
5	28298.00	NONDURABLE GOODS
6	72854.00	DURABLE GOODS
7	21559.00	TRANSPORTATION, COMMUNICATION AND UTILITIES
8	23374.00	WHOLESALE TRADE
9	74753.00	RETAIL TRADE
10	24523.00	FINANCE, INSURANCE AND REAL ESTATE
11	114602.00	SERVICES
12	87317.00	GOVERNMENT

ENTER ROW NUMBER TO BE CORRECTED < 1 0 TO 12 0 >  
 ENTER 0.0 IF ALL ARE CORRECT

GENERAL DATA FOR YEAR 1978 IS AS FOLLOWS

ROW	VALUE	
1	675820.00	TOTAL POPULATION (JULY 1)
2	2788118.00	TOTAL PERSONAL INCOME (1000 OF 1972 DOLLARS)
3	4126.00	PER CAPITA INCOME (1972 DOLLARS)
4	0.79	PER CAPITA INCOME RELATIVE (U.S. = 1.00)
5	281371.00	TOTAL EMPLOYMENT (JOB COUNT)
6	0.42	EMPLOYMENT/POPULATION RATIO
7	0.91	EMPLOYMENT/POPULATION RATIO RELATIVE

ENTER ROW NUMBER TO BE CORRECTED < 1.0 TO 7.0 >  
 ENTER 0.0 IF ALL ARE CORRECT .

GENERAL DATA FOR YEAR 1990 IS AS FOLLOWS

ROW	VALUE	
1	782370.00	TOTAL POPULATION (JULY 1)
2	4754974.00	TOTAL PERSONAL INCOME (1000 OF 1972 DOLLARS)
3	6078.00	PER CAPITA INCOME (1972 DOLLARS)
4	0.83	PER CAPITA INCOME RELATIVE (U.S. = 1.00)
5	362229.00	TOTAL EMPLOYMENT (JOB COUNT)
6	0.46	EMPLOYMENT/POPULATION RATIO
7	0.93	EMPLOYMENT/POPULATION RATIO RELATIVE

ENTER ROW NUMBER TO BE CORRECTED < 1.0 TO 7.0 >  
 ENTER 0.0 IF ALL ARE CORRECT

GENERAL DATA FOR YEAR 2030 IS AS FOLLOWS

ROW	VALUE	
1	1018032.00	TOTAL POPULATION (JULY 1)
2	14607920.00	TOTAL PERSONAL INCOME (1000 OF 1972 DOLLARS)
3	14349.00	PER CAPITA INCOME (1972 DOLLARS)
4	0.91	PER CAPITA INCOME RELATIVE (U.S. = 1.00)
5	474015.00	TOTAL EMPLOYMENT (JOB COUNT)
6	0.47	EMPLOYMENT/POPULATION RATIO
7	0.99	EMPLOYMENT/POPULATION RATIO RELATIVE

ENTER ROW NUMBER TO BE CORRECTED < 1.0 TO 7.0 >  
 ENTER 0.0 IF ALL ARE CORRECT

YEAR PROJECT IS TO BE IMPLEMENTED IS 1993. IS THAT CORRECT? <Y/N>

DATA INPUT WORKSHEET NO. 8b: Labor and Proprietor's Income  
(thousands of 1972 dollars)

	Base Year (1978)		Projection Year No. 1 (1990)		Projection Year No. 2 (2030)
<u>Total Labor &amp; Proprietor's Income</u>	3,040,151		3,552,968		10,968,674
<u>Agricultural Production (Farm)</u>	48,181	OBERS	53,791	OBERS	110,732
<u>Agricultural Services, Forestry, &amp; Fisheries</u>	6,142	OBERS	10,182	OBERS	28,165
<u>Mining</u>	109,060	OBERS	136,442	OBERS	160,377
Coal	-0-				
Oil and gas extraction	105,066				
Metal mining	-0-				
Nonmetallic minerals, excl. fuels	3,993				
<u>Construction</u>	147,549	OBERS	207,388	OBERS	500,423
<u>Manufacturing</u>	413,199				
<u>Nondurable goods</u>	122,225	OBERS	226,586	OBERS	768,466
Food & kindred products	30,952				
Textile mill products	696				
Apparel & other textile prod.	13,413				
Paper & allied products	39,350				
Printing & publishing	11,761				
Chemicals & allied products	10,495				
Petroleum & coal products	11,951				
Tobacco manufacturers	-0-				
Rubber & misc. plastic prod.	3,579				
Leather & leather products	29				
<u>Durable goods</u>	290,974	OBERS	616,353	OBERS	2,307,541
Lumber & wood products	65,933				
Furniture & fixtures	3,360				
Primary metal industries	21,669				
Fabricated metal products	45,602				
Machinery, excl. electrical	29,822				
Electric & electronic equip.	93,995				
Transport. equip., excl. motor vehicles	2,793				
Motor vehicles & equipment	3,048				
Ordnance	-0-				
Stone, clay, & glass products	18,702				
Instruments & related products	3,060				
Misc. manufacturing industries	2,988				
<u>Transportation &amp; Public Utilities</u>	171,807	OBERS	296,520	OBERS	893,096
<u>Wholesale Trade</u>	131,769	OBERS	217,468	OBERS	611,610
<u>Retail Trade</u>	222,726	OBERS	363,550	OBERS	1,043,025
<u>Finance, Insurance, &amp; Real Estate Services</u>	95,156	OBERS	182,260	OBERS	621,426
<u>Government &amp; Government Enterprises</u>	303,515	OBERS	593,456	OBERS	2,106,755
	359,252	OBERS	648,975	OBERS	1,817,059

DATA INPUT WORKSHEET NO. 9b: Employment 127

	Base Year (1978)	Projection Year No. 1 (1990)	Projection Year No. 2 (2030)
<u>Total Labor &amp; Proprietor's Income</u>	281,371	362,229	474,015
<u>Agricultural Production (Farm)</u>	13,017	OBERS 4,793	OBERS 3,373
<u>Agricultural Services, Forestry, &amp; Fisheries</u>	866	OBERS 1,949	OBERS 2,766
<u>Mining</u>	7,407	OBERS 6,541	OBERS 3,113
Coal	-0-		
Oil and gas extraction	6,996		
Metal mining	-0-		
Nonmetallic minerals, excl. fuels	411		
<u>Construction</u>	15,679	OBERS 20,324	OBERS 17,523
<u>Manufacturing</u>	45,953		
<u>Nondurable goods</u>	14,243	OBERS 19,023	OBERS 28,258
Food & kindred products	4,493		
Textile mill products	97		
Apparel & other textile prod.	3,093		
Paper & allied products	2,816		
Printing & publishing	1,665		
Chemicals & allied products	798		
Petroleum & coal products	844		
Tobacco manufacturers	-0-		
Rubber & misc. plastic prod.	433		
Leather & leather products	4		
<u>Durable goods</u>	31,709	OBERS 46,424	OBERS 72,854
Lumber & wood products	8,256		
Furniture & fixtures	570		
Primary metal industries	1,952		
Fabricated metal products	4,613		
Machinery, excl. electrical	3,158		
Electric & electronic equip.	9,209		
Transport. equip., excl. motor vehicles	473		
Motor vehicles & equipment	327		
Ordnance	-0-		
Stone, clay, & glass products	2,108		
Instruments & related products	436		
Misc. manufacturing industries	607		
<u>Transportation &amp; Public Utilities</u>	14,698	OBERS 17,650	OBERS 21,559
<u>Wholesale Trade</u>	14,957	OBERS 18,778	OBERS 23,374
<u>Retail Trade</u>	40,655	OBERS 56,799	OBERS 74,753
<u>Finance, Insurance, &amp; Real Estate Services</u>	10,690	OBERS 16,574	OBERS 24,523
<u>Services</u>	56,034	OBERS 81,122	OBERS 144,602
<u>Government &amp; Government Enterprises</u>	59,411	OBERS 72,251	OBERS 87,317

DATA INPUT WORKSHEET NO. 10b: Population, Personal Income, and Employment

	Base Year (1978)	Projection Year No. 1 (1990)	Projection Year No. 2 (2030)
POPULATION	675,820	782,370	1,018,032
1. Total Personal Income	2,788,118	4,754,974	14,607,920
2. Per Capita Income	4,126	6,078	14,349
3. Per Capita Income Relative	0.789	0.833	0.911
4. Total Employment	281,371	362,229	474,015
5. Employment/Population Ratio	0.417	0.463	0.466
6. Employment/Population Ratio Relative	0.907	0.926	0.991

DATA INPUT WORKSHEET NO. 10c: Population, Personal Income, and Employment

	Base Year ( )	Projection Year No. 1 ( )	Projection Year No. 2 ( )
POPULATION	BEA DATA FILE	OBERS	OBERS
1. Total Personal Income (000)	BEA DATA FILE	OBERS	OBERS
2. Per Capita Income	$\frac{(1)}{(2)} \times 1000$	$\frac{(1)}{(2)} \times 1000$	$\frac{(1)}{(2)} \times 1000$
3. Per Capita Income Relative	$\left( \frac{(2)}{\text{U.S. per capita income}} \right)$	$\left( \frac{(2)}{\text{U.S. per capita income}} \right)$	$\left( \frac{(2)}{\text{U.S. per capita income}} \right)$
4. Total Employment	BEA DATA FILE	OBERS	OBERS
5. Employment/Population Ratio	$\frac{(4)}{(5)}$	$\frac{(4)}{(5)}$	$\frac{(4)}{(5)}$
6. Employment/Population Ratio Relative	$\left( \frac{(5)}{\text{U.S. ratio of emp/pop}} \right)$	$\left( \frac{(5)}{\text{U.S. ratio of emp/pop}} \right)$	$\left( \frac{(5)}{\text{U.S. ratio of emp/pop}} \right)$

<sup>a</sup>U.S. per capita income data and employment/population ratios are published in the OBERS projections.

## CHAPTER 3

### Operating Evaluation Model

#### 3.1 Execution of the Program

The program has been written for simple use. The program should be compiled, linked to the I.M.S.L. single-precision library, and executed.

The execution of the program will cause questions to be asked, and, if mistakes are made in data input, these may be corrected in the data correction section. After the data are entered and verified, the I.M.S.L. linear program subroutine is called. The data correction section subsequently can be called again, allowing for correction of the data set. This operation can be used to input data for the "with" model simulation. The linear program subroutine is again subsequently called to solve the "with" model. The results of the two linear programs, along with base data supplied at this point, is used to determine the change in income and employment over the projected years.

#### 3.2 Output from the Model

The user will have specified three years for which he desires output to be generated by the model. In our example these years are 1978 (the base year), 1995, and 2030. The first set of output consists of two tables for each of the following data types: labor and proprietors' income by industry and place of work; employment by industry and by place of work; and general data on population, personal income, and employment/population ratios. One of the two tables in each set shows the projections under the baseline or "no-project" assumption. The second table in each set shows data for the

same variables but under the assumption that the project has been implemented. This set of six tables for the Shreveport, Louisiana (Red River) project are reported below as Tables 3.1 through 3.6.

Nine additional tables complete the set of program output. These tables compare the value of each variable in each data set under the baseline assumption and under the "with-project" assumption showing the change and percentage change as between the two cases. This is done for each of the years specified; in the example, of course, the years are 1972, 1995, and 2030. Thus, Tables 3.7, 3.8, and 3.9 compare labor and proprietors' income in each sector on a "with-" and "without-project" basis for the year 1972. Now, for that year, because the project has not been implemented, there is no change due to the project and, hence, the data are the same under the baseline condition as under the "with-project" condition. For the years 1995 and 2030 (Tables 3.8 and 3.9), the actual and percentage changes from the baseline to the "with-project" assumption are reported in detail.

Tables 3.10, 3.11, and 3.12 compare employment in each sector under the two assumptions for the same three years. Finally, Tables 3.13, 3.14, and 3.15 report the projections of population, personal income, per capita income, etc., again, on the same basis as done in the previous six tables.

TABLE 3.1

LABOR AND PROPRIETORS' INCOME BY INDUSTRY BY PLACE OF WORK,  
1978, 1995, AND 2030

ASSUMPTION: BASELINE (NO PROJECT)

	(THOUSANDS OF 1972 DOLLARS)		
	1978	1995	2030
TOTAL	2044395	4080494	10968667
AGRICULTURAL PRODUCTION	48181	58871	110732
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	6142	11562	28164
MINING	109059	139226	160376
COAL MINING	0	0	0
OIL AND GAS EXTRACTION	105066	133774	151428
METAL MINING	0	0	0
NONMETALLIC MINING EXCLUDING FUELS	3993	5452	8947
CONSTRUCTION	147549	231527	500422
MANUFACTURING	413198	990889	3076005
NONDURABLE GOODS	122224	263956	768465
FOOD AND KINDRED PRODUCTS	30951	58461	150398
TOBACCO PRODUCTS	0	0	0
TEXTILE MILL PRODUCTS	695	1322	3785
APPAREL AND OTHER TEXTILE PRODUCTS	13412	26481	72608
PAPER AND ALLIED PRODUCTS	39349	86711	257776
PRINTING AND PUBLISHING	11760	27591	81713
CHEMICALS AND ALLIED PRODUCTS	10494	27016	91333
PETROLEUM REFINING	11950	26864	79201
RUBBER AND PLASTICS PRODUCTS	3578	9466	31573
LEATHER AND LEATHER PRODUCTS	28	39	73
DURABLE GOODS	290973	726933	2307540
LUMBER PRODUCTS	65933	153791	474453
FURNITURE AND FIXTURES	3360	7839	24418
STONE, CLAY AND GLASS PRODUCTS	18702	47328	153553
PRIMARY METALS	21669	52224	162559
FABRICATED METALS	45602	116414	373093
NONELECTRICAL MACHINERY	29822	80808	270644
ELECTRICAL MACHINERY	93995	240767	764229
TRANSPORTATION EQUIPMENT	2793	6191	17452
MOTOR VEHICLES AND EQUIPMENT	3048	7439	24020
ORDNANCE	0	0	0
INSTRUMENTS	3060	7923	25810
MISCELLANEOUS MANUFACTURING	2988	6205	17303
TRANSPORTATION, COMMUNICATION AND UTILITIES	171806	340337	893095
WHOLESALE TRADE	131768	247474	611610
RETAIL TRADE	222725	414744	1043025
FINANCE, INSURANCE AND REAL ESTATE	95155	212460	621426
SERVICES	303515	695291	2106750
GOVERNMENT	395291	738109	1817055

TABLE 3.2

LABOR AND PROPRIETORS' INCOME BY INDUSTRY BY PLACE OF WORK,  
1978, 1995, AND 2030

ASSUMPTION: WITH PROJECT

	(THOUSAND OF 1972 DOLLARS)		
	1978	1995	2030
TOTAL	2044395	4242979	11446172
AGRICULTURAL PRODUCTION	48181	61184	115083
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	6142	11562	28164
MINING	109059	139226	160376
COAL MINING	0	0	0
OIL AND GAS EXTRACTION	105066	133774	151428
METAL MINING	0	0	0
NONMETALLIC MINING EXCLUDING FUELS	3993	5452	8948
CONSTRUCTION	147549	231527	500422
MANUFACTURING	413198	1045601	3240378
NONDURABLE GOODS	122224	295638	861697
FOOD AND KINDRED PRODUCTS	30951	58461	150398
TOBACCO PRODUCTS	0	0	0
TEXTILE MILL PRODUCTS	655	1322	3785
APPAREL AND OTHER TEXTILE PRODUCTS	13412	26481	72608
PAPER AND ALLIED PRODUCTS	39349	93115	276815
PRINTING AND PUBLISHING	11760	27591	81713
CHEMICALS AND ALLIED PRODUCTS	10494	26254	88758
PETROLEUM REFINING	11950	52903	155969
RUBBER AND PLASTICS PRODUCTS	3578	9466	31573
LEATHER AND LEATHER PRODUCTS	28	39	73
DURABLE GOODS	290973	749963	2378680
LUMBER PRODUCTS	65933	173503	535267
FURNITURE AND FIXTURES	3360	7839	24418
STONE, CLAY AND GLASS PRODUCTS	18702	47328	153553
PRIMARY METALS	21669	55541	172885
FABRICATED METALS	45602	116414	373093
NONELECTRICAL MACHINERY	29822	80808	270644
ELECTRICAL MACHINERY	93995	240767	764229
TRANSPORTATION EQUIPMENT	2793	6191	17452
MOTOR VEHICLES AND EQUIPMENT	3048	7439	24020
ORDNANCE	0	0	0
INSTRUMENTS	3060	7923	25810
MISCELLANEOUS MANUFACTURING	2988	6205	17303
TRANSPORTATION, COMMUNICATION AND UTILITIES	171806	353889	931974
WHOLESALE TRADE	131768	257328	638236
RETAIL TRADE	222725	431259	1088431
FINANCE, INSURANCE AND REAL ESTATE	95155	220920	648479
SERVICES	303515	722977	2198464
GOVERNMENT	395291	767500	1896158

TABLE 3.3

## EMPLOYMENT BY INDUSTRY BY PLACE OF WORK, 1978, 1995, AND 2030

ASSUMPTION: BASELINE (NO PROJECT)

	1978	1995	2030
TOTAL	279366	373906	474015
AGRICULTURAL PRODUCTION	13017	4587	3373
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	865	2036	2766
MINING	7407	5961	3113
COAL MINING	0	0	0
OIL AND GAS EXTRACTION	6996	5577	2793
METAL MINING	0	0	0
NONMETALLIC MINING EXCLUDING FUELS	411	383	319
CONSTRUCTION	15679	19950	17523
MANUFACTURING	45952	69101	101112
NONDURABLE GOODS	14243	19987	28257
FOOD AND KINDRED PRODUCTS	4493	5445	7055
TOBACCO PRODUCTS	0	0	0
TEXTILE MILL PRODUCTS	97	121	161
APPAREL AND OTHER TEXTILE PRODUCTS	3093	4591	6720
PAPER AND ALLIED PRODUCTS	2816	3956	5689
PRINTING AND PUBLISHING	1665	2597	3742
CHEMICALS AND ALLIED PRODUCTS	798	1254	1883
PETROLEUM REFINING	844	1217	1712
RUBBER AND PLASTICS PRODUCTS	433	800	1288
LEATHER AND LEATHER PRODUCTS	4	4	4
DURABLE GOODS	31708	49114	72854
LUMBER PRODUCTS	8255	11595	16592
FURNITURE AND FIXTURES	569	835	1229
STONE, CLAY AND GLASS PRODUCTS	2107	3267	4888
PRIMARY METALS	1951	2651	3712
FABRICATED METALS	4612	7149	10572
NONELECTRICAL MACHINERY	3157	5300	8083
ELECTRICAL MACHINERY	9208	15548	23710
TRANSPORTATION EQUIPMENT	472	656	913
MOTOR VEHICLES AND EQUIPMENT	326	479	701
ORDNANCE	0	0	0
INSTRUMENTS	435	749	1161
MISCELLANEOUS MANUFACTURING	606	880	1287
TRANSPORTATION, COMMUNICATION AND UTILITIES	14698	18096	21558
WHOLESALE TRADE	14956	19299	23374
RETAIL TRADE	40654	58782	74752
FINANCE, INSURANCE AND REAL ESTATE	10690	17405	24523
SERVICES	56033	84702	114602
GOVERNMENT	59410	73981	87316

TABLE 3.4

## EMPLOYMENT BY INDUSTRY BY PLACE OF WORK, 1978, 1995, AND 2030

ASSUMPTION: WITH PROJECT

	1978	1995	2030
TOTAL	279366	385941	490777
AGRICULTURAL PRODUCTION	13017	4767	3505
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	865	2036	2766
MINING	7407	5961	3113
COAL MINING	0	0	0
OIL AND GAS EXTRACTION	6996	5577	2793
METAL MINING	0	0	0
NONMETALLIC MINING EXCLUDING FUELS	411	383	319
CONSTRUCTION	15679	19950	17523
MANUFACTURING	45952	72192	105501
NONDURABLE GOODS	14243	21424	30285
FOOD AND KINDRED PRODUCTS	4493	5445	7055
TOBACCO PRODUCTS	0	0	0
TEXTILE MILL PRODUCTS	97	121	161
APPAREL AND OTHER TEXTILE PRODUCTS	3093	4591	6720
PAPER AND ALLIED PRODUCTS	2816	4248	6109
PRINTING AND PUBLISHING	1665	2597	3742
CHEMICALS AND ALLIED PRODUCTS	798	1218	1830
PETROLEUM REFINING	844	2396	3372
RUBBER AND PLASTICS PRODUCTS	433	800	1288
LEATHER AND LEATHER PRODUCTS	4	4	4
DURABLE GOODS	31708	50768	75216
LUMBER PRODUCTS	8255	13081	18719
FURNITURE AND FIXTURES	569	835	1229
STONE, CLAY AND GLASS PRODUCTS	2107	3267	4888
PRIMARY METALS	1951	2819	3948
FABRICATED METALS	4612	7149	10572
NONELECTRICAL MACHINERY	3157	5300	8083
ELECTRICAL MACHINERY	9208	15548	23710
TRANSPORTATION EQUIPMENT	472	656	913
MOTOR VEHICLES AND EQUIPMENT	326	479	701
ORDNANCE	0	0	0
INSTRUMENTS	435	749	1161
MISCELLANEOUS MANUFACTURING	606	880	1287
TRANSPORTATION, COMMUNICATION AND UTILITIES	14698	18679	22321
WHOLESALE TRADE	14956	19920	24200
RETAIL TRADE	40654	60675	77396
FINANCE, INSURANCE AND REAL ESTATE	10690	17966	25390
SERVICES	56033	87428	118654
GOVERNMENT	59410	76363	90404

TABLE 3.5

POPULATION, PERSONAL INCOME, LABOR AND PROPRIETORS' INCOME, AND EMPLOYMENT BY  
PLACE OF RESIDENCE 1978, 1995, AND 2030

ASSUMPTION: BASELINE (NO PROJECT)

	1978	1995	2030
TOTAL POPULATION (JULY 1)	675819	808548	1018032
TOTAL PERSONAL INCOME (1000 OF 1972 DOLLARS)	2788119	5471145	14607931
PER CAPITA INCOME (1972 DOLLARS)	4126	6766	14349
PER CAPITA INCOME RELATIVE (U.S. = 1.00)	0.79	0.84	0.91
TOTAL EMPLOYMENT (JOB COUNT)	281371	374614	474016
EMPLOYMENT/POPULATION RATIO	0.42	0.46	0.47
EMPLOYMENT/POPULATION RATIO RELATIVE	0.91	0.93	0.99

TABLE 3.6

POPULATION, PERSONAL INCOME, LABOR AND PROPRIETORS' INCOME, AND EMPLOYMENT BY  
PLACE OF RESIDENCE 1978, 1995, AND 2030

ASSUMPTION: WITH PROJECT

	1978	1995	2030
TOTAL POPULATION (JULY 1)	675819	821509	1035601
TOTAL PERSONAL INCOME(1000 OF 1972 DOLLARS)	2788119	5689004	15243866
PER CAPITA INCOME (1972 DOLLARS)	4126	6925	14719
PER CAPITA INCOME RELATIVE (U.S. = 1.00)	0.79	0.86	0.93
TOTAL EMPLOYMENT (JOB COUNT)	281371	386672	490778
EMPLOYMENT/POPULATION RATIO	0.42	0.47	.0.47
EMPLOYMENT/POPULATION RATIO RELATIVE	0.91	0.95	1.01

TABLE 3.7

LABOR AND PROPRIETORS' INCOME WITH AND WITHOUT PROJECT,  
CHANGE AND PERCENTAGE CHANGE DUE TO PROJECT 1978

(THOUSAND OF 1972 DOLLARS)

	BASELINE 2044395	WITH PROJ. 2044395	CHANGE	%CHG
TOTAL			0	0.0
AGRICULTURAL PRODUCTION	48181	48181	0	0.0
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	6142	6142	0	0.0
MINING	109059	109059	0	0.0
COAL MINING	0	0	0	0.0
OIL AND GAS EXTRACTION	105066	105066	0	0.0
METAL MINING	0	0	0	0.0
NONMETALLIC MINING EXCLUDING FUELS	3993	3993	0	0.0
CONSTRUCTION	147549	147549	0	0.0
MANUFACTURING	413198	413198	0	0.0
NONDURABLE GOODS	122224	122224	0	0.0
FOOD AND KINDRED PRODUCTS	30951	30951	0	0.0
TOBACCO PRODUCTS	0	0	0	0.0
TEXTILE MILL PRODUCTS	695	695	0	0.0
APPAREL AND OTHER TEXTILE PRODUCTS	13412	13412	0	0.0
PAPER AND ALLIED PRODUCTS	39349	39349	0	0.0
PRINTING AND PUBLISHING	11760	11760	0	0.0
CHEMICALS AND ALLIED PRODUCTS	10494	10494	0	0.0
PETROLEUM REFINING	11950	11950	0	0.0
RUBBER AND PLASTICS PRODUCTS	3578	3578	0	0.0
LEATHER AND LEATHER PRODUCTS	28	28	0	0.0
DURABLE GOODS	290973	290973	0	0.0
LUMBER PRODUCTS	65933	65933	0	0.0
FURNITURE AND FIXTURES	3360	3360	0	0.0
STONE, CLAY AND GLASS PRODUCTS	18702	18702	0	0.0
PRIMARY METALS	21669	21669	0	0.0
FABRICATED METALS	45602	45602	0	0.0
NONELECTRICAL MACHINERY	29822	29822	0	0.0
ELECTRICAL MACHINERY	93995	93995	0	0.0
TRANSPORTATION EQUIPMENT	2793	2793	0	0.0
MOTOR VEHICLES AND EQUIPMENT	3048	3048	0	0.0
ORDNANCE	0	0	0	0.0
INSTRUMENTS	3060	3060	0	0.0
MISCELLANEOUS MANUFACTURING	2988	2988	0	0.0
TRANSPORTATION, COMMUNICATION AND UTILITIES	171806	171806	0	0.0
WHOLESALE TRADE	131768	131768	0	0.0
RETAIL TRADE	222725	222725	0	0.0
FINANCE, INSURANCE AND REAL ESTATE	95155	95155	0	0.0
SERVICES	303515	303515	0	0.0
GOVERNMENT	395291	395291	0	0.0

TABLE 3.8

LABOR AND PROPRIETORS' INCOME WITH AND WITHOUT PROJECT,  
CHANGE AND PERCENTAGE CHANGE DUE TO PROJECT 1995

(THOUSAND OF 1972 DOLLARS)				
	BASELINE	WITH PROJ.	CHANGE	%CHG
TOTAL	4080494	4242979	162484	4.0
AGRICULTURAL PRODUCTION	58871	61184	2313	3.9
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	11562	11562	0	0.0
MINING	139226	139226	0	0.0
COAL MINING	0	0	0	0.0
OIL AND GAS EXTRACTION	133774	133774	0	0.0
METAL MINING	0	0	0	0.0
NONMETALLIC MINING EXCLUDING FUELS	5452	5452	0	0.0
CONSTRUCTION	231527	231527	0	0.0
MANUFACTURING	990889	1045601	54711	5.5
NONDURABLE GOODS	263956	295638	31681	12.0
FOOD AND KINDRED PRODUCTS	58461	58461	0	0.0
TOBACCO PRODUCTS	0	0	0	0.0
TEXTILE MILL PRODUCTS	1322	1322	0	0.0
APPAREL AND OTHER TEXTILE PRODUCTS	26481	26481	0	0.0
PAPER AND ALLIED PRODUCTS	86711	93115	6404	7.4
PRINTING AND PUBLISHING	27591	27591	0	0.0
CHEMICALS AND ALLIED PRODUCTS	27016	26254	-761	-2.8
PETROLEUM REFINING	26864	52903	26039	96.9
RUBBER AND PLASTICS PRODUCTS	9466	9466	0	0.0
LEATHER AND LEATHER PRODUCTS	39	39	0	0.0
DURABLE GOODS	726933	749963	23029	3.2
LUMBER PRODUCTS	153791	173503	19712	12.8
FURNITURE AND FIXTURES	7839	7839	0	0.0
STONE, CLAY AND GLASS PRODUCTS	47328	47328	0	0.0
PRIMARY METALS	52224	55541	3317	6.4
FABRICATED METALS	116414	116414	0	0.0
NONELECTRICAL MACHINERY	80808	80808	0	0.0
ELECTRICAL MACHINERY	240767	240767	0	0.0
TRANSPORTATION EQUIPMENT	6191	6191	0	0.0
MOTOR VEHICLES AND EQUIPMENT	7439	7439	0	0.0
ORDNANCE	0	0	0	0.0
INSTRUMENTS	7923	7923	0	0.0
MISCELLANEOUS MANUFACTURING	6205	6205	0	0.0
TRANSPORTATION, COMMUNICATION AND UTILITIES	340337	353889	13552	4.0
WHOLESALE TRADE	247474	257328	9854	4.0
RETAIL TRADE	414744	431259	16515	4.0
FINANCE, INSURANCE AND REAL ESTATE	212460	220920	8460	4.0
SERVICES	695291	722977	27686	4.0
GOVERNMENT	738109	767500	29391	4.0

TABLE 3.9

LABOR AND PROPRIETORS' INCOME WITH AND WITHOUT PROJECT,  
CHANGE AND PERCENTAGE CHANGE DUE TO PROJECT 2030

(THOUSAND OF 1972 DOLLARS)

	BASELINE	WITH PROJ.	CHANGE	%CHG
TOTAL	10968667	11446172	477505	4.4
AGRICULTURAL PRODUCTION	110732	115083	4350	3.9
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	28164	28164	0	0.0
MINING	160376	160376	0	0.0
COAL MINING	0	0	0	0.0
OIL AND GAS EXTRACTION	151428	151428	0	0.0
METAL MINING	0	0	0	0.0
NONMETALLIC MINING EXCLUDING FUELS	8947	8948	0	0.0
CONSTRUCTION	500422	500422	0	0.0
MANUFACTURING	3076005	3240378	164372	5.3
NONDURABLE GOODS	768465	861697	93232	12.1
FOOD AND KINDRED PRODUCTS	150398	150398	0	0.0
TOBACCO PRODUCTS	0	0	0	0.0
TEXTILE MILL PRODUCTS	3785	3785	0	0.0
APPAREL AND OTHER TEXTILE PRODUCTS	72608	72608	0	0.0
PAPER AND ALLIED PRODUCTS	257776	276815	19038	7.4
PRINTING AND PUBLISHING	81713	81713	0	0.0
CHEMICALS AND ALLIED PRODUCTS	91333	88758	-2575	-2.8
PETROLEUM REFINING	79201	155969	76768	96.9
RUBBER AND PLASTICS PRODUCTS	31573	31573	0	0.0
LEATHER AND LEATHER PRODUCTS	73	73	0	0.0
DURABLE GOODS	2307540	2378680	71140	3.1
LUMBER PRODUCTS	474453	535267	60813	12.8
FURNITURE AND FIXTURES	24418	24418	0	0.0
STONE, CLAY AND GLASS PRODUCTS	153553	153553	0	0.0
PRIMARY METALS	162559	172885	10326	6.4
FABRICATED METALS	373093	373093	0	0.0
NONELECTRICAL MACHINERY	270644	270644	0	0.0
ELECTRICAL MACHINERY	764229	764229	0	0.0
TRANSPORTATION EQUIPMENT	17452	17452	0	0.0
MOTOR VEHICLES AND EQUIPMENT	24020	24020	0	0.0
ORDNANCE	0	0	0	0.0
INSTRUMENTS	25810	25810	0	0.0
MISCELLANEOUS MANUFACTURING	17303	17303	0	0.0
TRANSPORTATION, COMMUNICATION AND UTILITIES	893095	931974	38879	4.4
WHOLESALE TRADE	611610	638236	26625	4.4
RETAIL TRADE	1043025	1088431	45406	4.4
FINANCE, INSURANCE AND REAL ESTATE	621426	648479	27052	4.4
SERVICES	2106750	2198464	91714	4.4
GOVERNMENT	1817055	1896158	79102	4.4

TABLE 3.10

EMPLOYMENT WITH AND WITHOUT PROJECT, CHANGE AND  
PERCENTAGE CHANGE DUE TO PROJECT 1978

	BASELINE	WITH PROJ.	CHANGE	%CHG
TOTAL	279366	279366	0	0.0
AGRICULTURAL PRODUCTION	13017	13017	0	0.0
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	865	865	0	0.0
MINING	7407	7407	0	0.0
COAL MINING	0	0	0	0.0
OIL AND GAS EXTRACTION	6996	6996	0	0.0
METAL MINING	0	0	0	0.0
NONMETALLIC MINING EXCLUDING FUELS	411	411	0	0.0
CONSTRUCTION	15679	15679	0	0.0
MANUFACTURING	45952	45952	0	0.0
NONDURABLE GOODS	14243	14243	0	0.0
FOOD AND KINDRED PRODUCTS	4493	4493	0	0.0
TOBACCO PRODUCTS	0	0	0	0.0
TEXTILE MILL PRODUCTS	97	97	0	0.0
APPAREL AND OTHER TEXTILE PRODUCTS	3093	3093	0	0.0
PAPER AND ALLIED PRODUCTS	2816	2816	0	0.0
PRINTING AND PUBLISHING	1665	1665	0	0.0
CHEMICALS AND ALLIED PRODUCTS	798	798	0	0.0
PETROLEUM REFINING	844	844	0	0.0
RUBBER AND PLASTICS PRODUCTS	433	433	0	0.0
LEATHER AND LEATHER PRODUCTS	4	4	0	0.0
DURABLE GOODS	31708	31708	0	0.0
LUMBER PRODUCTS	8255	8255	0	0.0
FURNITURE AND FIXTURES	569	569	0	0.0
STONE, CLAY AND GLASS PRODUCTS	2107	2107	0	0.0
PRIMARY METALS	1951	1951	0	0.0
FABRICATED METALS	4612	4612	0	0.0
NONELECTRICAL MACHINERY	3157	3157	0	0.0
ELECTRICAL MACHINERY	9208	9208	0	0.0
TRANSPORTATION EQUIPMENT	472	472	0	0.0
MOTOR VEHICLES AND EQUIPMENT	326	326	0	0.0
ORDNANCE	0	0	0	0.0
INSTRUMENTS	435	435	0	0.0
MISCELLANEOUS MANUFACTURING	606	606	0	0.0
TRANSPORTATION, COMMUNICATION AND UTILITIES	14698	14698	0	0.0
WHOLESALE TRADE	14956	14956	0	0.0
RETAIL TRADE	40654	40654	0	0.0
FINANCE, INSURANCE AND REAL ESTATE	10690	10690	0	0.0
SERVICES	56033	56033	0	0.0
GOVERNMENT	59410	59410	0	0.0

TABLE 3.11

EMPLOYMENT WITH AND WITHOUT PROJECT, CHANGE AND  
PERCENTAGE CHANGE DUE TO PROJECT 1995

	BASELINE	WITH PROJ.	CHANGE	%CHG
TOTAL	373906	385941	12035	3.2
AGRICULTURAL PRODUCTION	4587	4767	180	3.9
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	2036	2036	0	0.0
MINING	5961	5961	0	0.0
COAL MINING	0	0	0	0.0
OIL AND GAS EXTRACTION	5577	5577	0	0.0
METAL MINING	0	0	0	0.0
NONMETALLIC MINING EXCLUDING FUELS	383	383	0	0.0
CONSTRUCTION	19950	19950	0	0.0
MANUFACTURING	69101	72192	3091	4.5
NONDURABLE GOODS	19987	21424	1436	7.2
FOOD AND KINDRED PRODUCTS	5445	5445	0	0.0
TOBACCO PRODUCTS	0	0	0	0.0
TEXTILE MILL PRODUCTS	121	121	0	0.0
APPAREL AND OTHER TEXTILE PRODUCTS	4591	4591	0	0.0
PAPER AND ALLIED PRODUCTS	3956	4248	292	7.4
PRINTING AND PUBLISHING	2597	2597	0	0.0
CHEMICALS AND ALLIED PRODUCTS	1254	1218	-35	-2.8
PETROLEUM REFINING	1217	2396	1179	96.9
RUBBER AND PLASTICS PRODUCTS	800	800	0	0.0
LEATHER AND LEATHER PRODUCTS	4	4	0	0.0
DURABLE GOODS	49114	50768	1654	3.4
LUMBER PRODUCTS	11595	13081	1486	12.8
FURNITURE AND FIXTURES	835	835	0	0.0
STONE, CLAY AND GLASS PRODUCTS	3267	3267	0	0.0
PRIMARY METALS	2651	2819	168	6.4
FABRICATED METALS	7149	7149	0	0.0
NONELECTRICAL MACHINERY	5300	5300	0	0.0
ELECTRICAL MACHINERY	15548	15548	0	0.0
TRANSPORTATION EQUIPMENT	656	656	0	0.0
MOTOR VEHICLES AND EQUIPMENT	479	479	0	0.0
ORDNANCE	0	0	0	0.0
INSTRUMENTS	749	749	0	0.0
MISCELLANEOUS MANUFACTURING	880	880	0	0.0
TRANSPORTATION, COMMUNICATION AND UTILITIES	18096	18679	582	3.2
WHOLESALE TRADE	19299	19920	621	3.2
RETAIL TRADE	58782	60675	1892	3.2
FINANCE, INSURANCE AND REAL ESTATE	17405	17966	560	3.2
SERVICES	84702	87428	2726	3.2
GOVERNMENT	73981	76363	2381	3.2

TABLE 3.12

EMPLOYMENT WITH AND WITHOUT PROJECT, CHANGE AND  
PERCENTAGE CHANGE DUE TO PROJECT 2030

	BASELINE 474015	WITH PROJ. 490777	CHANGE 16762	%CHG 3.5
TOTAL				
AGRICULTURAL PRODUCTION	3373	3505	132	3.9
AGRICULTURAL SERVICES, FORESTRY, FISHERIES	2766	2766	0	0.0
MINING	3113	3113	0	0.0
COAL MINING	0	0	0	0.0
OIL AND GAS EXTRACTION	2793	2793	0	0.0
METAL MINING	0	0	0	0.0
NONMETALLIC MINING EXCLUDING FUELS	319	319	0	0.0
CONSTRUCTION	17523	17523	0	0.0
MANUFACTURING	101112	105501	4389	4.3
NONDURABLE GOODS	28257	30285	2027	7.2
FOOD AND KINDRED PRODUCTS	7055	7055	0	0.0
TOBACCO PRODUCTS	0	0	0	0.0
TEXTILE MILL PRODUCTS	161	161	0	0.0
APPAREL AND OTHER TEXTILE PRODUCTS	6720	6720	0	0.0
PAPER AND ALLIED PRODUCTS	5689	6109	420	7.4
PRINTING AND PUBLISHING	3742	3742	0	0.0
CHEMICALS AND ALLIED PRODUCTS	1883	1830	-53	-2.8
PETROLEUM REFINING	1712	3372	1660	96.9
RUBBER AND PLASTICS PRODUCTS	1268	1288	0	0.0
LEATHER AND LEATHER PRODUCTS	4	4	0	0.0
DURABLE GOODS	72854	75216	2362	3.2
LUMBER PRODUCTS	16592	18719	2126	12.8
FURNITURE AND FIXTURES	1229	1229	0	0.0
STONE, CLAY AND GLASS PRODUCTS	4888	4888	0	0.0
PRIMARY METALS	3712	3948	235	6.4
FABRICATED METALS	10572	10572	0	0.0
NONELECTRICAL MACHINERY	8083	8083	0	0.0
ELECTRICAL MACHINERY	23710	23710	0	0.0
TRANSPORTATION EQUIPMENT	913	913	0	0.0
MOTOR VEHICLES AND EQUIPMENT	701	701	0	0.0
ORDNANCE	0	0	0	0.0
INSTRUMENTS	1161	1161	0	0.0
MISCELLANEOUS MANUFACTURING	1287	1287	0	0.0
TRANSPORTATION, COMMUNICATION AND UTILITIES	21558	22321	762	3.5
WHOLESALE TRADE	23374	24200	826	3.5
RETAIL TRADE	74752	77396	2643	3.5
FINANCE, INSURANCE AND REAL ESTATE	24523	25390	867	3.5
SERVICES	114602	118654	4052	3.5
GOVERNMENT	87316	90404	3087	3.5

TABLE 3.13

POPULATION, PERSONAL INCOME, LABOR AND PROPRIETORS' INCOME, AND EMPLOYMENT  
WITH AND WITHOUT PROJECT, CHANGE AND PERCENTAGE CHANGE DUE TO PROJECT 1978

	BASELINE	WITH PROJ.	CHANGE	%CHG
TOTAL POPULATION (JULY 1)	675819	675819	0	0.0
TOTAL PERSONAL INCOME(1000 OF 1972 DOLLARS)	2788119	2788119	0	0.0
PER CAPITA INCOME (1972 DOLLARS)	4126	4126	0	0.0
PER CAPITA INCOME RELATIVE (U.S. = 1.00)	0.79	0.79	0.00	0.0
TOTAL EMPLOYMENT (JOB COUNT)	281371	281371	0	0.0
EMPLOYMENT/POPULATION RATIO	0.42	0.42	0.00	0.0
EMPLOYMENT/POPULATION RATIO RELATIVE	0.91	0.91	0.00	0.0

TABLE 3.14

POPULATION, PERSONAL INCOME, LABOR AND PROPRIETORS' INCOME, AND EMPLOYMENT  
WITH AND WITHOUT PROJECT, CHANGE AND PERCENTAGE CHANGE DUE TO PROJECT 1995

	BASELINE	WITH PROJ.	CHANGE	%CHG.
TOTAL POPULATION (JULY 1)	808548	821509	12961	1.6
TOTAL PERSONAL INCOME (1000 OF 1972 DOLLARS)	5471145	5689004	217859	4.0
PER CAPITA INCOME (1972 DOLLARS)	6766	6925	158	2.3
PER CAPITA INCOME RELATIVE (U.S. = 1.00)	0.84	0.86	0.02	2.3
TOTAL EMPLOYMENT (JOB COUNT)	374614	386672	12057	3.2
EMPLOYMENT/POPULATION RATIO	0.46	0.47	0.01	1.6
EMPLOYMENT/POPULATION RATIO RELATIVE	0.93	0.95	0.01	1.6

TABLE 3.15

POPULATION, PERSONAL INCOME, LABOR AND PROPRIETORS' INCOME, AND EMPLOYMENT  
WITH AND WITHOUT PROJECT, CHANGE AND PERCENTAGE CHANGE DUE TO PROJECT 2030

	BASELINE	WITH PROJ.	CHANGE	%CHG
TOTAL POPULATION (JULY 1)	1018032	1035601	17568	1.7
TOTAL PERSONAL INCOME(1000 OF 1972 DOLLARS)	14607931	15243866	635935	4.4
PER CAPITA INCOME (1972 DOLLARS)	14349	14719	370	2.6
PER CAPITA INCOME RELATIVE (U.S. = 1.00)	0.91	0.93	0.02	2.6
TOTAL EMPLOYMENT (JOB COUNT)	474016	490778	16762	3.5
EMPLOYMENT/POPULATION RATIO	0.47	0.47	0.01	1.7
EMPLOYMENT/POPULATION RATIO RELATIVE	0.99	1.01	0.02	1.7

### 3.3 Interpretation of Model Outputs

The interpretation of these data is quite straightforward. The analyst has at his disposal levels of income and earnings by sector, employment, population, per capita income, and several measures relative to the United States that capture most of the important economic welfare dimensions. The tables show the predicted changes and percentage changes by sector, allowing the analyst to determine where the earnings and employment changes will arise (i.e., that is, in which sectors). Changes in per capita income will help the analyst to assess the welfare implications of the proposed action, and change in the total population, of course has a range of significant implications including those for housing, schools, and a variety of other types of infrastructure. For example, reference back to Table 3.15 indicates that the model has predicted by the year 2030 that under the "no-project" assumption, total population in the Shreveport BEA area would be approximately 1.02 million. As a result of implementing the waterway project, total population would be higher by approximately 17.6 thousand to a level of 1.035 million. This represents a 1.7 percent change in population. Total personal income is expected to be higher by 4.4 percent, or \$635 million, as a result of the waterway project being implemented. The total employment impact of the waterway project is projected to be 3.5 percent above the baseline projection, or an increase of some 16.8 thousand new jobs. Increases are also shown in per capita income, the per capita income relative, the employment/population ratio, the employment/population ratio relative to that for the nation. In sum, the model produces a comprehensive set of measures of the regional development impacts of a waterway or related project. The data are printed in a form that make it suitable for direct reproduction and inclusion in project justification reports.

Alternative assumptions can be imposed on the evaluation model in order to perform sensitivity analysis. That is, changes can be made in transport costs, input/output coefficients, input availabilities, input or output prices, or other cost, demand, or supply conditions; and the impacts of these changes can be estimated by operating the evaluation model interactively similar to finding the original model solution. At the end of the original set of interactive instructions, a set of questions are then asked about changes that may be made in the input data. These changes can be made and a new solution to the model can be obtained.

At least two simulations using the evaluation model will have to be made in order to obtain estimates of regional impacts under base or "without" project conditions and "with" project conditions. There may be additional simulations that will be needed in order to assess the sensitivity of changes in employment, earnings, and population to various cost and/or price, or other parameter changes. For example, it may be desirable to obtain estimates of the effects of alternative assumptions about unemployment, hence, alternative labor availability, by region on production levels, earnings, and shifts that take place interregionally. Any number of appropriate changes can be made by enacting the interactive data check and change procedure of the evaluation system.

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APPENDIX A

LINEAR PROGRAMMING/ECONOMIC BASE--  
EVALUATION MODEL FOR ESTIMATING THE REGIONAL  
DEVELOPMENT IMPACTS OF WATER RESOURCE PROJECTS:

Training Manual

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## TRAINING COURSE OUTLINE

### 1.0 INTRODUCTION

The outline in what follows is a description of an 8-hour training course for briefing public resource managers on a regional water development evaluation modeling system. The objectives of the training course are:

1. To familiarize public resource managers with linear programming/economic base methodology for evaluating and estimating regional benefits derived from public water development projects.
2. To review the data requirements of the evaluation model.
3. To delineate the data sources and familiarize public resource managers with these data sources and data preparation procedures.
4. Review the procedures for formatting data, data input, and operating the evaluation model in interactive mode using the terminal, computer, and evaluation model computer routine.
5. To help public resource managers in the interpretation of estimates derived from the evaluation model, and to help these managers evaluate water development impacts projections.

A linear programming/economic base evaluation model is proposed for use in deriving estimates of the direct and secondary impacts of water development on regional economics. This evaluation model is documented in *LINEAR PROGRAMMING/ ECONOMIC BASE--EVALUATION MODEL FOR ESTIMATING THE REGIONAL DEVELOPMENT IMPACTS OF WATER RESOURCE PROJECTS: A User Manual*. A case which also is documented in the above user manual is used in the training course to instruct public resource managers on data needs, data gaps, data preparation, operation of the evaluation model, and interpretation of model

projections. The case study is the proposed Red River Waterway of northern and north central Louisiana.

The training course is divided into two major time and training sessions. The first session covers the introduction of the use of the evaluation model and its data requirements and preparation. The second session is the "hands on" training session where interactive operation of the evaluation model is carried out by the course enrollees with the aid of the instructors. Interpretation of model outputs also is covered in this second session.

## TRAINING COURSE SESSION I

### 2.0 PREPARATION OF DATA FOR CASE STUDY

#### 2.1 Introduction of Bases of Model for Measuring Regional Development Impacts (User Manual, Sections 1.1, 1.2, 1.3)

A review of direct and indirect or secondary impacts from water resource projects are to be reviewed. Then the linear programming/economic base evaluation model will be introduced and its basis for representation of regional economies and projecting direct and secondary impacts of development is discussed. The linear programming procedure is used to represent the supply and demand structure of the basic water-oriented sectors of the regional economy and to solve for output changes in these sectors as development of a water project is initiated and operated. The economic base system links these basic changes in output to changes in output in basic but nonwater-oriented and nonbasic sectors of the regional economy and derives estimates of associated changes in employment, earnings, and population.

#### 2.2 Criteria for Definition of Impact Regions (User Manual, Section 2.1)

This session is a discussion of the regional delineation needed to appropriately capture the direct and secondary impacts of a water resource project. Regional delineation associated with the case study is then outlined using the criteria discussed.

### 2.3 Delineation of Basic Water-Oriented Sectors vs. Other Sectors of Regional Economy (User Manual, Section 2.2)

Identification of water-oriented sectors of the regional economy is discussed. Linkage of these industries to water development impacts and other sector output changes via the output multiplier also is covered in this session. The sectors delineated for the case study also are reviewed using data from the benefit/cost analysis survey.

### 2.4 Data Requirements (User Manual, Sections 1.2, 1.3, 2.1, 2.2)

The linear programming/economic base model systems are then outlined and parameter values versus variables to be determined in solution of the model are delineated in order to show what data are needed for operation of the model. The data requirements for the linear programming system will be delineated first, then the model outputs from the linear programming solution. Subsequently, the data files needed for operation of the economic base system are covered, and the final outputs of the total evaluation system are then identified.

### 2.5 Data Sources (User Manual, Sections 2.1, 2.2, 2.3)

Once the data requirements are understood, then data sources are reviewed. The advantages and disadvantages of the sources are reviewed, and their data format is outlined and associated with the sequence of evaluation model data input procedures. Some calculations are necessary to transform source data into actual model input data. These calculations will be

reviewed using the case study data requirements to illustrate actual calculations or data transformations which have to be performed. Instruction sheets for such calculations will be distributed.

#### 2.6 Data Ordering for File Input (User Manual, Section 2.5)

Data ordering instructions given in the user manual, sections 2.5.1 and 2.5.2, will be reviewed in order to sequence the preparation of the data for input into the model file. The ordering will be discussed for the direct effects module first, and subsequently the secondary effects module. Worksheets for data ordering provided in sections 2.5.1 and 2.5.2 of the user manual and will be used in this session.

## TRAINING COURSE SESSION II

### 3.0 OPERATION OF THE EVALUATION MODEL

#### 3.1 Interactive Data Input and Model Operation (User Manual, Section 2.5)

Operations pertaining to the use of the terminal, data input at the terminal, and terminal operation of the evaluation model will be reviewed using sections 2.5.1, 2.5.2, and 3.1 of the user manual. The input data and model operation are interactive operations and provide a "hands on" opportunity for public resource managers to input data and assumptions and generate development impacts. Changes in data and assumptions can be made in order to evaluate development impact sensitivity and to comprehend the impacts of alternative development designs, regional economic structure, and intersectoral linkages.

#### 3.2 Interactive Data Input (User Manual, Section 2.5; Data Worksheets of Sections 2.5.1 and 2.5.2)

Course enrollees will engage in an interactive data input session at the terminal using the case study data on prepared worksheets (sections 2.5.1 and 2.5.2 of the user manual), and the terminal instructions of sections 2.5.1 and 2.5.2.

#### 3.3 Interactive Operation of the Evaluation Model (User Manual, Section 3.1)

Course enrollees will interactively operate the evaluation model to arrive at an optimal solution of the linear programming model which generates output levels and simulations of the economic base system to generate

changes in regional employment and earnings. The case study will be used to generate "without" project conditions and a "with" project comparison to estimate regional direct and indirect impacts. This will enable course enrollees to completely work through a development evaluation and to utilize initial and change operations at the terminal.

#### 3.4 Model Output Evaluation (User Manual, Sections 3.2, 3.3)

A session on model output evaluation will be held to complete the training course. Discussion of problems involved, advantages and disadvantages of the use of the model, and development impacts will complete the "hands on" session. Some discussion of these issues will, of course, take place during the interactive terminal sessions.