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Machine-Readable Mapping from National Network Simulation (NNS) Zones to Bureau of Economic Analysis (BEA) Areas
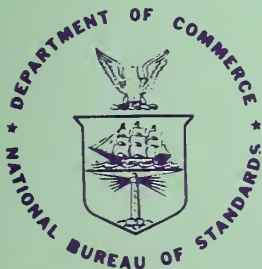
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National Bureau of Standards
Washington, D. C. 20234

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Final

U S. DEPARTMENT OF COMMERCE

NATIONAL BUREAU OF STANDARDS

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U.S. DEPARTMENT OF COMMERCE, Rogers C. B. Morton, *Secretary*
James A. Baker, III, *Under Secretary*
Dr. Betsy Ancker-Johnson, *Assistant Secretary for Science and Technology*
NATIONAL BUREAU OF STANDARDS, Ernest Ambler, *Acting Director*

Abstract

This report describes the allocation of freight flow data
from the National Network Simulation (NNS) zone system to the
Bureau of Economic Analysis (BEA) area system. The NNS zone
system was developed for use in the analysis of national modal
freight flows. The BEA area system was primarily developed for
the allocation of national economic data to regions of the United
States. The BEA area system contains approximately 175 distinct
areas and the NNS zone system, approximately 500. Assuming flows
of commodities are known among the NNS zones, the NNS zone to BEA
area mapping enables the determination of flows among the BEA areas.
When an NNS zone is completely contained in one BEA area, flows
entering and leaving the NNS zone accrue entirely to that BEA
area. When an NNS zone overlaps more than one BEA area, the
mapping specifies the allocation of incoming and outgoing flows
among the affected BEA areas. This report presents the NNS zone
to BEA area mapping which utilizes 1970 economic data as the basis
for allocating flows when an NNS zone overlaps more than one BEA
area. It also presents computer programs that could be used to
generate a mapping using economic data from some other year.
Closely related reports are R. Schofer, "Final Report on the
National Network Simulation", NBS Internal Report 75-912 and
R.H.F. Jackson, "A National Network Data Base System", NBS
Internal Report 75-911.

Table of Contents

1. Introduction

The National Network Simulation (NNS) zone system was developed for use in the analysis of national modal freight flows. The Bureau of Economic Analysis area system was primarily developed for the allocation of national economic data to regions of the United States (defined as the fifty states plus the District of Columbia). The BEA (Bureau of Economic Analysis) system contains approximately 175 areas and the NNS (National Network Simulation) system, approximately 500 zones.

It is desired to approximate the flows of several commodity groups among the BEA areas, starting from previously estimated flows among the NNS zones[*]. For this, the NNS zone to BEA area mapping is needed. The mapping specifies, for each NNS zone that lies wholly within some BEA area, the BEA area in which it lies; and for NNS zones not wholly contained in a single BEA area, it specifies the proportion of incoming and outgoing commodity flows to be allocated to each of the BEA areas that partially contain it. These commodity flow proportions are approximated by the use of two (county level) economic statistics provided by the Bureau of Economic Analysis: It is assumed that outgoing commodity flows are proportional to total earnings (equal to the sum of wages, salaries, proprietors income, other labor income) and that incoming commodity flows are proportional to total personal income (equal to total earnings plus property income (rents) plus transfer income (welfare, gifts) minus contributions and Social Security payments).

Only the NNS zone to BEA area mapping and the methods used to determine it are of interest in this report. The distribution of county level economic statistics on which part of the mapping is based could change from year to year. Thus automated (computer) methods were developed, insofar as possible, that will ease new determinations of the mapping in the future.

The fifty states plus the District of Columbia were subdivided into approximately 500 zones in the National Network Simulation system, and into 173 BEA areas in the Bureau of Economic Analysis. Except in four states in New England the NNS zones contain integer numbers of counties; the BEA areas always contain integer numbers of counties.

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[*] For further information see "A National Network Data Base System", NBS Internal Report 75-911, by Richard H.F. Jackson, September 1975, and "Final Report on the National Network Simulation", NBS Internal Report 75-912, by Ralph Schofer, to appear.

THE READER SHOULD CAREFULLY NOTE THAT THE
AUTOMATED PROCEDURE TO BE DESCRIBED IS
BASED UPON THE FACT THAT THERE ARE INTEGER
NUMBERS OF COUNTIES IN BOTH THE NNS AND THE
BEA ZONES. THE SELECTED ECONOMIC STATISTICS
AVAILABLE BY COUNTY IN MACHINE-READABLE
FORM MAKE THIS APPROACH FEASIBLE.

Both a zone and an area are defined as a contiguous land
region. From here on in this report, the authors take the
liberty to speak of NNS zones and BEA zones for purposes of
expository clarity. Readers should note that BEA zone is
synonymous to BEA area.

With the exception of certain NNS zones in four New England
states and Alaska, the mapping was done by creating machine-readable
data sets from raw source data and a Fortran computer program for
processing them. The output of the program is the zone mapping
in machine-readable form (Fortran DATA statements). Part of the
basis for the computing program was selected economic statistics
by county. The NNS zones that were processed by computer consti-
tuted an integral number of whole counties, or could be so con-
strued: Certain states, notably Virginia, have "independent
cities" which for our purposes could be combined with counties.

Although all BEA zones are defined as an integral number of
whole counties, in four New England states some of the NNS zones
are defined at the township level. Thus additional data was
needed to develop the mapping in these cases and a manual approach
seemed most expeditious. The manual approach was based on the
distribution of population at the township level. Alaska consists
of one BEA zone and nine NNS zones with no boundary complications,
but for technical reasons (the BEA zone definition is in terms of
"Jurisdictional Districts" rather than counties) it also was done
by hand. The manual and machine-produced data are identical in
format, which is described in the next section.

All economic and population data used in the mapping presented
in this report are for the year 1970. Economic data was provided
on magnetic tape by the BEA. Population data and detailed state
and county maps were found in

County and City Data Book 1972,
issued by the U.S. Dept. of Commerce

and

1970 Census of the Population
vol. 1 Characteristics of the Population
part 8 (Connecticut), 23 (Massachusetts),
31 (New Hampshire) and 41 (Rhode Island),
issued March 1973 by the U.S. Department
of Commerce.

Procedures for allocating commodity flows where NNS zones were contained by more than one BEA area were developed in consultation with Allan L. Olson and his colleagues at the BEA. These people also provided much helpful assistance in understanding and utilizing data files developed by other groups within the BEA.

Computer runs were made on the NBS central computer; and the programs may have some system-dependent features. This report describes duplicate Master Transmittal Tapes on which are recorded the raw source data received from BEA, refined source data, programs and output data (the NNS to BEA zone mapping).

II. Machine-Readable Form of the Mapping

The mapping of NNS zones into BEA zones is presented in Appendix 1 in the form of Fortran DATA statement which can be compiled into any Fortran program that requires the zone mapping.

The first series of DATA statements specify the contents of a table with the Fortran name NDX. The length of the table is 509 words, one word for each NNS zone. Let $v(i)$ be the (integer) value found in word i. If $v(i)$ is positive, then NNS zone i is wholly contained in BEA zone $v(i)$. If $v(i)$ is zero, then there is no NNS zone i. If $v(i)$ is negative, then NNS zone i is not wholly contained in a single BEA zone, and $-v(i)$ is the starting location of a "record" of information pertaining to NNS zone i in a second table with the Fortran name PCT.

The second series of DATA statements specify the contents of the PCT table. The table is constructed in the following way: It contains one record for each NNS zone that overlaps more than one BEA zone. If NNS zone i is such a zone, then $-v(i)$ is the starting location (Fortran subscript of the first word) of the record for NNS zone i, as described above. Let $w(i)$ be the number of BEA zones that partially contain NNS zone i. Then the contents of word $-v(i)$ of PCT is $1000i + w(i)$. The record is completed in $w(i)$ triplets of words immediately following word $-v(i)$. The contents of each triplet are as follows. Word 3 contains the BEA zone number, word 2 contains the fraction of total earnings in NNS zone i that is to be allotted to this BEA zone, and word 1 contains the fraction of total personal income in NNS zone i that is to be allotted to this BEA zone. In the commodity-flow program (not described in this report), fractional shipments into and out of parts of NNS zones that overlap more than one BEA zone are to be determined by the income and earnings fractions, respectively, in the PCT table.

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This form of storage for the PCT table permits the use of variable length records with no unused locations in the table. The DATA statements are arranged to show clearly the contents of the starting location and the following triplets. Note that the Fortran type of the constants appearing in words 1 and 2 of each triplet is REAL and that the type of constant in word 3 is INTEGER. These types will be preserved regardless of the declared type of PCT. To use the PCT table in a Fortran program, the following programming technique is needed. First declare PCT and IPCT of type REAL and INTEGER respectively, and of equal length. Then make the declaration

EQUIVALENCE (PCT(1),IPCT(1)).

In executable statements following this declaration reference to PCT or IPCT must be coded in accordance with the actual type of data stored in the Fortran array.

III. Program MAIN

This program, with subroutines ISL, BINSCH, CMP, SNDX and PAR, produces the NNS to BEA zone mapping in machine-readable form from three input data sets NNS, INDEX and BEA. Listings of the program and subroutines appear in Appendix 2, and listings of the data sets NNS and BEA appear in Appendices 3 and 4. The construction of these three input data sets from original source data is described in Section V; their form as required by program MAIN is described in the following pages.

NNS   This data set specifies the counties, by BEA county code[*], that comprise the NNS zones. Note that only NNS zones made up of whole counties can be included, so that in particular NNS zones 2-6,8,9,12-40 cannot be part of this data set. These are the NNS zones in New England that contain parts of counties. In the computer this data set is stored as a linear array of integers. For each NNS zone there is a record starting at some location in the array.

[*] The term "BEA county code" refers to the 6-digit BEA state-county code in which the first three digits specify the state and the last three, the county. Similarly, the term "FIPS county code", to be introduced later, refers to the 5-digit FIPS state-county code, in which the first two digits specify the state and the last three, the county.

The first word of the record contains the NNS zone times 1000 plus the number N of counties in the zone. The following N words contain the BEA county codes. The records are arranged in ascending order of NNS zones, with the record for NNS zone 1 starting in word 1 of the array. The NNS zones must be in sequence with no gaps, but the number N can be zero for unused NNS zones or zones, such as the ones in New England listed above, for which processing by program MAIN is to be bypassed.

INDEX   For each county (identified by the BEA county codes) this data set gives the BEA zone in which it lies plus the total personal income and the total earnings in the county in 1970. In the computer this data set is stored as a two-dimensional array. The Fortran DIMENSION statement specifies the total number of counties and 4 as the first and second subscript limits. For the i-th county, the (i,j)-th array element contains the BEA county code, the BEA zone number in which the county lies, total personal income (1970) and total earnings (1970) for $j = 1,2,3,4$ respectively.

BEA   This data set specifies the counties, by BEA county code, that comprise the BEA zones. In the computer this data set is stored as a linear array of integers. For each BEA zone there is a record starting at some location in the array. The first word of the record contains the BEA zone times 1000 plus the number N of counties in the zone. The following N words contain the BEA county codes. The records are arranged in ascending order of BEA zones, with the record for BEA zone 1 starting in word 1 of the array.

The machine-readable output of program MAIN is described in Section II. Briefly, it consists of two data sets in the form of Fortran DATA statements, listed in Appendix 1. These statements store the necessary numbers in Fortran arrays, named NDX and PCT, that specify the NNS to BEA zone mapping.

The primary logic of program MAIN is simple. Starting and stopping NNS zone numbers are read. The input data sets INDEX, NNS and BEA are read from logical units 7, 8 and 9. Then the main loop is entered. For each NNS zone, the first county in the zone is ascertained and the BEA zone in which it lies is located. This is done by doing a binary search in the INDEX table using subroutine BINSCH. Subroutine CMP then compares the list of counties in the NNS and BEA zones to determine if the NNS zone is wholly contained in the BEA zone. If so, subroutine SNDX is called to make the appropriate entry in the NDX table.

If not, subroutine SNDX again makes the appropriate entry in NDX. Then subroutine PAR is called to determine the fractions that will specify the allocation (to the proper BEA zone) of in-coming and outgoing commodity flows of the NNS zone under consid-eration. This allocation is done with the aid of the total per-sonal income and total earnings data in the INDEX table: Each of these statistics is accumulated over all counties in the NNS zone. They are also accumulated for subsets of counties in the NNS zone that lie in the same BEA zone. Ratios are then formed to deter-mine the allocation of the commodity flows of the NNS zone among the two or more BEA zones it partially overlaps, with total per-sonal income as the surrogate for incoming flows and total earn-ings as the surrogate for outgoing flows. Finally, SNDX enters the fractions into the PCT table.

The output data sets NDX and PCT are written to logical units 24 and 25 by subroutines SNDX and PAR, respectively.

Note that where NNS zones comprise an integral number of counties, the procedure carried out by program MAIN works because income and earnings data are contained in the INDEX table by county. The program cannot be used for NNS zones, 2-6, 8, 9, 12-40 in four New England states because these NNS zones do not comprise an integer number of counties. For these zones, the data for the NDX and PCT tables were determined manually, as described in the next Section, and inserted into the data sets produced by program MAIN.

IV. Method for Certain NNS Zones in New England

In New England, as elsewhere, the BEA zones are made up of county units only. But in some cases the counties are too large an aggregation for the much finer system of NNS zones. There-fore, some NNS zones in New England are defined in terms of

subdivisions of the county, such as townships[*]. This problem oc-
curred only in Rhode Island, Massachusetts, Connecticut and New
Hampshire. Although total personal income and total earnings
data were available only at the county level, we were able to
find population data at the township level in the 1970 Census
of the Population, referenced in the Introduction. For NNS zones
that intersect more than one BEA zone, we used population to
hand-calculate percentage allotments of total NNS zone income and
total NNS zone earnings for each intersected BEA zone.

The method we used was the following: We assumed the total
personal income and earnings of a part of a county to be propor-
tional to the population of that part of the county. Thus we
determined income and earnings figures for NNS zones containing
parts of counties, and for parts of NNS zones lying in different
BEA zones. Forming the required ratios, we then determined the
required percentage allotments and made appropriate entries in
the NDX and PCT data sets. We used this manual method for NNS
zones 1 through 40; these calculations affected only BEA zones
1 through 6.

V. Preparation of Machine-Readable Input to MAIN

Machine-readable input to program MAIN consists of the data
sets NNS, INDEX and BEA, described in Section III.

Data set NNS was prepared by punching data on cards from an
available list of NNS zones, since no machine-readable form of
this data was available. Data set BEA was prepared, using simple
Fortran programs, from data on a magnetic tape supplied by the
Bureau of Economic Analysis. A copy of this magnetic tape exists
as "File 1" on the "Master Transmittal Tape" described in Section
VII. The programs used to prepare the data set BEA have not been
kept, since we anticipate that any corrections or changes in the
NNS or BEA area systems will be minor.

Preparation of data set INDEX was somewhat more complicated.
At first it was conceived as only specifying, for each county,
the BEA zone that contained it. Program CNTYLIST, listed in
Appendix 5, carried this out using data set BEA as the primary
input. Then it was decided to include the two economic statistics
total personal income (1970) and total earnings (1970). A second
program INDX, also listed in Appendix 4 accomplished this using

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[*] The exact definitions had to be deduced from maps, since only
unpublished documents defining the NNS zones in terms of counties
and unspecified "parts" of counties were available.

income and earnings data provided by BEA on two magnetic tapes.
Unfortunately, these tapes were arranged by FIPS county code
rather than BEA county code. Being unwilling to convert pre-
viously constructed data sets to a FIPS code basis, we decided
to stay with the BEA county codes, although there may be good
reasons for making the opposite choice. In either case, we
needed a conversion table between FIPS and BEA county codes.
This was derived from a magnetic tape received from BEA which
exists as "File 2" on the Master Transmittal Tape. Copies of
the income and earnings tapes supplied by BEA exist as "File 3"
and "File 4" on the same master tape.

The programs CNTYLIST and INDX, although listed in Appendix 5
and transmitted on the master tape, are considered primitive. But
if data set INDEX were to be recreated using economic data for a
year other than 1970, they could be used or could serve as a guide
for development of a better single program. Three data sets named
INCOME, EARNINGS and BEAFIPS were created for use as input by
program INDX. All are included on the master tape; see Section VII.

Data sets INCOME and EARNINGS were created from the income
and earnings tapes by the use of simple Fortran programs and edit-
ing sessions. The major editing task was to consolidate data for
"independent cities" with appropriate counties to correspond to
the BEA county definitions. The FIPS codes, but not the BEA codes,
contain designations for independent cities. The following de-
scribes data sets INCOME, EARNINGS and FIPSBEA.

INCOME   This data set contains total personal income for
              each county in the U.S. for the years 1969 through
              1973. The data is arranged by FIPS county code,
              and only the FIPS codes corresponding to BEA
              county designations are included. The format of
              the data is given in Section VII.

EARNINGS   This data set contains total earnings for each
              county in the U.S. for the years 1969 through
              1973. The data is arranged by FIPS county code,
              and only the FIPS codes corresponding to BEA
              county designations are included.

FIPSBEA   This data set provides conversion from FIPS to
              BEA county codes. It is arranged in ascending
              order of the 5-digit FIPS codes, and it provides
              alphabetic identification and the corresponding
              BEA code for each FIPS county code.

Certain anomalies arose during the preparation of the data sets NNS, INDEX and BEA. Already mentioned is the fact that "independent cities" in Virginia are given separate FIPS codes but are consolidated with counties in the BEA code list. This was important only in the creation of the INCOME and EARNINGS data sets. Other anomalies included non-uniform treatment of certain combinations of counties for BEA and FIPS codes. The counties that were at times combined and at other times listed separately included the five boroughs of New York City, Dekalb and Fulton counties in Georgia, Shawano and Menominee counties in Wisconsin, and Park County and Yellowstone National Park in Wyoming. Each of these cases was treated as a single county since not all data was available for the separate counties.

Another problem was the name and code number change from Muscogee county to Columbus City in the most recent updating of the FIPS codes for Georgia. This presented no difficulties once the mapping was changed from the old FIPS number to the new number.

VI.   Other Programs

Certain auxiliary programs are deemed useful enough to be included in this report and on the Master Transmittal Tape. They are listed in Appendix 6.

Program NAMELIST

This program prints an alphabetical listing of the counties making up either the NNS zones or the BEA zones as specified by the numerical data sets NNS and BEA; see descriptions of these data in Section III. Program NAMELIST exists solely for the purpose of listing the contents of these data sets in a form suitable for easy checking; it was used to produce Appendices 3 and 4.

Input is read from logical units 10, 11, 12 and 13, as follows:

L.U. 10   FIPSBEA (alphabetic field only).

L.U. 11   An integer, the number of entries in the table
             to follow on L.U. 12.

L.U. 12   Either the NNS or BEA data set.

L.U. 13   BEAFIPS

Printed output is divided between L.U. 6 (error messages) and L.U. 15 (the alphabetical listing). After program execution, L.U. 15 can be printed using the EXEC 8 control sequence

@DATA 15.

@END.

NAMELIST does not provide output for certain NNS zones in New England and Alaska. These zones were specially handled without the use of the computer for reasons described elsewhere. Further, the output for BEA zones will be absent for all counties that lie in these special NNS zones. A field of asterisks is printed in these cases.

It remains to describe data set BEAFIPS since FIPSBEA was described in the previous Section.

BEAFIPS This data set provides an indirect inverse for the FIPSBEA table. For each BEA zone, it gives the "record" number in the FIPSBEA table to which it corresponds. There is one record per county in FIPSBEA, arranged by FIPS code. Thus BEAFIPS provides access to county data (i.e., the name of the county) by way of BEA county code rather than FIPS county code.

Program FBBFC

This program exists solely to check the compatibility of date sets FIPSBEA and BEAFIPS. In other words, it merely verifies that no matter whether BEA or FIPS codes are specified, the same county record is retrieved from data set FIPSBEA.

VII. Master Transmittal Tapes

There are two Master Transmittal Tapes, which are exact duplicates of each other. They exist on NBS reel numbers A019 and A045 in the tape library of the NBS central computer facility, Room A27, Administration Building. They are recorded as 9 track labelled tapes, odd parity, 800 frames per inch. A rental fee of $.50 per tape per pay period (2 weeks) is being charged against the project computer account. This charge will continue until the Computer Room is told to release the tapes. The Computer Services Division will transfer the charges to another account upon request.

The fact that the Master Transmittal Tapes are "labelled" means that the computer system will not permit them to be used (neither read nor written) unless the control card "assigning" the tape contains certain information that matches exactly the information in the tape label. The tape label is recorded on the tape and may have nothing to do with external labels appearing on the reel. The system checks every tape that is mounted to see if it has a label, and if so, to compare it against the assigning control card. This protection will last until 23 October 1978, the "expiration date" recorded as part of the tape label.

The control cards that will "assign" the Master Transmittal Tapes in "read only" mode are

        @ASG,T LBEA*NNSBEA1.,8C9,A019

        @ASG,T LBEA*NNSBEA2.,8C9,A045

Other forms of these cards are required if any alteration of the tapes is desired.

The tapes contain 14 "files" of information - data and programs. These files are described below.

File 1   Copy of tape received from BEA. Format: EBCDIC, logical record length 250 characters, physical record length 1250 characters (5 logical records), tape consists of a short header record plus 615 physical records. Each logical record is for one county in the United States; in this listing there are 3074 counties. Logical record format: cols. 9-14, BEA county code; cols. 25-30, BEA zone number; cols. 64-100, county and state name; other columns contain information of no interest.

File 2   Copy of tape received from BEA. Format: EBCDIC, logical record length 110 characters, physical record length 1100 characters (10 logical records), tape consists of 34 physical records. Each logical record corresponds to a state, county or independent city; in this listing there are a

File 5   FIPSBEA   There is one record per county. Cols. 1-5 contain the FIPS county code, cols. 7-20 contain the state and county name, cols. 60-65 contain the BEA county code.

File 6   BEAFIPS   This is in 10I10 format and is used by program NAMELIST.   See Section VI.

File 7   INCOME   There is one record per county. Cols. 2-6 contain the FIPS county code; total personal income for each county in the years 1969-1973 is given in cols. 14-23, 24-33, 34-43, 44-53 and 54-63. This file is an edited version of File 3.

File 8   EARNINGS   There is one record per county. Identical to File 7 in format, but gives total earnings by county instead of total personal income. This file is an edited version of File 4.

File 9   INDEX   This file is in binary format and is used by program MAIN.   See Section III.

File 10   NNS   This file is in 10I10 format and is used by program MAIN.   See Section III.

File 11   BEA   This file is in 10I10 format and is used by program MAIN.   See Section III.

File 12   NDX   See Appendix 1 for a listing.

File 13   PCT   See Appendix 2 for a listing.

File 14   This is the program file containing all programs and subroutines described in this report.

Appendix 1

Data Sets NDX and PCT

```
      DATA (NDX(I),I=   1,  40)/
 1.       1,     -1,      2,      2,      2,     -8,    -15,      3,      4,      3,
 2.     -25,      4,      4,      4,      4,      4,      4,      4,      4,      4,
 3.     -35,      6,    -42,    -49,      4,    -56,    -63,      4,    -70,      5,
 4.       5,      5,      5,      5,    -77,      5,    -84,      5,     14,     14/
      DATA (NDX(I),I=  41, 230)/
 1.     -91,      6,      6,      7,      7,      7,      8,      9,      9,      9,
 2.      10,    -98,     12,   -108,      6,     14,     14,      0,      0,     14,
 3.      14,   -118,     15,     15,     15,     15,     15,     15,     16,   -125,
 4.      13,     13,   -132,   -142,   -152,     66,     66,     66,     16,     16,
 5.      16,   -162,     16,     15,     17,     17,     17,   -172,     18,     18,
 6.      68,     68,     67,     68,     68,     68,     66,     66,     66,   -186,
 7.      68,   -193,     64,   -200,   -207,     62,     62,     63,     63,   -217,
 8.      69,   -227,     70,   -237,   -244,     75,   -251,     61,     61,   -267,
 9.    -277,     60,     60,     55,     56,     59,   -310,     76,     77,     77,
 *.      77,     82,   -317,   -330,     79,     78,     78,   -350,     58,
 1.    -357,     57,     57,     57,   -373,   -380,      0,   -390,   -400,   -410,
 2.      74,     74,     71,      0,     71,     71,   -420,     72,     72,     71,
 3.      74,   -427,     73,     73,   -434,   -441,   -448,   -455,   -462,   -469,
 4.    -482,     85,     84,     84,     84,     83,   -502,   -512,   -522,
 5.    -532,     17,   -539,     22,     22,     21,   -556,   -563,   -573,
 6.      20,     20,   -580,     51,   -590,     19,   -597,     52,     52,     52,
 7.    -620,     53,   -633,   -643,     54,   -656,     46,     46,     49,
 8.    -689,   -699,   -706,     50,   -713,   -669,   -682,   -740,
 9.      25,   -750,     23,     23,   -760,   -767,   -720,   -727,     26,   -781/
      DATA (NDX(I),I= 231, 420)/
 1.    -791,   -798,     29,   -811,     28,   -827,     44,   -834,     32,   -844,
 2.      33,   -857,     42,   -870,     43,     41,   -880,     38,   -887,     34,
 3.    -894,     35,     37,   -904,   -914,      0,      0,     36,   -921,     39,
 4.    -928,    137,   -938,     40,   -951,     45,     45,   -964,     47,     45,
 5.    -971,   -981,   -994,    135,   -1007,    138,   -1023,    138,   -1030,    139,
 6.     139,   -1040,    133,   -1047,    132,   -1054,   -1061,    117,   -1074,
 7.   -1081,    118,   -1088,   -1101,     87,     87,   -1108,   -1121,   -1131,     91,
 8.   -1138,   -1148,    103,   -1161,   -1168,    105,     81,   -1178,   -1191,     80,
 9.   -1204,   -1214,    106,   -1227,   -1234,    111,    111,    111,   -1244,    116,
 *.   -1257,   -1264,    114,     93,   -1274,   -1287,   -1294,     97,    100,   -1301,
 1.     100,   -1311,     99,    101,    102,   -1321,   -1328,   -1338,    102,   -1345,
 2.     108,   -1355,    107,    109,   -1362,    111,   -1372,    110,   -1382,    110,
 3.   -1389,    109,    119,   -1396,   -1403,   -1419,    120,   -1432,    121,   -1439,
 4.   -1446,    131,   -1446,   -1456,    130,    140,    141,   -1466,   -1485,    143,
 5.   -1498,    144,    144,    143,   -1505,    142,    129,   -1512,    128,    127,
 6.     127,    127,   -1522,   -1529,    121,   -1551,    122,    122,    122,   -1564,
 7.     123,   -1571,    125,    124,    124,   -1590,    126,   -1600,    127,    162,
 8.   -1607,    163,    162,    162,    162,   -1614,   -1621,   -1628,   -1635,    146,
 9.     145,    141,   -1645,   -1652,     94,   -1659,   -1666,     95,     95,   -1679/
      DATA (NDX(I),I= 421, 509)/
 1.   -1686,   -1693,   -1703,   -1716,   -1729,   -1736,   -1743,   -1750,   -1757,    151,
 2.     151,    151,    151,   -1767,   -1774,   -1784,    149,   -1784,    148,    148,
 3.   -1797,    147,    147,   -1804,   -1811,   -1811,    154,   -1818,   -1825,    155,
 4.   -1835,    155,    157,    157,   -1842,    156,    159,    158,    158,    155,
 5.     158,   -1849,   -1856,   -1863,    168,    171,    171,    167,   -1873,    158,
 6.   -1886,    171,    171,   -1893,    166,   -1900,    165,    165,    165,    165,
 7.     165,    164,    165,    161,    161,    160,    160,    160,   -1907,    165,
 8.       0,      0,      0,      0,    172,    172,    172,    172,    172,    172,
 +.     172,    172,    172,    173,    173,    173,    173,    173,    173/
END DATA.
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@DATA PCT.
DATA T7 RL70-5 10/10-20:19:07

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 1.          DATA (PCT(I),I=   1,    7)/002002,
 2.     1.0792,.0626,.001,
 3.     2.9204,.9374,.002/
 4.          DATA (PCT(I),I=   8,   14)/006002,
 5.     1.2723,.3296,.002,
 6.     2.7277,.6704,.004/
 7.          DATA (PCT(I),I=  15,   24)/008003,
 8.     1.0935,.0755,.003,
 9.     2.1845,.1641,.005,
10.     3.7220,.7604,.004/
11.          DATA (PCT(I),I=  25,   34)/011003,
12.     1.1900,.1700,.006,
13.     2.6100,.5900,.003,
14.     3.2000,.2400,.005/
15.          DATA (PCT(I),I=  35,   41)/021002,
16.     1.5669,.5410,.005,
17.     2.4331,.4590,.004/
18.          DATA (PCT(I),I=  42,   48)/023002,
19.     1.8078,.8274,.006,
20.     2.1922,.1726,.005/
21.          DATA (PCT(I),I=  49,   55)/024002,
22.     1.0071,.0070,.004,
23.     2.9929,.9930,.005/
24.          DATA (PCT(I),I=  56,   62)/026002,
25.     1.0310,.0330,.005,
26.     2.9690,.9670,.004/
27.          DATA (PCT(I),I=  63,   69)/028002,
28.     1.8984,.8929,.004,
29.     2.1016,.1071,.005/
30.          DATA (PCT(I),I=  70,   76)/029002,
31.     1.2836,.3609,.004,
32.     2.7164,.6391,.005/
33.          DATA (PCT(I),I=  77,   83)/035002,
34.     1.4966,.5057,.005,
35.     2.5034,.4943,.014/
36.          DATA (PCT(I),I=  84,   90)/038002,
37.     1.1034,.1245,.005,
38.     2.8966,.8755,.014/
39.          DATA (PCT(I),I=  91,   97)/041002,
40.     1.8537,.8823,.006,
41.     2.1463,.1177,.007/
42.          DATA (PCT(I),I=  98,  107)/052003,
43.     1.3012,.3009,.007,
44.     2.4251,.4648,.012,
45.     3.2737,.2342,.008/
46.          DATA (PCT(I),I= 108,  117)/054003,
47.     1.6756,.6715,.012,
48.     2.2195,.2313,.007,
49.     3.1049,.0972,.006/
50.          DATA (PCT(I),I= 118,  124)/062002,
51.     1.8770,.9156,.014,
52.     2.1230,.0844,.015/
53.          DATA (PCT(I),I= 125,  131)/070002,
54.     1.7241,.7453,.015,
55.     2.2759,.2547,.013/
56.          DATA (PCT(I),I= 132,  141)/073003,
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57.      1.3890,.3320,012,
58.      2.5308,.5801,011,
59.      3.0802,.0879,013/
60.         DATA (PCT(I),I= 142, 151)/074003,
61.      1.6628,.6866,011,
62.      2.1651,.1579,066,
63.      3.1721,.1556,009/
64.         DATA (PCT(I),I= 152, 161)/075003,
65.      1.3399,.3251,066,
66.      2.2970,.3009,010,
67.      3.3631,.3740,067/
68.         DATA (PCT(I),I= 162, 171)/082003,
69.      1.1061,.1171,013,
70.      2.5700,.5903,016,
71.      3.3239,.2926,015/
72.         DATA (PCT(I),I= 172, 178)/088002,
73.      1.3178,.3579,066,
74.      2.6822,.6421,017/
75.         DATA (PCT(I),I= 179, 185)/097002,
76.      1.9659,.9543,068,
77.      2.0341,.0457,066/
78.         DATA (PCT(I),I= 186, 192)/100002,
79.      1.3757,.3953,068,
80.      2.6243,.6047,070/
81.         DATA (PCT(I),I= 193, 199)/102002,
82.      1.9623,.9275,064,
83.      2.0377,.0725,066/
84.         DATA (PCT(I),I= 200, 206)/104002,
85.      1.8229,.8524,064,
86.      2.1771,.1476,052/
87.         DATA (PCT(I),I= 207, 216)/105003,
88.      1.3910,.3718,062,
89.      2.3544,.3676,064,
90.      3.2546,.2606,052/
91.         DATA (PCT(I),I= 217, 226)/110003,
92.      1.2650,.2815,069,
93.      2.5555,.5515,063,
94.      3.1796,.1670,064/
95.         DATA (PCT(I),I= 227, 236)/112003,
96.      1.4940,.4595,068,
97.      2.1478,.1242,069,
98.      3.3583,.4164,064/
99.         DATA (PCT(I),I= 237, 243)/114002,
100.     1.5782,.5992,075,
101.     2.4218,.4008,070/
102.        DATA (PCT(I),I= 244, 250)/115002,
103.     1.3281,.2560,075,
104.     2.6719,.7440,076/
105.        DATA (PCT(I),I= 251, 266)/117005,
106.     1.2422,.2160,075,
107.     2.2397,.2562,061,
108.     3.0948,.0710,059,
109.     4.3892,.4269,060,
110.     5.0341,.0300,076/
111.        DATA (PCT(I),I= 267, 276)/120003,
112.     1.2026,.1934,062,
113.     2.7171,.7416,061,
114.     3.0803,.0650,060/
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115.       DATA (PCT(I),I= 277, 286)/121003,
116.     1.7184,.7638,.060,
117.     2.1826,.1608,.054,
118.     3.0990,.0754,.062/
119.       DATA (PCT(I),I= 287, 299)/123004,
120.     1.1286,.0951,.054,
121.     2.6389,.7192,.055,
122.     3.0758,.0541,.056,
123.     4.1567,.1316,.060/
124.       DATA (PCT(I),I= 300, 309)/126003,
125.     1.6249,.6557,.059,
126.     2.1313,.0973,.056,
127.     3.2438,.2470,.060/
128.       DATA (PCT(I),I= 310, 316)/128002,
129.     1.1575,.1405,.059,
130.     2.8425,.8595,.077/
131.       DATA (PCT(I),I= 317, 329)/133004,
132.     1.2763,.2882,.079,
133.     2.2276,.2250,.077,
134.     3.0634,.0485,.081,
135.     4.4327,.4383,.082/
136.       DATA (PCT(I),I= 330, 339)/134003,
137.     1.1502,.1236,.079,
138.     2.7717,.8199,.077,
139.     3.0781,.0565,.078/
140.       DATA (PCT(I),I= 340, 349)/136003,
141.     1.7459,.8027,.078,
142.     2.1783,.1434,.113,
143.     3.0758,.0540,.079/
144.       DATA (PCT(I),I= 350, 356)/139002,
145.     1.3912,.4189,.058,
146.     2.6088,.5811,.077/
147.       DATA (PCT(I),I= 357, 372)/141005,
148.     1.1243,.1277,.056,
149.     2.2463,.2588,.114,
150.     3.3888,.4044,.058,
151.     4.1215,.1232,.055,
152.     5.1190,.0859,.057/
153.       DATA (PCT(I),I= 373, 379)/145002,
154.     1.8455,.8455,.114,
155.     2.1545,.1545,.057/
156.       DATA (PCT(I),I= 380, 389)/146003,
157.     1.1769,.1755,.115,
158.     2.6528,.6663,.114,
159.     3.1703,.1583,.055/
160.       DATA (PCT(I),I= 390, 399)/148003,
161.     1.5059,.5415,.113,
162.     2.1849,.1255,.114,
163.     3.3092,.3330,.057/
164.       DATA (PCT(I),I= 400, 409)/149003,
165.     1.1646,.1320,.073,
166.     2.2308,.1904,.074,
167.     3.6046,.6776,.076/
168.       DATA (PCT(I),I= 410, 419)/150003,
169.     1.6198,.6233,.074,
170.     2.2432,.2454,.070,
171.     3.1370,.1313,.076/
172.       DATA (PCT(I),I= 420, 426)/157002,
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173.    1.3119,.3090,072,
174.    2.6881,.6910,071,
175.        DATA (PCT(I),I= 427, 433)/162002,
176.    1.5139,.5652,072,
177.    2.4861,.4348,073/
178.        DATA (PCT(I),I= 434, 440)/165002,
179.    1.4531,.4483,072,
180.    2.5469,.5517,073/
181.        DATA (PCT(I),I= 441, 447)/166002,
182.    1.5206,.5072,085,
183.    2.4794,.4928,072/
184.        DATA (PCT(I),I= 448, 454)/167002,
185.    1.8495,.8346,045,
186.    2.1505,.1654,087/
187.        DATA (PCT(I),I= 455, 461)/168002,
188.    1.1120,.0638,087,
189.    2.8880,.9362,086/
190.        DATA (PCT(I),I= 462, 468)/169002,
191.    1.3915,.3559,085,
192.    2.6085,.6441,086/
193.        DATA (PCT(I),I= 469, 481)/170004,
194.    1.0231,.0113,083,
195.    2.4884,.4608,089,
196.    3.2692,.2770,086,
197.    4.2193,.2509,088/
198.        DATA (PCT(I),I= 482, 494)/171004,
199.    1.6196,.6286,085,
200.    2.2711,.2751,084,
201.    3.0543,.0434,083,
202.    4.0550,.0529,086/
203.        DATA (PCT(I),I= 495, 501)/176002,
204.    1.5851,.5534,084,
205.    2.4149,.4466,082/
206.        DATA (PCT(I),I= 502, 511)/178003,
207.    1.5620,.5490,081,
208.    2.2850,.2922,082,
209.    3.1530,.1587,083/
210.        DATA (PCT(I),I= 512, 521)/179003,
211.    1.7550,.7732,083,
212.    2.0926,.0943,081,
213.    3.1524,.1324,089/
214.        DATA (PCT(I),I= 522, 531)/180003,
215.    1.5075,.5529,088,
216.    2.4355,.3829,091,
217.    3.0570,.0642,086/
218.        DATA (PCT(I),I= 532, 538)/181002,
219.    1.5806,.6072,087,
220.    2.4194,.3928,088/
221.        DATA (PCT(I),I= 539, 548)/183003,
222.    1.4067,.4172,021,
223.    2.1684,.1120,022,
224.    3.4249,.4708,018/
225.        DATA (PCT(I),I= 549, 555)/186002,
226.    1.5805,.5924,021,
227.    2.4195,.4076,022/
228.        DATA (PCT(I),I= 556, 562)/188002,
229.    1.5726,.5670,021,
230.    2.4274,.4330,020/
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231.          DATA (PCT(I),I= 563, 572)/189003,
232.         1.6910,.7490,.019,
233.         2.2033,.1699,.018,
234.         3.1057,.0811,021/
235.          DATA (PCT(I),I= 573, 579)/190002,
236.         1.3843,.3130,020,
237.         2.6157,.6870,019/
238.          DATA (PCT(I),I= 580, 589)/193003,
239.         1.0148,.0104,051,
240.         2.1379,.1068,025,
241.         3.8473,.8828,020/
242.          DATA (PCT(I),I= 590, 596)/195002,
243.         1.7292,.7092,052,
244.         2.2708,.2908,051/
245.          DATA (PCT(I),I= 597, 606)/197003,
246.         1.8136,.8368,065,
247.         2.1264,.1171,052,
248.         3.0600,.0461,066/
249.          DATA (PCT(I),I= 607, 619)/198004,
250.         1.3715,.3719,052,
251.         2.0173,.0129,065,
252.         3.4892,.5379,064,
253.         4.1220,.0773,066/
254.          DATA (PCT(I),I= 620, 632)/201004,
255.         1.5070,.5463,053,
256.         2.1919,.1899,062,
257.         3.1825,.1618,052,
258.         4.1186,.1019,054/
259.          DATA (PCT(I),I= 633, 642)/203003,
260.         1.4032,.3985,050,
261.         2.2970,.2856,053,
262.         3.2998,.3159,052/
263.          DATA (PCT(I),I= 643, 655)/204004,
264.         1.4124,.3817,053,
265.         2.1244,.1233,049,
266.         3.4367,.4747,054,
267.         4.0266,.0203,050/
268.          DATA (PCT(I),I= 656, 668)/206004,
269.         1.2890,.2749,115,
270.         2.0606,.0374,054,
271.         3.2690,.3191,049,
272.         4.3813,.3686,055/
273.          DATA (PCT(I),I= 669, 681)/207004,
274.         1.0271,.0136,049,
275.         2.8131,.8196,046,
276.         3.0649,.0577,047,
277.         4.0950,.1090,115/
278.          DATA (PCT(I),I= 682, 688)/209002,
279.         1.8906,.9024,049,
280.         2.1094,.0976,047/
281.          DATA (PCT(I),I= 689, 698)/211003,
282.         1.1711,.1256,048,
283.         2.6332,.6808,049,
284.         3.1957,.1936,050/
285.          DATA (PCT(I),I= 699, 705)/212002,
286.         1.9823,.9878,048,
287.         2.0177,.0122,044/
288.          DATA (PCT(I),I= 706, 712)/213002,
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289.    1.6017,.6670,048,
290.    2.3983,.3330,050/
291.    DATA (PCT(I),I= 713, 719)/215002,
292.    1.2814,.2501,050,
293.    2.7186,.7499,051/
294.    DATA (PCT(I),I= 720, 726)/216002,
295.    1.0687,.0788,048,
296.    2.9313,.9212,027/
297.    DATA (PCT(I),I= 727, 739)/218004,
298.    1.7764,.7916,026,
299.    2.1419,.1415,025,
300.    3.0653,.0579,027,
301.    4.0165,.0090,028/
302.    DATA (PCT(I),I= 740, 749)/220003,
303.    1.5123,.5432,026,
304.    2.1849,.1861,023,
305.    3.3028,.2708,025/
306.    DATA (PCT(I),I= 750, 759)/222003,
307.    1.6228,.6360,025,
308.    2.0430,.0307,020,
309.    3.3342,.3332,023/
310.    DATA (PCT(I),I= 760, 766)/225002,
311.    1.8259,.8425,023,
312.    2.1741,.1575,022/
313.    DATA (PCT(I),I= 767, 773)/226002,
314.    1.7255,.7402,024,
315.    2.2745,.2598,023/
316.    DATA (PCT(I),I= 774, 780)/228002,
317.    1.6884,.6632,023,
318.    2.3116,.3368,024/
319.    DATA (PCT(I),I= 781, 790)/230003,
320.    1.6552,.6559,030,
321.    2.2632,.2631,029,
322.    3.0817,.0811,026/
323.    DATA (PCT(I),I= 791, 797)/231002,
324.    1.5707,.4759,031,
325.    2.4293,.5241,028/
326.    DATA (PCT(I),I= 798, 810)/232004,
327.    1.1464,.1526,032,
328.    2.5426,.5355,031,
329.    3.2759,.2873,029,
330.    4.0351,.0245,033/
331.    DATA (PCT(I),I= 811, 826)/234005,
332.    1.5139,.5096,028,
333.    2.2832,.3234,031,
334.    3.1232,.1082,026,
335.    4.0319,.0226,032,
336.    5.0478,.0362,029/
337.    DATA (PCT(I),I= 827, 833)/236002,
338.    1.7615,.7365,044,
339.    2.2385,.2635,048/
340.    DATA (PCT(I),I= 834, 843)/238003,
341.    1.2169,.2319,042,
342.    2.6365,.6587,044,
343.    3.1466,.1094,032/
344.    DATA (PCT(I),I= 844, 856)/240004,
345.    1.5959,.6014,033,
346.    2.2034,.2008,032,
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347.        3.1781,.1832,.042,
348.        4.0226,.0146,.034/
349.            DATA (PCT(I),I= 857, 869)/242004,
350.        1.0932,.0990,.033,
351.        2.4545,.4611,.041,
352.        3.1705,.1449,.042,
353.        4.2818,.2950,.034/
354.            DATA (PCT(I),I= 870, 879)/244003,
355.        1.5412,.5120,.044,
356.        2.1627,.1654,.042,
357.        3.2961,.3226,.043/
358.            DATA (PCT(I),I= 880, 886)/247002,
359.        1.8041,.7997,.041,
360.        2.1959,.2003,.043/
361.            DATA (PCT(I),I= 887, 893)/249002,
362.        1.7427,.7600,.034,
363.        2.2573,.2400,.038/
364.            DATA (PCT(I),I= 894, 903)/251003,
365.        1.4188,.4876,.034,
366.        2.1601,.1077,.037,
367.        3.4211,.4047,.035/
368.            DATA (PCT(I),I= 904, 913)/254003,
369.        1.2752,.3379,.035,
370.        2.5891,.5370,.037,
371.        3.1357,.1251,.036/
372.            DATA (PCT(I),I= 914, 920)/255002,
373.        1.7003,.6406,.037,
374.        2.2997,.3594,.036/
375.            DATA (PCT(I),I= 921, 927)/259002,
376.        1.6203,.6060,.038,
377.        2.3797,.3940,.039/
378.            DATA (PCT(I),I= 928, 937)/261003,
379.        1.8826,.8994,.040,
380.        2.0311,.0258,.137,
381.        3.0862,.0748,.039/
382.            DATA (PCT(I),I= 938, 950)/263004,
383.        1.3909,.3888,.040,
384.        2.1987,.1468,.045,
385.        3.1658,.1810,.136,
386.        4.2446,.2834,.137/
387.            DATA (PCT(I),I= 951, 963)/265004,
388.        1.5374,.5492,.045,
389.        2.2805,.2779,.043,
390.        3.0261,.0174,.044,
391.        4.1560,.1555,.040/
392.            DATA (PCT(I),I= 964, 970)/268002,
393.        1.3637,.3190,.045,
394.        2.6363,.6810,.047/
395.            DATA (PCT(I),I= 971, 980)/271003,
396.        1.1035,.0779,.045,
397.        2.5286,.5625,.048,
398.        3.3679,.3596,.047/
399.            DATA (PCT(I),I= 981, 993)/272004,
400.        1.0859,.0924,.047,
401.        2.4196,.3859,.046,
402.        3.4397,.4718,.045,
403.        4.0548,.0499,.134/
404.            DATA (PCT(I),I= 994,1006)/273004,
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405.    1.2660,.2501,135,
406.    2.3845,.3963,134,
407.    3.1431,.1502,045,
408.    4.2064,.2033,136/
409.       DATA (PCT(I),I=1007,1022)/275005,
410.    1.2811,.2639,138,
411.    2.0790,.0691,135,
412.    3.2441,.2321,136,
413.    4.3810,.4217,137,
414.    5.0148,.0131,134/
415.       DATA (PCT(I),I=1023,1029)/277002,
416.    1.7769,.7596,138,
417.    2.2231,.2404,139/
418.       DATA (PCT(I),I=1030,1039)/279003,
419.    1.6432,.6411,139,
420.    2.3071,.3100,133,
421.    3.0496,.0489,138/
422.       DATA (PCT(I),I=1040,1046)/282002,
423.    1.8642,.9055,133,
424.    2.1358,.0945,138/
425.       DATA (PCT(I),I=1047,1053)/284002,
426.    1.6236,.6481,132,
427.    2.3764,.3519,133/
428.       DATA (PCT(I),I=1054,1060)/286002,
429.    1.8977,.9165,134,
430.    2.1023,.0835,117/
431.       DATA (PCT(I),I=1061,1073)/287004,
432.    1.1034,.0994,046,
433.    2.3310,.3450,134,
434.    3.2050,.1877,117,
435.    4.3606,.3678,131/
436.       DATA (PCT(I),I=1074,1080)/290002,
437.    1.5720,.5452,117,
438.    2.4280,.4548,046/
439.       DATA (PCT(I),I=1081,1087)/291002,
440.    1.3174,.2898,117,
441.    2.6826,.7102,046/
442.       DATA (PCT(I),I=1088,1100)/293004,
443.    1.2702,.2295,116,
444.    2.6157,.6711,119,
445.    3.0418,.0383,118,
446.    4.0723,.0610,117/
447.       DATA (PCT(I),I=1101,1107)/294002,
448.    1.7598,.7525,117,
449.    2.2402,.2475,118/
450.       DATA (PCT(I),I=1108,1120)/297004,
451.    1.1755,.1644,097,
452.    2.1385,.1246,091,
453.    3.4358,.4506,092,
454.    4.2502,.2603,087/
455.       DATA (PCT(I),I=1121,1130)/298003,
456.    1.8238,.8087,091,
457.    2.0636,.0722,087,
458.    3.1127,.1191,097/
459.       DATA (PCT(I),I=1131,1137)/299002,
460.    1.6732,.6694,091,
461.    2.3268,.3306,099/
462.       DATA (PCT(I),I=1138,1147)/301003,
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463.    1.5230,.4867,091,
464.    2.3873,.4271,090,
465.    3.0896,.0862,089/
466.         DATA (PCT(I),I=1148,1160)/302004,
467.    1.4608,.4698,104,
468.    2.3472,.3430,103,
469.    3.1000,.1008,105,
470.    4.0919,.0864,099/
471.         DATA (PCT(I),I=1161,1167)/304002,
472.    1.8878,.8921,105,
473.    2.1122,.1079,104/
474.         DATA (PCT(I),I=1168,1177)/305003,
475.    1.4157,.4234,081,
476.    2.4865,.4670,105,
477.    3.0979,.1096,103/
478.         DATA (PCT(I),I=1178,1190)/308004,
479.    1.1643,.1593,107,
480.    2.2276,.1992,106,
481.    3.5241,.5578,104,
482.    4.0840,.0837,103/
483.         DATA (PCT(I),I=1191,1203)/309004,
484.    1.1406,.1331,080,
485.    2.1385,.1293,105,
486.    3.0699,.0685,104,
487.    4.6510,.6692,106/
488.         DATA (PCT(I),I=1204,1213)/311003,
489.    1.5674,.5728,080,
490.    2.3276,.3419,079,
491.    3.1051,.0852,081/
492.         DATA (PCT(I),I=1214,1226)/312004,
493.    1.5164,.4677,106,
494.    2.2969,.3537,113,
495.    3.1356,.1335,079,
496.    4.0511,.0451,080/
497.         DATA (PCT(I),I=1227,1233)/314002,
498.    1.3712,.3543,106,
499.    2.6288,.6457,107/
500.         DATA (PCT(I),I=1234,1243)/315003,
501.    1.7058,.7286,112,
502.    2.1396,.1133,113,
503.    3.1546,.1581,114/
504.         DATA (PCT(I),I=1244,1256)/319004,
505.    1.3551,.3058,111,
506.    2.2626,.2722,112,
507.    3.1161,.0934,116,
508.    4.2661,.3286,114/
509.         DATA (PCT(I),I=1257,1263)/321002,
510.    1.9467,.9564,116,
511.    2.0533,.0436,114/
512.         DATA (PCT(I),I=1264,1273)/322003,
513.    1.6411,.6753,115,
514.    2.3307,.3004,114,
515.    3.0282,.0243,116/
516.         DATA (PCT(I),I=1274,1286)/325004,
517.    1.7409,.7645,092,
518.    2.1335,.1201,097,
519.    3.0735,.0673,093,
520.    4.0521,.0480,096/
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521.            DATA (PCT(I),I=1287,1293)/326002,
522.       1.9417,.9473,.096,
523.       2.0583,.0527,.093/
524.            DATA (PCT(I),I=1294,1300)/327002,
525.       1.6133,.5824,.097,
526.       2.3867,.4176,.096/
527.            DATA (PCT(I),I=1301,1310)/330003,
528.       1.3122,.3172,.099,
529.       2.5388,.5300,.098,
530.       3.1490,.1528,.100/
531.            DATA (PCT(I),I=1311,1320)/332003,
532.       1.4385,.4240,.099,
533.       2.5087,.5182,.103,
534.       3.0528,.0578,.100/
535.            DATA (PCT(I),I=1321,1327)/336002,
536.       1.1721,.1654,.102,
537.       2.8279,.8346,.103/
538.            DATA (PCT(I),I=1328,1337)/337003,
539.       1.4549,.4486,.103,
540.       2.0530,.0494,.102,
541.       3.4921,.5020,.107/
542.            DATA (PCT(I),I=1338,1344)/338002,
543.       1.8619,.8723,.102,
544.       2.1381,.1277,.148/
545.            DATA (PCT(I),I=1345,1354)/340003,
546.       1.5976,.5906,.108,
547.       2.2855,.3140,.102,
548.       3.1168,.0954,.107/
549.            DATA (PCT(I),I=1355,1361)/342002,
550.       1.1959,.1455,.107,
551.       2.8041,.8545,.108/
552.            DATA (PCT(I),I=1362,1371)/345003,
553.       1.8315,.8529,.111,
554.       2.0549,.0488,.110,
555.       3.1136,.0983,.109/
556.            DATA (PCT(I),I=1372,1381)/347003,
557.       1.5221,.5475,.116,
558.       2.4313,.4132,.111,
559.       3.0465,.0394,.110/
560.            DATA (PCT(I),I=1382,1388)/349002,
561.       1.7259,.7186,.110,
562.       2.2741,.2814,.109/
563.            DATA (PCT(I),I=1389,1395)/351002,
564.       1.8317,.8326,.109,
565.       2.1683,.1674,.110/
566.            DATA (PCT(I),I=1396,1402)/354002,
567.       1.7997,.7663,.119,
568.       2.2003,.2337,.116/
569.            DATA (PCT(I),I=1403,1418)/355005,
570.       1.0345,.0310,.120,
571.       2.1357,.1086,.127,
572.       3.1700,.1709,.131,
573.       4.1051,.1006,.118,
574.       5.5547,.5889,.119/
575.            DATA (PCT(I),I=1419,1431)/356004,
576.       1.7102,.6825,.120,
577.       2.1698,.1731,.121,
578.       3.0204,.0173,.127,
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579.       4.0996,.1272,118/
580.       DATA (PCT(I),I=1432,1438)/358002,
581.       1.4488,.4311,120,
582.       2.5512,.5689,121/
583.       DATA (PCT(I),I=1439,1445)/360002,
584.       1.6168,.6045,120,
585.       2.3832,.3955,119/
586.       DATA (PCT(I),I=1446,1455)/363003,
587.       1.2728,.2645,131,
588.       2.2576,.2465,127,
589.       3.4697,.4890,130/
590.       DATA (PCT(I),I=1456,1465)/364003,
591.       1.7369,.7631,130,
592.       2.1345,.1121,140,
593.       3.1286,.1248,141/
594.       DATA (PCT(I),I=1466,1484)/368006,
595.       1.0231,.0267,124,
596.       2.0865,.0687,141,
597.       3.4206,.5076,128,
598.       4.3187,.2861,129,
599.       5.0445,.0338,130,
600.       6.1066,.0772,127/
601.       DATA (PCT(I),I=1485,1497)/369004,
602.       1.1231,.1320,143,
603.       2.0888,.0645,129,
604.       3.4843,.5065,142,
605.       4.3037,.2970,141/
606.       DATA (PCT(I),I=1498,1504)/371002,
607.       1.7959,.7925,143,
608.       2.2041,.2075,144/
609.       DATA (PCT(I),I=1505,1511)/375002,
610.       1.8286,.8199,142,
611.       2.1714,.1801,143/
612.       DATA (PCT(I),I=1512,1521)/378003,
613.       1.5135,.4539,142,
614.       2.3148,.3383,129,
615.       3.1717,.2078,126/
616.       DATA (PCT(I),I=1522,1528)/383002,
617.       1.2193,.1733,121,
618.       2.7807,.8267,127/
619.       DATA (PCT(I),I=1529,1550)/384007,
620.       1.1151,.0857,128,
621.       2.1414,.1304,125,
622.       3.5373,.6059,145,
623.       4.0383,.0235,140,
624.       5.1163,.1087,127,
625.       6.0241,.0220,126,
626.       7.0245,.0237,121/
627.       DATA (PCT(I),I=1551,1563)/386004,
628.       1.4574,.4177,121,
629.       2.1153,.1195,122,
630.       3.3570,.3924,123,
631.       4.0703,.0704,125/
632.       DATA (PCT(I),I=1564,1570)/390002,
633.       1.7555,.7268,123,
634.       2.2445,.2732,122/
635.       DATA (PCT(I),I=1571,1589)/392006,
636.       1.1269,.1073,130,
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637.    2.4247,.4481,124,
638.    3.0207,.0182,126,
639.    4.2557,.2479,125,
640.    5.0849,.0858,123,
641.    6.0870,.0927,122/
642.         DATA (PCT(I),I=1590,1599)/396003,
643.    1.5354,.5510,124,
644.    2.3702,.3649,142,
645.    3.0944,.0841,126/
646.         DATA (PCT(I),I=1600,1606)/398002,
647.    1.2197,.2306,145,
648.    2.7803,.7694,124/
649.         DATA (PCT(I),I=1607,1613)/401002,
650.    1.4967,.5001,163,
651.    2.5033,.4999,162/
652.         DATA (PCT(I),I=1614,1620)/406002,
653.    1.7959,.8606,145,
654.    2.2041,.1394,146/
655.         DATA (PCT(I),I=1621,1627)/407002,
656.    1.6724,.6798,146,
657.    2.3276,.3202,149/
658.         DATA (PCT(I),I=1628,1634)/408002,
659.    1.8276,.8177,146,
660.    2.1724,.1823,122/
661.         DATA (PCT(I),I=1635,1644)/409003,
662.    1.8598,.8839,122,
663.    2.0894,.0730,145,
664.    3.0508,.0431,146/
665.         DATA (PCT(I),I=1645,1651)/413002,
666.    1.6793,.6738,153,
667.    2.3207,.3262,094/
668.         DATA (PCT(I),I=1652,1658)/414002,
669.    1.7705,.7648,153,
670.    2.2295,.2352,094/
671.         DATA (PCT(I),I=1659,1665)/416002,
672.    1.9464,.9532,094,
673.    2.0536,.0468,095/
674.         DATA (PCT(I),I=1666,1678)/417004,
675.    1.4664,.4519,093,
676.    2.2940,.3020,095,
677.    3.2119,.2182,094,
678.    4.0277,.0279,096/
679.         DATA (PCT(I),I=1679,1685)/420002,
680.    1.1210,.1282,094,
681.    2.8790,.8718,095/
682.         DATA (PCT(I),I=1686,1692)/421002,
683.    1.6337,.5811,154,
684.    2.3663,.4189,152/
685.         DATA (PCT(I),I=1693,1702)/422003,
686.    1.1382,.1449,159,
687.    2.6362,.6432,152,
688.    3.2255,.2120,154/
689.         DATA (PCT(I),I=1703,1715)/423004,
690.    1.6049,.6192,152,
691.    2.0478,.0378,151,
692.    3.2705,.2863,154,
693.    4.0768,.0566,159,
694.         DATA (PCT(I),I=1716,1728)/424004,
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695.   1.3261,.3208,152,
696.   2.6196,.6315,159,
697.   3.0339,.0298,154,
698.   4.0204,.0179,151/
699.         DATA (PCT(I),I=1729,1735)/425002,
700.   1.9613,.9636,159,
701.   2.0387,.0364,154/
702.         DATA (PCT(I),I=1736,1742)/426002,
703.   1.9035,.9030,095,
704.   2.0965,.0970,100/
705.         DATA (PCT(I),I=1743,1749)/427002,
706.   1.8642,.8554,150,
707.   2.1358,.1446,100/
708.         DATA (PCT(I),I=1750,1756)/428002,
709.   1.9456,.9474,150,
710.   2.0544,.0526,101/
711.         DATA (PCT(I),I=1757,1766)/429003,
712.   1.3479,.3543,150,
713.   2.5512,.5601,151,
714.   3.1009,.0856,152/
715.         DATA (PCT(I),I=1767,1773)/435002,
716.   1.4720,.4692,161,
717.   2.5280,.5308,151/
718.         DATA (PCT(I),I=1774,1783)/436003,
719.   1.2229,.2223,151,
720.   2.2267,.1813,161,
721.   3.5504,.5964,149/
722.         DATA (PCT(I),I=1784,1796)/438004,
723.   1.0959,.0600,147,
724.   2.7394,.7698,148,
725.   3.1576,.1645,149,
726.   4.0071,.0056,150/
727.         DATA (PCT(I),I=1797,1803)/441002,
728.   1.7372,.7918,147,
729.   2.2628,.2082,148/
730.         DATA (PCT(I),I=1804,1810)/444002,
731.   1.9635,.9526,147,
732.   2.0365,.0474,149/
733.         DATA (PCT(I),I=1811,1817)/446002,
734.   1.2406,.2351,154,
735.   2.7594,.7649,155/
736.         DATA (PCT(I),I=1818,1824)/448002,
737.   1.5388,.5072,154,
738.   2.4612,.4928,156/
739.         DATA (PCT(I),I=1825,1834)/449003,
740.   1.6649,.6609,156,
741.   2.3008,.3038,154,
742.   3.0343,.0354,157/
743.         DATA (PCT(I),I=1835,1841)/451002,
744.   1.8391,.8148,155,
745.   2.1609,.1852,157/
746.         DATA (PCT(I),I=1842,1848)/456002,
747.   1.9564,.9559,157,
748.   2.0436,.0441,156/
749.         DATA (PCT(I),I=1849,1855)/463002,
750.   1.5363,.5392,170,
751.   2.4637,.4608,169/
752.         DATA (PCT(I),I=1856,1862)/464002,
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753.        1.6039,.6894,169,
754.        2.3961,.3106,168/
755.          DATA (PCT(I),I=1863,1872)/465003,
756.        1.3998,.4547,168,
757.        2.5477,.4849,171,
758.        3.0525,.0604,169/
759.          DATA (PCT(I),I=1873,1885)/470004,
760.        1.3765,.3946,167,
761.        2.3228,.2667,168,
762.        3.2727,.3056,166,
763.        4.0281,.0331,165/
764.          DATA (PCT(I),I=1886,1892)/471002,
765.        1.6541,.7100,167,
766.        2.3459,.2900,171/
767.          DATA (PCT(I),I=1893,1899)/475002,
768.        1.0933,.0850,165,
769.        2.9067,.9150,166/
770.          DATA (PCT(I),I=1900,1906)/477002,
771.        1.3499,.4079,166,
772.        2.6501,.5921,165/
773.          DATA (PCT(I),I=1907,1913)/490002,
774.        1.9897,.9874,160,
775.        2.0103,.0126,161/
END DATA.
```

.

Appendix 2

Listing of Program MAIN

.

```
LBEA.PRO(1).MAIN(13)

     1          INTEGER BEA
     2          DIMENSION NNS(3525),INDEX(3016,4),BEA(3246),LS(50)
     3          COMMON /IC/NNS1,NNS2
     4          READ(5,10)NNS1,NNS2
     5       10 FORMAT()
     6          READ(7)INDEX
     7          READ (8,20) NNS
     8          READ (9,20) BEA
     9       20 FORMAT(10I10)
    10          IADRS=ISL(NNS,NNS1)-1
    11          LNNSI=0
    12          JPAR=91
    13          CALL SNDX(0,-1)
    14       00 100 I=NNS1,NNS2
    15          IADRS=IADRS+LNNSI+1
    16          IF (NNS(IADRS)/1000.NE.I) GO TO 119
    17          LNNSI=MOD(NNS(IADRS),1000)
    18          IF(LNNSI.EQ.0) GO TO 99
    19          CALL BINSCH(INDEX,3016,NNS(IADRS+1),K)
    20          IF (K.LE.0) GO TO 120
    21          J=INDEX(K,2)
    22          JADPS=ISL(BEA,J)
    23          IF(BEA(JADRS)/1000.NE.J) GO TO 115
    24          LBEAJ=MOD(BEA(JADRS),1000)
    25          CALL CMP(NNS(IADRS+1),LNNSI,BEA(JADRS+1),LBEAJ,NCON,LS)
    26          IF (NCON-LNNSI) 50,60,130
    27       50 CONTINUE
    28          CALL SNDX(-JPAR,I/NNS2)
    29          CALL PAR(IADRS,LNNSI,J,NCON,LS,JPAR,INDEX,NNS,BEA)
    30          GO TO 100
    31       60 CONTINUE
    32          CALL SNDX(J,I/NNS2)
    33          GO TO 100
    34       99 CALL SNOX(0,I/NNS2)
    35      100 CONTINUE
    36      105 ENDFILE24
    37          ENDFILE25
    38          WRITE (6,101)
    39      101 FORMAT('0DONE')
    40          STOP
    41      110 WRITE (6,111) I,IADRS,NNS(IADRS)
    42      111 FORMAT('0ENTRY IN NNS TABLE NOT FOUND'/
    43         1' I,IADRS,NNS(IADRS):',3I10)
    44          GO TO 105
    45      115 WRITE(6,116)J,JADPS,BEA(JADRS)
    46      116 FORMAT('0ENTRY IN BEA TABLE NOT FOUND'/
    47         1' J,JADRS,BEA(JADRS):',3I10)
    48          GO TO 105
    49      120 WRITE (6,121) IADRS,NNS(IADRS),NNS(IADRS+1),K
    50      121 FORMAT('0ENTRY IN INDEX TABLE NOT FOUND'/
    51         1' IADRS,NNS(IADRS),NNS(IADRS+1),K:',4I10)
    52          GO TO 105
    53      130 WRITE (6,131) NCON,LNNSI
    54      131 FORMAT('0UNEXPECTED OUTPUT FROM SUBROUTINE CMP'/
    55         1' NCON,LNNSI:',2I10)
    56          GO TO 105
    57          END
```

(31)

```
 1           FUNCTION ISL(TBL,K)
 2     CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
 3     CCCCC FUNCTION COMPUTES STARTING LOCATION OF K-TH RECORD IN TABLE OF
 4     CCCCC VARIABLE LENGTH RECORDS.  TABLE IS OF THE FORM:
 5     CCCCC (RECORD # TIMES 1000)+#OF WORDS IN THIS RECORD
 6     CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
 7           INTEGER TBL(1)
 8           ISL=1
 9           IF (K.EQ.1) GO TO 20
10           JU=K-1
11           DO 10 J=1,JU
12  10       ISL=ISL+MOD(TBL(ISL),1000)+1
13  20       CONTINUE
14           IF (TBL(ISL)/1000.EQ.K) RETURN
15           WRITE (6,30) K,ISL,TBL(ISL)
16  30       FORMAT('0ALGORITHM TO FIND STARTING LOCATION IN TABLE HAS FAILED'/
17          1' K,ISL,TBL(ISL):',3I10)
18           ENDFILE24
19           ENDFILE25
20           STOP
21           END
```

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LBEA*PRO(1).BINSCH(6)

```
 1          SUBROUTINE BINSCH(LST,LNG,KEY,K)
 2   C      BINARY SEARCH SUBROUTINE.
 3   C      INPUT:
 4   C         LST...LIST OF INTEGERS IN ASCENDING ORDER TO BE SEARCHED
 5   C         LNG...LENGTH OF LIST TO BE SEARCHED
 6   C         KEY...ENTRY IN LIST TO BE LOCATED
 7   C      OUTPUT:
 8   C         K...IF POSITIVE, THE ORDINAL NUMBER OF THE ENTRY IN
 9   C             THE LIST. IF NEGATIVE OR ZERO, THE ENTRY IS NOT
10   C             IN THE LIST, AND ABS(K) IS THE ORDINAL NUMBER
11   C             OF THE LAST ELEMENT IN THE LIST THAT IS LESS
12   C             THAN THE ENTRY. IF ABS(K).EQ.0, THERE IS NO
13   C             ELEMENT IN THE LIST LESS THAN THE ENTRY.
14          DIMENSION LST(1)
15          IL=1
16          IU=LNG
17          K=0
18   10     IF (IU.LT.IL) GO TO 50
19          I=(IL+IU)/2
20          IF (LST(I)-KEY) 20,40,30
21   20     IL=I+1
22          GO TO 10
23   30     IU=I-1
24          GO TO 10
25   40     K=I
26          RETURN
27   50     K=-IU
28          RETURN
29          END
```

END PRT

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```
 1          SUBROUTINE CMP(LST1,LNG1,LST2,LNG2,NCON,LS)
 2    CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
 3    CCCCC SUBROUTINE COMPARES LIST1 OF LENGTH1 WITH LIST2 OF LENGTH2
 4    CCCCC AND RETURNS LS, LIST OF ELEMENTS CONTAINED IN EACH LIST
 5    CCCCC AND NCON, THE LENGTH OF LS
 6    CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
 7          IMPLICIT INTEGER (A-Z)
 8          DIMENSION LST1(LNG1),LST2(LNG2),LS(NCON)
 9          I=1
10          NCON=0
11          DO 20 J=1,LNG2
12          IF (I.GT.LNG1) GO TO 30
13          CALL BINSCH(LST1(I),LNG1-I+1,LST2(J),K)
14          IF (K.GT.0) GO TO 10
15          I=I-K
16          GO TO 20
17    10    CONTINUE
18          NCON=NCON+1
19          LS(NCON)=LST2(J)
20          I=I+K
21    20    CONTINUE
22    30    RETURN
23          END
```

(34)

```
LRFA.PRO(1).SNDX(3)

      1            SUBROUTINE SNDX(INPUT,IND)
      2    CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
      3    CCCCC SUBROUTINE CREATES NDX OUTPUT TABLE ON OUTPUT UNIT 24 CCCCCC
      4    CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
      5            DIMENSION ITEM(10)
      6            COMMON /IC/NNS1,NNS2
      7            DATA IOUT/24/
      8            DATA ITEMCT,LINECT/0,0/
      9            IF(IND.GF.0) GO TO 5
     10            IS=NNS1
     11            IL=MIN(IS+189,NNS2)
     12            RETURN
     13    5       CONTINUE
     14            ITEMCT=ITEMCT+1
     15            ITEM(ITEMCT)=INPUT
     16            IF (IND.EQ.1) GO TO 50
     17            IF (ITEMCT.LT.10) RETURN
     18            ITEMCT=0
     19            IF (LINECT.GT.0) GO TO 20
     20            WRITE (IOUT,10) IS,IL
     21    10      FORMAT(6X,'DATA (NDX(I),I=',I3,1H,,I3,2H)/)
     22            IS=IS+190
     23            IL=MIN(IL+190,NNS2)
     24    20      LINECT=LINECT+1
     25            IF (LINECT-10) 21,24,27
     26    21      WRITE (IOUT,22) LINECT,ITEM
     27    22      FORMAT(I6,10(I5,1H,))
     28            RETURN
     29    24      WRITE (IOUT,25) ITEM
     30    25      FORMAT(5X,1H.,10(I5,1H,))
     31            RETURN
     32    27      L=LINECT-10
     33            IF (L.EQ.9) GO TO 28
     34            WRITE (IOUT,22) L,ITEM
     35            RETURN
     36    28      WRITE (IOUT,29) L,ITEM
     37    29      FORMAT(I6,9(I5,1H,),I5,1H/)
     38            LINECT=0
     39            RETURN
     40    50      CONTINUE
     41            GO TO (51,52,53,54,55,56,57,58,59,60),ITEMCT
     42    51      WRITE (IOUT,151) (ITEM(I),I=1,ITEMCT)
     43    151     FORMAT(5X,1H+,I5,1H/)
     44            GO TO 70
     45    52      WRITE (IOUT,152) (ITEM(I),I=1,ITEMCT)
     46    152     FORMAT(5X,1H+,I5,1H,,I5,1H/)
     47            GO TO 70
     48    53      WRITE (IOUT,153) (ITEM(I),I=1,ITEMCT)
     49    153     FORMAT(5X,1H+,2(I5,1H,),I5,1H/)
     50            GO TO 70
     51    54      WRITE (IOUT,154) (ITEM(I),I=1,ITEMCT)
     52    154     FORMAT(5X,1H+,3(I5,1H,),I5,1H/)
     53            GO TO 70
     54    55      WRITE (IOUT,155) (ITEM(I),I=1,ITEMCT)
     55    155     FORMAT(5X,1H+,4(I5,1H,),I5,1H/)
     56            GO TO 70
     57    56      WRITE (IOUT,156) (ITEM(I),I=1,ITEMCT)
```

(35)

```
156   FORMAT(5X,1H+,5(I5,1H,),I5,1H/)
      GO TO 70
57    WRITE (IOUT,157) (ITEM(I),I=1,ITEMCT)
157   FORMAT(5X,1H+,6(I5,1H,),I5,1H/)
      GO TO 70
58    WRITE (IOUT,158) (ITEM(I),I=1,ITEMCT)
158   FORMAT(5X,1H+,7(I5,1H,),I5,1H/)
      GO TO 70
59    WRITE (IOUT,159) (ITEM(I),I=1,ITEMCT)
159   FORMAT(5X,1H+,8(I5,1H,),I5,1H/)
      GO TO 70
60    WRITE (IOUT,160) (ITEM(I),I=1,ITEMCT)
160   FORMAT(5X,1H+,9(I5,1H,),I5,1H/)
70    ITEMCT=0
      LINECT=0
      IS=1
      IL=100
      RETURN
      END
```

```
 1          SUBROUTINE PAR(IADRS,LNNSI,J,NCON,LS,JPAR,INDEX,NNS,BEA)
 2    CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
 3    CCCCC  SUBROUTINE PAR ***** COMPUTES PERCENTAGE TABLES
 4    CCCCC  L=# OF COUNTIES PROCESSED THUS FAR
 5    CCCCC  L2=# OF BEA ZONES IN NNS ZONE BEING PROCESSED
 6    CCCCC  N1=TOTAL INCOME FOR NNS ZONE BEING PROCESSED
 7    CCCCC  N2=TOTAL EARNINGS FOR NNS ZONE BEING PROCESSED
 8    CCCCC  J1=TOTAL INCOME FOR PART OF CURRENT NNS ZONE IN BEA ZONE J
 9    CCCCC  J2=TOTAL EARNINGS FOR PART OF CURRENT NNS ZONE IN BEA ZONE J
10    CCCCC  JPAR=INITIAL ENTRY ADDRESS FOR TABLES IPCT & PCT
11    CCCCC  IADRS=LOCATION OF 1ST WORD OF CURRENT NNS RECORD IN NNS TABLE
12    CCCCC  LNNSI=# COUNTIES IN CURRENT NNS RECORD
13    CCCCC  J=CURRENT NNS ZONE #
14    CCCCC  NCON=#COUNTIES IN CURRENT NNS RECORD THAT ARE CONTAINED
15    CCCCC     IN CURRENT BEA RECORD
16    CCCCC  LS=LIST OF THESE COUNTIES,NCON IN NUMBER
17    CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
18          INTEGER BEA
19          DIMENSION LS(1),I(50,3),INDEX(3016,1),NNS(1),BEA(1)
20          DIMENSION PCT(50),IPCT(50)
21          EQUIVALENCE (PCT,IPCT)
22          N1=0
23          N2=0
24          DO 15 K=1,LNNSI
25          I(K,1)=NNS(IADRS+K)
26          L4=I(K,1)
27          CALL BINSCH(INDEX,3016,L4,M)
28          IF (M.LE.0) GO TO 20
29          I(K,2)=INDEX(M,3)
30          I(K,3)=INDEX(M,4)
31          N1=N1+I(K,2)
32          N2=N2+I(K,3)
33          GO TO 15
34    15    CONTINUE
35    CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
36    CCCCC  AT THIS POINT THE TABLE I CONTAINS ONE LINE OF THE FORM:
37    CCCCC  I(K,1)=BEA COUNTY CODE
38    CCCCC  I(K,2)=TOTAL PERSONAL INCOME (1970) FOR THIS COUNTY
39    CCCCC  I(K,3)=TOTAL EARNINGS (1970) FOR THIS COUNTY
40    CCCCC  WHERE K RUNS FROM 1 TO THE NUMBER OF COUNTIES IN THE CURRENT NNS ZONE
41    CCCCC  ALSO, N1=TOTAL PERSONAL INCOME (1970) FOR NNS ZONE
42    CCCCC        N2=TOTAL EARNINGS (1970) FOR NNS ZONE
43    C
44    CCCCC  NOW COMPUTE PERCENTAGES AND STORE PCT TABLE
45    CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
46          L=0
47          L2=0
48          LL=1
49    16    J1=0
50          J2=0
51          N=1
52          KK=1
53    25    IF (LS(KK).NE.I(N,1)) GO TO 30
54          J1=J1+I(N,2)
55          J2=J2+I(N,3)
56          I(N,1)=-I(N,1)
57          KK=KK+1
```

(37)

```
58        IF (KK.GT.NCON) GO TO 35
59        N=N+1
60  30    IF (N.GT.LNNSII) GO TO 50
61        GO TO 25
62  35    L3=3*L2
63        L2=L2+1
64        IPCT(L3+3)=J
65        PCT(L3+1)=FLOAT(J1)/FLOAT(N1)
66        PCT(L3+2)=FLOAT(J2)/FLOAT(N2)
67        L=L+NCON
68  CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
69  CCCCC NOW FIND NEXT UNFLAGGED COUNTY AND REPEAT, OR EXIT TO OUTPUT
70  CCCCC CODING IF NO UNFLAGGED COUNTIES REMAIN
71  CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
72        IF (L.EQ.LNNSI) GO TO 70
73        IF (L.GT.LNNSI) GO TO 60
74  36    IF(I(LL,11) 39,37,40
75  37    WRITE(6,38)LL,I(LL,1)
76  38    FORMAT('0ERROR---NO COUNTY CODE'/' LL,I(LL,1)',2I101)
77        GO TO 110
78  39    LL=LL+1
79        IF(LL.GT.LNNSI) GO TO 55
80        GO TO 36
81  40    CALL BINSCH(INDEX,3016,I(LL,1),MI
82        IF(M.LE.01 GO TO 65
83        J=INDEX(M,2)
84        JADRS=ISL(REA,J)
85        IF(REA(JADRS)/1000.NE.J) GO TO 90
86        LREAJ=MOD(REA(JADRS),10001
87        CALL CMP(NNS(IADRS+LL1,LNNSI-LL+1,REA(JADRS+11,LBEAJ,NCON,LS1
88        GO TO 10
89  70    MMM=-M
90        MMI=MMM+1
91        WRITE(6,21)L4,M,INDEX(MMM,11,INDEX(MMI,1),K
92  21    FORMAT('0MISTAKE**ENTRY IN NNS TABLE NOT FOUND'/
93       +' L4,M,INDEX(MMM,11,INDEX(MMI,1),K',5II91
94        GO TO 110
95  50    WRITE(6,51)N,LNNSI,JPAR,IADRS
96  51    FORMAT('0ERROR+++SUBSCRIPT OF I HIGHER THAN DIMENSIONED-CAN''T
97       U''/' FIND LS IN N(SUBSCRIPT),LNNSI(DIMENSION1,JPAR,IADRS',4I5)
98        GO TO 110
99  55    WRITE(6,56)LL,LNNSI,JPAR,IADRS
100 56    FORMAT('0ERROR   CAN''T FIND POSITIVE VALUE FOR I(LL,1)'/
101      U' LL,LNNSI,JPAR,IADRS',4I5)
102       GO TO 110
103 60    WRITE(6,61)L,LNNSI,JPAR,IADRS
104 61    FORMAT('0ERROR   SOME COUNTY WAS PROCESSED MORE THAN ONCE'/
105      1' L,LNNSI,JPAR,IADRS',4I5)
106       GO TO 110
107 65    WRITE(6,66)I(LL,1),M
108 66    FORMAT('0ERROR$$$I(LL,1) NOT FOUND DURING BINSCH OF INDEX'/
109      1'(LL,1),M',2I10,I15)
110       GO TO 110
111 70    IF(L2.GT.9) GO TO 100
112       II=NNS(IADRS1/100*1000+L2
113       KE=JPAR+3*L2
114       WRITE(25,75)JPAR,K5,II
115 75    FORMAT(6X,'DATA (PCT(I),I=',I4,',',I4,')/',J6,'.',')
```

(38)

```
116        K4=L7-1
117        DO 80 K6=1,K4
118        K8=3*K6
119        K7=K8-2
120   80   WRITE(25,81)K6,(PCT(K9),K9=K7,K8)
121   81   FORMAT(5X,I1,F5.4,',',F5.4,',',J3,',')
122        K11=K5-JPAR
123        K10=K11-2
124        WRITE(25,85)L2,(PCT(K9),K9=K10,K11)
125   85   FORMAT(5X,I1,F5.4,',',F5.4,',',J3,',',/)
126        JPAR=K5+1
127        RETURN
128   90   WRITE(6,91)J,JADRS,REA(JADRS)
129   91   FORMAT('0ENTRY IN REA TABLE NOT FOUND'/
130       1' J,JADRS,REA(JADRS):',3I10)
131        GO TO 110
132  100   WRITE(6,105)NNS(IADRS),L2
133  105   FORMAT('0ERROR####L2.GE.10, FORMAT STATEMENTS ARE WRONG'
134       1' NNS(IADRS),L2:',2I6)
135  110   ENDFILE24
136        ENDFILE25
137        STOP
138        END
```

(39)

Appendix 3

Data Set NNS

The first column gives the NNS zone number times
1000 plus the number of counties in the zone.   In
the next six columns, for as many lines as are
needed, the county names (with state name abbrevi-
ations) are listed.   For example, lines 1 and 2
list the 10 counties that comprise NNS zone 10.
NNS zones 1-9 and 12-40 do not appear in the list-
ing because they are part of the special New
England zones for which the NNS to BEA zone mapping
was manually determined.   NNS zones 10 and 11 appear
in spite of the fact that they were treated manually.
Other omissions in the list, such as NNS zone 147,
are due to the fact that certain NNS zones are not
currently defined.

```
@RUN,M/R JOHNA,36131-JACKSO,LBEA,3
@ASG,AX PRO.
@ASG,A FIPSBEA.
@USE 10.,FIPSREA.
@ASG,A ANNS.
@USE 11.,ANNS.
@ASG,A NNS.
@USE 12.,NNS.
@ASG,A BEAFIPS.
@USE 13.,BEAFIPS.
@ASG,A BNNS.
@USE 15.,BNNS.
@XQT PRO.NAMELIST
@FREE 15.
@DATA BNNS.
DATA T7 RL70-5 08/14-09:30:57
```

No.	Code						
1.	10910	VT ADDISON	VT CALEDONIA	VT CHITTENDEN	VT ESSEX	VT FRANKLIN	VT GRAND ISLE
2.		VT LAMOILLE	VT ORANGE	VT ORLEANS	VT WASHINGTON		
3.	11004	VT BENNINGTON	VT RUTLAND	VT WINDHAM	VT WINDSOR		
4.	41005	NY CLINTON	NY ESSEX	NY FRANKLIN	NY WARREN	NY WASHINGTON	
5.	42004	NY ALBANY	NY RENSSELAER	NY SARATOGA	NY SCHENECTADY		
6.	43003	NY FULTON	NY HAMILTON	NY MONTGOMERY			
7.	44003	NY JEFFERSON	NY LEWIS	NY ST LAWRENCE			
8.	45002	NY HERKIMER	NY ONEIDA				
9.	46003	NY MADISON	NY ONONDAGA	NY WAYNE			
10.	47004	NY LIVINGSTON	NY MONROE	NY OSWEGO			
11.	48002	NY GENESEE	NY WYOMING	NY ORLEANS			
12.	49002	NY ERIE	NY NIAGARA				
13.	50003	NY ALLEGANY	NY CATTARAUGUS	NY CHAUTAUQUA			
14.	51001	PA ERIE					
15.	52008	NY CAYUGA	NY CHEMUNG	NY ONTARIO	NY SCHUYLER	NY SENECA	NY STEUBEN
16.		NY TOMPKINS	NY YATES				
17.	53003	NY BROOME	NY TIOGA	PA SUSQUEHANNA			
18.	54005	NY CHENANGO	NY CORTLAND	NY DELAWARE	NY OTSEGO	NY SCHOHARIE	
19.	55002	NY COLUMBIA	NY GREENE				
20.	56005	NY DUTCHESS	NY ORANGE	NY PUTNAM	NY SULLIVAN	NY ULSTER	
21.	58005	NY NASSAU	NY ROCKLAND	NY SUFFOLK	NY WESTCHESTER	NY FIVE BOROS	
22.	60006	NJ BERGEN	NJ ESSEX	NJ HUDSON	NJ MORRIS	NJ PASSAIC	NJ UNION
23.							
24.	61001	NJ SUSSEX	NJ MIDDLESEX	NJ MONMOUTH	NJ OCEAN	NJ SOMERSET	
25.	62005	NJ HUNTERDON					
26.	63001	NJ MERCER					
27.	64001	NJ ATLANTIC					
28.	65002	NJ CAPE MAY	NJ CUMBERLAND				

#	Code						
29.	66008	NJ BURLINGTON	NJ CAMDEN	NJ GLOUCESTER	PA BUCKS	PA CHESTER	PA DELAWARE
30.		PA MONTGOMERY	PA PHILADELPHIA				
31.	67001	PA LANCASTER					
32.	68001	PA BERKS					
33.		NJ WARREN	PA LEHIGH	PA NORTHAMPTON			
34.	69003	PA CARBON	PA MONROE	PA PIKE	PA WAYNE		
35.	70004	PA LACKAWANNA					
36.	71001	PA LUZERNE					
37.	72001	PA BRADFORD	PA LYCOMING	PA SULLIVAN	PA TIOGA	PA WYOMING	
38.	73005	PA CAMERON	PA CENTRE	PA CLEARFIELD	PA CLINTON	PA ELK	PA INDIANA
39.	74009	PA JEFFERSON	PA MCKEAN	PA POTTER			
40.		PA ARMSTRONG	PA BUTLER	PA CLARION	PA CRAWFORD	PA FOREST	
41.	75009	PA MERCER	PA VENANGO	PA WARREN			PA LAWRENCE
42.		PA ALLEGHANY	PA REAVER	PA WASHINGTON	PA WESTMORELAND		
43.	76004	PA FAYETTE	PA GREENE				
44.	77002	PA CAMBRIA	PA SOMERSET				
45.	78002	PA BLAIR					
46.	79001	PA BEDFORD	PA FRANKLIN	PA FULTON	PA HUNTINGDON	PA JUNIATA	PA MIFFLIN
47.	80006						
48.	81003	PA CUMBERLAND	PA DAUPHIN	PA PERRY			
49.	82007	PA COLUMBIA	PA LEBANON	PA MONTOUR	PA NORTHUMBRLND	PA SCHUYLKILL	PA SNYDER
50.		PA UNION					
51.	83002	PA ADAMS	PA YORK				
52.	84003	NJ SALEM	DE NEW CASTLE	MD CECIL			
53.	85002	DE KENT	DE SUSSEX				
54.	86008	MD CAROLINE	MD DORCHESTER	MD KENT	MD QUEEN ANNES	MD SOMERSET	MD TALBOT
55.		MD WICOMICO	MD WORCESTER				
56.	87006	MD ANNE ARUNDEL	MD BALTIMORE	MD BALTIMORE CY	MD CARROLL	MD HARFORD	MD HOWARD
57.							
58.	88004	MD ALLEGANY	MD FREDERICK	MD GARRETT	MD WASHINGTON		
59.	89003	MD CALVERT	MD CHARLES	MD ST MARYS			
60.	90007	MD MONTGOMERY	MD PRINCE GEORG	DC WASHINGTON	VA ARLING?ALEXA	VA FAIRFAX?FALL	VA LOUDOUN
61.		VA PRINCEWILLIA					
62.	91001	OH LORAIN					
63.	92001	OH ASHTABULA					
64.	93002	OH MAHONING					
65.	94004	OH CUYAHOGA	OH GEAUGA	OH LAKE	OH MEDINA		
66.	95002	OH PORTAGE	OH SUMMIT				
67.	96001	OH STARK					
68.	97009	OH ASHLAND	OH CARROLL	OH COLUMBIANA	OH COSHOCTON	OH HARRISON	OH HOLMES
69.		OH KNOX	OH TUSCARAWAS	CH WAYNE			
70.	98003	OH JEFFERSON	WV BROOKE	WV HANCOCK			
71.	99003	OH BELMONT	WV MARSHALL	WV OHIO			
72.	100006	OH ERIE	OH HANCOCK	OH HURON	OH OTTAWA	OH SANDUSKY	OH SENECA
73.							
74.	101001	OH RICHLAND					
75.	102007	OH FAIRFIELD	OH GUERNSEY	OH LICKING	OH MONROE	OH MUSKINGUM	OH NOBLE
76.		OH PERRY					
77.	103003	OH DELAWARE	OH FRANKLIN	OH PICKAWAY			
78.	104008	OH ATHENS	OH GALLIA	OH HOCKING	OH JACKSON	OH MEIGS	OH MORGAN
79.		OH VINTON	OH WASHINGTON				
80.	105008	OH ADAMS	OH BROWN	OH CLINTON	OH FAYETTE	OH HIGHLAND	OH PIKE
81.		OH ROSS	OH SCIOTO				
82.	106007	OH CLERMONT	OH HAMILTON	IN DEARBORN	KY BOONE		KY CAMPBELL
83.		KY KENTON					
84.	107001	OH BUTLER					
85.	108004	OH GREENE	OH MONTGOMERY	OH PREBLE			
86.	109001	OH CLARK	OH MIAMI				

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No.	Code						
87.	110008	OH AUGLAIZE	OH CHAMPAIGN	OH DARKE	OH LOGAN	OH MADISON	OH MERCER
88.		OH SHELBY	OH UNION	OH VAN WERT		OH WYANDOT	
89.	111003	OH ALLEN	OH PUTNAM	OH MARION	OH MORROW		
90.	112005	OH CRAWFORD	OH HARDIN	OH WOOD			
91.	113003	MI MONROE	OH LUCAS				
92.	114005	OH DEFIANCE	OH FULTON	OH HENRY	OH PAULDING	OH WILLIAMS	
93.	115007	IN DE KALB	IN ELKHART	IN KOSCIUSKO	IN LAGRANGE	IN NOBLE	IN STEUBEN
94.		IN WHITLEY					
95.	116001	IN ALLEN	IN BLACKFORD	IN CARROLL	IN CASS	IN CLINTON	IN FULTON
96.	117014	IN ADAMS	IN HOWARD	IN HUNTINGTON	IN JAY	IN MIAMI	IN TIPTON
97.		IN GRANT	IN WELLS				
98.		IN WABASH					
99.	118001	IN DELAWARE					
100.	119001	IN MADISON					
101.	120007	IN FAYETTE	IN FRANKLIN	IN HENRY	IN RANDOLPH	IN RUSH	IN UNION
102.		IN WAYNE					
103.	121012	IN BARTHOLOMEW	IN BROWN	IN DECATUR	IN JACKSON	IN JEFFERSON	IN JENNINGS
104.		IN MONROE	IN OHIO	IN RIPLEY	IN SCOTT	IN SWITZERLAND	IN WASHINGTON
105.	122008	IN BOONE	IN HAMILTON	IN HANCOCK	IN HENDRICKS	IN JOHNSON	IN MARION
106.		IN MORGAN	IN SHELBY				
107.	123015	IN CRAWFORD	IN DAVIESS	IN DUBOIS	IN GIBSON	IN GREENE	IN HARRISON
108.		IN KNOX	IN LAWRENCE	IN MARTIN	IN ORANGE	IN OWEN	IN PERRY
109.		IN PIKE	IN POSEY	IN SPENCER			
110.	124003	IN VANDERBURGH	IN WARRICK	KY HENDERSON			
111.	125004	IN CLAY	IN SULLIVAN	IN VERMILLION	IN VIGO		
112.	126001	IN FOUNTAIN	IN MONTGOMERY	IN PARKE	IN PUTNAM	IN WARREN	
113.	127001	IN TIPPECANOE		IN LA PORTE		IN PULASKI	IN STARKE
114.	128007	IN BENTON	IN JASPER		IN NEWTON		
115.		IN WHITE					
116.	129002	IN MARSHALL	IN ST JOSEPH				
117.	130902	IN LAKE	IN PORTER		IL LAKE		
118.	131006	IL COOK	IL DU PAGE	IL KANE		IL MCHENRY	IL WILL
119.		IL BOONE	IL WINNEBAGO				
120.	132002	IL CARROLL	IL DE KALB	IL JO DAVIESS	IL LEE	IL OGLE	IL STEPHENSON
121.	133007	IL WHITESIDE			IL LA SALLE		
122.		IL BUREAU	IL GRUNDY				
123.	134007	IL STARK		IL KENDALL		IL MARSHALL	IL PUTNAM
124.		IL HENRY	IL ROCK ISLAND	IA SCOTT			
125.	135003	IL FULTON	IL HANCOCK	IL HENDERSON	IL KNOX	IL MCDONOUGH	IL MERCER
126.	136008	IL SCHUYLER	IL WARREN				
127.		IL PEORIA	IL TAZEWELL	IL WOODFORD			
128.	137003	IL MCLEAN					
129.	138001	IL FORD	IL IROQUOIS	IL KANKAKEE	IL LIVINGSTON		
130.	139005	IL CHAMPAIGN				IL VERMILION	
131.	140001	IL CLARK	IL CLAY	IL COLES	IL CRAWFORD		
132.	141017	IL EDGAR	IL EDWARDS	IL EFFINGHAM	IL JASPER	IL CUMBERLAND	IL DOUGLAS
133.		IL PIATT	IL RICHLAND	IL SHELBY	IL WABASH	IL LAWRENCE	IL MOULTRIE
134.		IL MACON				IL WAYNE	
135.	142001	IL DE WITT	IL LOGAN	IL MASON	IL MENARD		
136.	143004	IL SANGAMON					
137.	144001	IL BOND	IL CHRISTIAN	IL CLINTON	IL FAYETTE	IL JEFFERSON	IL MACOUPIN
138.	145009	IL MARION	IL MONTGOMERY	IL WASHINGTON			
139.		IL ALEXANDER	IL FRANKLIN	IL GALLATIN			
140.	146017	IL JOHNSON	IL MASSAC	IL MONROE	IL HAMILTON	IL HARDIN	IL JACKSON
141.		IL RANDOLPH	IL SALINE	IL UNION	IL PERRY	IL POPE	IL PULASKI
142.		IL ADAMS	IL BROWN	IL CALHOUN	IL WHITE	IL WILLIAMSON	
143.	148009	IL MORGAN	IL PIKE	IL SCOTT	IL CASS	IL GREENE	IL JERSEY
144.							

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No.	Code						
145.	149005	MI ALLEGAN	MI BARRY	MI BERRIEN	MI CASS	MI VAN BUREN	
146.	150005	MI BRANCH	MI CALHOUN	MI HILLSDALE	MI LENAWEE	MI ST JOSEPH	
147.	151001	MI KALAMAZOO					
148.	152001	MI JACKSON					
149.	153001	MI WASHTENAW					
150.	155003	MI MACOMB	MI OAKLAND	MI WAYNE			
151.	156002	MI GENESEE	MI LAPEER				
152.	157004	MI HURON	MI ST CLAIR	MI SANILAC	MI TUSCOLA		
153.	158001	MI BAY					
154.	159001	MI SAGINAW					
155.	160002	MI LIVINGSTON	MI SHIAWASSEE				
156.	161003	MI CLINTON	MI EATON	MI INGHAM			
157.	162014	MI ARENAC	MI CLARE	MI GLADWIN	MI GRATIOT	MI IONIA	MI ISABELLA
158.		MI LAKE	MI MASON	MI MECOSTA	MI MIDLAND	MI MONTCALM	MI NEWAYGO
159.		MI OCEANA	MI OSCEOLA				
160.	163002	MI KENT	MI OTTAWA				
161.	164001	MI MUSKEGON					
162.	165021	MI ALCONA	MI ALPENA	MI ANTRIM	MI BENZIE	MI CHARLEVOIX	MI CHEROYGAN
163.		MI CRAWFORD	MI EMMET	MI GRD TRAVERSE	MI IOSCO	MI KALKASKA	MI LEELANAU
164.		MI MANISTEE	MI MISSAUKEE	MI MONTMORENCY	MI OGEMAW	MI OSCODA	MI OTSEGO
165.		MI PRESQUE ISLE	MI ROSCOMMON	MI WEXFORD			
166.	166206	MI ALGER	MI CHIPPEWA	MI DELTA	MI LUCE	MI MACKINAC	MI SCHOOLCRAFT
167.							
168.	167009	MI BARAGA	MI OICKINSON	MI GOGEBIC	MI HOUGHTON	MI IRON	MI KEWEENAW
169.		MI MARQUETTE	MI MENOMINEE	MI ONTONAGON			
170.	168004	WI IRON	WI ONEIDA	WI PRICE	WI VILAS		
171.	169008	WI FLORENCE	WI FOREST	WI LANGLADE	WI LINCOLN	WI MARATHON	WI MARINETTE
172.		WI OCONTO	WI SHA#A?MENOM				
173.	170010	WI ADAMS	WI BUFFALO	WI CLARK	WI EAU CLAIRE	WI JACKSON	WI JUNFAU
174.		WI LA CROSSE	WI MONROE	WI TREMPEALEAU	WI WOOO		
175.	171013	WI CALUMET	WI DOOR	WI FONO DU LAC	WI GREEN LAKE	WI KEWAUNEE	WI MANITOWOC
176.		WI MARQUETTE	WI OUTAGAMIE	WI PORTAGE	WI SHEBOYGAN	WI WAUPACA	WI WAUSHARA
177.		WI WINNEBAGO					
178.	172001	WI BROWN		WI WASHINGTON			
179.	173004	WI MILWAUKEE	WI OZAUKEE		WI WAUKESHA		
180.	174001	WI RACINE					
181.	175001	WI KENOSHA					
182.	176004	WI DODGE	WI JEFFERSON	WI ROCK	WI WALWORTH		
183.	177001	WI DANE					
184.	179004	WI GRANT	WI GREEN	WI IOWA	WI LAFAYETTE		
185.	180010	WI COLUMBIA	WI CRAWFORD	WI RICHLAND	WI SAUK	WI VERNON	
186.		WI BARRON	WI BURNETT	WI CHIPPEWA	WI DUNN	WI PEPIN	WI PIERCE
187.	181004	WI POLK	WI RUSK	WI ST CROIX	WI TAYLOR		
188.	182002	WI ASHLAND	WI RAYFIELD	WI SAWYER	WI WASHBURN		
189.	183014	VA ACCOMACK	VA NORTHAMPTON	VA GLOUCESTER	VA KING ? QUEEN		
190.		VA CAROLINE	VA ESSEX	VA MIDOLESEX	VA NORTHUMBERLD		
191.		VA LANCASTER	VA MATHEWS				
192.		VA STAFFORD	VA WESTMORELAND				
193.	18-502	VA CHESCITY?J?P	VA RFACH				
194.	185201	VA YORK?HAMP?NN					
195.	186512	VA BRUNSWICK	VA CHARLES CITY	VA DINWIDDIE?P	VA GRNSVL?EMPOR	VA ISLE OF WIGHT	VA JAMESCITY?WI
196.		VA NANSEMO?SUFF	VA NEW KENT	VA PR GEO?HOPE	VA SHAMPTON?FRA	VA SURRY	VA SUSSEX
197.	187203	VA CHESTFR?CHTS	VA HANOVER	VA HERICO?RICHM			
198.	189217	VA ALBEMARLE?CH	VA AMELIA	VA APPOMATTOX	VA BUCKINGHAM	VA CHARLOTTE	VA CUMBERLANO
199.		VA FLUVANNA	VA GOOCHLAND	VA HALIFAX?SBOS	VA LOUISA	VA LUNENBURG	VA MECKLENBURG
200.	187203	VA NELSON	VA NOTTOWAY	VA PITTSYLV?OAN	VA POWHATAN	VA PRINCEEO?RD	
201.	189217	VA CLARKE	VA CULPEPER	VA FAUQUIER	VA FREDERICK?WI	VA GREENE	VA MAOISON
202.	189512	VA ORANGE	VA PAGE	VA RAPPAHANNOCK	VA ROCKINGHAM?H	VA SHENANDOAH	VA WARREN

No.	Code	VA ALLEG?CLF?CU	VA AUGUSTA?ST?W	VA BATH	VA BEDFORD?BEDC	VA BOTETOURT	VA CRAIG
203.	190008	VA ALLEG?CLF?CU	VA AUGUSTA?ST?W				
205.	191001	VA HIGHLAND	VA ROCKBR?BV?LF				
206.	192002	VA ROANOKE?RO?S					
207.	193011	VA AMHERST	VA CAMPBELL?LYN	VA FLOYD	VA FRANKLIN	VA GILES	VA GRAYSON
20B.		VA RLAND	VA CARROLL?GALA	VA PATRICK	VA PULASKI	VA WYTHE	VA SMYTH
209.	194009	VA HENRY?MARTIN	VA MONTGOMERY?R	VA LEE	VA RUSSELL	VA SCOTT	
210.		VA BUCHANAN	VA DICKENSON	VA WISE?NORTON			
211.	195012	VA TAZEWELL	VA WASHINGTN?BR	WV GREENBRIER	WV LINCOLN	WV LOGAN	WV MCDOWELL
212.		WV BOONE	WV FAYETTE	WV MONROE	WV RALEIGH	WV SUMMERS	WV WYOMING
213.	196007	WV MERCER	WV MINGO	WV HAMPSHIRE	WV HARDY	WV JEFFERSON	WV MORGAN
214.		WV BERKELEY	WV GRANT	WV CLAY	WV HARRISON	WV LEWIS	WV MARION
215.	197016	WV PENDLETON	WV BRAXTON	WV NICHOLAS	WV POCAHONTAS	WV PRESTON	WV RANDOLPH
216.		WV BARBOUR	WV MONONGALIA	WV GILMER	WV WEBSTER	WV MASON	WV PLEASANTS
217.		WV MINERAL	WV UPSHUR	WV ROANE	WV JACKSON	WV AETZEL	WV WIRT
218.	198013	WV TAYLOR	WV DODDRIDGE		WV TYLER		
219.		WV CALHOUN	WV RITCHIE				
220.	199001	WV PUTNAM	WV WOOO				
221.	200004	WV WOOD					
222.	201036	WV KANAWHA					
223.		OH LAWRENCE	KY BOURBON	KY WAYNE	KY BOYD	KY CARTER	KY CLARK
224.		KY BATH	KY ESTILL	KY BRACKEN	KY CARROLL	KY GALLATIN	KY GRANT
225.		KY ELLIOTT	KY HARRISON	KY FLEMING	KY FRANKLIN	KY LAWRENCE	KY LEE
226.		KY GREENUP	KY MADISON	KY HENRY	KY JOHNSON	KY MENIFEE	KY MONTGOMERY
227.		KY LEWIS	KY NICHOLAS	KY MAGOFFIN	KY MASON	KY PENDLETON	KY POWELL
228.		KY MORGAN	KY ROWAN	KY OLDHAM	KY OWEN	KY TRIMBLE	KY WOLFE
229.	202001	KY ROBERTSON		KY SCOTT	KY SHELBY		
		KY FAYETTE					
230.	203016	KY BELL	KY BREATHITT	KY CLAY	KY FLOYD	KY HARLAN	KY JACKSON
231.		KY KNOTT	KY KNOX	KY LAUREL	KY LESLIE	KY LETCHER	KY MARTIN
232.		KY OWSLEY	KY PERRY	KY PIKE	KY WHITLEY		
233.	204030	KY ADAIR	KY ALLEN	KY ANDERSON	KY BARREN	KY BOYLE	KY BULLITT
234.		KY CASEY	KY CLINTON	KY CUMBERLAND	KY GARRARD	KY GREEN	KY HARDIN
235.		KY HART	KY JESSAMINE	KY LARUE	KY LINCOLN	KY MCCREARY	KY MARION
236.		KY MERCER	KY METCALFE	KY MONROE	KY NELSON	KY PULASKI	KY ROCKCASTLE
237.		KY RUSSELL	KY SPENCER	KY TAYLOR	KY WASHINGTON	KY WAYNE	KY WOODFORD
		IN CLARK	IN FLOYD	KY JEFFERSON	KY CALDWELL	KY CALLOWAY	KY CARLISLE
238.	205003	KY BALLARD	KY BRECKINRIDGE	KY BUTLER	KY EDMONSON	KY FULTON	KY GRAVES
239.	206031	KY CHRISTIAN	KY CRITTENDEN	KY DAVIESS	KY HOPKINS	KY LIVINGSTON	KY LOGAN
240.		KY GRAYSON	KY HANCOCK	KY HICKMAN	KY MARSHALL	KY MEADE	KY MUHLENBERG
241.		KY LYON	KY MCCRACKEN	KY MCLEAN	KY TRIGG	KY UNION	KY WARREN
242.		KY OHIO	KY SIMPSON	KY TODD			
243.		KY WEBSTER					
244.	207020	TN BENTON	TN CARROLL	TN CHESTER	TN CROCKETT	TN DECATUR	TN DYER
245.		TN FAYETTE	TN GIBSON	TN HARDEMAN	TN HARDIN	TN HAYWOOD	TN HENDERSON
246.		TN HENRY	TN LAKE	TN LAUDERDALE	TN MCNAIRY	TN MADISON	TN OBION
247.		TN TIPTON	TN WEAKLEY				
248.		TN SHELBY					
249.	208002	AR CRITTENDEN					
250.	209023	TN BEDFORD	TN CANNON	TN CHEATHAM	TN COFFEE	TN DICKSON	TN FRANKLIN
251.		TN GILES	TN HICKMAN	TN HOUSTON	TN HUMPHREYS	TN LAWRENCE	TN LEWIS
252.		TN LINCOLN	TN MARSHALL	TN MAURY	TN MONTGOMERY	TN MOORE	TN PERRY
253.		TN ROBERTSON	TN RUTHERFORD	TN STEWART	TN WAYNE	TN WILLIAMSON	
254.	210003	TN DAVIDSON	TN SUMNER	TN WILSON			
255.	211020	TN BLEDSOE	TN CLAY	TN CUMBERLAND	TN DE KALB	TN FENTRESS	TN GRUNDY
256.		TN JACKSON	TN MACON	TN MARION	TN MORGAN	TN OVERTON	TN PICKETT
257.		TN PUTNAM	TN SCOTT	TN SEQUATCHIE	TN SMITH	TN TROUSDALE	TN VAN BUREN
258.		TN WARREN	TN WHITE				
259.	212002	GA HAMILTON	GA UNION				
260.	213008	TN BRADLEY	TN LOUDON	TN MCMINN	TN MEIGS		TN POLK

No.	Code						
261.			TN RHEA				
262.	214703	TN ANDERSON	TN ROANE	TN KNOX	TN COCKE	TN GRAINGER	TN GREENE
263.	215016	TN CAMPBELL	TN BLOUNT	TN CLAIBORNE	TN JEFFERSON	TN JOHNSON	TN SEVIER
264.		TN HAMBLEN	TN CARTER	TN HAWKINS	TN WASHINGTON		
265.		TN SULLIVAN	TN HANCOCK	TN UNION			
266.	216010	NC CHEROKEE	TN UNICOI	NC GRAHAM	NC HAYWOOD	NC HENDERSON	NC JACKSON
267.		NC MACON	NC CLAY	NC SWAIN	NC TRANSYLVANIA		
268.	217001	NC BUNCOMBE	NC ALLEGHANY				
269.	218019	NC ALEXANDER	NC CLEVELAND	NC ASHE	NC AVERY	NC BURKE	NC CALDWELL
270.		NC CATAWBA	NC POLK	NC GASTON	NC IREDELL	NC LINCOLN	NC MCDOWELL
271.		NC MITCHELL		NC RUTHERFORD	NC SURRY	NC WATAUGA	NC WILKES
272.		NC YANCEY					
273.	219002	NC MECKLENBURG	NC UNION	NC CHATHAM	NC DAVIDSON	NC DAVIE	NC HARNETT
274.	220014	NC ANSON	NC CABARRUS	NC MONTGOMERY	NC MOORE	NC RICHMOND	NC ROWAN
275.		NC HOKE	NC LEE				
276.		NC SCOTLAND	NC STANLY				
277.	221004	NC FORSYTH	NC GUILFORD	NC RANDOLPH	NC YADKIN	NC PERSON	NC ROCKINGHAM
278.	222009	NC ALAMANCE	NC CASWELL	NC FRANKLIN	NC GRANVILLE		
279.		NC STOKES	NC VANCE	NC WARREN			
280.	223002	NC DURHAM	NC ORANGE				
281.	224001	NC WAKE					
282.	225022	NC BEAUFORT	NC BERTIE	NC CAMDEN	NC CHOWAN	NC CURRITUCK	NC DARE
283.		NC EDGECOMBE	NC GATES	NC GREENE	NC HALIFAX	NC HERTFORD	NC HYDE
284.		NC JOHNSTON	NC MARTIN	NC NASH	NC NORTHAMPTON	NC PASQUOTANK	NC PERQUIMANS
285.		NC PITT	NC TYRRELL	NC WASHINGTON	NC WILSON		
286.	226010	NC CARTERET	NC CRAVEN	NC DUPLIN	NC JONES	NC LENOIR	NC ONSLOW
287.		NC PAMLICO	NC PENDER	NC SAMPSON	NC WAYNE		
288.	227001	NC CUMBERLAND					
289.	228003	NC BLADEN	NC COLUMBUS	NC ROBESON			
290.	229002	NC BRUNSWICK	NC NEW HANOVER				
291.	230014	SC CHESTERFIELD	SC CLARENDON	SC DARLINGTON	SC DILLON	SC FLORENCE	SC GEORGETOWN
292.		SC HORRY	SC KERSHAW	SC LANCASTER	SC LEE	SC MARION	SC MARLBORO
293.		SC SUMTER	SC WILLIAMSBURG				
294.	231002	SC BERKELEY	SC CHEROKEE			SC CALHOUN	SC COLLETON
295.	232010	SC ALLENDALE	SC BAMBERG	SC BARNWELL	SC BEAUFORT		
296.		SC DORCHESTER	SC HAMPTON	SC JASPER	SC ORANGEBURG		
297.	233002	SC LEXINGTON	SC RICHLAND	SC CHARLESTON	SC CHESTER	SC EDGEFIELD	SC FAIRFIELD
298.	234015	SC ABBEVILLE	SC ANDERSON	SC MCCORMICK	SC NEWBERRY	SC OCONEE	SC SALUDA
299.		SC GREENWOOD	SC LAURENS	SC YORK			
300.		SC SPARTANBURG	SC UNION				
301.	235002	SC GREENVILLE	SC PICKENS				
302.	236029	GA BANKS	GA BARTOW	GA CARROLL	GA CATOOSA	GA CHATTOOGA	GA CHEROKEE
303.		GA DADE	GA DAWSON	GA DOUGLAS	GA FANNIN	GA FLOYD	GA FORSYTH
304.		GA FRANKLIN	GA GILMER	GA GORDON	GA HABERSHAM	GA HALL	GA HARALSON
305.		GA LUMPKIN	GA MURRAY	GA PAULDING	GA PICKENS	GA POLK	GA RABUN
306.		GA STEPHENS	GA TOWNS	GA UNION	GA WHITE	GA WHITFIELD	
307.	237004	GA CLAYTON	GA COBB	GA GWINNETT	GA DEKALB?FULTN		
308.	238028	GA BALDWIN	GA BARROW	GA CLARKE	GA COLUMBIA	GA ELBERT	GA GLASCOCK
309.		GA GREENE	GA HANCOCK	GA HART	GA JACKSON	GA JASPER	GA JONES
310.		GA LINCOLN	GA MCDUFFIE	GA MADISON	GA MORGAN	GA NEWTON	GA OCONEE
311.		GA OGLETHORPE	GA PUTNAM	GA ROCKDALE	GA TALIAFERRO	GA TWIGGS	GA WALTON
312.		GA WARREN	GA WASHINGTON	GA WILKES	GA WILKINSON		
313.	239002	SC AIKEN	GA RICHMOND				
314.	240022	GA APPLING	GA BRYAN	GA BULLOCH	GA BURKE	GA CANDLER	GA EFFINGHAM
315.		GA EMANUEL	GA EVANS	GA JEFFERSON	GA JENKINS	GA JOHNSON	GA LAURENS
316.		GA LIBERTY	GA LONG	GA MCINTOSH	GA MONTGOMERY	GA SCREVEN	GA TATTNALL
317.		GA TOOMBS	GA TREUTLEN	GA WAYNE	GA WHEELER		
318.	241001	GA CHATHAM					

#	Code						
319.	242030	GA ATKINSON	GA BACON	GA BEN HILL	GA BERRIEN	GA BLECKLEY	GA BRANTLEY
320.		GA BROOKS	GA CAMDEN	GA CHARLTON	GA CLINCH	GA COFFEE	GA COLQUITT
321.		GA COOK	GA CRISP	GA DODGE	GA DOOLY	GA ECHOLS	GA GLYNN
322.		GA IRWIN	GA JEFF DAVIS	GA LANIER	GA LOWNDES	GA PIERCE	GA PULASKI
323.		GA TELFAIR	GA TIFT	GA TURNER	GA WARE	GA WILCOX	GA WORTH
324.	2430D2	GA BIBB	GA HOUSTON	GA CRAWFORD	GA FAYETTE	GA HARRIS	GA HEARD
325.	2440D20	GA BUTTS	GA COWETA	GA MACON	GA MARION	GA MERIWETHER	GA MONROE
326.		GA HENRY	GA LAMAR	GA SCHLEY	GA SPALDING	GA TALBOT	GA TAYLOR
327.		GA PEACH	GA PIKE				
328.		GA TROUP	GA UPSON				
329.	2450D3	GA CHATTAHOOCHE	GA MUSCOGEE	AL RUSSELL			
330.	2460D1	GA DOUGHERTY					
331.	247017	GA BAKER	GA CALHOUN	GA CLAY	GA DECATUR	GA EARLY	GA GRADY
332.		GA LEE	GA MILLER	GA MITCHELL	GA QUITMAN	GA RANDOLPH	GA SEMINOLE
333.		GA STEWART	GA SUMTER	GA TERRELL	GA THOMAS	GA WEBSTER	
334.	2480D1	FL LEON	FL COLUMBIA	FL DIXIE	FL GILCHRIST	FL HAMILTON	FL JEFFERSON
335.	2490D12	FL BAKER	FL MADISON	FL NASSAU	FL SUWANNEE	FL TAYLOR	FL UNION
336.		FL LAFAYETTE					
337.	250001	FL DUVAL					
338.	251014	FL ALACHUA	FL BRADFORD	FL CITRUS	FL CLAY	FL FLAGLER	FL HERNANDO
339.		FL LAKE	FL LEVY	FL MARION	FL PASCO	FL PUTNAM	FL ST JOHNS
340.		FL SUMTER	FL VOLUSIA				
341.	252002	FL ORANGE	FL SEMINOLE				
342.	253002	FL HILLSBOROUGH	FL PINELLAS				
343.	254014	FL BREVARD	FL CHARLOTTE	FL DE SOTO	FL GLADES	FL HARDEE	FL HIGHLANDS
344.		FL INDIAN RIVER	FL MANATEE	FL MARTIN	FL OKEECHOBEE	FL OSCEOLA	FL POLK
345.		FL ST LUCIE	FL SARASOTA	FL LEE			
346.	255004	FL COLLIER	FL HENDRY	FL MONROE			
347.	258D03	FL BROWARD	FL DADE	FL PALM BEACH			
348.	259D12	FL BAY	FL CALHOUN	FL FRANKLIN	FL GADSDEN	FL GULF	FL HOLMES
349.		FL JACKSON	FL LIBERTY	FL OKALOOSA	FL WAKULLA	FL WALTON	FL WASHINGTON
350.	260002	FL ESCAMBIA	FL SANTA ROSA				
351.	261013	AL BARBOUR	AL BULLOCK	AL BUTLER	AL COFFEE	AL CONECUH	AL COVINGTON
352.		AL CRENSHAW	AL DALE	AL ESCAMBIA	AL GENEVA	AL HENRY	AL HOUSTON
353.		AL PIKE					
354.	262DD2	AL BALDWIN	AL MOBILE				
355.	263015	AL AUTAUGA	AL BIBB	AL CHILTON	AL CHOCTAW	AL CLARKE	AL DALLAS
356.		AL GREENE	AL HALE	AL LOWNDES	AL MARENGO	AL MONROE	AL PERRY
357.		AL SUMTER	AL WASHINGTON	AL WILCOX			
358.	264002	AL ELMORE	AL MONTGOMERY				
359.	265011	AL CALHOUN	AL CHAMBERS	AL CLAY	AL CLEBURNE	AL COOSA	AL LEE
360.		AL MACON	AL RANDOLPH	AL ST CLAIR	AL TALLADEGA	AL TALLAPOOSA	
361.	2660D3	AL JEFFERSON	AL SHELBY	AL WALKER			
362.	267001	AL TUSCALOOSA					
363.	268012	AL BLOUNT	AL COLBERT	AL CULLMAN	AL FAYETTE	AL FRANKLIN	AL LAMAR
364.		AL LAUDERDALE	AL LAWRENCE	AL MARION	AL MORGAN	AL PICKENS	AL WINSTON
365.	2690D2	AL LIMESTONE	AL MADISON				
366.	2700D1	AL ETOWAH					
367.	271004	AL CHEROKEE	AL DE KALB	AL JACKSON	AL MARSHALL		
368.	272024	MS ALCORN	MS BENTON	MS CALHOUN	MS CHICKASAW	MS CLAY	MS COAHOMA
369.		MS DE SOTO	MS ITAWAMBA	MS LAFAYETTE	MS LEE	MS MARSHALL	MS MONROE
370.		MS PANOLA	MS PONTOTOC	MS PRENTISS	MS QUITMAN	MS TALLAHATCHIE	MS TATE
371.		MS TIPPAH	MS TISHOMINGO	MS TUNICA	MS UNION	MS WEBSTER	MS YALOBUSHA
372.	273025	MS ATTALA	MS CARROLL	MS CHOCTAW	MS GRENADA	MS HOLMES	MS LEFLORE
373.		MS HUMPHREYS	MS ISSAQUENA	MS KEMPER	MS LAUDERDALE	MS LEAKE	
374.		MS LOWNDES	MS MADISON	MS NESHOBA	MS NEWTON	MS NOXUBEE	MS OKTIBBEHA
375.		MS SCOTT	MS SHARKEY	MS SUNFLOWER	MS WARREN	MS WASHINGTON	MS WINSTON
376.		MS YAZOO					

No.	Code						
377.	274C02	MS HINOS	MS RANKIN	MS CLAIBORNE	MS CLARKE	MS COPIAH	MS COVINGTON
378.	275031	MS ADAMS	MS AMITE	MS GEORGE	MS GREENE	MS HANCOCK	MS HARRISON
379.		MS FORREST	MS FRANKLIN	MS JASPER	MS JEFFERSON	MS JONES	MS LAMAR
380.		MS JACKSON	MS JASPER	MS JEFFERSON	MS MONTGOMERY	MS PEARL RIVER	MS PERRY
381.		MS LAWRENCE	MS LINCOLN	MS MARION	MS STONE	MS WALTHALL	MS WAYNE
382.		MS PIKE	MS SIMPSON	MS SMITH			
383.		MS WILKINSON					
384.	276004	LA JEFFERSON	LA ORLEANS	LA ST BERNARD	LA ST TAMMANY	LA IBERVILLE	LA LAFOURCHE
385.	277019	LA ASCENSION	LA ASSUMPTION	LA E FELICIANA	LA IBERIA	LA ST JAMES	LA ST JOHN THE
386.		LA LIVINGSTON	LA PLAQUEMINES	LA ST CHARLES	LA ST HELENA	LA WASHINGTON	LA W BATON ROUG
387.		LA ST MARTIN	LA ST MARY	LA TANGIPAHOA	LA TERREBONNE		
388.	278001	LA E BATON ROUG					
389.	279013	LA JEFFERSON DA	LA ACADIA	LA AVOYELLES	LA BEAUREGARD	LA CAMERON	LA EVANGELINE
390.		LA W FELICIANA	LA POINTE COUPE	LA RAPIDES	LA ST LANDRY	LA VERMILION	LA VERNON
391.		LA LAFAYETTE					
392.	280001	LA CALCASIEU					
393.	281001	LA CALDWELL					
394.	282011	LA CATAHOULA	LA CONCORDIA	LA EAST CARROLL	LA FRANKLIN		LA LA SALLE
395.		LA MADISON	LA RICHLAND	LA TENSAS	LA WEST CARROLL		
396.	283001	LA OUACHITA					
397.	284012	LA BIENVILLE	LA CLAIBORNE	LA DE SOTO	LA GRANT	LA JACKSON	LA LINCOLN
398.		LA NATCHITOCHES	LA RED RIVER	LA SABINE	LA UNION	LA WEBSTER	LA WINN
399.		LA BOSSIER	LA CADDO				
400.	285302	AR ASHLEY	AR CALHOUN	AR CHICOT	AR LEE	AR LONOKE	AR OESHA
401.	286009	AR DREW	AR UNION	AR GRANT	AR WHITE	AR WOODRUFF	AR HOTSPRING
402.	287013	AR CLAY	AR COLUMBIA	AR NEVADA	AR CRAIGHEAD	AR FULTON	AR PIKE
403.		AR HOWARD	AR DALLAS		AR LAWRENCE	AR MISSISSIPPI	
404.		AR SEVIER	AR LITTLE RIVER				
405.	288001	AR JEFFERSON	AR SALINE	AR MONROE	AR LONOKE		AR PHILLIPS
406.	289002	AR PULASKI	AR CROSS	AR GREENE	AR WOODRUFF		
407.	290010	AR ARKANSAS	AR ST FRANCIS	AR POINSETT	AR FULTON	AR MISSISSIPPI	
408.		AR PRAIRIE	AR CLEBURNE				AR INDEPENDENCE
409.	291014	AR CLARK	AR JACKSON				AR RANDOLPH
410.		AR IZARD	AR STONE				
411.		AR SHARP					
412.	292004	AR CRAWFORD	AR SEBASTIAN	OK SEQUOYAH	OK LE FLORE	AR FRANKLIN	AR JOHNSON
413.	293012	AR BAXTER	AR BENTON	AR CARROLL	AR BOONE	AR VAN BUREN	AR WASHINGTON
414.		AR MADISON	AR MARION	AR SEARCY	AR NEWTON	AR MONTGOMERY	AR PERRY
415.	294010	AR CONWAY	AR FAULKNER	AR LOGAN	AR GARLAND		
416.		AR POLK	AR POPE	AR YELL	AR SCOTT		
417.	295002	MN COOK	MN LAKE	MN HUBBARD	MN CLEARWATER	MN ITASCA	MN KITTSON
418.	296002	MN DOUGLAS	MN ST LOUIS	MN MARSHALL	MN MAHNOMEN	MN NORMAN	MN PENNINGTON
419.	297015	MN BECKER	MN BELTRAMI		MN ROSEAU		
420.		MN KOOCHICHING	MN LAKE OF WOOD				
421.		MN POLK	MN RED LAKE				
422.	298022	MN AITKIN	MN BENTON	MN CASS	MN CARLTON	MN CHISAGO	MN CROW WING
423.		MN DOUGLAS	MN GRANT	MN KANABEC	MN ISANTI	MN MILLE LACS	MN MORRISON
424.		MN OTTER TAIL	MN PINE	MN SHERBURNE	MN MADENA	MN STEARNS	MN STEVENS
425.		MN TODD	MN TRAVERSE	MN WILKIN			
426.	299019	MN BIG STONE	MN BROWN	MN COTTONWOOD	MN CHIPPEWA	MN KANDIYOHI	MN JACKSON
427.		MN LAC QUI PARL	MN LYON	MN MARTIN	MN LYON	MN MURRAY	MN NOBLES
428.		MN PIPESTONE	MN REDWOOD	MN ROCK	MN RENVILLE	MN SWIFT	MN WATONWAN
429.		MN YELLOW MEDIC					
430.	300005	MN ANOKA	MN DAKOTA	MN RAMSEY	MN HENNEPIN	MN WASHINGTON	MN FREEBORN
431.	301022	MN BLUE EARTH	MN CARVER	MN FARIBAULT	MN DODGE	MN FILLMORE	MN MOWER
432.		MN GOODHUE	MN HOUSTON	MN MCLEOD	MN LE SUEUR	MN MEEKER	MN STEELE
433.		MN NICOLLET	MN OLMSTED	MN SCOTT	MN RICE	MN SIBLEY	
434.		MN WABASHA	MN WASECA	MN WRIGHT	MN WINONA		

#	Code						
435.		IA BUENA VISTA	IA CHEROKEE	IA CLAY	IA DICKINSON	IA EMMET	IA HUMBOLOT
436.		IA KOSSUTH	IA LYON	IA O BRIEN	IA OSCEOLA	IA PALO ALTO	IA PLYMOUTH
437.		IA POCAHONTAS	IA SIOUX				
438.	302014	IA WOODBURY	NE DAKOTA				
439.	303002	IA BUTLER	IA CERRO GORDO	IA FRANKLIN	IA MITCHELL	IA WINNEBAGO	
440.	304008	IA WRIGHT					
441.	305011	IA ALLAMAKEE	IA BREMER	IA BUCHANAN	IA CHICKASAW	IA CLAYTON	IA CRAWFORD
442.		IA DELAWARE	IA FAYETTE	IA HANCOCK	IA HOWARD	IA WINNESHIEK	
443.	306001	IA BLACK HAWK					
444.	307001	IA DUBUQUE					
445.	308013	IA AUDUBON	IA BOONE	IA CALHOUN	IA CARROLL	IA DALLAS	IA GREENE
446.		IA GUTHRIE	IA HARRISON	IA IDA	IA MONONA	IA SAC	IA SHELBY
447.		IA WEBSTER					
448.	309010	IA BENTON	IA GRUNDY	IA HAMILTON	IA HARDIN	IA IOWA	IA JASPER
449.		IA MARSHALL	IA POWESHIEK	IA STORY	IA TAMA		
450.	310001	IA LINN					
451.	311005	IA CEDAR	IA CLINTON	IA JACKSON	IA JOHNSON	IA JONES	IA KEOKUK
452.	312018	IA APPANOOSE	IA DAVIS	IA DES MOINES	IA HENRY	IA JEFFERSON	IA MONROE
453.		IA LEE	IA LOUISA	IA LUCAS	IA MAHASKA	IA MARION	IA WAYNE
454.		IA MUSCATINE	IA VAN BUREN	IA WAPELLO	IA WASHINGTON		
455.	313001	IA POLK					
456.	314013	IA ADAIR	IA ADAMS	IA CASS	IA CLARKE	IA DECATUR	IA FREMONT
457.		IA MADISON	IA MILLS	IA MONTGOMERY	IA PAGE	IA RINGGOLD	IA TAYLOR
458.		IA UNION					
459.	315024	MO ADAIR	MO AUDRAIN	MO BOONE	MO CALLAWAY	MO CHARITON	MO CLARK
460.		MO HOWARD	MO KNOX	MO LEWIS	MO LINCOLN	MO LINN	MO MACON
461.		MO MARION	MO MONROE	MO MONTGOMERY	MO PIKE	MO PUTNAM	MO RALLS
462.		MO RANDOLPH	MO SCHUYLER	MO SCOTLAND	MO SHELBY	MO SULLIVAN	MO WARREN
463.	316016	MO ANDREW	MO ATCHISON	MO CALDWELL	MO CARROLL	MO CLINTON	MO DAVIESS
464.		MO DE KALB	MO GENTRY	MO GRUNDY	MO HARRISON	MO HOLT	MO LIVINGSTON
465.		MO MERCER	MO NODAWAY	MO RAY	MO WORTH		
466.	317001	MO BUCHANAN					
467.	318006	MO CASS	MO CLAY	MO JACKSON	MO PLATTE	KS JOHNSON	KS WYANDOTTE
468.							
469.	319025	MO BATES	MO BENTON	MO CAMDEN	MO CEDAR	MO COLE	MO COOPER
470.		MO DALLAS	MO GASCONADE	MO HENRY	MO HICKORY	MO JOHNSON	MO LACLEDE
471.		MO LAFAYETTE	MO MARIES	MO MILLER	MO MONITEAU	MO MORGAN	MO OSAGE
472.		MO PETTIS	MO PHELPS	MO POLK	MO PULASKI	MO ST CLAIR	MO SALINE
473.		MO VERNON					
474.	320001	MO GREENE					
475.	321016	MO BARRY	MO BARTON	MO CHRISTIAN	MO DADE	MO DOUGLAS	MO HOWELL
476.		MO JASPER	MO LAWRENCE	MO MCDONALO	MO NEWTON	MO OZARK	MO STONE
477.		MO TANEY	MO TEXAS	MO WEBSTER	MO WRIGHT		
478.	322023	MO BOLLINGER	MO BUTLER	MO CAPE GIRARDE	MO CARTER	MO CRAWFORD	MO DENT
479.		MO DUNKLIN	MO IRON	MO MADISON	MO MISSISSIPPI	MO NEW MADRID	MO OREGON
480.		MO PEMISCOT	MO PERRY	MO REYNOLOS	MO RIPLEY	MO ST FRANCOIS	MO STE GENEVIEV
481.		MO SCOTT	MO SHANNON	MO STODDARD	MO WASHINGTON	MO WAYNE	
482.	323007	IL MADISON	IL ST CLAIR	MO FRANKLIN	MO JEFFERSON	MO ST CHARLES	MO ST LOUIS
483.		MO ST LOUIS CTY					
484.	324009	ND BOTTINEAU	ND BURKE	ND DIVIDE	ND MCHENRY	ND MCLEAN	ND MOUNTRAIL
485.		ND RENVILLE	ND WARD	ND WILLIAMS			
486.	325017	ND BENSON	ND CAVALIER	ND EDDY	ND FOSTER	ND GRAND FORKS	ND GRIGGS
487.		ND NELSON	ND PEMBINA	ND PIERCE	ND RAMSEY	NO ROLETTE	ND SHERIDAN
488.		ND STEELE	ND TOWNER	ND TRAILL	ND WALSH	ND WELLS	
489.	326014	ND ADAMS	ND BILLINGS	ND BOWMAN	ND DUNN	ND GOLDEN VALLY	ND GRANT
490.		ND HETTINGER	ND MCKENZIE	ND MERCER	ND MORTON	ND OLIVER	ND SIOUX
491.		ND SLOPE	ND STARK				
492.	327012	ND BARNES	ND BURLEIGH	ND DICKEY	ND EMMONS	ND KIDDER	ND LA MOURE

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#	Code						
493.		ND LOGAN	ND MCINTOSH	ND RANSOM	ND RICHLAND	ND SARGENT	ND STUTSMAN
494.	328002	MN CLAY	ND CASS	SD DEWEY	SD HARDING	SD LAWRENCE	SD MEADE
495.	329008	SD BUTTE	SD CORSON				
496.		SD PERKINS	SD ZIEBACH				
497.	330025	SD BEADLE	SD BROOKINGS	SD BROWN	SD CAMPBELL	SD CLARK	SD CODINGTON
498.		SD DEUEL	SD DEUEL	SD EDMUNDS	SD FAULK	SD GRANT	SD HAMLIN
499.		SD DAY	SD HUGHES	SD HYDE	SD KINGSBURY	SD LAKE	SD MCPHERSON
500.		SD HAND	SD MOODY	SD POTTER	SD ROBERTS	SD SPINK	SD SULLY
501.		SD MARSHALL / SD WALWORTH					
502.	331015	SD BENNETT	SD CUSTER	SD FALL RIVER	SD GREGORY	SD HAAKON	SD JACKSON
503.		SD JONES	SD LYMAN	SD MELLETTE	SD PENNINGTON	SD SHANNON	SD STANLEY
504.		SD TODD	SD TRIPP	SD WASHABAUGH			
505.	332018	SD AURORA	SD BON HOMME	SD BRULE	SD BUFFALO	SD CHARLES MIX	SD CLAY
506.		SD DAVISON	SD DOUGLAS	SD HANSON	SD HUTCHINSON	SD JERAULD	SD LINCOLN
507.		SD MCCOOK	SD MINER	SD SANBORN	SD TURNER	SD UNION	SD YANKTON
508.	333001	SD MINNEHAHA					
509.	334011	NE BANNER	NE BOX BUTTE	NE CHEYENNE	NE DAWES	NE DEUEL	NE GARDEN
510.	335004	NE KIMBALL	NE MORRILL	NE SCOTTS BLUFF	NE SHERIDAN	NE SIOUX	
511.		NE CHERRY	NE GRANT	NE HOOKER	NE THOMAS	NE HOLT	NE KEYA PAHA
512.	336009	NE BLAINE	NE BOYD	NE BROWN	NE GARFIELD		
513.		NE LOUP	NE ROCK	NE WHEELER			
514.	337017	NE ANTELOPE	NE BOONE	NE BURT	NE CEDAR	NE COLFAX	NE CUMING
515.		NE DIXON	NE DODGE	NE KNOX	NE MADISON	NE NANCE	NE PIERCE
516.	338012	NE PLATTE	NE STANTON	NE THURSTON	NE WASHINGTON	NE WAYNE	
517.		NE ARTHUR	NE CHASE	NE DUNDY	NE FRONTIER	NE HAYES	NE HITCHCOCK
518.		NE KEITH	NE LINCOLN	NE LOGAN	NE MCPHERSON	NE PERKINS	NE RED WILLOW
519.	339016	NE ADAMS	NE BUFFALO	NE CUSTER	NE DAWSON	NE FRANKLIN	NE FURNAS
520.		NE GOSPER	NE GREELEY	NE HALL	NE HARLAN	NE HOWARD	NE KEARNEY
521.		NE PHELPS	NE SHERMAN	NE VALLEY	NE WEBSTER		
522.	340013	NE BUTLER	NE CLAY	NE FILLMORE	NE HAMILTON	NE JEFFERSON	NE MERRICK
523.		NE NUCKOLLS	NE POLK	NE SALINE	NE SAUNDERS	NE SEWARD	NE THAYER
524.		NE YORK					
525.	341001	NE LANCASTER	NE GAGE	NE JOHNSON	NE NEMAHA	NE OTOE	NE PAWNEE
526.	342007	NE CASS					
527.		NE RICHARDSON / IA POTTAWATTAMI					
528.	343003	KS CLOUD	NE DOUGLAS	NE SARPY	KS LINCOLN	KS MITCHELL	KS OSBORNE
529.	344011		KS ELLSWORTH	KS JEWELL	KS SALINE	KS SMITH	
530.		KS OTTAWA	KS REPUBLIC	KS RUSSELL	KS CLAY	KS DICKINSON	KS DONIPHAN
531.	345018	KS ATCHISON	KS BROWN	KS CHASE	KS LEAVENWORTH	KS MARION	KS MARSHALL
532.		KS GEARY	KS JACKSON	KS JEFFERSON	KS RILEY	KS WABAUNSEE	KS WASHINGTON
533.		KS MORRIS	KS NEMAHA	KS POTTAWATOMIE			
534.	346001	KS SHAWNEE	KS ANDERSON	KS BOURBON	KS CHAUTAUQUA	KS CHEROKEE	KS COFFEY
535.	347020	KS ALLEN	KS DOUGLAS	KS ELK	KS FRANKLIN	KS GREENWOOD	KS LABETTE
536.		KS CRAWFORD	KS LYON	KS MIAMI	KS MONTGOMERY	KS NEOSHO	KS OSAGE
537.		KS LINN	KS WOODSON				
538.		KS WILSON	KS SEDGWICK				
539.	348002	KS BUTLER	KS BARTON	KS COWLEY	KS HARPER	KS HARVEY	KS KINGMAN
540.	349012	KS BARBER	KS PRATT	KS RENO	KS RICE	KS STAFFORD	KS SUMNER
541.		KS MCPHERSON	KS COMANCHE	KS EDWARDS	KS FINNEY	KS FORD	KS GRANT
542.	350016	KS CLARK	KS HAMILTON	KS HASKELL	KS KEARNY	KS KIOWA	KS MEADE
543.		KS GRAY	KS SEWARD	KS STANTON	KS STEVENS		
544.		KS MORTON	KS GOVE	KS GREELEY	KS HODGEMAN		
545.	351013	KS ELLIS	KS PAWNEE	KS RUSH	KS SCOTT	KS LANE	KS LOGAN
546.		KS NESS				KS TREGO	KS WALLACE
547.		KS WICHITA					
548.	352010	KS CHEYENNE	KS DECATUR	KS GRAHAM	KS NORTON	KS PHILLIPS	KS RAWLINS
549.		KS ROOKS	KS SHERIDAN	KS SHERMAN	KS THOMAS		
550.	353003	OK CREEK	OK OSAGE	OK TULSA			

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No.	Code						
551.	354010	OK ADAIR	OK CHEROKEE	OK DELAWARE	OK CRAIG	OK MAYES	OK NOWATA
552.		OK OTTAWA	OK ROGERS	OK WASHINGTON	OK WAGONER		OK MCCURTAIN
553.		OK ATOKA	OK BRYAN	OK HASKELL	OK CHOCTAW	OK LATIMER	
554.		OK MCINTOSH	OK MUSKOGEE	OK PUSHMATAHA	OK OKMULGEE		
555.	355010	OK CARTER	OK COAL	OK GARVIN	OK COTTON	OK HUGHES	OK JEFFERSON
556.	356018	OK JOHNSTON	OK LINCOLN	OK MCCLAIN	OK LOVE	OK MARSHALL	OK MURRAY
557.		OK OKFUSKEE	OK PITTSBURG	OK POTTAWATOMIE	OK PONTOTOC	OK SEMINOLE	OK STEPHENS
558.	357003	OK CANADIAN	OK CLEVELAND	OK OKLAHOMA			
559.	358011	OK BECKHAM	OK CADDO	OK CUSTER	OK GRADY	OK GREER	OK HARMON
560.		OK JACKSON	OK KIOWA	OK ROGER MILLS	OK TILLMAN	OK WASHITA	
561.	359001	OK COMANCHE		OK DEWEY	OK ELLIS		OK GRANT
562.	360016	OK ALFALFA	OK BLAINE	OK KINGFISHER	OK LOGAN	OK GARFIELD	OK NOBLE
563.		OK HARPER	OK KAY	OK WOODS	OK WOODWARD	OK MAJOR	
564.		OK PAWNEE	OK PAYNE	OK TEXAS			
565.	361003	OK BEAVER	OK CIMARRON				
566.	362002	AR MILLER	TX BOWIE				
567.	363017	TX CAMP	TX CASS	TX DELTA	TX FANNIN	TX FRANKLIN	TX GREGG
568.		TX HARRISON	TX HOPKINS	TX HUNT	TX LAMAR	TX MARION	TX MORRIS
569.		TX RAINS	TX RED RIVER	TX TITUS	TX UPSHUR	TX WOOD	
570.	364016	TX ANGELINA	TX CHEROKEE	TX HOUSTON	TX JASPER	TX NACOGDOCHES	TX NEWTON
571.		TX PANOLA	TX POLK	TX RUSK	TX SABINE	TX SAN AUGUSTIN	TX SAN JACINTO
572.		TX SHELBY	TX TRINITY	TX TYLER	TX WALKER		.
573.	365001	TX SMITH					
574.	366002	TX JEFFERSON	TX ORANGE	TX HARRIS	TX LIBERTY	TX MONTGOMERY	
575.	367005	TX BRAZORIA	TX FORT BEND	TX BELL	TX BRAZOS	TX BURLESON	TX FALLS
576.	368020	TX ANDREWS	TX AUSTIN	TX HENDERSON	TX LEE	TX LEON	TX LIMESTONE
577.		TX FREESTONE	TX GRIMES	TX NAVARRO	TX ROBERTSON	TX VAN ZANDT	TX WALLER
578.		TX MADISON	TX MILAM				
579.	369018	TX WASHINGTON	TX WILLIAMSON				
580.		TX ARANSAS	TX BASTROP	TX BEE	TX CALDWELL	TX CALHOUN	TX COLORADO
581.		TX DE WITT	TX FAYETTE	TX GOLIAD	TX GONZALES	TX JACKSON	TX KARNES
582.		TX LAVACA	TX MATAGORDA	TX REFUGIO	TX VICTORIA	TX WHARTON	TX WILSON
583.	370002	TX NUECES	TX SAN PATRICIO				
584.	371009	TX BROOKS	TX DUVAL	TX JIM HOGG	TX JIM WELLS	TX KENEDY	TX KLEBERG
585.		TX STARR	TX WILLACY	TX ZAPATA			
586.	372001	TX HIDALGO					
587.	373001	TX CAMERON					
588.	374001	TX WEBB					
589.	375011	TX ATASCOSA	TX DIMMIT	TX FRIO	TX KINNEY	TX LA SALLE	TX LIVF OAK
590.		TX MCMULLEN	TX MAVERICK	TX MEDINA	TX UVALDE	TX ZAVALA	
591.	376002	TX BEXAR	TX GUADALUPE				
592.	377001	TX TRAVIS					
593.	378016	TX BANDERA	TX BLANCO	TX COMAL	TX BURNET	TX CONCHO	TX GILLESPIE
594.		TX HAYS	TX KENDALL	TX KIMBLE	TX KERR	TX LLANO	TX MCCULLOCH
595.		TX MASON	TX MENARD	TX SAN SABA	TX REAL		
596.	379001	TX MCLENNAN					
597.	380006	TX COLLIN	TX DALLAS	TX ELLIS	TX DENTON	TX KAUFMAN	TX ROCKWALL
598.		TX TARRANT					
599.	381002	TX JOHNSON		TX MONTAGUE		TX WISE	
600.	382001	TX GRAYSON					
601.	383005	TX CLAY	TX COOKE	TX COLEMAN	TX JACK	TX COMANCHE	TX CORYELL
602.	384023	TX BOSQUE	TX BROWN	TX HARDIN	TX CALLAHAN	TX HASKELL	TX HILL
603.		TX FASTLAND	TX EL PASO	TX PALO PINTO	TX HAMILTON	TX PARKER	TX RUNNELS
604.		TX HOOD	TX LAMPASAS	TX THROCKMORTON	TX MILLS		
605.		TX SHACKLEFORD	TX SOMERVELL		TX STEPHENS	TX YOUNG	
606.	385002	TX ARCHER	TX WICHITA				
607.	386014	TX BAYLOR	TX BRISCOE	TX CHILDRESS	TX COTTLE	TX CROSBY	TX DICKENS
608.		TX FLOYD	TX FOARD	TX HALL	TX HARDEMAN	TX KING	TX KNOX

No.	Code					
609.	387012	TX MOTLEY	TX WILBARGER	TX DONLEY	TX GRAY	TX HANSFORD
610.	388006	TX ARMSTRONG	TX CARSON	TX OCHILTREE	TX ROBERTS	TX WHEELER
611.		TX HEMPHILL	TX HUTCHINSON	TX MOORE	TX OLDHAM	TX SHERMAN
612.		TX DALLAM	TX DEAF SMITH			
613.						
614.	389002	TX POTTER	TX RANDALL	TX HALE	TX HOCKLEY	TX LAMB
615.	390009	TX BAILEY	TX CASTRO			
616.		TX PARMER	TX TERRY			
617.	391001	TX LUBBOCK	TX BORDEN	TX DAWSON	TX FISHER	TX GAINES
618.	392018	TX ANDERSON	TX GLASSCOCK	TX KENT	TX LYNN	TX MARTIN
619.		TX GARZA	TX NOLAN	TX STERLING	TX STONEWALL	TX SWISHER
620.		TX MITCHELL	TX TAYLOR			
621.	393002	TX JONES				
622.	394001	TX MIDLAND				
623.	395001	TX ECTOR				
624.	396012	TX BREWSTER	TX CRANE	TX CROCKETT	TX IRION	TX PECOS
625.	397001	TX REAGAN	TX SCHLEICHER	TX TERRELL	TX UPTON	TX VAL VERDE
626.		TX TOM GREEN				
627.	398008	TX CULBERSON	TX HUOSPETH	TX LOVING	TX PRESIDIO	TX REEVES
628.		TX WARD	TX WINKLER			
629.		TX ERATH				
630.	399001	AZ MARICOPA		AZ GRAHAM		
631.	400901	AZ COCHISE	AZ GILA	AZ GREENLEE	AZ PINAL	AZ SANTA CRUZ
632.						
633.	401006	AZ PIMA	AZ NAVAJO	AZ YAVAPAI		
634.	402001	AZ APACHE	AZ MOHAVE			
635.	403002	AZ COCONINO				
636.	404003	AZ YUMA				
637.	405001	NM CATRON	NM DONA ANA	NM GRANT	NM LUNA	NM SIERRA
638.	406008	NM SOCORRO	NM VALENCIA	NM HIDALGO	NM SAN JUAN	NM SANTE FE
639.		NM LOS ALAMOS	NM MCKINLEY	NM RIO ARRIBA	NM SAN MIGUEL	NM TORRANCE
640.		NM COLFAX	NM HARDING	NM SANDOVAL		
641.	407005	NM TAOS	NM UNION	NM MORA	NM ROOSEVELT	
642.	408008	NM CURRY	NM DE BACA	NM QUAY		
643.				NM GUADALUPE		
644.	409006	NM BERNALILLO	NM EDDY	NM LEA		
645.		NM CHAVES		NM OTERO		
646.	410001	TX CHAMBERS	TX GALVESTON			
647.	411004	MT FLATHEAD	MT GLACIER	MT LINCOLN	MT MINERAL	MT PONDERA
648.	412002	MT SANDERS	MT TETON	MT LAKE	MT LEWIS? CLARK	
649.	413009	MT BEAVERHEAD	MT DEER LODGE	MT TOOLE	MT JEFFERSON	MT MADISON
650.	414010	MT MISSOULA	MT POWELL	MT GRANITE	MT SILVER BOW	
651.		MT CASCADE		MT RAVALLI		
652.	415001	MT BLAINE	MT CHOUTEAU	MT FERGUS	MT HILL	MT LIBERTY
653.	416009	MT MUSSELSHELL	MT PETROLEUM	MT PHILLIPS	MT JUDITH BASIN	
654.		MT DANIELS	MT DAWSON	MT GARFIELD	MT MCCONE	
655.	417010	MT ROOSEVELT	MT SHERIDAN	MT VALLEY	MT PRAIRIE	MT RICHLAND
656.	418007	MT BIG HORN	MT CARTER	MT CUSTER	MT WIBAUX	MT ROSEBUD
657.		MT TREASURE			MT POWDER RIVER	
658.	419001	MT YELLOWSTONE			MT FALLON	MT YSNP?PARK
659.	420009	MT BROADWATER	MT CARBON	MT GALLATIN	MT MEAGHER	
660.		MT STILLWATER	MT SWEET GRASS	MT WHEATLAND	MT GOLOEN VALLE	
661.	421008	ID BONNER	IO BOUNDARY	IO CLEARWATER	ID KOOTENAI	ID LEMHI
662.		ID MINIDOKA	ID POWER	ID JEROME	ID LATAH	ID OWYHEE
663.	422009	IO ADAMS	IO BOISE	ID GOODING	ID CARIBOU	ID CLARK
664.		ID TWIN FALLS	ID VALLEY	IO FREMONT?YSNP	ID PAYETTE	ID SHOSHONE
665.	423013	ID BANNOCK	ID BEAR LAKE	ID BINGHAM	IO BONNEVILLE	
666.		ID FRANKLIN	ID IDAHO	IO LINCOLN	IO NEZ PERCE	

No.	Code						
667.		ID WASHINGTON	ID BUTTE	ID CAMAS	ID CANYON	ID CASSIA	ID ELMORE
668.	424012	ID BLAINE	ID JEFFERSON	ID LEWIS	ID MADISON	ID ONEIDA	ID TETON
669.		ID GEM	ID BENEWAH				
670.	425002	ID ADA					
671.	426005	WY BIG HORN	WY CROOK	WY HOT SPRINGS	WY PARK	WY WASHAKIE	WY NATRONA
672.	427004	WY CAMPBELL	WY JOHNSON	WY SHERIDAN	WY WESTON		
673.	428008	WY ALBANY	WY CARBON	WY CONVERSE	WY GOSHEN	WY LARAMIE	WY UINTA
674.		WY NIOBRARA	WY PLATTE				
675.	429006	WY FREMONT	WY LINCOLN	WY SUBLETTE	WY SWEETWATER	WY TETON	
676.							
677.	430004	UT BOX ELDER	UT CACHE	UT RICH	UT TOOELE	UT SUMMIT	UT UINTAH
678.	431007	UT CARBON	UT DAGGETT	UT DUCHESNE	UT MORGAN		
679.		UT WASATCH					
680.	432001	UT WEBER	UT SALT LAKE				
681.	433002	UT DAVIS					
682.	434001	UT UTAH	UT IRON	UT JUAB	UT MILLARD	UT PIUTE	UT SANPETE
683.	435008	UT BEAVER	UT WASHINGTON	UT GRAND	UT KANE	UT SAN JUAN	UT WAYNE
684.		UT SEVIER	UT GARFIELD				
685.	436006	UT EMERY					
686.							
687.	437004	CO GARFIELD	CO MESA	CO MOFFATT	CO RIO BLANCO	CO GRAND	CO JACKSON
688.	438013	CO CHAFFEE	CO CLEAR CREEK	CO EAGLE	CO GILPIN	CO ROUTT	CO SUMMIT
689.		CO LAKE	CO LARIMER	CO PARK	CO PITKIN		
690.		CO TELLER					
691.	439007	CO LOGAN	CO MORGAN	CO PHILLIPS	CO SEDGWICK	CO WASHINGTON	CO WELD
692.		CO YUMA					
693.	440005	CO ADAMS	CO ARAPAHOE	CO BOULDER	CO DENVER	CO JEFFERSON	CO ELBERT
694.	441012	CO BACA	CO BENT	CO CHEYENNE	CO CROWLEY	CO DOUGLAS	CO PROWERS
695.		CO KIOWA	CO KIT CARSON	CO LAS ANIMAS	CO LINCOLN	CO OTERO	
696.	442001	CO EL PASO					
697.	443001	CO PUEBLO					
698.	444010	CO ALAMOSA	CO ARCHULETA	CO CONEJOS	CO COSTILLA	CO CUSTER	CO FREMONT
699.		CO HUERFANO	CO MINERAL	CO RIO GRANDE	CO SAGUACHE		
700.	445010	CO DELTA	CO DOLORES	CO GUNNISON	CO HINSDALE	CO LA PLATA	CO MONTEZUMA
701.		CO MONTROSE	CO OURAY	CO SAN JUAN	CO SAN MIGUEL		
702.	446007	WA FERRY	WA OKANOGAN	WA PEND OREILLE	WA SAN JUAN	WA SKAGIT	WA STEVENS
703.		WA WHATCOM					
704.	447001	WA SPOKANE	WA ASOTIN	WA COLUMBIA	WA FRANKLIN	WA GARFIELD	WA LINCOLN
705.	448008	WA ADAMS	WA WHITMAN				
706.		WA WALLA WALLA					
707.	449007	WA BENTON	WA CHELAN	WA DOUGLAS	WA GRANT	WA KITTITAS	WA KLICKITAT
708.		WA YAKIMA					
709.	450002	WA KING	WA SNOHOMISH	WA GRAYS HARBOR	WA ISLAND	WA JEFFERSON	WA KITSAP
710.	451012	WA CLALLAM	WA COWLITZ	WA PACIFIC	WA SKAMANIA	WA THURSTON	WA WAHKIAKUM
711.		WA LEWIS	WA MASON				
712.	452001	WA PIERCE					
713.	453004	OR CLATSOP	OR COLUMBIA	OR TILLAMOOK	OR YAMHILL	OR JEFFERSON	OR SHERMAN
714.	454002	OR MARION	OR POLK	OR MULTNOMAH	OR WASHINGTON	OR UNION	OR WALLOWA
715.	455004	WA CLARK	OR CLACKAMAS	OR GILLIAM	OR HOOD RIVER		
716.	456008	OR CROOK	OR DESCHUTES				
717.		OR WASCO	OR WHEELER				
718.	457006	OR BAKER	OR GRANT	OR MORROW	OR UMATILLA		
719.							
720.	458002	OR HARNEY	OR MALHEUR				
721.	459002	OR KLAMATH	OR LAKE				
722.	460005	OR COOS	OR CURRY	OR DOUGLAS	OR JACKSON	OR JOSEPHINE	
723.	461001	OR LANE					
724.	462003	OR BENTON	OR LINCOLN	OR LINN	(53)		

Line	Code					
725.	463005	CA DEL NORTE	CA HUMBOLDT	CA SHASTA	CA SISKIYOU	CA TRINITY
726.	464005	CA LASSEN	CA MODOC	CA NEVADA	CA PLUMAS	CA SIERRA
727.	465009	CA BUTTE	CA COLUSA	CA GLENN	CA LAKE	CA MENDOCINO / CA SONOMA
728.	466003	CA SUTTER	CA TEHAMA	CA YUBA		
729.	467002	CA PLACER	CA SACRAMENTO	CA YOLO		
730.	468005	CA NAPA	CA SOLANO			
731.	469001	CA ALAMEDA	CA CONTRA COSTA	CA MARIN	CA SAN FRANCISC	CA SAN MATEO
732.	470008	CA SAN JOAQUIN	CA AMADOR	CA CALAVERAS	CA EL DORADO	CA MADERA
733.	471004	CA ALPINE	CA TUOLUMNE	CA SANTA CRUZ	CA STANISLAUS	CA MARIPOSA
734.	472001	CA MONO	CA SAN BENITO			
735.	473001	CA MERCED				
736.	474001	CA SANTA CLARA				
737.	475002	CA MONTEREY				
738.	476001	CA FRESNO				
739.	477002	CA INYO	CA TULARE			
740.	478002	CA KERN				
741.	479001	CA KINGS	CA SAN LUIS OBI			
742.	480001	CA RIVERSIDE	CA SAN BERNADIN			
743.	481001	CA LOS ANGELES				
744.	482301	CA VENTURA				
745.	483001	CA SANTA BARBAR				
746.	484301	CA ORANGE				
747.	485001	CA SAN DIEGO				
748.	486002	CA IMPERIAL				
749.	487003	NV CLARK	NV NYE	NV WHITE PINE		
750.	488004	NV LINCOLN	NV EUREKA	NV LANDER	NV PERSHING	
751.	489001	NV ELKO	NV HUMBOLDT	NV LYON	NV MINERAL	
752.	490006	NV CHURCHILL			NV CARSON CITY	
753.		NV WASHOE				NV STOREY
754.		NV DOUGLAS	NV ESMERALDA			
755.						
756.	506001	HI HAWAII				
757.	507001	HI MAUI?KOLOWAO				
758.	508001	HI HONOLULU				
759.	509001	HI KAUAI				

END DATA.

Appendix 4

Data Set BEA

The first column gives the BEA zone number
times 1000 plus the number of counties in
the zone. In the next six columns, for as
many lines as are needed, the county names
(with state abbreviations) are listed. For
example, lines 17 and 18 list the 12 counties
that comprise BEA zone 7. The error messages
and strings of asterisks that appear in place
of some county names for BEA zones 1-6 and 14
do not detract from the validity of the list-
ing for other BEA zones. These BEA zones are
the only ones affected by the first 40 NNS
zones for which the NNS to BEA zone mapping
was manually determined.

```
@RUN,M/R JOHNB,36131-JACKSO,LBEA,3
@ASG,AX PRO.
@ASG,A FIPSBEA.
@USE 10.,FIPSBEA.
@ASG,A ABEA.
@USE 11.,ABEA.
@ASG,A BEA.
@USE 12.,BEA.
@ASG,A BEAFIPS.
@USE 13.,BEAFIPS.
@ASG,A BBEA.
@USE 15.,BBEA.
@XQT PRO.NAMELIST
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101002      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101005      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101010      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101011      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101014      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101015      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101001      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101003      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101004      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101006      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101007      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101008      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101009      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101012      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101013      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   101016      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   102009      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   102004      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   102005      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   102010      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   102001      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   102002      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   102006      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   102007      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   102008      0
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   104001    -14
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NI:   104003    -14
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   104004    -14
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   104005    -14
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   104009    -14
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   104010    -14
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   104011    -14
ERROR---I(M+M2) NOT FOUND IN II; I(M+M2),NN:   104012    -14
```

```
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    104013    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    104014    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    105001    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    105002    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    105003    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    105004    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    105005    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    102003     0
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    104006    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    104007    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    104008    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    106002    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    106003    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    106004    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    106005    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    106006    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    106007    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    106008    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    104002    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    106001    -14
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    950001   -3012
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    950002   -3012
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    950003   -3012
ERROR---I(M+M2) NOT FOUND IN III! I(M+M2),NN:    950004   -3012

QFREE 15.

QDATA BBEA,
DATA T7 RL70-5 08/14-10:38:36
 1.   1006   *************************************************
 2.          *************************************************
 3.   2011   *************************************************
 4.          *************************************************
 5.   3015   VT ESSEX      VT FRANKLIN     VT GRAND ISLE   VT ADDISON    VT CALEDONIA   VT CHITTENDEN
 6.          VT RUTLAND    VT WASHINGTON   VT WINDSOR      VT LAMOILLE   VT ORANGE      VT ORLEANS
 7.          *************************************************
 8.   4020   *************************************************
 9.          *************************************************
10.          *************************************************
11.          *************************************************
12.   5012   ************** VT WINDHAM *********
13.          *************************************************
14.   6016   VT BENNINGTON NY ALBANY       NY CLINTON      NY ESSEX
15.          NY FULTON     NY GREENE       NY HAMILTON     NY MONTGOMERY NY RENSSELAER  NY SARATOGA
16.          NY SCHENECTADY NY SCHOHARIE   NY WARREN       NY WASHINGTON
17.   7012   NY CAYUGA     NY CORTLAND     NY FRANKLIN     NY HERKIMER   NY JEFFERSON   NY LEWIS
18.          NY MADISON    NY ONEIDA       NY ONONDAGA     NY OSWEGO     NY ST LAWRENCE NY TOMPKINS
19.   8007   NY LIVINGSTON NY MONROE       NY ONTARIO      NY ORLEANS    NY SENECA      NY WAYNE
20.          NY YATES
21.   9009   NY ALLEGANY   NY CATTARAUGUS  NY CHAUTAUQUA   NY ERIE       NY GENESEE     NY NIAGARA
22.          NY WYOMING    PA MCKEAN       PA POTTER
23.  10005   PA CRAWFORD   PA ERIE         PA FOREST       PA VENANGO    PA WARREN
24.  11008   PA CAMERON    PA CENTRE       PA CLEARFIELD   PA CLINTON    PA ELK         PA JEFFERSON
25.          PA LYCOMING   PA SULLIVAN
26.  12011   NY BROOME     NY CHEMUNG      NY CHENANGO     NY DELAWARE   NY OTSEGO      NY SCHUYLER
27.          NY STEUBEN    NY TIOGA        PA BRADFORD     PA SUSQUEHANNA PA TIOGA      PA WAYNE
28.  13006   PA COLUMBIA   PA LACKAWANNA   PA LUZERNE      PA PIKE       PA WAYNE       PA WYOMING
29.          *************************************************
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(57)

No.	Code						
30.	14022	**************	NY DUTCHESS	NY NASSAU	NY ORANGE	NY PUTNAM	NY ROCKLAND
31.		NY SUFFOLK	NY SULLIVAN	NY ULSTER	NY WESTCHESTER	NY FIVE BOROS	NJ BERGEN
32.		NJ ESSEX	NJ HUDSON	NJ HUNTERDON	NJ MIDDLESEX	NJ MONMOUTH	NJ MORRIS
33.		NJ PASSAIC	NJ SOMERSET	NJ SUSSEX	NJ UNION		
34.	15023	NJ ATLANTIC	NJ BURLINGTON	NJ CAMDEN	NJ CAPE MAY	NJ CUMBERLAND	NJ GLOUCESTER
35.		NJ MERCER	NJ OCEAN	NJ SALEM	NJ WARREN	PA BERKS	PA BUCKS
36.		PA CARBON	PA CHESTER	DE NEW CASTLE	PA LEHIGH	PA MONROE	PA MONTGOMERY
37.		PA NORTHAMPTON	PA PHILADELPHIA	PA SCHUYLKILL		MD CECIL	
38.	16018	PA ADAMS	PA BEDFORD	PA BLAIR	PA CUMBERLAND	PA DAUPHIN	PA FRANKLIN
39.		PA FULTON	PA HUNTINGDON	PA JUNIATA	PA LANCASTER	PA LEBANON	PA MIFFLIN
40.		PA MONTOUR	PA NORTHUMBRLND	PA PERRY	PA SNYDER	PA UNION	PA YORK
41.	17020	DE KENT	DE SUSSEX	MD ANNE ARUNDEL	MD BALTIMORE	MD BALTIMORE CY	MD CAROLINE
42.		MD CARROLL	MD DORCHESTER	MD FREDERICK	MD HARFORD	MD HOWARD	MD KENT
43.		MD QUEEN ANNES	MD SOMERSET	MD TALBOT	MD WASHINGTON	MD WICOMICO	MD WORCESTER
44.		VA ACCOMACK	VA NORTHAMPTON				
45.	18016	MD CALVERT	MD CHARLES	MD MONTGOMERY	MD PRINCE GEORG	MD ST MARYS	DC WASHINGTON
46.		VA ARLING?ALEXA	VA CULPEPER	VA FAIRFAX?FALL	VA FAUQUIER	VA KING GEORGE	VA LOUDOUN
47.		VA PRINCEWILLIA	VA RAPPAHANNOCK	VA SPOTSYLV?FRK	VA STAFFORD		
48.	19017	VA AUGUSTA?ST?W	VA BATH	VA CLARKE	VA FREDERICK?WI	VA HIGHLAND	VA PAGE
49.		VA ROCKBR?BV?LE	VA ROCKINGHAM?H	VA SHENANDOAH	VA WARREN	WV BERKELEY	WV GRANT
50.		WV HAMPSHIRE	WV HARDY	WV JEFFERSON	WV MORGAN	WV PENDLETON	
51.	20021	VA ALLEG?CLF?CU	VA AMHERST	VA APPOMATTOX	VA BEDFORD?BEDC	VA BOTETOURT	VA CAMPBELL?LYN
52.		VA CHARLOTTE	VA CRAIG	VA FLOYD	VA FRANKLIN	VA GILES	VA HALIFAX?SBOS
53.		VA HENRY?MARTIN	VA MONTGOMERY?R	VA NELSON	VA PATRICK	VA PITTSYLV?DAN	VA PULASKI
54.		VA ROANOKE?PRO?S	VA WYTHE				
55.	21033	VA ALBEMARLE?CH	VA AMELIA	VA BRUNSWICK	VA BUCKINGHAM	VA CAROLINE	VA CHARLES CITY
56.		VA CHESTFD?CHTS	VA CUMBERLAND	VA DINWIDDIES?P	VA ESSEX	VA FLUVANNA	VA GOOCHLAND
57.		VA GREENE	VA GRNSVL?EMPOR	VA HANOVER	VA HERICO?RICHM	VA KING ? QUEEN	VA KING WILLIAM
58.		VA LANCASTER	VA LOUISA	VA LUNENBURG	VA MADISON	VA MECKLENBURG	VA NEW KENT
59.		VA NORTHUMBERLD	VA NOTTOWAY	VA ORANGE	VA POWHATAN	VA PRINCEEDWARD	VA PR GEO?HOPEW
60.		VA RICHMOND	VA SUSSEX	VA WESTMORELAND			
61.	22019	VA GLOUCESTER	VA ISLE OFWIGHT	VA JAMESCITY?WI	VA MATHEWS	VA MIDDLESEX	VA NANSEMO?SUFF
62.		VA CHESCITY?N?P	VA VA BEACH	VA SHAMPTON?FRA	VA SURRY	VA YORK?HAMP?NN	NC BERTIE
63.		NC CAMDEN	NC CHOWAN	NC CURRITUCK	NC GATES	NC HERTFORD	NC PASQUOTANK
64.		NC PERQUIMANS					
65.	23031	NC BEAUFORT	NC BLADEN	NC CHATHAM	NC CUMBERLAND	NC DARE	NC DURHAM
66.		NC EDGECOMBE	NC FRANKLIN	NC GRANVILLE	NC GREENE	NC HALIFAX	NC HARNETT
67.		NC HOKE	NC HYDE	NC JOHNSTON	NC LEE	NC MARTIN	NC NASH
68.		NC NORTHAMPTON	NC ORANGE	NC PERSON	NC PITT	NC ROBESON	NC SAMPSON
69.		NC TYRRELL	NC VANCE	NC WAKE	NC WARREN	NC WASHINGTON	NC WAYNE
70.		NC WILSON					
71.	24011	NC BRUNSWICK	NC CARTERET	NC COLUMBUS	NC CRAVEN	NC DUPLIN	NC JONES
72.		NC LENOIR	NC NEW HANOVER	NC ONSLOW	NC PAMLICO	NC PENDER	
73.	25017	VA CARROLL?GALA	VA GRAYSON	NC ALAMANCE	NC ALLEGHANY	NC ASHE	NC DAVIDSON
74.		NC DAVIE	NC FORSYTH	NC GUILFORD	NC MONTGOMERY	NC MOORE	NC RANDOLPH
75.		NC ROCKINGHAM	NC STOKES	NC SURRY	NC WILKES	NC YADKIN	
76.	26021	NC ALEXANDER	NC ANSON	NC BURKE	NC CABARRUS	NC CALDWELL	NC CATAWBA
77.		NC CLEVELAND	NC GASTON	NC IREDELL	NC LINCOLN	NC MECKLENBURG	NC RICHMOND
78.		NC ROWAN	NC RUTHERFORD	NC SCOTLAND	NC STANLY	NC UNION	NC WATAUGA
79.		SC CHESTER	SC LANCASTER	SC YORK			
80.	27014	NC AVERY	NC BUNCOMBE	NC CLAY	NC GRAHAM	NC HAYWOOD	NC HENDERSON
81.		NC JACKSON	NC MCDOWELL	NC MACON	NC MADISON	NC MITCHELL	NC SWAIN
82.		NC TRANSYLVANIA	NC YANCEY				
83.	28011	NC POLK	SC ABBEVILLE	SC ANDERSON	SC CHEROKEE	SC GREENVILLE	SC GREENWOOD
84.		SC LAURENS	SC OCONEE	SC PICKENS	SC SPARTANBURG	SC UNION	
85.	29010	SC CALHOUN	SC CLARENDON	SC FAIRFIELD	SC KERSHAW	SC LEE	SC LEXINGTON
86.		SC NEWBERRY	SC ORANGEBURG	SC RICHLAND	SC SUMTER		
87.	30009	SC CHESTERFIELD	SC DARLINGTON	SC DILLON (59)	SC FLORENCE	SC GEORGETOWN	SC HORRY

#	Code						
88		SC MARION	SC MARLBORO	SC WILLIAMSBURG			
89	31006	SC BEAUFORT	SC BERKELEY	SC CHARLESTON	SC COLLETON	SC DORCHESTER	SC HAMPTON
90							
91	32019	SC AIKEN	SC ALLENDALE	SC BAMBERG	SC BARNWELL	SC EDGEFIELD	SC MCCORMICK
92		SC SALUDA	GA BURKE	GA COLUMBIA	GA EMANUEL	GA GLASCOCK	GA JEFFERSON
93		GA JENKINS	GA LINCOLN	GA MCDUFFIE	GA RICHMOND	GA TALIAFERRO	GA WARREN
94		GA WILKES					
95	33019	SC JASPER	GA APPLING	GA ATKINSON	GA BACON	GA BRYAN	GA BULLOCH
96		GA CANDLER	GA CHATHAM	GA COFFEE	GA EFFINGHAM	GA EVANS	GA JEFF DAVIS
97		GA LIBERTY	GA LONG	GA MONTGOMERY	GA SCREVEN	GA TATTNALL	GA TOOMBS
98		GA WAYNE					
99	34024	GA BRANTLEY	GA CAMDEN	GA CHARLTON	GA GLYNN	GA MCINTOSH	GA PIERCE
100		GA WARE	FL ALACHUA	FL BAKER	FL BRADFORD	FL CLAY	FL COLUMBIA
101		FL DIXIE	FL DUVAL	FL GILCHRIST	FL HAMILTON	FL LAFAYETTE	FL LEVY
102		FL MARION	FL NASSAU	FL PUTNAM	FL ST JOHNS	FL SUWANNEE	FL UNION
103	35008	FL BREVARD	FL FLAGLER	FL LAKE	FL ORANGE	FL OSCEOLA	FL SEMINOLE
104		FL SUMTER	FL VOLUSIA				
105	36010	FL BROWARD	FL DADE	FL GLADES	FL HENDRY	FL INDIAN RIVER	FL MARTIN
106	37014	FL MONROE	FL OKEECHOBEE	FL PALM BEACH	FL ST LUCIE	FL HARDEE	FL HERNANDO
107		FL CHARLOTTE	FL CITRUS	FL COLLIER	FL DE SOTO	FL PASCO	FL PINELLAS
108		FL HIGHLANDS	FL HILLSBOROUGH	FL LEE	FL MANATEE		
109		FL POLK	FL SARASOTA				
110	38014	FL BAY	FL CALHOUN	FL FRANKLIN	FL GADSDEN	FL GULF	FL HOLMES
111		FL JACKSON	FL JEFFERSON	FL LEON	FL LIBERTY	FL MADISON	FL TAYLOR
112		FL WAKULLA	FL WASHINGTON				
113	39005	FL ESCAMBIA	FL OKALOOSA	FL SANTA ROSA	FL WALTON		
114	40020	AL AUTAUGA	AL BARBOUR	AL BULLOCK	AL BUTLER	AL ESCAMBIA	AL COOSA
115		AL COVINGTON	AL CRENSHAW	AL DALE	AL DALLAS	AL COFFEE	AL GENEVA
116		AL HENRY	AL HOUSTON	AL LOWNDES	AL MACON	AL ELMORE	AL PERRY
117	41027	AL PIKE	AL TALLAPOOSA			AL MONTGOMERY	
118		GA BAKER	GA BEN HILL	GA BERRIEN	GA BROOKS	GA CALHOUN	GA CLAY
119		GA CLINCH	GA COLQUITT	GA COOK	GA DECATUR	GA DOUGHERTY	GA EARLY
120		GA ECHOLS	GA GRADY	GA IRWIN	GA LANIER	GA LEE	GA LOWNDES
121		GA MILLER	GA MITCHELL	GA RANDOLPH	GA SEMINOLE	GA TERRELL	GA THOMAS
122		GA TIFT	GA TURNER	GA WORTH			
123	42026	GA BALDWIN	GA BIBB	GA BLECKLEY	GA CRAWFORD	GA CRISP	GA DODGE
124		GA DOOLY	GA HANCOCK	GA HOUSTON	GA JASPER	GA JOHNSON	GA JONES
125		GA LAURENS	GA MACON	GA MONROE	GA PEACH	GA PULASKI	GA PUTNAM
126		GA TAYLOR	GA TELFAIR	GA TREUTLEN	GA TWIGGS	GA WASHINGTON	GA WHEELER
127		GA WILCOX	GA WILKINSON				
128	43017	GA CHATTAHOOCHE	GA HARRIS	GA HEARD	GA MARION	GA MERIWETHER	GA MUSCOGEE
129		GA QUITMAN	GA SCHLEY	GA STEWART	GA SUMTER	GA TALBOT	GA TROUP
130		GA WEBSTER	AL CHAMBERS	AL LEE	AL RANDOLPH	AL RUSSELL	
131	44049	GA BANKS	GA BARROW	GA BARTOW	GA CARROLL		GA CHEROKEE
132		GA CLARKE	GA CLAYTON	GA COBB	GA DAWSON		GA DOUGLAS
133		GA ELBERT	GA FANNIN	GA FAYETTE	GA FORSYTH		GA FRANKLIN
134		GA GILMER	GA GREENE	GA GWINNETT	GA HALL		GA HARALSON
135		GA HART	GA HENRY	GA JACKSON	GA LAMAR	GA LUMPKIN	GA MADISON
136		GA MORGAN	GA NEWTON	GA OCONEE	GA OGLETHORPE	GA PAULDING	GA PICKENS
137		GA PIKE	GA POLK	GA RABUN	GA ROCKDALE	GA WALTON	GA STEPHENS
138		GA TOWNS	GA UNION	GA UPSON	GA SPALDING	GA WHITE	GA DEKALB?FULTN
139	45035	AL CLEBURNE	AL BLOUNT	AL CALHOUN	AL CHILTON		AL CLAY
140		AL BIBB	AL ETOWAH	AL FAYETTE	AL HALE		AL JEFFERSON
141		AL CULLMAN	AL MARION	AL PICKENS	AL SHELBY		AL TALLADEGA
142		AL LAMAR	AL WALKER	AL WINSTON	MS CHICKASAW		MS CHOCTAW
143		AL TUSCALOOSA	MS ITAWAMBA	MS LEE	MS MONROE		MS NOXUBEE
144		MS CLAY	MS PONTOTOC	MS PRENTISS (59)	MS WEBSTER		
145		MS OKTIBBEHA					

No.	Code						
146.	46038	TN CARROLL	TN CHESTER	TN CROCKETT	TN DECATUR	TN DYER	TN FAYETTE
147.		TN GIBSON	TN HARDEMAN	TN HAYWOOD	TN HENDERSON	TN HENRY	TN LAUDERDALE
148.		TN MADISON	TN SHELBY	TN TIPTON	TN WEAKLEY	MS BENTON	MS COAHOMA
149.		MS DE SOTO	MS LAFAYETTE	MS MARSHALL	MS PANOLA	MS QUITMAN	MS TATE
150.		MS TIPPAH	MS TUNICA	AR CLAY	AR CRAIGHEAD	AR CRITTENDEN	AR CROSS
151.		AR GREENE	AR LAWRENCE	AR LEE	AR MISSISSIPPI	AR PHILLIPS	AR POINSETT
152.		AR RANDOLPH	AR ST FRANCIS				
153.	47015	TN FRANKLIN	TN HARDIN	TN LINCOLN	TN MCNAIRY	TN WAYNE	AL COLBERT
154.		AL FRANKLIN	AL LAUDERDALE	AL LAWRENCE	AL LIMESTONE	AL MADISON	AL MARSHALL
155.		AL MORGAN	MS ALCORN	MS TISHOMINGO			
156.	48020	TN BLEDSOE	TN BRADLEY	TN GRUNDY	TN HAMILTON	TN MARION	TN MEIGS
157.		TN POLK	TN RHEA	TN SEQUATCHIE	GA CATOOSA	GA CHATTOOGA	GA DADE
158.		GA GORDON	GA MURRAY	GA WALKER	GA WHITFIELD	NC CHEROKEE	AL DE KALB
159.		AL JACKSON					
160.	49050	KY ALLEN	KY BARREN	KY BUTLER	KY CHRISTIAN	KY CLINTON	KY CUMBERLAND
161.		KY EDMONSON	KY LOGAN	KY METCALFE	KY MONROE	KY SIMPSON	KY TODD
162.		KY TRIGG	KY WARREN	TN BEDFORD	TN CANNON	TN CHEATHAM	TN CLAY
163.		TN COFFEE	TN DAVIDSON	TN DE KALB	TN DICKSON	TN GILES	TN HICKMAN
164.		TN HOUSTON	TN HUMPHREYS	TN JACKSON	TN LAWRENCE	TN LEWIS	TN MACON
165.		TN MARSHALL	TN MAURY	TN MONTGOMERY	TN MOORE	TN OVERTON	TN PERRY
166.		TN PICKETT	TN PUTNAM	TN ROBERTSON	TN RUTHERFORD	TN SMITH	TN STEWART
167.		TN SUMNER	TN TROUSDALE	TN VAN BUREN	TN WARREN	TN WHITE	TN WILLIAMSON
168.		TN WILSON					
169.	50025	KY BELL	KY HARLAN	KY KNOX	KY LAUREL	KY MCCREARY	KY WAYNE
170.		KY WHITLEY	TN ANDERSON	TN BLOUNT	TN CAMPBELL	TN CLAIBORNE	TN COCKE
171.		TN CUMBERLAND	TN FENTRESS	TN GRAINGER	TN HAMBLEN	TN JEFFERSON	TN KNOX
172.		TN LOUDON	TN MONROE	TN MORGAN	TN ROANE	TN SCOTT	TN SEVIER
173.		TN UNION					
174.	51020	VA BLAND	VA BUCHANAN	VA DICKENSON	VA LEE	VA RUSSELL	VA SCOTT
175.		VA SMYTH	VA TAZEWELL	VA WASHINGTN?BR	VA WISE?NORTON	WV MCDOWELL	WV MERCER
176.		TN CARTER	TN GREENE	TN HANCOCK	TN HAWKINS	TN JOHNSON	TN SULLIVAN
177.		TN UNICOI	TN WASHINGTON				
178.	52038	OH GALLIA	OH LAWRENCE	OH MEIGS	OH SCIOTO	WV BOONE	WV BRAXTON
179.		WV CABELL	WV CALHOUN	WV CLAY	WV FAYETTE	WV GILMER	WV GREENBRIER
180.		WV JACKSON	WV KANAWHA	WV LINCOLN	WV LOGAN	WV MASON	WV MINGO
181.		WV MONROE	WV NICHOLAS	WV POCAHONTAS	WV PUTNAM	WV RALEIGH	WV ROANE
182.		WV SUMMERS	WV WAYNE	WV WEBSTER	WV WYOMING	KY BOYD	KY CARTER
183.		KY ELLIOTT	KY FLOYD	KY GREENUP	KY JOHNSON	KY LAWRENCE	KY MARTIN
184.		KY PIKE	KY ROWAN				
185.	53039	KY ADAIR	KY ANDERSON	KY BATH	KY BOURBON	KY BOYLE	KY BREATHITT
186.		KY CASEY	KY CLARK	KY CLAY	KY ESTILL	KY FAYETTE	KY FRANKLIN
187.		KY GARRARD	KY GREEN	KY HARRISON	KY JACKSON	KY JESSAMINE	KY KNOTT
188.		KY LEE	KY LESLIE	KY LETCHER	KY LINCOLN	KY MADISON	KY MAGOFFIN
189.		KY MENIFEE	KY MERCER	KY MONTGOMERY	KY MORGAN	KY NICHOLAS	KY OWSLEY
190.		KY PERRY	KY POWELL	KY PULASKI	KY ROCKCASTLE	KY RUSSELL	KY SCOTT
191.		KY TAYLOR	KY WOLFE	KY WOODFORD			
192.	54024	IN CLARK	IN CRAWFORD	IN FLOYD	IN HARRISON	IN JEFFERSON	IN ORANGE
193.		IN SCOTT	IN WASHINGTON	KY BRECKINRIDGE	KY BULLITT	KY GRAYSON	KY HARDIN
194.		KY HART	KY HENRY	KY JEFFERSON	KY LARUE	KY MARION	KY MEADE
195.		KY NELSON	KY OLDHAM	KY SHELBY	KY SPENCER	KY TRIMBLE	KY WASHINGTON
196.	55029	IN DAVIESS	IN DUBOIS	IN GIBSON	IN KNOX	IN MARTIN	IN PERRY
197.		IN PIKE	IN POSEY	IN SPENCER	IN VANDERBURGH	IN WARRICK	IL EDWARDS
198.		IL GALLATIN	IL HAMILTON	IL LAWRENCE	IL SALINE	IL WABASH	IL WHITE
199.		KY CALDWELL	KY CRITTENDEN	KY DAVIESS	KY HANCOCK	KY HENDERSON	KY HOPKINS
200.		KY MCLEAN	KY MUHLENBERG	KY OHIO	KY UNION	KY WEBSTER	
201.	56008	IN CLAY	IN GREENE	IN PARKE	IN SULLIVAN	IN VERMILLION	IN VIGO
202.	57012	IL CLARK	IL CRAWFORD	IL DE WITT (60)			
203.		IL CASS	IL CHRISTIAN	IL LOGAN	IL MACON	IL MASON	

No.	Code						
204.	58008	IL MENARD	IL MORGAN	IL MOULTRIE	IL SANGAMON	IL SCOTT	IL SHELBY
205.		IL CHAMPAIGN	IL COLES	IL CUMBERLAND	IL DOUGLAS	IL EDGAR	IL FORD
206.		IL PIATT	IL VERMILION				
207.	59008	IN BENTON	IN CARROLL	IN CLINTON	IN MONTGOMERY	IN FOUNTAIN	IN TIPPECANOE
208.		IN WARREN	IN WHITE				
209.	60022	IN BARTHOLOMEW	IN BROWN	IN BROWN	IN CASS	IN DECATUR	IN HAMILTON
210.		IN HANCOCK	IN HOWARD	IN HOWARD	IN JACKSON	IN JENNINGS	IN JOHNSON
211.		IN LAWRENCE	IN HENDRICKS	IN MIAMI	IN MONROE	IN MORGAN	IN OWEN
212.		IN PUTNAM	IN MARION	IN SHELBY	IN TIPTON	IN RUSH	IN GRANT
213.	61008	IN BLACKFORD	IN DELAWARE	IN HENRY	IN JAY	IN MADISON	
214.		IN RANDOLPH	IN WAYNE				
215.	62028	OH ADAMS	OH BROWN	OH CLERMONT	OH CLINTON	OH HAMILTON	
216.		OH HIGHLAND	OH WARREN	IN DEARBORN	IN FAYETTE	IN FRANKLIN	IN OHIO
217.		IN RIPLEY	IN SWITZERLAND	IN UNION	KY BOONE	KY BRACKEN	KY CAMPBELL
218.		KY CARROLL	KY GALLATIN	KY GRANT	KY KENTON	KY LEWIS	
219.		KY MASON	KY FLEMING	KY OWEN	KY PENDLETON	KY ROBERTSON	
220.	63009	OH CHAMPAIGN	OH CLARK	OH DARKE	OH GREENE	OH LOGAN	OH MIAMI
221.		OH MONTGOMERY	OH PREBLE	OH SHELBY			
222.	64025	OH ATHENS	OH DELAWARE	OH FAIRFIELD	OH FAYETTE	OH FRANKLIN	OH GUERNSEY
223.		OH HOCKING	OH JACKSON	OH LICKING	OH MADISON	OH MARION	OH MORGAN
224.		OH MUSKINGUM	OH NOBLE	OH PERRY	OH PICKAWAY	OH PIKE	OH ROSS
225.		OH UNION	OH VINTON	OH WASHINGTON	WV PLEASANTS	WV RITCHIE	WV WIRT
226.		WV WOOD					
227.	65011	WV BARBOUR	WV DODDRIDGE	WV HARRISON	WV LEWIS	WV MARION	WV MONONGALIA
228.		WV PRESTON	WV RANDOLPH	WV TAYLOR	WV TUCKER	WV UPSHUR	
229.	66025	PA ALLEGHANY	PA ARMSTRONG	PA BEAVER	PA BUTLER	PA CAMBRIA	PA CLARION
230.		PA FAYETTE	PA GREENE	PA INDIANA	PA SOMERSET	PA WASHINGTON	PA WESTMORELAND
231.		MD ALLEGANY	MD GARRETT	OH BELMONT	OH HARRISON	OH JEFFERSON	OH MONROE
232.		WV BROOKE	WV HANCOCK	WV MARSHALL	WV MINERAL	WV OHIO	WV TYLER
233.		WV WETZEL					
234.	67004	PA LAWRENCE	PA MERCER				
235.	68023	OH ASHLAND	OH ASHTABULA	OH MAHONING	OH TRUMBULL	OH COSHOCTON	OH CRAWFORD
236.		OH CUYAHOGA	OH ERIE	OH CARROLL	OH COLUMBIANA	OH HURON	OH KNOX
237.		OH LAKE	OH LORAIN	OH GEAUGA	OH HOLMES	OH PORTAGE	OH RICHLAND
238.		OH STARK	OH SUMMIT	OH MEDINA	OH MORROW	OH WYANDOT	
239.		OH ALLEN	OH AUGLAIZE	OH TUSCARAWAS	OH WAYNE	OH PUTNAM	OH VAN WERT
240.	69006		MI MONROE	OH HANCOCK	OH MERCER	OH PUTNAM	OH LUCAS
241.	70010	MI LENAWEE	OH SANDUSKY	MI LIVINGSTON	MI MACOMB	MI MACOMB	MI ST CLAIR
242.		OH OTTAWA	MI LAPEER	MI WASHTENAW	MI WAYNE	MI WAYNE	
243.	71010	MI GENESEE	MI SHIAWASSEE	MI LIVINGSTON	MI MACOMB		
244.		MI SANILAC					
245.	72024	MI ALCONA	MI ALPENA	MI ARENAC	MI BAY	MI CHEBOYGAN	MI CHIPPEWA
246.		MI CLARE	MI CRAWFORD	MI GLADWIN	MI GRATIOT	MI HURON	MI IOSCO
247.		MI ISABELLA	MI LUCE	MI MACKINAC	MI MIDLAND	MI MONTMORENCY	MI OGEMAW
248.		MI OSCODA	MI OTSEGO	MI PRESQUE ISLE	MI ROSCOMMON	MI SAGINAW	MI TUSCOLA
249.	73022	MI ALLEGAN	MI ANTRIM	MI BENZIE	MI CHARLEVOIX	MI EMMET	MI GRD TRAVERSE
250.		MI IONIA	MI KALKASKA	MI KENT	MI LAKE	MI LEELANAU	MI MANISTEE
251.		MI MASON	MI MECOSTA	MI MISSAUKEE	MI MONTCALM	MI MUSKEGON	MI NEWAYGO
252.		MI OCEANA	MI OSCEOLA	MI OSCEOLA	MI WEXFORD		
253.	74010	MI BARRY	MI BRANCH	MI CALHOUN	MI CLINTON	MI EATON	MI HILLSDALE
254.		MI INGHAM	MI JACKSON	MI KALAMAZOO	MI VAN BUREN		
255.	75012	OH DEFIANCE	OH PAULDING	OH WILLIAMS	IN ADAMS	IN ALLEN	IN DE KALB
256.		IN HUNTINGTON	IN NOBLE	IN STEUBEN	IN WABASH	IN WELLS	IN WHITLEY
257.	76009	MI BERRIEN	MI CASS	IN ST JOSEPH	IN ELKHART	IN FULTON	IN KOSCIUSKO
258.		IN LAGRANGE	IN MARSHALL	IN ST JOSEPH			
259.	77021	IN JASPER	IN DE KALB	IN LA PORTE	IN NEWTON	IN PORTER	IN PULASKI
260.		IN STARKE	IL KENDALL (61)	IL DE KALB	IL DU PAGE	IL GRUNDY	IL IROQUOIS
261.		IL KANE		IL LAKE	IL LAKE	IL LA SALLE	IL LIVINGSTON

No.	Code					
262.		IL MCHENRY	IL PUTNAM	IL WILL	IL MCLEAN	IL PEORIA
263.		IL FULTON	IL KNOX	IL MCDONOUGH	IL WOODFORD	IL WHITESIDE
264.		IL STARK	IL TAZEWELL	IL WARREN	IL MERCER	
265.	78010	IL BUREAU	IL CARROLL	IL HENRY	IA SCOTT	
266.		IA CLINTON	IA LOUISA	IA MUSCATINE	IA JOHNSON	IA LINN
267.	79010	IA BENTON	IA CEDAR	IA IOWA		
268.		IA WASHINGTON				
269.	80007	IL JO DAVIESS	WI CRAWFORD	WI GRANT	WI LAFAYETTE	IA CLAYTON
270.		IA DELAWARE	IA DUBUQUE	IA HOWARD	IA JACKSON	IA WINNESHIEK
271.	81011	IL BOONE	IL LEE	IL OGLE	IL STEPHENSON	WI GREEN
272.		WI ROCK				
273.	82007	WI ADAMS	WI COLUMBIA	WI DANE	WI GREEN LAKE	WI MARQUETTE
274.		WI RICHLAND	WI SAUK	WI WAUSHARA		
275.	83009	WI DODGE	WI FOND DU LAC	WI JEFFERSON	WI KENOSHA	WI OZAUKEE
276.		WI RACINE	WI SHEBOYGAN	WI WALWORTH	WI WASHINGTON	
277.	84011	MI ALGER	MI BARAGA	MI DELTA	MI DICKINSON	MI IRON
278.		MI KEWEENAW	MI MARQUETTE	MI MENOMINEE	MI SCHOOLCRAFT	WI CALUMET
279.	85023	WI DOOR	WI FLORENCE	WI FOREST	WI KEWAUNEE	WI MARINETTE
280.		WI OCONTO	WI OUTAGAMIE	WI SHAWA?MENOM	WI WAUPACA	
281.		WI CLARK	WI LANGLADE	WI LINCOLN	WI MARATHON	WI PORTAGE
282.	86010	WI PRICE	WI TAYLOR	WI VILAS	WI WOOD	
283.		MI GOGEBIC	MI ONTONAGON	WI ASHLAND	WI BAYFIELD	WI IRON
284.	87012	MN CARLTON	MN COOK	MN ITASCA	MN KOOCHICHING	MN ST LOUIS
285.		WI BARRON	WI CHIPPEWA	WI DUNN	WI EAU CLAIRE	WI RUSK
286.	88008	WI SAWYER	WI WASHBURN			
287.		WI BUFFALO	WI JACKSON	WI JUNEAU	WI LA CROSSE	WI TREMPEALEAU
288.	89009	WI VERNON	MN HOUSTON	MN WINONA		
289.		MN DODGE	MN FILLMORE	MN FREEBORN	MN MOWER	MN STEELE
290.	90007	MN WABASHA				
291.		WI BURNETT	WI PIERCE	WI POLK	WI ST CROIX	MN ANOKA
292.	91056	MN BELTRAMI	MN BENTON	MN BIG STONE	MN BLUE EARTH	MN CARVER
293.		MN CASS	MN CHIPPEWA	MN CHISAGO	MN COTTONWOOD	MN DAKOTA
294.		MN DOUGLAS	MN FARIBAULT	MN GOODHUE	MN GRANT	MN HUBBARD
295.		MN ISANTI	MN KANABEC	MN KANDIYOHI	MN LAC QUI PARL	MN LE SUEUR
296.		MN MCLEOD	MN MARTIN	MN MEEKER	MN MILLE LACS	MN NICOLLET
297.		MN PINE	MN POPE	MN RAMSEY	MN REDWOOD	MN RICE
298.		MN SCOTT	MN SHERBURNE	MN SIBLEY	MN STEARNS	MN SWIFT
299.		MN TODD	MN TRAVERSE	MN WADENA	MN WASECA	MN WATONWAN
300.		MN WRIGHT	MN YELLOW MEDIC			
301.	92015	MN CLEARWATER	MN KITTSON	MN MARSHALL	MN PENNINGTON	MN RED LAKE
302.		MN ROSEAU	MN BENSON	ND CAVALIER	ND GRAND FORKS	ND PEMBINA
303.		ND RAMSEY	ND TOWNER	ND WALSH		
304.	93016	ND BOTTINEAU	ND BURKE	ND DIVIDE	ND MCHENRY	ND MCLEAN
305.		ND MOUNTRAIL	ND PIERCE	ND RENVILLE	ND ROLETTE	ND WILLIAMS
306.		MT DANIELS	MT RICHLAND	MT ROOSEVELT	MT SHERIDAN	
307.	94019	MT BLAINE	MT BROADWATER	MT CASCADE	MT CHOUTEAU	MT FERGUS
308.		MT HILL	MT JEFFERSON	MT JUDITH BASIN	MT LEWIS? CLARK	MT LIBERTY
309.		MT PETROLEUM	MT PHILLIPS	MT PONDERA	MT TETON	MT TOOLE
310.		MT WHEATLAND				
311.	95023	MT BIG HORN	MT CARBON	MT CARTER	MT CUSTER	MT FALLON
312.		MT GALLATIN	MT GARFIELD	MT GOLDEN VALLE	MT MCCONE	MT YSNP?PARK
313.		MT POWDER RIVER	MT PRAIRIE	MT ROSEBUD	MT STILLWATER	MT TREASURE
314.		MT YELLOWSTONE	WY BIG HORN	WY HOT SPRINGS	WY PARK	WY WASHAKIE
315.	96019	ND ADAMS	ND BILLINGS	ND BOWMAN	ND BURLEIGH	ND EMMONS
316.		ND GOLDEN VALLY	ND GRANT	ND HETTINGER	ND KIDDER	ND MORTON
317.		ND OLIVER	ND SHERIDAN	ND SIOUX	ND SLOPE	ND WELLS
318.		MT WIBAUX				
319.	97021	MN BECKER	MN CLAY	MN MAHNOMEN (62)	MN NORMAN	MN OTTER TAIL	MN WILKIN

No.	ID						
320.		ND BARNES	ND CASS	ND DICKEY	ND EDDY	ND FOSTER	ND GRIGGS
321.		ND LA MOURE	ND LOGAN	ND MCINTOSH	ND RANSOM	ND RICHLAND	ND SARGENT
322.		ND STEELE	ND STUTSMAN	ND TRAILL			
323.	98013	SD BROWN	SD CLARK	SD CODINGTON	SD DAY	SD DEUEL	SD EDMUNDS
324.		SD FAULK	SD GRANT	SD HAMLIN	SD MCPHERSON	SD MARSHALL	SD ROBERTS
325.		SD SPINK					
326.	99025	MN JACKSON	MN LINCOLN	MN LYON	MN MURRAY	MN NOBLES	MN PIPESTONE
327.		MN ROCK	IA LYON	IA OSCEOLA	SD AURORA	SD BEADLE	SD BROOKINGS
328.		SD DAVISON	SD HAND	SD HANSON	SD JERAULD	SD KINGSBURY	SD LAKE
329.		SD LINCOLN	SD MCCOOK	SD MINER	SD MINNEHAHA	SD MOODY	SD SANBORN
330.		SD TURNER					
331.	100033	SD BENNETT	SD BRULE	SD BUFFALO	SD BUTTE	SD CAMPBELL	SD CORSON
332.		SD CUSTER	SD DEWEY	SD FALL RIVER	SD GREGORY	SD HAAKON	SD HARDING
333.		SD HUGHES	SD HYDE	SD JACKSON	SD JONES	SD LAWRENCE	SD LYMAN
334.		SD MEADE	SD MELLETTE	SD PENNINGTON	SD PERKINS	SD POTTER	SD SHANNON
335.		SD STANLEY	SD SULLY	SD TODD	SD TRIPP	SD WALWORTH	SD WASHABAUGH
336.		SD ZIEBACH	WY CROOK	WY WESTON			
337.	101012	NE BANNER	NE BOX BUTTE	NE CHEYENNE	NE DAWES	NE DEUEL	NE GARDEN
338.		NE KIMBALL	NE MORRILL	NE SCOTTS BLUFF	NE SHERIDAN	NE SIOUX	WY GOSHEN
339.	102039	NE ADAMS	NE ARTHUR	NE BLAINE	NE BOONE	NE BUFFALO	NE CHERRY
340.		NE CLAY	NE CUSTER	NE DAWSON	NE FRANKLIN	NE FRONTIER	NE FURNAS
341.		NE GARFIELD	NE GOSPER	NE GRANT	NE GREELEY	NE HALL	NE HAMILTON
342.		NE HARLAN	NE HAYES	NE HITCHCOCK	NE HOOKER	NE HOWARD	NE KEARNEY
343.		NE KEITH	NE LINCOLN	NE LOGAN	NE LOUP	NE MCPHERSON	NE MERRICK
344.		NE NANCE	NE NUCKOLLS	NE PHELPS	NE RED WILLOW	NE SHERMAN	NE THOMAS
345.		NE VALLEY	NE WEBSTER	NE WHEELER			
346.	103031	IA CHEROKEE	IA CRAWFORD	IA IDA	IA MONONA	IA O BRIEN	IA PLYMOUTH
347.		IA SIOUX	IA WOODBURY	SD BON HOMME	SD CHARLES MIX	SD CLAY	SD DOUGLAS
348.		SD HUTCHINSON	SD UNION	SD YANKTON	NE ANTELOPE	NE BOYD	NE BROWN
349.		NE CEDAR	NE CUMING	NE DAKOTA	NE DIXON	NE HOLT	NE KEYA PAHA
350.		NE KNOX	NE MADISON	NE PIERCE	NE ROCK	NE STANTON	NE THURSTON
351.		NE WAYNE					
352.	104015	IA BUENA VISTA	IA CALHOUN	IA CARROLL	IA CLAY	IA DICKINSON	IA EMMET
353.		IA GREENE	IA GUTHRIE	IA HAMILTON	IA HUMBOLDT	IA PALO ALTO	IA POCAHONTAS
354.		IA SAC	IA WEBSTER	IA WRIGHT			
355.	105016	IA BLACK HAWK	IA BREMER	IA BUCHANAN	IA BUTLER	IA CERRO GORDO	IA CHICKASAW
356.		IA FAYETTE	IA FLOYD	IA FRANKLIN	IA GRUNDY	IA HANCOCK	IA HARDIN
357.		IA KOSSUTH	IA MITCHELL	IA WINNEBAGO	IA WORTH		
358.	106026	IA ADAIR	IA APPANOOSE	IA BOONE	IA CLARKE	IA DALLAS	IA DAVIS
359.		IA DECATUR	IA JASPER	IA JEFFERSON	IA KEOKUK	IA LUCAS	IA MADISON
360.		IA MAHASKA	IA MARION	IA MARSHALL	IA MONROE	IA POLK	IA POWESHIEK
361.		IA RINGGOLD	IA STORY	IA TAMA	IA UNION	IA VAN BUREN	IA WAPELLO
362.		IA WARREN					
363.	107020	IA ADAMS	IA AUDUBON	IA CASS	IA FREMONT	IA HARRISON	IA MILLS
364.		IA MONTGOMERY	IA PAGE	IA POTTAWATTAMI	IA SHELBY	IA TAYLOR	NE BURT
365.		NE CASS	NE COLFAX	NE DODGE	NE DOUGLAS	NE PLATTE	NE SARPY
366.		NE SAUNDERS	NE WASHINGTON				
367.	108015	NE BUTLER	NE FILLMORE	NE GAGE	NE JEFFERSON	NE JOHNSON	NE LANCASTER
368.		NE NEMAHA	NE OTOE	NE PAWNEE	NE POLK	NE RICHARDSON	NE SALINE
369.		NE SEWARD	NE THAYER	NE YORK			
370.	109038	KS BARTON	KS CHEYENNE	KS CLAY	KS CLOUD	KS DECATUR	KS DICKINSON
371.		KS ELLIS	KS ELLSWORTH	KS GOVE	KS GRAHAM	KS GREELEY	KS JEWELL
372.		KS LANE	KS LINCOLN	KS LOGAN	KS MCPHERSON	KS MITCHELL	KS MORRIS
373.		KS NESS	KS NORTON	KS OSBORNE	KS OTTAWA	KS PHILLIPS	KS RAWLINS
374.		KS REPUBLIC	KS RICE	KS ROOKS	KS RUSH	KS RUSSELL	KS SALINE
375.		KS SCOTT	KS SHERIDAN	KS SHERMAN	KS SMITH	KS THOMAS	KS TREGO
376.		KS WALLACE	KS WICHITA				
377.	110034	KS BARBER	KS BUTLER	KS CHASE (63)	KS CHAUTAUQUA	KS CLARK	KS COMANCHE

No.	Code						
378.		KS COWLEY	KS EDWARDS	KS ELK	KS FINNEY	KS FORD	KS GRANT
379.		KS GRAY	KS GREENWOOD	KS HAMILTON	KS HARPER	KS HARVEY	KS HASKELL
380.		KS HODGEMAN	KS KEARNY	KS KINGMAN	KS KIOWA	KS MARION	KS MEADE
381.		KS MORTON	KS PAWNEE	KS PRATT	KS RENO	KS SEDGWICK	KS SEWARD
382.		KS STAFFORD	KS STANTON	KS STEVENS	KS SUMNER		
383.	111052	MO ANDREW	MO ATCHISON	MO BATES	MO BENTON	MO BUCHANAN	MO CALDWELL
384.		MO CARROLL	MO CASS	MO CLAY	MO CLINTON	MO DAVIESS	MO DE KALB
385.		MO GENTRY	MO GRUNDY	MO HARRISON	MO HENRY	MO HOLT	MO JACKSON
386.		MO JOHNSON	MO LAFAYETTE	MO LIVINGSTON	MO MERCER	MO NODAWAY	MO PETTIS
387.		MO PLATTE	MO RAY	MO SALINE	MO WORTH	KS ANDERSON	KS ATCHISON
388.		KS BROWN	KS COFFEY	KS DONIPHAN	KS DOUGLAS	KS FRANKLIN	KS GEARY
389.		KS JACKSON	KS JEFFERSON	KS JOHNSON	KS LEAVENWORTH	KS LINN	KS LYON
390.		KS MARSHALL	KS MIAMI	KS NEMAHA	KS OSAGE	KS POTTAWATOMIE	KS RILEY
391.		KS SHAWNEE	KS WABAUNSEE	KS WASHINGTON	KS WYANDOTTE		
392.	112023	MO ADAIR	MO AUDRAIN	MO BOONE	MO CALLAWAY	MO CAMDEN	MO CHARITON
393.		MO COLE	MO COOPER	MO HOWARD	MO KNOX	MO LINN	MO MACON
394.		MO MILLER	MO MONITEAU	MO MONROE	MO MORGAN	MO OSAGE	MO PUTNAM
395.		MO RANDOLPH	MO SCHUYLER	MO SCOTLAND	MO SHELBY	MO SULLIVAN	
396.	113013	IL ADAMS	IL BROWN	IL HANCOCK	IL HENDERSON	IL PIKE	IL SCHUYLER
397.		IA DES MOINES	IA HENRY	IA LEE	MO CLARK	MO LEWIS	MO MARION
398.		MO RALLS					
399.	114048	IL BOND	IL CALHOUN	IL CLAY	IL CLINTON	IL EFFINGHAM	IL FAYETTE
400.		IL FRANKLIN	IL GREENE	IL JACKSON	IL JASPER	IL JEFFERSON	IL JERSEY
401.		IL MACOUPIN	IL MADISON	IL MARION	IL MONROE	IL MONTGOMERY	IL PERRY
402.		IL RANDOLPH	IL RICHLAND	IL ST CLAIR	IL WASHINGTON	IL WAYNE	IL WILLIAMSON
403.		MO CRAWFORD	MO DENT	MO FRANKLIN	MO GASCONADE	MO IRON	MO JEFFERSON
404.		MO LACLEDE	MO LINCOLN	MO MADISON	MO MARIES	MO MONTGOMERY	MO PERRY
405.		MO PHELPS	MO PIKE	MO PULASKI	MO REYNOLDS	MO ST CHARLES	MO ST FRANCOIS
406.		MO ST LOUIS	MO ST LOUIS CTY	MO STE GENEVIEV	MO TEXAS	MO WARREN	MO WASHINGTON
407.	115031	IL ALEXANDER	IL HARDIN	IL JOHNSON	IL MASSAC	IL POPE	IL PULASKI
408.		IL UNION	MO BOLLINGER	MO BUTLER	MO CAPE GIRARDE	MO CARTER	MO DUNKLIN
409.		MO MISSISSIPPI	MO NEW MADRID	MO PEMISCOT	MO RIPLEY	MO SCOTT	MO STODDARD
410.		MO WAYNE	KY BALLARD	KY CALLOWAY	KY CARLISLE	KY FULTON	KY GRAVES
411.		KY HICKMAN	KY LIVINGSTON	KY LYON	KY MCCRACKEN	KY MARSHALL	TN LAKE
412.		TN OBION					
413.	116041	MO BARRY	MO BARTON	MO CEDAR	MO CHRISTIAN	MO DADE	MO DALLAS
414.		MO DOUGLAS	MO GREENE	MO HICKORY	MO HOWELL	MO JASPER	MO LAWRENCE
415.		MO MCDONALD	MO NEWTON	MO OREGON	MO OZARK	MO POLK	MO ST CLAIR
416.		MO SHANNON	MO STONE	MO TANEY	MO VERNON	MO WEBSTER	MO WRIGHT
417.		KS ALLEN	KS BOURBON	KS CHEROKEE	KS CRAWFORD	KS LABETTE	KS MONTGOMERY
418.		KS NEOSHO	KS WILSON	KS WOODSON	AR BAXTER	AR BOONE	AR CARROLL
419.		AR MARION	AR NEWTON	AR SEARCY	OK CRAIG	OK OTTAWA	AR FAULKNER
420.	117030	AR ARKANSAS	AR CLARK	AR CLEBURNE	AR CLEVELAND	AR CONWAY	AR IZARD
421.		AR FULTON	AR GARLAND	AR GRANT	AR HOTSPRING	AR INDEPENDENCE	AR MONROE
422.		AR JACKSON	AR JEFFERSON	AR JOHNSON	AR LINCOLN	AR LONOKE	AR PULASKI
423.		AR MONTGOMERY	AR PERRY	AR PIKE	AR POPE	AR PRAIRIE	AR WOODRUFF
424.		AR SALINE	AR SHARP	AR STONE	AR VAN BUREN	AR WHITE	AR SEBASTIAN
425.	118013	AR CRAWFORD	AR FRANKLIN	AR LOGAN	AR POLK	AR SCOTT	OK PUSHMATAHA
426.		AR YELL	OK HASKELL	OK LATIMER	OK LE FLORE	OK PITTSBURG	
427.		OK SEQUOYAH					
428.	119020	AR BENTON	AR MADISON	AR WASHINGTON	OK ADAIR	OK CHEROKEE	OK CREEK
429.		OK DELAWARE	OK KAY	OK MCINTOSH	OK MAYES	OK MUSKOGEE	OK NOWATA
430.		OK OKMULGEE	OK OSAGE	OK PAWNEE	OK PAYNE	OK ROGERS	OK TULSA
431.		OK WAGONER	OK WASHINGTON				
432.	120035	OK ALFALFA	OK ATOKA	OK BECKHAM	OK BLAINE	OK CANADIAN	OK CARTER
433.		OK CLEVELAND	OK COAL	OK CUSTER	OK DEWEY	OK ELLIS	OK GARFIELD
434.		OK GARVIN	OK GRADY	OK GRANT	OK HARPER	OK HUGHES	OK JOHNSTON
435.		OK KINGFISHER	OK LINCOLN	OK LOGAN	OK LOVE	OK MCCLAIN	OK MAJOR

(64)

No.	ID						
436.		OK MURRAY	OK NOBLE	OK OKFUSKEE	OK OKLAHOMA	OK PONTOTOC	OK POTTAWATOMIE
437.		OK ROGER MILLS	OK SEMINOLE	OK WASHITA	OK WOODS	OK WOODWARD	
438.	121022	OK CADDO	OK COMANCHE	OK COTTON	OK GREER	OK HARMON	OK JACKSON
439.		OK JEFFERSON	OK KIOWA	OK STEPHENS	OK TILLMAN	TX ARCHER	TX BAYLOR
440.		TX CHILDRESS	TX CLAY	TX COTTLE	TX FOARD	TX HARDEMAN	TX JACK
441.		TX THROCKMORTON	TX WICHITA	TX WILBARGER	TX YOUNG		
442.	122035	OK BEAVER	OK CIMARRON	OK TEXAS	TX ARMSTRONG	TX BRISCOE	TX CARSON
443.		TX CASTRO	TX COLLINGSWORT	TX DALLAM	TX DEAF SMITH	TX DONLEY	TX GRAY
444.		TX HALL	TX HANSFORD	TX HARTLEY	TX HEMPHILL	TX HUTCHINSON	TX LIPSCOMB
445.		TX MOORE	TX OCHILTREE	TX OLDHAM	TX PARMER	TX POTTER	TX RANDALL
446.		TX ROBERTS	TX SHERMAN	TX SWISHER	TX WHEELER	NM CURRY	NM DE BACA
447.		NM GUADALUPE	NM HARDING	NM QUAY	NM ROOSEVELT	NM UNION	
448.	123015	TX BAILEY	TX COCHRAN	TX CROSBY	TX DICKENS	TX FLOYD	TX GARZA
449.		TX HALE	TX HOCKLEY	TX KENT	TX LAMB	TX LUBBOCK	TX LYNN
450.		TX MOTLEY	TX TERRY	TX YOAKUM			
451.	124020	TX ANDREWS	TX BORDEN	TX BREWSTER	TX CRANE	TX CROCKETT	TX DAWSON
452.		TX ECTOR	TX GAINES	TX GLASSCOCK	TX HOWARD	TX LOVING	TX MARTIN
453.		TX MIDLAND	TX PECOS	TX REAGAN	TX REEVES	TX TERRELL	TX UPTON
454.		TX WARD	TX WINKLER				
455.	125017	TX BROWN	TX CALLAHAN	TX COMANCHE	TX EASTLAND		TX FISHER
456.		TX HASKELL	TX JONES	TX KING	TX KNOX	TX MITCHELL	TX NOLAN
457.		TX SCURRY	TX SHACKLEFORD	TX STEPHENS	TX STONEWALL	TX TAYLOR	
458.	126014	TX COKE	TX CONCHO	TX IRION	TX KIMBLE	TX MCCULLOCH	TX MASON
459.		TX MENARD	TX MILLS	TX RUNNELS	TX SAN SABA	TX SCHLEICHER	TX STERLING
460.		TX SUTTON	TX TOM GREEN				
461.	127026	OK BRYAN	OK MARSHALL	TX COLLIN	TX DALLAS		TX DELTA
462.		TX DENTON	TX ELLIS	TX ERATH	TX GRAYSON		TX HOOD
463.		TX HOPKINS	TX HUNT	TX JOHNSON	TX MONTAGUE		TX NAVARRO
464.		TX PALO PINTO	TX PARKER	TX RAINS	TX SOMERVELL		TX TARRANT
465.		TX VAN ZANDT	TX WISE				
466.	128010	TX BELL	TX BOSQUE	TX CORYELL	TX FALLS	TX FREESTONE	TX HAMILTON
467.		TX HILL	TX LAMPASAS	TX LIMESTONE	TX MCLENNAN		
468.	129016	TX BASTROP	TX BLANCO	TX BRAZOS	TX BURLESON	TX BURNET	TX CALDWELL
469.		TX GRIMES	TX HAYS	TX LEE	TX LEON	TX LLANO	TX MADISON
470.		TX MILAM	TX ROBERTSON	TX TRAVIS	TX WILLIAMSON		
471.	130019	TX ANDERSON	TX ANGELINA	TX CHEROKEE	TX FRANKLIN	TX GREGG	TX HARRISON
472.		TX HENDERSON	TX HOUSTON	TX MARION	TX NACOGDOCHES	TX PANOLA	TX RUSK
473.		TX SABINE	TX SAN AUGUSTIN	TX SHELBY	TX SMITH	TX TRINITY	TX UPSHUR
474.		TX WOOD					
475.	131016	AR HEMPSTEAD	AR HOWARD	AR LAFAYETTE	AR LITTLE RIVER	AR MILLER	AR NEVADA
476.		AR SEVIER	OK CHOCTAW	OK MCCURTAIN	TX BOWIE	TX CAMP	TX CASS
477.		TX LAMAR	TX MORRIS	TX RED RIVER	TX TITUS		
478.	132009	LA BIENVILLE	LA BOSSIER	LA CADDO	LA CLAIBORNE	LA DE SOTO	LA NATCHITOCHES
479.		LA RED RIVER	LA SABINE	LA WEBSTER			
480.	133018	LA AVOYELLES	LA CALDWELL	LA CATAHOULA	LA EAST CARROLL	LA FRANKLIN	LA GRANT
481.		LA JACKSON	LA LA SALLE	LA LINCOLN	LA MADISON	LA MOREHOUSE	LA OUACHITA
482.		LA RAPIDES	LA RICHLAND	LA TENSAS	LA UNION	LA WFST CARROLL	LA WINN
483.	134022	MS BOLIVAR	MS CARROLL	MS GRENADA	MS HUMPHREYS	MS ISSAQUENA	MS LEFLORE
484.		MS MONTGOMERY	MS SHARKEY	MS SUNFLOWER	MS TALLAHATCHIE	MS WASHINGTON	MS YALOBUSHA
485.		AR ASHLEY	AR BRADLEY	AR CALHOUN	AR CHICOT	AR COLUMBIA	AR DALLAS
486.		AR DESHA	AR DREW	AR OUACHITA	AR UNION		
487.	135013	MS ATTALA	MS CLAIBORNE	MS COPIAH	MS HINDS	MS HOLMES	MS LEAKE
488.		MS MADISON	MS RANKIN	MS SCOTT	MS SIMPSON	MS SMITH	MS WARREN
489.		MS YAZOO					
490.	136016	AL CHOCTAW	AL MARENGO	AL SUMTER	MS CLARKE	MS COVINGTON	MS FORREST
491.		MS JASPER	MS JONES	MS KEMPER	MS LAMAR	MS LAUDERDALE	MS NESHOBA
492.		MS NEWTON	MS PERRY	MS WAYNE	MS WINSTON		
493.	137012	AL BALDWIN	AL CLARKE	AL CONECUH (65)	AL MOBILE	AL MONROE	AL WASHINGTON

No.	Code						
494.		AL WILCOX	MS GEORGE	MS GREENE	MS HARRISON	MS JACKSON	MS STONE
495.	138036	MS ADAMS	MS AMITE	MS FRANKLIN	MS HANCOCK	MS JEFFERSON	MS JEFFERSON DA
496.		MS LAWRENCE	MS LINCOLN	MS MARION	MS PEARL RIVER	MS PIKE	MS WALTHALL
497.		MS WILKINSON	LA ASCENSION	LA ASSUMPTION	LA CONCORDIA	LA E BATON ROUG	LA E FELICIANA
498.		LA IBERVILLE	LA JEFFERSON	LA LAFOURCHE	LA LIVINGSTON	LA ORLEANS	LA PLAQUEMINES
499.		LA POINTE COUPE	LA ST BERNARD	LA ST CHARLES	LA ST HELENA	LA ST JAMES	LA ST JOHN THE
500.		LA ST TAMMANY	LA TANGIPAHOA	LA TERREBONNE	LA WASHINGTON	LA W BATON ROUG	LA W FELICIANA
501.	139014	LA ACADIA	LA ALLEN	LA BEAUREGARD	LA CALCASIEU	LA CAMERON	LA EVANGELINE
502.		LA IBERIA	LA JEFFERSON DA	LA LAFAYETTE	LA ST LANDRY	LA ST MARTIN	LA ST MARY
503.		LA VERMILION	LA VERNON				
504.	140006	TX HARDIN	TX JASPER	TX JEFFERSON	TX NEWTON	TX ORANGE	TX TYLER
505.							
506.	141017	TX AUSTIN	TX BRAZORIA	TX CHAMBERS	TX COLORADO	TX FAYETTE	TX FORT BEND
507.		TX GALVESTON	TX HARRIS	TX LIBERTY	TX MATAGORDA	TX MONTGOMERY	TX POLK
508.		TX SAN JACINTO	TX WALKER	TX WALLER	TX WASHINGTON	TX WHARTON	
509.	142026	TX ATASCOSA	TX BANDERA	TX BEXAR	TX CALHOUN	TX COMAL	TX DE WITT
510.		TX EDWARDS	TX FRIO	TX GILLESPIE	TX GOLIAD	TX GONZALES	TX GUADALUPE
511.		TX JACKSON	TX KARNES	TX KENDALL	TX KERR	TX KINNEY	TX LAVACA
512.		TX MAVERICK	TX MEDINA	TX REAL	TX UVALDE	TX VAL VERDE	TX VICTORIA
513.		TX WILSON	TX ZAVALA				
514.	143017	TX ARANSAS	TX BEE	TX BROOKS	TX DIMMIT	TX DUVAL	TX JIM HOGG
515.		TX JIM WELLS	TX KENEDY	TX KLEBERG	TX LA SALLE	TX LIVE OAK	TX MCMULLEN
516.	144004	TX NUECES	TX REFUGIO	TX SAN PATRICIO	TX WEBB	TX ZAPATA	
517.	145017	TX CAMERON	TX HIDALGO	TX STARR	TX WILLACY		
518.		TX CULBERSON	TX EL PASO	TX HUDSPETH	TX JEFF DAVIS	TX PRESIDIO	NM CATRON
519.		NM CHAVES	NM DONA ANA	NM EDDY	NM GRANT	NM HIDALGO	NM LEA
520.		NM LINCOLN	NM LUNA	NM OTERO	NM SIERRA	NM SOCORRO	
521.	146012	NM BERNALILLO	NM COLFAX	NM LOS ALAMOS	NM MCKINLEY	NM MORA	NM RIO ARRIBA
522.		NM SANDOVAL	NM SAN MIGUEL	NM SANTE FE	NM TAOS	NM TORRANCE	NM VALENCIA
523.	147021	CO ALAMOSA	CO BACA	CO BENT	CO CHAFFEE	CO CONEJOS	CO COSTILLA
524.		CO CROWLEY	CO CUSTER	CO EL PASO	CO FREMONT	CO HUERFANO	CO KIOWA
525.		CO LAS ANIMAS	CO LINCOLN	CO MINERAL	CO OTERO	CO PROWERS	CO PUEBLO
526.		CO RIO GRANDE	CO SAGUACHE	CO TELLER			
527.	148026	NE CHASE	NE DUNDY	NE PERKINS	CO ADAMS	CO ARAPAHOE	CO BOULDER
528.		CO CHEYENNE	CO CLEAR CREEK	CO DENVER	CO DOUGLAS	CO ELBERT	CO GILPIN
529.		CO GRAND	CO JEFFERSON	CO KIT CARSON	CO LAKE	CO LARIMER	CO LOGAN
530.		CO MORGAN	CO PARK	CO PHILLIPS	CO SEDGWICK	CO SUMMIT	CO WASHINGTON
531.		CO WELD	CO YUMA				
532.	149021	NM SAN JUAN	CO ARCHULETA	CO DELTA	CO DOLORES	CO EAGLE	CO GARFIELD
533.		CO GUNNISON	CO HINSDALE	CO LA PLATA	CO MESA	CO MOFFATT	CO MONTEZUMA
534.		CO MONTROSE	CO OURAY	CO PITKIN	CO RIO BLANCO	CO ROUTT	CO SAN JUAN
535.		CO SAN MIGUEL	UT GRAND	UT SAN JUAN			
536.	150012	WY ALBANY	WY CAMPBELL	WY CARBON	WY CONVERSE	WY FREMONT	WY JOHNSON
537.		WY LARAMIE	WY NATRONA	WY NIOBRARA	WY PLATTE	WY SHERIDAN	CO JACKSON
538.	151029	ID BEAR LAKE	ID FRANKLIN	ID ONEIDA	WY LINCOLN	WY SUBLETTE	WY SWEETWATER
539.		WY UINTA	UT BOX ELDER	UT CACHE	UT CARBON	UT DAGGETT	UT DAVIS
540.		UT DUCHESNE	UT EMERY	UT JUAB	UT MILLARD	UT MORGAN	UT PIUTE
541.		UT RICH	UT SALT LAKE	UT SANPETE	UT SEVIER	UT SUMMIT	UT TOOELE
542.		UT UINTAH	UT UTAH	UT WASATCH	UT WAYNE	UT WEBER	
543.	152022	ID BANNOCK	ID BINGHAM	ID BLAINE	ID BONNEVILLE	ID BUTTE	ID CAMAS
544.		ID CARIBOU	ID CASSIA	ID CLARK	ID CUSTER	ID GOODING	ID JEFFERSON
545.		ID JEROME	ID LEMHI	ID LINCOLN	ID MADISON	ID MINIDOKA	ID POWER
546.		ID TETON	ID TWIN FALLS	ID FREMONT?YSNP	WY TETON		
547.	153013	MT BEAVERHEAD	MT DEER LODGE	MT FLATHEAD	MT GRANITE	MT LAKE	MT LINCOLN
548.		MT MADISON	MT MINERAL	MT MISSOULA	MT POWELL	MT RAVALLI	MT SANDERS
549.		MT SILVER BOW					
550.	154024	ID BENEWAH	ID BONNER	ID BOUNDARY	ID CLEARWATER	ID IDAHO	ID KOOTENAI
551.		ID LATAH	ID LEWIS (66)	ID NEZ PERCE	ID SHOSHONE	WA ADAMS	WA ASOTIN

Code	No.						
	552.	WA CHELAN	WA COLUMBIA	WA DOUGLAS	WA FERRY	WA GARFIELD	WA GRANT
	553.	WA LINCOLN	WA OKANOGAN	WA PEND OREILLE	WA SPOKANE	WA STEVENS	WA WHITMAN
155015	554.	WA CLALLAM	WA GRAYS HARBOR	WA ISLAND	WA JEFFERSON	WA KING	WA KITSAP
	555.	WA LEWIS	WA MASON	WA PACIFIC	WA PIERCE	WA SAN JUAN	WA SKAGIT
	556.	WA SNOHOMISH	WA THURSTON	WA WHATCOM			
156013	557.	WA BENTON	WA FRANKLIN	WA KITTITAS	WA WALLA WALLA	WA YAKIMA	OR BAKER
	558.	OR GILLIAM	OR GRANT	OR MORROW	OR UMATILLA	OR UNION	OR WALLOWA
	559.	OR WHEELER					
157023	560.	WA CLARK	WA COWLITZ	WA KLICKITAT	WA SKAMANIA	OR BENTON	
	561.	OR CLACKAMAS	OR CLATSOP	OR COLUMBIA	OR CROOK	OR DESCHUTES	OR HOOD RIVER
	562.	OR JEFFERSON	OR LINCOLN	OR LINN	OR MARION	OR MULTNOMAH	OR POLK
	563.	OR SHERMAN	OR TILLAMOOK	OR WASCO	OR WASHINGTON	OR YAMHILL	
158008	564.	OR COOS	OR CURRY	OR DOUGLAS	OR JACKSON	OR JOSEPHINE	OR KLAMATH
	565.	OR LAKE	OR LANE				
159012	566.	ID ADA	ID ADAMS	ID BOISE	ID CANYON	ID ELMORE	ID GEM
	567.	ID OWYHEE	ID PAYETTE	ID VALLEY	ID WASHINGTON	OR HARNEY	OR MALHEUR
160013	568.	NV CHURCHILL	NV DOUGLAS	NV ELKO	NV EUREKA	NV HUMBOLDT	NV LANDER
	569.	NV LYON	NV MINERAL	NV CARSON CITY	NV PERSHING	NV STOREY	NV WASHOE
	570.	NV WHITE PINE					
161009	571.	UT BEAVER	UT GARFIELD	UT IRON	UT KANE	UT WASHINGTON	NV CLARK
	572.	NV ESMERALDA	NV LINCOLN	NV NYE			
162009	573.	AZ APACHE	AZ COCONINO	AZ GILA	AZ MARICOPA	AZ MOHAVE	AZ NAVAJO
	574.	AZ PINAL	AZ YAVAPAI	AZ YUMA			
163005	575.	AZ COCHISE	AZ GRAHAM	AZ GREENLEE	AZ PIMA	AZ SANTA CRUZ	
164001	576.	CA SAN DIEGO					
165010	577.	CA IMPERIAL	CA INYO	CA LOS ANGELES	CA MONO	CA ORANGE	CA RIVERSIDE
	578.	CA SAN BERNADIN	CA SAN LUIS OBI	CA SANTA BARBAR	CA VENTURA		
166005	579.	CA FRESNO	CA KERN	CA KINGS	CA MADERA	CA TULARE	
167008	580.	CA ALPINE	CA AMADOR	CA CALAVERAS	CA MARIPOSA	CA MERCED	CA SAN JOAQUIN
	581.	CA STANISLAUS	CA TUOLUMNE				
168010	582.	CA BUTTE	CA COLUSA	CA EL DORADO	CA GLENN	CA NEVADA	CA PLACER
	583.	CA SACRAMENTO	CA SUTTER	CA YOLO	CA YUBA		
169007	584.	CA LASSEN	CA MODOC	CA PLUMAS	CA SHASTA	CA SIERRA	CA SISKIYOU
	585.	CA TEHAMA					
170003	586.	CA DEL NORTE	CA HUMBOLDT	CA TRINITY			
171014	587.	CA ALAMEDA	CA CONTRA COSTA	CA LAKE	CA MARIN	CA MENDOCINO	CA MONTEREY
	588.	CA NAPA	CA SAN BENITO	CA SAN FRANCISC	CA SAN MATEO	CA SANTA CLARA	CA SANTA CRUZ
	589.	CA SOLANO					
		************	************	************	************	************	
172004	590.	HI HAWAII	HI HONOLULU	HI KAUAI	HI MAUI?KOLOWAO		
173004	591.						

END DATA.

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Appendix 5

Listings of Programs CNTYLIST and INDX

```
LBFA.PRO(I).CNTYLIST(27)

  1        DIMENSION NSTAT(46),NCOUN(46),J(3021),JJ(3021),IBEA(3247)
  2        DO 10 I=1,46
  3  10    READ(25,15)NSTAT(I),NCOUN(I)
  4  15    FORMAT(I)
  5        READ(15,20)IBEA
  6        M=0
  7        DO 1000 I=1,46
  8        NN=NSTAT(I)
  9        IF (NN.EQ.207) GO TO 207
 10        IF (NN.EQ.531) GO TO 531
 11        IF (NN.EQ.742) GO TO 742
 12        IS=NCOUN(I)
 13        DO 100 II=1,15
 14 100    J(M+II)=NSTAT(I)*1000+II
 15        GO TO 999
 16 207    J(M+1)=207001
 17        J(M+2)=207002
 18        J(M+38)=207042
 19        DO 208 II=3,22
 20 208    J(M+II)=207001+II
 21        DO 209 II=23,28
 22 209    J(M+II)=207002+II
 23        DO 210 II=29,37
 24 210    J(M+II)=207003+II
 25        DO 211 II=39,58
 26 211    J(M+II)=207005+II
 27        GO TO 999
 28 531    DO 532 II=1,43
 29 532    J(M+II)=531000+II
 30        DO 533 II=44,58
 31 533    J(M+II)=531001+II
 32        DO 534 II=59,158
 33 534    J(M+II)=531002+II
 34        GO TO 999
 35 742    DO 743 II=1,21
 36 743    J(M+II)=742000+II
 37        DO 744 II=22,43
 38 744    J(M+II)=742001+II
 39        J(M+44)=742046
 40 999    M=M+NCOUN(I)
 41 1000   CONTINUE
 42        K=1
 43 2000   KBEAZ=IBEA(K)/1000
 44        KCOUN=IBEA(K)-KBEAZ*1000
 45        DO 2500 I=1,KCOUN
 46        K2=IBEA(K+I)
 47        CALL BINSCH(J,3021,K2,12)
 48        IF (I2.LE.0) GO TO 2500
 49        JJ(I2)=J(I2)*1000+KREAZ
 50 2500   CONTINUE
 51 3000   K=K+KCOUN+1
 52        IF (K.LE.3247) GO TO 2000
 53        WRITE(20,20)JJ
 54 20     FORMAT(I3I10)
 55        ENDFILE20
 56        STOP
 57        END
```

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```
   1          DIMENSION IN(3016),INDEX(3016,4),IFIPS(2),INC(2),IEARN(2),MM(3016)
   2          READ(11,11)IN
   3    11    FORMAT(10I10)
   4          DO 100 I=1,3016
   5          INDEX(I,1)=IN(I)/1000
   6    100   INDEX(I,2)=MOD(IN(I),1000)
   7          M=1
   8    50    READ(12,12)IFIPS
   9    12    FORMAT(I5,54X,I6)
  10          READ(13,13)INC
  11    13    FORMAT(I6,17X,I10)
  12          READ(14,14)IEARN
  13    14    FORMAT(I6,17X,I10)
  14          I1=IFIPS(1)
  15          I2=INC(1)
  16          I3=IEARN(1)
  17          IF(I1.NE.I2) GO TO 24
  18          IF(I1.NE.I3) GO TO 29
  19          CALL BINSCH(INDEX,3016,IFIPS(2),K)
  20          IF(K.LE.0) GO TO 34
  21          INDEX(K,3)=INC(2)
  22          INDEX(K,4)=IEARN(2)
  23          MM(K)=M
  24          M=M+1
  25          IF(M.LE.3016) GO TO 50
  26          WRITE(15)INDEX
  27          ENDFILE15
  28          WRITE(6,20)((INDEX(J,K),K=1,4),J=1,100)
  29          WRITE(6,20)((INDEX(J,K),K=1,4),J=1500,1600)
  30          WRITE(6,20)((INDEX(J,K),K=1,4),J=2917,3016)
  31    20    FORMAT(4I15)
  32          WRITE(17,17)(INDEX(J,1),MM(J),J=1,3016)
  33    17    FORMAT(10I10)
  34    24    WRITE(6,25)I1,I2,M
  35    25    FORMAT('0IFIPS(1).NE.INC(1)''/' IFIPS(1),INC(1),M:',3I10)
  36    29    WRITE(6,30)I1,I3,M
  37    30    FORMAT('0IFIPS(1).NE.IEARN(1)''/' IFIPS(1),IEARN(1),M:',3I10)
  38    34    WRITE(6,35)IFIPS(2),K
  39    35    FORMAT('0IFIPS(2) NOT FOUND IN INDEX''/' IFIPS(2),K:',2I10)
  40          STOP
  41          END
```

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Appendix 6

Listings of Programs NAMELIST and FBBFC

```
 1          DIMENSION NFIPS(3016,3),I(3600),II(3016,2),L(300)
 2          READ(10,10)((NFIPS(J,K),K=1,3),J=1,3016)
 3   10     FORMAT(5X,7A6,A4)
 4          READ(11,11)N
 5   11     FORMAT()
 6          READ(12,12)(I(J),J=1,N)
 7   12     FORMAT(1011O)
 8          READ(13,13)((II(J,K),K=1,2),J=1,3016)
 9   13     FORMAT(1011O)
10          M=1
11          MM=I(M)
12   50     DO 51 KK=1,300
13   51     L(KK)=*******
14          MI=MOD(MM,1000)
15          IF(MI.EQ.0) GO TO 85
16          IF(MI.GT.100) GO TO 90
17          DO 75 M2=1,MI
18          CALL BINSCH(II,3016,I(M+M2),NN)
19          IF(NN.LE.0) GO TO 65
20          MM2=(M2-1)*3
21          III=II(NN,2)
22          DO 55 JJ=1,3
23   55     L(MM2+JJ)=NFIPS(III,JJ)
24          GO TO 75
25   65     WRITE(6,66)I(M+M2),NN
26   66     FORMAT(' ERROR---I(M+M2) NOT FOUND IN II:'
27         1' I(M+M2),NN:',2I10)
28   75     CONTINUE
29          M3=3*MI
30          WRITE(15,80)MM,(L(J),J=1,M3)
31   80     FORMAT(I6,4X,18A6,/,(10X,18A6))
32   85     M=M+MI+1
33          IF(M.LE.N) GO TO 50
34          GO TO 100
35   90     WRITE(6,91)MI
36   91     FORMAT('0ERROR...L IS DIMENSIONED TOO LOW MI=',I5)
37  100     ENDFILE15
38          STOP
39          END
```

LBEA.PRO(1).FRRFC(2)

```
 1    C    PROGRAM TO COMPARE FIPSREA AND BEAFIPS FOR COMPATIBILITY
 2    C    DATA SETS FIPSBEA AND BEAFIPS WILL BE READ FROM LOGICAL UNITS 7 AND 8, RESP.
 3         INTEGER FIPREA(3100,2),BEAFIP(10)
 4    C    FIPSREA IS A LIST OF REA CODES AND CORRESPONDING BEA CODES. BEAFIPS
 5    C    IS A LIST OF FIPS CODES AND CORRESPONDING ENTRY LOCATIONS IN THE FIPSBEA
 6    C    TABLE. THE TWO DATA SETS FIPSBEA AND BEAFIPS ARE COMPATIBLE IF (1) THEY
 7    C    HAVE THE SAME NUMBER OF ENTRIES, (2) THE ENTRY LOCATIONS IN BEAFIPS ALL
 8    C    SPECIFY THE PROPER ENTRY IN FIPSREA, AND (3) THERE ARE NO REDUNDANCIES.
 9         DO 20 I=1,3100
10         READ (7,10,END=30) FIPREA(I,1),FIPBEA(I,2)
11    10   FORMAT(I5,54X,I6)
12    20   CONTINUE
13         WRITE (6,21)
14    21   FORMAT(' ABORT...3100 OR MORE ENTRIES IN FIPSBEA')
15         STOP
16    30   CONTINUE
17         I=I-1
18         WRITE (6,31) I
19    31   FORMAT(' NUMBER OF ENTRIES IN FIPSBEA',I10)
20         DO 60 I=1,620
21         READ (8,40,END=65) BEAFIP
22    40   FORMAT(10I10)
23         DO 60 J=1,5
24         K=BEAFIP(2*J)
25         IF (K.EQ.0) GO TO 70
26         IF (FIPBEA(K,2).EQ.BEAFIP(2*J-1)) GO TO 55
27         WRITE (6,51) I,J,BEAFIP(2*J-1),BEAFIP(2*J-1),FIPBEA(K,1),FIPBEA(K,2)
28    51   FORMAT(' ERROR...',6I10)
29    55   CONTINUE
30    C    THIS MARKS ENTRY IN FIPREA SO THAT A SECOND REFERENCE TO IT WILL BE
31    C    FLAGGED AS AN ERROR.
32         FIPBEA(K,2)=-FIPBEA(K,2)
33    60   CONTINUE
34         WRITE (6,61)
35    61   FORMAT(' ABORT...3100 OR MORE ENTRIES IN BEAFIPS')
36         STOP
37    65   CONTINUE
38         J=1
39    70   CONTINUE
40         K=5*(I-1)+J-1
41         WRITE (6,71) K
42         WRITE (6,72)
43    71   FORMAT(' NUMBER OF ENTRIES IN BEAFIPS',I10)
44    72   FORMAT(' DONE. IF NO ABORTS OR ERRORS ARE INDICATED,DATA SETS ARE
45         1COMPATIBLE.')
46         STOP
47         END
```

END PRT

(73)

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16. ABSTRACT *(A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)*

This report describes the allocation of freight flow data from the National Network Simulation (NNS) zone system to the Bureau of Economic Analysis (BEA) area system. The NNS zone system was developed for use in the analysis of national modal freight flows. The BEA area system was primarily developed for the allocation of national economic data to regions of the United States. The BEA area system contains approximately 175 distinct areas and the NNS zone system, approximately 500. Assuming flows of commodities are known among the NNS zones, the NNS zone to BEA area mapping enables the determination of flows among the BEA areas. When an NNS zone is completely contained in one BEA area, flows entering and leaving the NNS zone accrue entirely to that BEA area. When an NNS zone overlaps more than one BEA area, the mapping specifies the allocation of incoming and outgoing flows among the affected BEA areas. This report presents the NNS zone to BEA area mapping which utilizes 1970 economic data as the basis for allocating flows when an NNS zone overlaps more than one BEA area. It also presents computer programs that could be used to generate a mapping using economic data from some other year. Closely related reports are R. Schofer, "Final Report on the National Network Simulation", NBS Internal Report 75-912 and R.H.F. Jackson, "A National Network Data Base System", NBS Internal Report 75-911.

17. KEY WORDS *(six to twelve entries; alphabetical order; capitalize only the first letter of the first key word unless a proper name; separated by semicolons)*

Commodity flow analysis, Economic analysis, National Network Simulation System.

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