

**DEVELOPMENT AND IMPLEMENTATION OF A COMPUTERIZED
PROCEDURE FOR ESTIMATING PAVEMENT REHABILITATION
AND MAINTENANCE EXPENDITURES: RENU3**

by

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DISCLAIMER

The views, interpretations, and conclusions expressed or implied in this report are those of the research group. They are not necessarily those of the Texas State Department of Highways and Public Transportation.

ABSTRACT

This report summarizes the results of work under an Interagency Contract with the Texas State Department of Highways and Public Transportation (SDHPT). The focal task of the contract was to develop an enhanced version of RENU2, the computerized methodology for estimating pavement rehabilitation and maintenance costs. Detailed documentation of RENU3, the enhanced methodology, is provided in this report.

RENU3 retains the key elements of its predecessor, which include the basic procedure for calculating rehabilitation, routine maintenance and preventive maintenance costs, allowance for multiple overlays in rehabilitation; application of survivor curves for different performance levels, the capability to evaluate the impact of changes in legal load limits on costs and pavement condition; and the rehabilitation/maintenance budget planning capability.

Enhancements introduced in RENU3 include the demarcation of the Texas pavement network into five climatically homogeneous regions; definition of basic costs, performance and survivor parameters and other input parameters by climatic region to allow evaluation of rehabilitation and maintenance costs on regional basis; development of performance and survivor parameters for rigid pavements; and incorporation of a wider range of truck types in the evaluation of the effects of changes in legal axle-load limits; development of a procedure to rehabilitate pavements older than terminal serviceability (POTTS) in a specified number of years; and automation of the data input procedure.

As part of the project, the Pavement Evaluation System (PES) was evaluated for possible synthesis with RENU3. The results indicate that while consolidation of PES and RENU3 is desirable because of potential

improvements in scope of application, the actual process of synthesis will involve significant efforts to make the two programs compatible.

The report includes an application of RENU3, reflecting latest available input data. Outputs were made at the detailed level for the South/Texas area (Region 4); only summary outputs were made for the other regions.

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I. INTRODUCTION

RENU3 is the third generation of a computerized methodology for estimating the cost of rehabilitation and maintenance for the Texas pavement network. The basic function of determining rehabilitation and maintenance costs was significantly enhanced in RENU2, the immediate past predecessor of RENU3, by the addition of the capability to evaluate the impact of changes in legal axle load limits, in terms of pavement condition and costs of rehabilitation and maintenance. RENU3 introduces further enhancements by developing a mechanism for defining input and cost parameters according to five climatically homogeneous regions, providing a comprehensive input data automation procedure, incorporating a total of ten truck types in the investigation of impact of changes in axle load limits, and including performance and survivor parameters for rigid pavements. The purpose of this report is to document the revised methodology and its application to each of the five regions of the State of Texas.

A. PREVIOUS RELATED WORK

Past work on procedures for estimating road rehabilitation requirements due to changes in axle-load limits has resulted in the development of computerized methods such as REHAB [10,13] and NULOAD [2,3]. For different types of pavements, these methods estimate the lane mileage requiring rehabilitation work, based on survivor curves, performance curves, and shifting procedures to redistribute traffic loads when a change in axle-load limits is considered.

Both programs have their limitations. REHAB does not generate performance and survivor curves as does NULOAD, but must have them read in as input data. On the other hand, NULOAD uses the AASHTO Road Test performance equations, which in some cases may not accurately represent

pavement performance in Texas and do not allow the consideration of specific types of distress. Additionally, NULOAD assumes survivor curves instead of generating them on the basis of observed data. In RENU, performance, distress, and survivor curves are generated based upon observed data in Texas and, as a result, it is believed to represent a more appropriate option.

The overall development of the original RENU procedure was undertaken in three phases. The objective of the first phase of the study was to perform a comparison between REHAB and NULOAD and propose an improved methodology which would take into consideration SDHPT requirements concerning pavement classification, data availability, and district organization of overall highway system. The results of the first phase of the study were summarized in three volumes. Volume 1 [6] contains the evaluation procedure: (a) analysis of the assumptions of REHAB and NULOAD, (b) evaluation of data needs and data availability, and (c) documentation of findings and recommendation. Volume 2 [7] is composed of a detailed flowchart of the REHAB program, a FORTRAN listing of the computerized procedure, an sample of the program output, and a section with a description of all variables used in the model. Volume 3 [8] contains the NULOAD program and a sample output of the model.

The second phase was the development of the proposed computerized procedure to evaluate the effects on costs and pavement condition of changing legal axle-load limits. It was decided to design a procedure that would not suffer from the major limitations found in the REHAB and NULOAD programs.

This procedure was developed by using experimental values of material properties, climatic conditions, design factors, and traffic measurements obtained by the Texas Transportation Institute (TTI) at Texas A&M University

in cooperation with the Center for Transportation Research (CTR) at the University of Texas at Austin.

In the third phase, the scope of RENU was expanded to include a budgeting capability over a specified planning horizon. The result of this phase was the program RENU2, allowing the determination of the costs of upgrading critical pavement sections of the network to a specified performance level, routine and preventive maintenance, and pavement rehabilitation.

B. RENU3 vs. RENU2

The enhanced procedure, RENU3, retains all key elements of RENU2, such as:

- 1) Treatment of pavements currently below critical serviceability or distress levels;
- 2) Multiple overlays as part of rehabilitation decisions;
- 3) Separate consideration of routine and preventive maintenance operations;
- 4) Survivorcurves for different performance levels;
- 5) Consideration of future mileage generated from reconstruction or new construction;
- 6) Rehabilitation/maintenance budget planning capability;
- 7) Capability to evaluate the effects of changing legal axle-load limits on pavement conditions and rehabilitation/maintenance costs.

Beyond these features of RENU2, RENU3 provides enhancement in six key areas which serve to simplify and improve the efficiency and accuracy of the process of estimating rehabilitation/maintenance costs. They include:

- 1) Division of the Texas State road network into five climatically homogeneous areas;
- 2) Development of basic rehabilitation/maintenance cost parameters by climatic areas;

- 3) Definition of pavement performance and survivor relationships by climatic areas for the three types of pavements: hot mix, black-base, and overlaid;
- 4) Incorporation of performance/survivor relationships for rigid pavements;
- 5) Development of a procedure to rehabilitate pavements older than terminal serviceability (POTTS) in a specified number of years;
- 6) Development of a procedure to automate data input processes.

Each of these areas is considered in greater detail in the following section of the report.

II. BASIC METHODOLOGY

A. IDENTIFICATION OF CLIMATIC AREAS

By means of a Cluster Analysis procedure [11], the 254 Texas counties of the highway network were divided into five climatically homogeneous areas. The five basic steps followed in cluster analysis include development of the input data matrix, standardization of the input data, definition and computation of similarity coefficients, clustering, and validation of the clusters. A brief description of the clustering procedure used in the study follows:

1. Development of Input Data Matrix. Twelve climatic factors (attributes) were identified and measurements obtained for each Texas county. They include:
 - o Thorntwaite Index (TI)
 - o Average Temperature (AVT)
 - o Freeze-Thaw Cycles (FT)
 - o Percipitation (rainfall, R)
 - o Moisture Change (MC)
 - o Actual Evapotrans (AE)
 - o Days with Precipitation (DP)
 - o Mean Maximum Temperature (MMT)
 - o Potential Evaporation (PE)
 - o Max. days with continuous precipitation (MDCP)
 - o Wet Freeze-Thaw (WFT)

Data used consisted of 20-yr monthly averages for each attribute. The primary input data were analyzed for relative statistical significance using the following procedure:

- i) Perform initial clustering using varying number of attributes (3, 4, ..., 12);
- ii) Examine between-cluster variances and identify variables with values that are .70 or more. The result was the 5 attributes TI, AVT, R, DP, and FT;
- iii) Identify logically correlated variables and select the most powerful one; discard others. R and DP are such; R was retained and DP dropped;
- iv) Compute mean standard deviation per attribute for runs with different number of attributes in (i). Minimum standard deviation was found to occur at 4 attributes, in support of result in (ii).

2. Standardization of Input Data. Standardization serves to convert the original attributes to new unitless attributes. This eliminates any arbitrary effects on the similarity coefficients (Step 3), and causes attributes to contribute more equally to the similarities among counties. An attribute with a wider range of values across counties will tend to be weighted more heavily in the similarity coefficient than one with a narrow range of values without standardization.

To standardize a sample of attribute values, the difference between each single value of the attribute and its sample mean is divided by the standard deviation of the sample:

$$Z_{ij} = (X_{ij} - \bar{X}_i) / S_i$$

where: X_{ij} : value of attribute i for county j

\bar{X}_i : mean value of attribute i

S_i : standard deviation of attribute i

Z_{ij} : standardized value of attribute i for county j .

3. Definition and Computation of Similarity Coefficients. A S.A.S. procedure [12] named FASTCLUS was used for clustering on the present project. The procedure is based on a group of techniques known as K-means system. This group of techniques uses the EUCLIDEAN distance between the centroid (representing a region) and a point (representing a county) as the basis for assigning counties to each climatic region. This distance is known as a similarity coefficient.
4. Clustering Algorithm. At each iteration in the assignment process, FASTCLUS represents each county by a point in a 4-dimensional Euclidean space (each of the 4 climatic factors constitutes one dimension in the space), and each region by the centroid of its member points. A county is assigned to the region with the smallest centroid-to-point distance. When all counties have been assigned, new centroids are computed for each region and the assignment process is repeated. Clustering is complete when two consecutive values of the centroid for each region remain unchanged.
5. Results and Validation. The results from Cluster analysis of the 254 Texas counties indicate that several Districts identify with more than one climatic area. For example, District 10 has three climatic areas with five of the eight counties in the same area as other East Texas districts 1, 12, 19 and 20. Wood and Smith counties identify with the Panhandle districts, while Henderson county shows the same climatic area as Central Texas districts. Thus, districts such as 10 are said to possess outlier counties. The presence of outlier counties dictates three possible representations of the results, depending on how the outliers are treated.

For the purpose of this project, a district has been assigned to the region with which a majority of its member counties identifies. Table 1 depicts the regional breakdown under this criterion. No outliers are allowed in this representation. This is consistent with the past practice of dividing the state of Texas into five regions without violating district boundaries. Furthermore, since pavement sections are usually identified by districts rather than counties, a representation which maintains district integrity might be preferable. For rigid pavements, only two climatically homogeneous areas are assumed for the state of Texas. Area A consists of regions 1, 3, and 5 on Table 1, while Area B is made up of regions 2 and 4. Figure 1 shows the demarcation of climatic areas assumed under RENU3 for flexible pavements.

Table 1. Climatic Regions with Outliers Not Allowed

Region (R)	Districts	Outlier Counties
1. East Texas	1, 10, 11, 12, 19, 20	none
2. West Texas	6, 7, 8, 24	none
3. Texas Panhandle	4, 5, 25	none
4. South Texas	13, 15, 16, 21	none
5. North-Central Texas	2, 3, 9, 14, 17, 18, 23	none

B. DEVELOPMENT OF IMPROVED PAVEMENT PERFORMANCE AND SURVIVAL RELATIONS

A survivor curve is a functional relationship that predicts the percentage of mileage in a given pavement category that does not require immediate rehabilitation at a specified time. This specified time can be considered as the time at which the pavement has reached a given traffic load level, or the time since last rehabilitation. Evidently, to decide if a pavement requires or does not require some kind of rehabilitation, it is first necessary to define a measure of pavement performance. This measure of performance has been defined in terms of PSI or distress (area or severity for several distress types). A fundamental idea behind the development of a survivor curve is the concept that since the performance relationship is deterministic, it would be meaningful to determine a second relationship that estimates the percent of pavement mileage that actually survives when the performance function reaches a critical value.

Survival times are data that measure the time to failure. These times are subject to random variations, and like any random variables, form a distribution; the two-parameter Weibull distribution [14] is assumed as the survival distribution for predicting the survival or failure rate of pavements. The Weibull distribution is one of the well-known survival distributions; its applicability to various failure situations, such as electron tube failure, the fatigue life of deep-groove ball bearings, etc., has been extensively investigated and recommended.

The Weibull distribution is characterized by two non-negative parameters λ and γ ; its probability density function, $f(w)$, and the cumulative distribution function, $F(w)$, are defined as follows:

$$f(w) = \lambda \gamma (\lambda w)^{\gamma-1} e^{-(\lambda w)^\gamma}$$

$$F(w) = 1 - e^{-(\lambda w)^\gamma}$$

In the specific application of the Weibull distribution to the study of pavement survivability, w represents the number of 18-Kip equivalent single-axle loads at which the pavement reaches a critical performance level. The parameters λ and γ are referred to as a "scale parameter" and a "shape parameter," respectively.

The survival function, denoted by $s(w)$, is defined as the probability that an individual mile of pavement of a given type survives a traffic load larger than w . From the definition of the cumulative distribution function $F(w)$, it can be concluded that $s(w) = 1-F(w)$. That is,

$$s(w) = e^{-(\lambda w)^\gamma}$$

As explained here, $s(w)$ is the survival rate of a given type of pavement structure under w traffic loads.

1. Parameter Estimation Method. As already mentioned, the parameters λ and γ determine the position and shape of the survival distribution. The maximum likelihood estimation method [9] can be applied to obtain estimates $\hat{\lambda}$ and $\hat{\gamma}$ on the basis of a random sample of survival times or traffic loads w_1, w_2, \dots, w_n . The corresponding estimates are the solution to the following non-linear system of Equations.

$$\frac{\sum_{i=1}^n W_i^{\hat{\gamma}} \ln(W_i)}{\sum_{i=1}^n W_i^{\hat{\gamma}}} - \frac{1}{\hat{\gamma}} - \frac{1}{n} \sum_{i=1}^n \ln(W_i) = 0 \quad (1)$$

$$\frac{1}{\hat{\lambda}^{\hat{\gamma}}} - \frac{1}{n} \sum_{i=1}^n W_i^{\hat{\gamma}} = 0 \quad (2)$$

Equation (1) can be approximately solved using the Newton-Raphson method [14] to find $\hat{\gamma}$, which in turn is used in Equation (2) to find $\hat{\lambda}$.

2. Data Generation Procedure. For a specified critical level of performance measured in terms of PSI or distress area/severity indices corresponding to a given type of distress (rutting, alligator cracking, longitudinal cracking, transverse cracking), the sample w_1, w_2, \dots, w_n can be generated from the pavement performance model used in the RENU programs. This model can be written as shown below:

$$g = e - (\rho/w)^\beta \quad (3)$$

where ρ and β have been determined for hot-mix, black-base, and overlaid pavements. Solving Equation (3) for w , we obtain

$$w = \left(\frac{\rho^\beta}{\ln(g_c)} \right)^{1/\beta} \quad (4)$$

where g_c represents the specified critical level of performance. Using Equation (4) for n test sections (each with different ρ, β values), the sample w_1, w_2, \dots, w_n is obtained.

If the performance data correspond to measurements of the present serviceability index (PSI), the critical performance index is calculated as

$$g_c = \frac{P_0 - P_c}{P_0 - P_f} \quad (5)$$

For Equation (5) to yield a valid value of g_c it is necessary that $P_c \geq P_f$. Therefore, when considering test sections of a given type of pavement, Equation (4) can be used only in the sections having a P_f value less than or equal to the specified value P_c . All other sections violating this condition cannot be used to generate w values for the maximum likelihood estimation procedure. In the case of pavement distress analysis, the critical value g_c is directly specified as an input parameter. Survivor curves were generated for three levels of critical performance, with values P_c of 1, 2, and 3 for

PSI, and g_c of .17, .35, and .50 for distress.

3. Summary of Results. Tables 2 through 4 indicate values of the performance and survivor parameters based on PSI and Distress for both flexible and rigid pavement sections.

Parameters for flexible pavements are stated for hot-mix, black base, and overlaid pavements. The performance parameters on Table 2a and 2b represent values for typical pavement sections of a given type in each region. Tables 3a and 3b show corresponding survivor parameters at the three critical performance levels based on PSI and Distress, respectively. Table 3b reflects the finding by Allison, et al. [1] that the most critical types of distress are alligator cracking area for hot mix, alligator cracking severity for black base, and transversal cracking severity for overlaid pavements. Table 4a gives performance parameters for typical sections of rigid pavements, while Table 4b shows corresponding survivor parameters.

C. TYPICAL REHABILITATION/MAINTENANCE DECISIONS AND RELATED COSTS

1. Flexible Pavements. RENU3 retains the same decision scenarios considered under RENU2. Rehabilitation consists of asphaltic concrete overlays; routine maintenance activities include pot-hole patching, crack sealing, and base and surface repair; and preventive maintenance consists of seal coating. For each of the five climatic regions, cost parameters for these activities were determined using primary cost data and pavement project data obtained from SDHPT.

Table 2a. Representative Performance Parameters for Flexible Pavements (PSI)

Pavement Type	Region 1		Region 2		Region 3		Region 4		Region 5	
	Beta	Rho	Beta	Rho	Beta	Rho	Beta	Rho	Beta	Rho
HOT MIX	0.182	0.116	1.209	0.854	3.170	1.392	0.501	1.324	2.180	1.494
BLACK BASE	0.501*	2.710*	1.209	1.291	3.003	1.996	0.501	2.710	0.742	5.749
OVERLAY	2.313	4.180	0.140	0.013	2.054	0.116	1.658	1.269	0.975	1.245

* Values are estimated on the basis of physical proximity, due to lack of traffic/PSI primary input data.

Table 2b. Representative Performance Parameters for Flexible Pavements (Distress)

Pavement Type	Region 1		Region 2		Region 3		Region 4		Region 5	
	Beta	Rho	Beta	Rho	Beta	Rho	Beta	Rho	Beta	Rho
HOT MIX	1.257	1.207	3.219	1.433	2.063	2.430	2.027	0.160	1.876	0.938
BLACK BASE	2.128*	0.496*	6.390*	1.391*	6.390	1.391	2.128*	0.496*	2.128	0.496
OVERLAY	0.685	1.597	3.354	0.921	1.240	0.100	2.111	0.705	5.742	0.476

* Values are estimated on the basis of physical proximity, due to lack of traffic/PSI primary input data.

Table 3a. Survivor Parameters for Flexible Pavements (PSI)

Pavement Type	P _c	Region 1		Region 2		Region 3		Region 4		Region 5	
		Gamma	Lambda	Gamma	Lambda	Gamma	Lambda	Gamma	Lambda	Gamma	Lambda
HOT MIX	1	0.670*	0.193*	2.088	0.618	3.041	0.160	0.670*	0.193*	0.670	0.193
	2	1.030	0.078	0.763	0.252	3.476	0.314	1.242	0.184	0.954	0.549
	3	1.216	0.290	1.425	0.656	0.032	0.0001	0.528	0.141	1.268	1.985
BLACK BASE	1	14.128*	0.171*	1.486	1.234	5.522	0.292	1.603	0.072	14.128	0.171
	2	0.933	0.158	0.775	0.537	0.962	0.194	0.700	0.062	0.933	0.158
	3	0.899	0.363	1.154	1.670	0.539	0.117	0.574	0.037	0.899	0.363
OVERLAY	1	0.940	0.125	1.905	0.273	4.980	0.569	2.201*	0.136*	2.201	0.136
	2	1.276	0.221	0.029	0.0003	1.591	0.627	1.718	0.278	1.398	0.134
	3	1.639	0.424	0.632	0.393	1.544	0.004	0.939	0.540	0.787	0.555

* Values are estimated on the basis of physical proximity, due to lack of traffic/PSI primary input data.

Table 3b. Survivor Parameters for Flexible Pavements (Distress)

Payement Type	G_c	Region 1		Region 2		Region 3		Region 4		Region 5	
		Gamma	Lambda	Gamma	Lambda	Gamma	Lambda	Gamma	Lambda	Gamma	Lambda
HOT MIX	0.17	0.177*	0.0002*	0.177	0.0002	0.177	0.0002	1.072	0.960	1.072	0.960
	0.35	2.661	0.949	2.661	0.949	2.574	0.609	2.661	0.949	2.661	0.949
	0.5	2.586	1.047	2.586	1.047	1.313	0.387	0.707	1.085	0.707	1.085
BLACK BASE	0.17	0.177*	0.0002*	0.177*	0.0002*	0.177	0.0002	1.072	0.960	1.072*	0.960*
	0.35	7.216	0.357	7.216	0.357	7.216	0.357	7.216	0.357	7.216	0.357
	0.5	10.758	0.479	10.758	0.479	10.758	0.479	10.758	0.479	10.758	0.479
OVERLAY	0.17	0.177	0.00002	0.177	0.0002	0.177	0.0002	1.072	0.960	1.072	0.960
	0.35	0.387	0.257	0.257	0.256	0.257	0.256	1.394	1.317	1.394	1.317
	0.5	0.661	7.672	7.672	0.913	0.757	0.875	0.614	0.311	0.614	0.311

* Values are estimated on the basis of physical proximity, due to lack of traffic/PSI primary input data.

Table 4a. Representative Performance Parameters for Rigid Pavements

Pavement Type	PSI				DISTRESS			
	Region A		Region B		Region A		Region B	
	Beta	Rho	Beta	Rho	Beta	Rho	Beta	Rho
Reinforced	0.189	5.75	0.550	1.930	1.180	7.660	1.260	9.320
Plain	1.510	2.120	0.548	2.070	1.270	15.040	1.260	10.03

Table 4b. Survivor Parameters for Rigid Pavements.

Pavement Type	PSI					DISTRESS				
	P _c	Region A		Region B		G _c	Region A		Region B	
		Gamma	Lambda	Gamma	Lambda		Gamma	Lambda	Gamma	Lambda
Reinforced	1	4.190	0.339	2.490	0.003	0.17	3.73	0.0278	4.36	0.0103
	2	4.190	0.264	2.490	0.0231	0.35	3.78	0.0344	4.70	0.0323
	3	4.190	0.129	2.490	0.113	0.50	3.90	0.0560	4.77	0.0520
Plain	1	12.07	0.012	0.541	0.0127	0.17	24.03	0.1436	13.29	0.9340
	2	15.39	0.1208	0.737	0.0241	0.35	24.03	0.3609	13.29	0.2347
	3	18.30	0.465	0.936	0.134	0.50	24.03	0.5340	13.29	0.3470

Table 5 is a matrix of cost parameters for rehabilitation of flexible pavements. Values were determined from a least-squares regression analysis of 71 rehabilitation projects. The general form of the rehabilitation cost model is

$$TC = C_0 + C_1V_1 + C_2V_2 + \xi$$

where:

TC = rehabilitation cost per lane mile

V_1 = cubic yards of pavement overlay per lane mile

V_2 = cubic yards of unpaved shoulder per lane mile

C_0 = \$ per lane mile

C_1 = \$/yd³ of paved section

C_2 = \$/yd³ of unpaved shoulder.

Routine maintenance costs were determined from the EAROMAR model, modified for conditions in Texas. The model was formulated as:

$$C_t = \frac{(110C_1 + 1000C_2 + 5C_3)}{(1 + e^{-(t-10)/1.16})}$$

where:

C_t = maintenance cost in year t per lane mile

C_1 = \$/yd² of bituminous skin patching

C_2 = \$/linear foot of crack sealing

C_3 = \$/yd³ of bituminous base and surface repair.

Statewide estimates for C_1 , C_2 , and C_3 obtained from SDHPT are \$42.60, \$0.135, and \$27.50, respectively. These estimates were adjusted for regional variations on the basis of average daily vehicle miles to obtain the values shown on Table 6.

Table 5. Rehabilitation Costs for Flexible Pavements.

Region	C_0 (\$/ln-mile)	C_1 (\$/yd ³)	C_2 (\$/yd ³)
1	5802.62	169.65	103.30
2	2234.97	65.34	39.78
3	1703.45	49.80	30.32
4	4057.68	118.63	72.23
5	5525.20	161.53	98.36

Table 6. Routine Maintenance Costs for Flexible Pavements.

Region	Patching* (\$/yd ²)	Crack-Sealing (\$/ft.)	Surface Repair (\$/yd ³)
1	58.31	0.19	37.64
2	22.46	0.07	14.50
3	17.12	0.06	11.05
4	40.78	0.13	26.35
5	55.52	0.18	35.84

(* an average thickness of 4" is assumed)

Table 7. Cost Parameters for Flexible Pavements.

	REGION				
	1	2	3	4	5
Traffic (\$/ADT)	0.48	0.19	0.14	0.34	0.46
Area (\$/yd ²)	0.91	0.35	0.27	0.64	0.87

Table 8. Cost Parameters for Rigid Pavements.

REGION	REHABILITATION		MAINTENANCE \$/Lane Mile-Failure
	\$/Lane Mile	\$/yd ³	
A	4344	127	1124.00
B	3147	92	743.00

Costs of preventive maintenance were also estimated using a least-squares regression analysis of 565 maintenance projects distributed across the entire state of Texas. The general form of the model is

$$C_s = C_1ADT + C_2TSY + \epsilon$$

where:

C_s = total cost of seal coating

C_1 = unit cost contribution from traffic

ADT = average daily traffic

C_2 = \$/yd² seal coated.

Table 7 shows values of C_1 and C_2 for each region.

2. Rigid Pavements. Rehabilitation for rigid pavements is considered to consist of either asphaltic concrete or slab overlay. Same cost parameters as for flexible pavements were assumed with appropriate regional adjustments. Thus region A parameters were determined by averaging values for regions 1, 3, and 5 on Table 5. Similarly, region B parameters are the averages of regions 2 and 4 on Table 5.

Maintenance activities considered for rigid pavements include patching, blow-up, mudjack, and joint sealing. State wide cost parameters were obtained from SDHPT and adjusted for regional conditions on the basis of daily vehicle miles. Table 8 shows both rehabilitation and maintenance cost parameters for each climatic region.

D. AUTOMATION OF DATA INPUT PROCEDURES

The objective of the input data automation task was to eliminate the use of card inputs by consolidating all input elements into a single input data file. All data input to RENU3 originates from two primary sources, namely preloaded record tapes and card inputs defined by the user.

Intermediary programs were developed to extract all data from source tapes and sort them to appropriate formats. (See Appendix F: Description of Programs and Files for Automated Input Procedure) Items in this category include truck classification, roadlife, and roadway inventory data. A standard input form was also designed to accommodate all other input data, formerly input by card entry. Inputs from tape are then merged with those on the standard form to create the single input file.

Figure 2 shows the automation procedure. Truck-mix and load distributions are generated from the truck classification tapes, and age distributions from the road life/roadway tapes. The procedure is designed to allow only one time creation of the final input data file for each generation of primary input data. The application of this automation procedure will significantly reduce the effort on the part of a user. The user only needs to enter the inputs required on the standard forms (Tables 9 and 10), which are then stored in a user-input file for subsequent consolidation with other input data.

E. EVALUATION OF PES FOR SYNTHESIS WITH RENU3

The Pavement Evaluation System (PES) estimates rehabilitation and maintenance costs of a pavement section by means of a three-step process consisting of determination of present pavement condition measured in terms of the pavement utility score (PS), selection of appropriate intervention strategy depending on the value of PS, and calculation of costs for the selected strategy. Figure 3 shows the primary steps in the PES methodology. This is compared to the basic methodology of RENU3 in Figure 4. The essential differences between PES and RENU3 are summarized on Table 11.

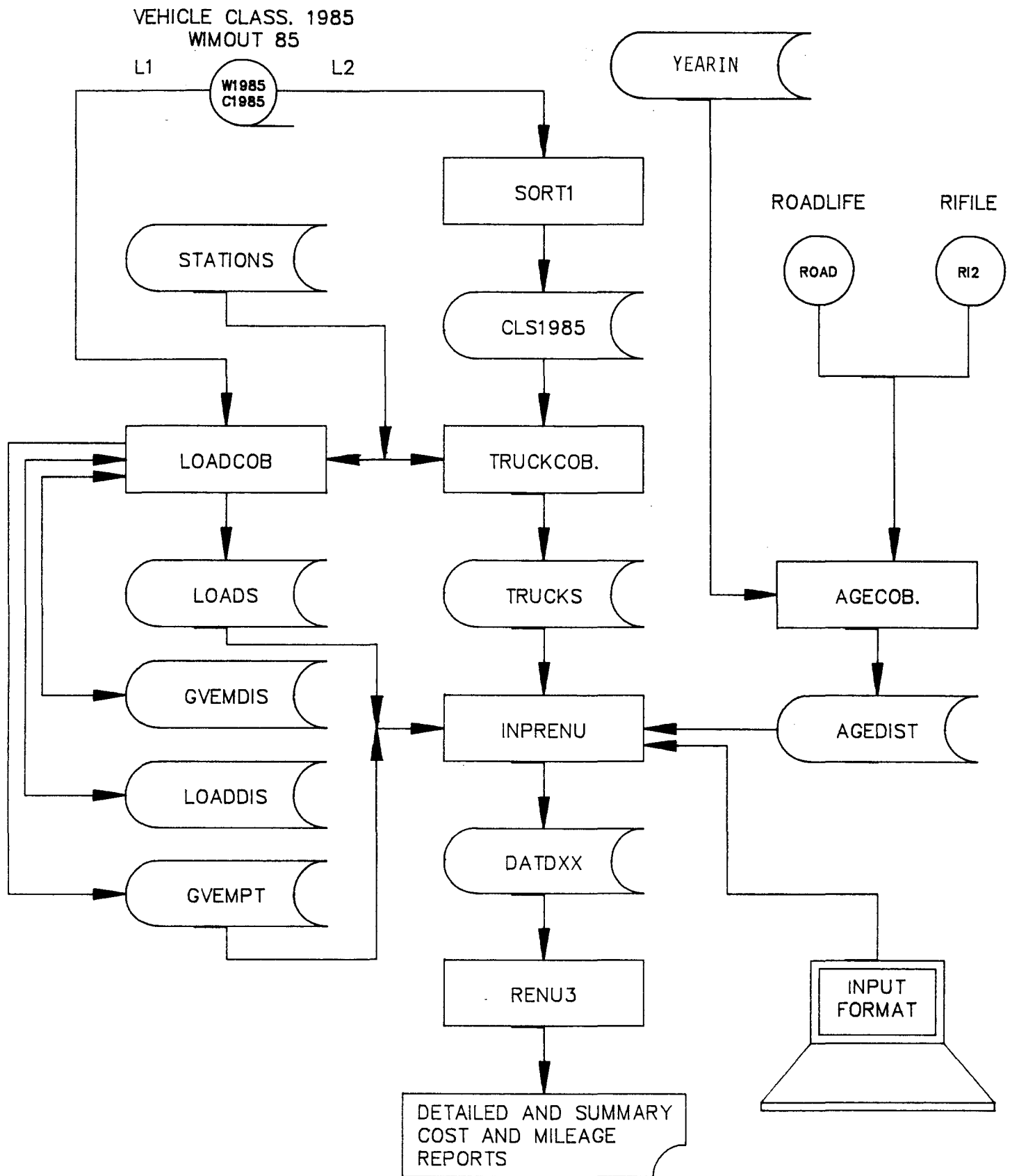


Figure 2. RENU3 Data Input Automation Procedure.

Table 9.

Region:
1 2

FORM F-1: Basic Input Parameters for RENU3
- FLEXIBLE PAVEMENTS -

General Parameters

NYAP
1 5

AGR
6 10

RTINT
13 17

XHCIO
20 24

XHCIM
27 31

LOAD LIMITS:

	GVWL	SAL	TAL	TRAL
Present	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Future	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	1 8 9	16 17	24 25	32

TRUCKS CONSIDERED

Type	1	2	3	4	5	6	7	8	9	10
Option	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Present Limit	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Future Limit	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	1 8 16 24 32 40 48 56 64 72 80									

Calculate costs for future Limits? (Load shift procedure):

District:
1 2

23

1 2	COMBINATION	OVERLAYS AND SEAL COATS					ROAD DESCRIPTORS					PERFORMANCE					78
		4 8	10 14	16 17	19 21	23 25	27 32	34 38	40 44	46 50	52 52	54 58	60 64	66 70	72 76		
No.		XMNOTK	XMOTK	NDEL	JYR	IYR	WLANE	PPVDSH	WPSH	WGSB	IACR	PF	PFO	PTERM	PIOV	OMIT	
1	1 1 1 1																
2	1 1 1 2																
3	1 1 2 1																
⋮	⋮																
⋮	⋮																
36	3 3 2 2																
00																	

36 Lines

Sythesizing PES with RENU3 should provide the capability to evaluate rehabilitation and maintenance costs at the lowest possible level of detail, while at the same time taking advantage of the theoretically superior methodology of determining expected mileage failures via the survival curves presently in RENU3. However, a number of adjustments will be necessary to make the two systems compatible at all levels. To facilitate analysis at the project level, all present RENU3 inputs would have to be defined at that level. Also, evaluation of reconstruction costs will have to be incorporated into RENU3, necessitating the development of appropriate cost and other input parameters.

Table 11. PES vs. RENU3

	PES	RENU3
1	Analysis at Project level, with results for individual pavement section.	Analysis at System level with results for District, Region or State.
2	Intervention strategies are rehabilitation, reconstruction, and preventive maintenance, routine maintenance is not considered.	Intervention strategies include rehabilitation, routine maintenance, and preventative maintenance. Reconstruction is not considered.
3	Only one level of performance is considered defined by the current pavement score.	Three critical levels of performance, in terms of PSI and distress are considered.
4	No survival curves are used. Intervention decision is based on current pavement score.	Survivor curves determine the pavement mileage needing intervention.

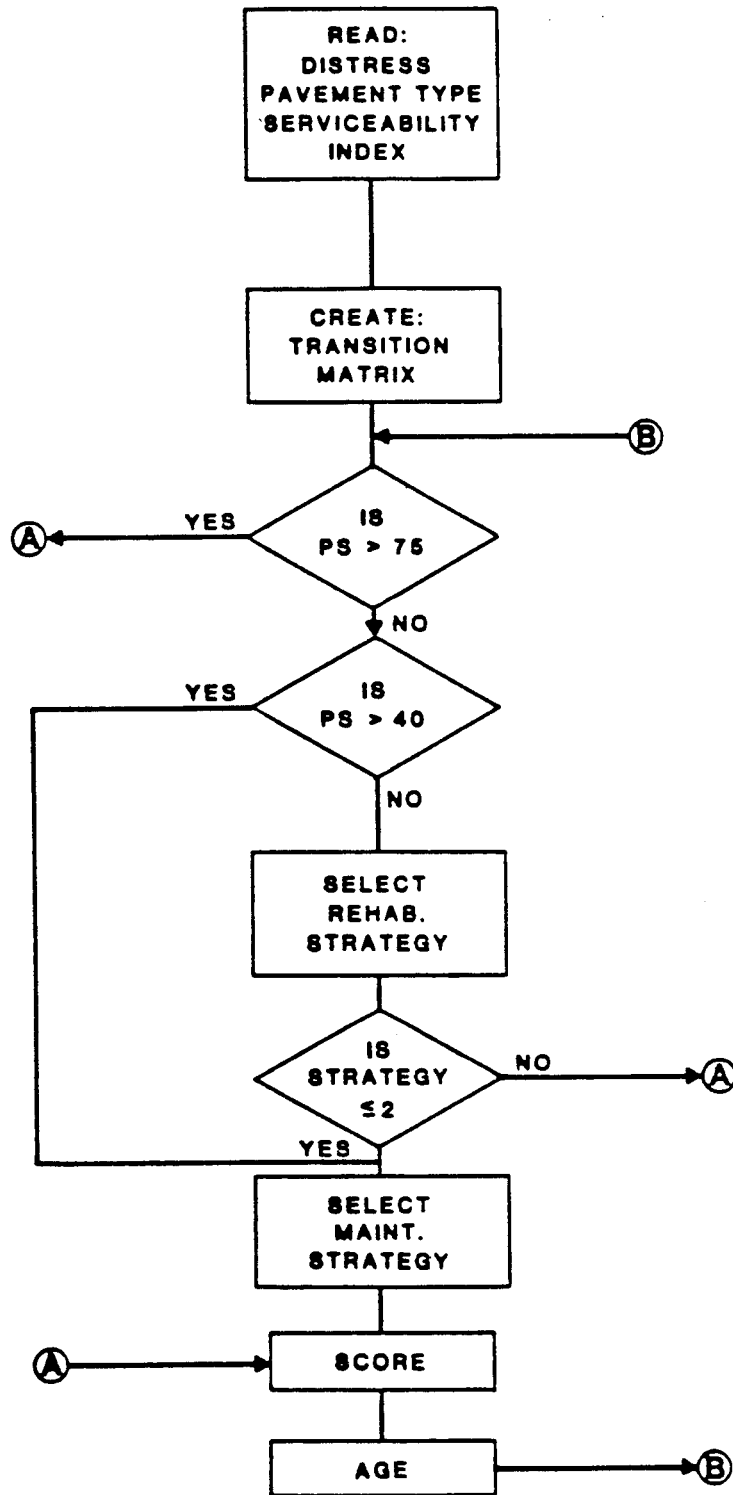


Figure 3. Basic Methodology of PES

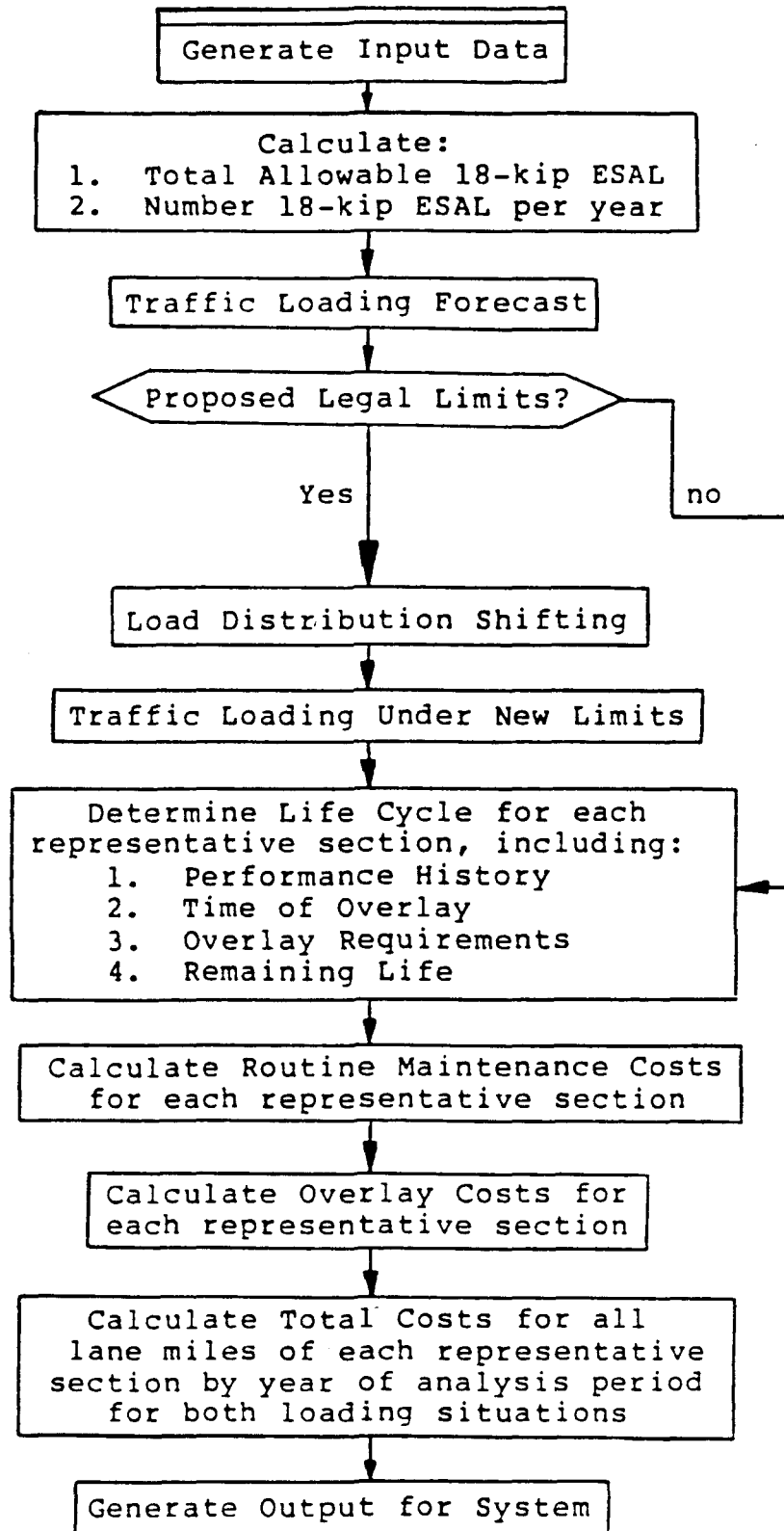


Figure 4. Basic Methodology of RENU3

III. APPLICATION OF RENU3

RENU3 was applied to the Texas pavement network using the most recent available data. For each of the 5 regions of flexible pavement, 3 highway systems (Interstate, US/State, and FM); 3 surface types (Hot-mix, Black-base, and Overlaid); and 2 traffic levels (High or Low) were considered.

The input data-set for each combination of highway system, surface type and traffic level consisted of age distributions drawn from the 1985 Roadlife and Road Inventory data tapes; truck count and weight data for ten different truck types drawn from the 1985 Truck Classification and Weight-in-Motion data tapes; and other user defined data such as load limits, critical and threshold performance levels entered on the standard user-input form F-1. Table 12 shows sample values for all user-defined input variables.

Similar input data were also generated for rigid pavements by district. Table 13 shows sample values for the user-defined data on Form F-2. The automated input procedure generates the age distributions, truck type compositions (percent mix) and load distributions, and consolidates all input data to a single file which feeds RENU3.

Results of the application runs are attached in Appendix C. A full detail (district level) run was made for the South Texas area (Region 4). In all cases, the output includes rehabilitated mileage, cost of rehabilitation, cost of routine maintenance, and cost of preventive maintenance for each year in the 18-year planning horizon. (NPOT stands for mileage out of POTTs, POT stands for mileage in POTTs) Also, the net present values of costs of rehabilitation, routine maintenance, and preventive maintenance over the 18-year period are given. No preventive maintenance was considered for rigid pavements.

Table 12: Sample User-Input Data for Flexible Pavements

Region:
 1 2

FORM F-1: Basic Input Parameters for RENU3
 - FLEXIBLE PAVEMENTS -

General Parameters

NYAP 1 5 AGR 6 10 RTINT 11 15 XHCIO 16 20 XHCIM 21 25

LOAD LIMITS:

	GVWL	SAL	TAL	TRAL
Present	<input type="text" value="80.00"/>	<input type="text" value="20.00"/>	<input type="text" value="34.00"/>	<input type="text" value="56.00"/>
Future	<input type="text" value="120.00"/>	<input type="text" value="22.40"/>	<input type="text" value="36.00"/>	<input type="text" value="56.00"/>

TRUCKS CONSIDERED

Type	1	2	3	4	5	6	7	8	9	10
Option	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>						
Present Limit	<input type="text" value="13.00"/>	<input type="text" value="13.00"/>	<input type="text" value="12.00"/>	<input type="text" value="8.00"/>						
Future Limit	<input type="text" value="16.00"/>	<input type="text" value="16.00"/>	<input type="text" value="16.00"/>	<input type="text" value="16.00"/>						

Calculate costs for future Limits? (Load shift procedure):

District:
 1 2

1	2	OVERLAYS AND SEAL COATS					ROAD DESCRIPTORS				PERFORMANCE					78											
		4	8	10	14	16	17	19	21	23	25	27	32	34	38		40	44	46	50	52	52	54	58	60	64	66
No.	COMBINATION	XMNOTK	XXMOTK	NDEL	JYR	IYR	WLANE	PPVDSH	WPSH	WGSB	IACR	PF	PFO	PTERM	PIOV	OMIT											
1	1 1 1 1	<input type="text" value="1.00"/>	<input type="text" value="6.00"/>	<input type="text" value="06"/>	<input type="text" value="010"/>	<input type="text" value="010"/>			<input type="text" value="4.75"/>	<input type="text" value="0.25"/>	<input type="text" value="1"/>	<input type="text" value="3.00"/>	<input type="text" value="3.00"/>	<input type="text" value="3.05"/>	<input type="text" value="4.70"/>												
2	1 1 1 2																										
3	1 1 2 1																										
⋮	⋮																										
⋮	⋮																										
⋮	⋮																										
36	3 3 2 2																										
00																											

29

36
Lines

IV. SUMMARY, CONCLUSION AND RECOMMENDATIONS

RENU3 introduces a number of significant enhancements to the basic methodology for estimating pavement rehabilitation and maintenance costs in the State of Texas which should improve the budget planning process by facilitating better accuracy and efficiency in cost estimating.

Using statistically sound clustering procedures, the Texas flexible pavement network was demarcated into five climatically homogeneous regions labelled East Texas, West Texas, the Texas Panhandle, North Central Texas and South Texas. These regions were further grouped into two rigid pavements regions. Such clustering facilitates the definition of pavement performance and survival parameters along regional lines so that the subsequent evaluation of damage intervention costs reflect varying pavement environmental conditions.

Unit cost matrices for rehabilitation, routine maintenance, and preventive maintenance were developed by climatic region, as were pavement performance and survival parameters, for both flexible and rigid pavements with different surface types. These were incorporated into the cost evaluation methodology. The result is the capability to analyze and report costs of rehabilitation and maintenance at either the district or regional level for any combination of traffic level, pavement surface type, and highway system.

Other areas of enhancement introduced by RENU3 include the expansion of the number of truck types considered in axle load analysis from four to ten, and the complete automation of the data-input procedures. The automation process and the special forms developed for all user-defined inputs significantly improve the user-friendliness of RENU3.

Finally, the Pavement Evaluation System (PES) was evaluated for possible synthesis with RENU3. The findings suggest that consolidation of PES and RENU3 is desirable because of expected increases in the scope of application. However, it will be necessary to redefine some input variables and reconstruct the present structures of the two programs in order to make them compatible in all respects. It is believed that the benefits accruing from consolidation will outweigh the costs.

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APPENDIX A:

INPUT VARIABLE DESCRIPTIONS: MANUAL DATA INPUT
(User Manual)

KEYWORD: RUN PARAMETERS*

DIRECTIVE (one card)

	NYAP	IEQTRP	AGR	RTINT	XHCIO	XHCIM	
UN PARAMETERS	15	15	F10.0	F10.0	F10.0	F10.0	
1	20	25	30	40	50	60	70

NYAP--Number of years in the analysis period, \leq , (right adjusted)

IEQTRP--18 kip (80 KN) Equivalent Single Axle Loads (ESAL) Analysis Method Switch, (Right Adjusted)

= 0: 18 kip (80 KN) ESAL analysis based on trucks carrying equal total payload under present and proposed load limits

= 1: 18 kip (80 KN) ESAL analysis method based on trucks making the same number of trips

AGR--Annual Growth Rate in 18 kip (80 KN) Equivalent Single Axle Loads (percent per year)

RTINT--Interest Rate used for economic analysis (percent per year)

XHCIO--Surfacing Cost Index (expressed in decimal form)

XHCIM--Maintenance material cost Index (expressed in decimal form)

*Must be the first directive of the data deck and the first directive after any -EXECUTE- directive if NYAP, IEQTRP, AGR, or RTINT are to be changed, except that only the -SYSTEM TITLE- directive may precede this directive.

KEYWORD: SYSTEM TITLE

DIRECTIVE (one card required for each highway system)

SYSTEM TITLE	
1	20

PROBLEM AND SYSTEM IDENTIFICATION (three cards required)

TITLE	
20A4	
1	80

TITLE--Alphanumeric Problem and System Title and all identifying information to be printed on each page of output

KEYWORD: FLEXIBLE (omit if -RIGID- directive is used)*

DIRECTIVE (one card)

		WLANE			PF		PF0	
FLEXIBLE		F10.0	F10.0	F10.0	F10.0	F10.0		
1	20	31	40	50	60	70	80	

WLANE--Lane Width (feet)

PF--Asymptotic serviceability index

PF0--Asymptotic serviceability index for overall

KEYWORD: RIGID (omit if -FLEXIBLE- directive is used)*

DIRECTIVE (one card)

		WLANE	XK	AGG	E	DISTCT		
RIGID		F10.0	F10.0	F10.0	F10.0	F10.0		
1	20	31	40	50	60	70	80	

WLANE--Lane Width (feet)

XK--Composite Support Value, k (pci)

AGG--Type of aggregate (0=Siliceous river gravel, 1=Lime stone)

E--Modulus of Concrete (psi)

DISTCT--District number

SECTION DESCRIPTION (one card required)

SECTTL							
20A4							
1							80

SECTTL--Alphanumeric Section Title to identify each representative section in the output. The first eight columns should contain an eight letter alphanumeric label which will be used in abbreviated prints.

*Only one representative section can be placed between -EXECUTE- keywords. Therefore either -RIGID- keyword or -FLEXIBLE- keyword is used up not both for any one problem.

FUTURE MILEAGE ADDED AS A RESULT OF CONSTRUCTION (two cards)

YEAR I =	1	2	3	4	5	6	7	8	9	10	11	12	
CONSTR(I) =	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	
	1	5	10	15	20	25	30	35	40	45	50	55	60

YEAR I =	13	14	15	16	17	18	19	20	
CONSTR(I) =	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	
	1	5	10	15	20	25	30	35	40

CONSTRU(I)--Number of Lane Miles added during analysis period

FLEXIBLE PAVEMENT DESCRIPTORS (one card)

NDIST	NIS	NPT	NRU	NLH	NDEL	TPE	XMNOTK	XMOTK	IACR	IYR	JYR
15	15	15	15	15	15	15	F5.0	F5.0	15	15	15
1							45	50	65		

NDIST--District Number: If more than one district is in the section, include the number of one of the districts within the group

NIS--Indicator = 1: Interstate
 2: FM
 3: US or State

NPT--Type of Pavement = 1: Hot Mix
 3: Surface treated
 4: Overlaid

NRU--Indicator = 1: Rural
 2: Urban

NLH--Indicator = 1: Low traffic intensity
 2: High traffic intensity

NDEL--Estimated time between overlays for distressed pavements

XMNOTK--Minimum overlay thickness

XMOTK--Maximum overlay thickness

IACR--Desired standard for section
 = 1: Low - overlay when distress value is 50%
 = 2: Moderate - overlay when distress value is 35%
 - 3: High - overlay when distress value is 17%

IYR--Number of years to overlay mileage in POTTS

JRY--Time between seal coats

MATERIALS (one card required; up to four layers; place surface layer first and proceed down into structure; Format specification is 4(A3, 2x, 2F5.0, 1x))

MCODE	THICK	STRC	MCODE	THICK	STRC	MCODE	THICK	STRC	MCODE	THICK	STRC	
A3	F5.0	F5.0	A3	F5.0	F5.0	A3	F5.0	F5.0	A3	F5.0	F5.0	
1	3	6	11	17	22	27	33	38	43	49	54	59

MCODE--Material Code
 ACP - Asphalt Concrete Pavement SAB - San Asphalt Base
 ATB - Asphalt Treated Base LTB - Lime Treated Base
 AGB - Aggregate Base AGS - Aggregate Subbase
 CTB - Cement Treated Base LTS - Lime Treated Subbase

THICK--Layer Thickness (inches) (Layer thickness for representative sections will be used if left blank)

STRC--Structural Coefficient (if blank, default is used; refer to Table A1)

(FOR FLEXIBLE PAVEMENTS INSERT BLANK CARD)

Table A1. AASHTO Structural Coefficients

MATERIAL TYPE	MATERIAL CODE	AASHTO STRUCTURAL COEFFICIENTS
Asphalt Concrete Pavement	ACP	.44
Asphalt Treated Base	ATB	.34
Aggregate Base	AGB	.14
Cement Treated Base	CTB	.23
Sand Asphalt Base	SAB	.30
Lime Treated Base	LTB	.18
Aggregate Subbase	AGS	.11
Lime Treated Subbase	LTS	.14

MATERIALS (one card required; up to four layers; Format specification is 4(A3, 2x, 2F5.0, 1x))**

MCODE	THICK	MCODE	THICK	MCODE	THICK	MCODE	THICK		
A3	F5.0	A3	F5.0	A3	F5.0	A3	F5.0		
1	3	6	10	17	22	33	38	49	54

MCODE--Material Code

JCP = Jointed Concrete Pavement

CRC = Continuously Reinforced Concrete

(also, may applicable material codes under the -FLEXIBLE-directive)**

**The input of ACP and a thickness for the first layer, followed by CRC or JCP layer, will key the procedure to consider the section as composite. The asphalt and rigid layer thicknesses will be converted to an equivalent thickness of rigid material.

KEYWORD: AGE DISTRIBUTION

DIRECTIVE (one card)

	NASL	ISLV	FLRP	
AGE DISTRIBUTION	15	15	F10.0	
	20	25	30	40

NASL--Number of Years for which Lane-Mile Data is Provided, \leq 30 (right adjusted)

ISLV--Salvage Value Switch

- = 0: No salvage value data read; no salvage value computations
- = 1: Read NASL values of material value and NASL values of rate of loss of value; calculate salvage value at beginning of analysis period and at the end under both present and proposed regulations.

FLRP--Factor by which the loss rate is to be multiplied for any mileage going into POTTS (Pavement Older Than Terminal Serviceability). If no value is provided, a default value is selected from an internal table based on the input value of terminal PSI, PTERM.

MILEAGE (one or two cards required)

XLM(I)

F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	
1	5	10	15	20	25	30	35	40	45	50	55	60	65	70

XLM--Number of Lane Miles for Pavement Ages 1 through NASL

VALUE (one or two cards required)

VI(I)

F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	
1	5	10	15	20	25	30	35	40	45	50	55	60	65	70

VI--Material value of existing pavement, estimated at the beginning of the analysis period. One value for each pavement age, in thousands of dollars per lane mile. (Read only if ISLV>0)

LOSS RATE (one or two cards required)

RI(I)

F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	F5.0	
1	5	10	15	20	25	30	35	40	45	50	55	60	65	70

RI--Rate of loss of value, percent per year, for each pavement age. (Read only if ISLV>0)

KEYWORD: TRUCK TYPE (must precede -LOAD LIMITS-, -STEERING AXLES-, -SINGLE AXLES-, -TANDEM AXLES-, TRIDEMS-, CVW-, and -EMPTH- directives)

DIRECTIVE (one card)

		NTTY	NATT	PERCT(1)	PERCT(2)	PERCT(3)	PERCT(4)
TRUCK TYPE		15	15	F10.0	F10.0	F10.0	F10.0
1	20	25	30	40	50	60	70

NTTY--Number of Truck Types (≤ 10) (right adjusted)

NATT--Number of Truck Types Added During Analysis Period (≤ 10 -NTTY). If NATT>0: read a second set of truck percent data for proposed regulations

PERCT(I)--Percentage of each truck type (2D, 3A, 3-S2, 2-S1-2 respectively) which is shifted.

LABEL (maximum of 2 cards; Format specification 8 (2A4, 2X))

TTYP (2 NTTY+NATT)							
2A4	2A4	2A4	2A4	2A4	2A4	2A4	2A4
1	8	11	21	31	41	51	61
							71

TTYP--AASHTO Truck Type Notation for Vehicle Axle Arrangement* (up to ten truck types, eight on first card and two on second card)

*See Recommended Policy of Maximum Dimensions and Weights of Motor Vehicles to be Operated Over the Highways for the United States, American Association of State Highway and Transportation Officials, 1974.

AXLES (maximum of 2 cards; Format specification (I3, 1x, 11F6.0))

NAXLES				NAXLES (10,4)											
0	2	0	1	4I2	4I2	4I2	4I2	4I2	4I2	4I2	4I2	4I2	4I2		
1	2	3	4	10	18	20	28	30	38	40	48	50	58		
													60		
													68		
													70		
													78		

NAXLES--Number of Single, Tandem, Tridem, and Steering Axles Truck by Truck Type. Numbers must be right justified integers. First Field has example input for 3-S2

TRUCK DATA (one card for each analysis year required; Format specification 8(4I2, 2x))

I	PTTYP (10, 20, 2)											
13	F6.0	F6.0	F6.0	F6.0	F6.0	F6.0	F6.0	F6.0	F6.0	F6.0	F6.0	F6.0
1	3	5	11	17	23	29	35	41	47	53	59	65

I--Analysis year (right adjusted)

PTTYP--Percent of Given Truck Type as a Percentage of a Vehicles

PCTTR--Percent of all Trucks as a Percentage of all Vehicles

KEYWORD: LOAD LIMITS

DIRECTIVE (one card)

		IEWS	
LOAD LIMITS		15	
1	20	25	

IEWS--Empty Weight Switch
= 0: omit WEIGHT INCREASE card
> 0: read WEIGHT INCREASE card

WEIGHT LIMITS (two cards required; first card must contain present limits and second card must contain proposed limit)

PGVWL	PSAL	PTAL	PTRAL	
F10.0	F10.0	F10.0	F10.0	
1	10	20	30	40

PGVWL--Gross Vehicle Weight Limit (kips)

PSAL--Single Axle Legal Load Limit (kips)

PTAL--Tandem Axle Legal Load Limit (kips)

PTRAL--Tridem Axle Legal Load Limit (kips)

STEERING WEIGHT (two cards required; first card must contain present limits; second card must contain proposed limits)

PSTAW (10, 2)										
F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0
1	8	16	24	32	40	48	56	64	72	80

PSTAW--Steering Axle Weight by Truck Type (kips) (first field corresponds to first truck type)

WEIGHT INCREASE (one card required if IEWS>0)

EPI (10)										
F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0	F8.0
1	8	16	24	32	40	48	56	64	72	80

EPI--Percentage Increase of Empty Vehicle Weight from Present to Proposed Weight Limits (first field corresponds to first truck type). This card is read if IEWS>0

KEYWORD: SINGLE AXLES

DIRECTIVE (one card)

		NLDI	STARTS	
SINGLE AXLES	15	F10.0		
1	20	25	31	40

NLDI--Number of Load Intervals in the Single Axle Load Distribution Array (<30) (right adjusted)

STARTS--Beginning of First Load Level for Single Axle Load Distribution Array

SINGLES (NLDI cards required; maximum of 30 intervals)

ELDINT		SA (10)									
F10.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0
1	10	17	24	31	38	45	52	59	66	73	80

ELDINT--Load at Upper End of Load Interval

SA--Number of Single Axles Weighed within this Interval by Truck Type (order of input must conform to order to truck type labels following the -TRUCK TYPE- directive)

KEYWORD: TANDEM AXLES

DIRECTIVE (one card)

		NLDI	STARTS	
TANDEM AXLES	15	F10.0		
1	20	25	31	40

NLDI--Number of Load Intervals in the Tandem Axle Load Distribution Array (<30) (right adjusted)

STARTS--Beginning of First Load interval for Tandem Axle Load Distribution Array

TANDEMS (NLDI cards required; maximum of 30 intervals)

ELDINT		TA (10)									
F10.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0
1	10	17	24	31	38	45	52	59	66	73	80

ELDINT--Load at Upper Eng of Load Interval

TA--Number of Tandem Axles Weighted within this Interval by Truck Type (order of input must conform to order of truck type labels following the -TRUCK TYPE- directive)

KEYWORD: GVW

DIRECTIVE (one card)

		NLDI	STARTS	
GVW	15	F10.0		
1	20	25	31	40

NLDI--Number of Load Intervals in the Gross Vehicle Weight Load Distribution Array, (<75) (right adjusted)

STARTS--Beginning of first load interval in the Gross Vehicle Weight Load Distribution Array

GRUSS (NLDI cards required; maximum of 75 intervals)

ELDINT		VG (10)									
F10.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0
1	10	17	24	31	38	45	52	59	66	73	80

ELDINT--Load at Upper End of Load Interval

VG--Number of Trucks with Gross Vehicle Weight in this Interval by Truck Type (order of input must conform to order of truck type labels following the -TRUCK TYPE - directive)

KEYWORD: EMPTY

DIRECTIVE (one card)

		NLDI		STARTS	
EMPTY		15		F10.0	
1		20	25	31	40

NLDI--Number of Load Intervals in the Empty Load Distribution Array, (< 30)
(right adjusted)

STARTS--Beginning of first load interval in the Empty Load Distribution Array

EMPTY VEHICLES (NLDI cards required; maximum of 30 intervals)

ELDINT		VE (10)									
F10.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0
1	10	17	24	31	38	45	52	59	66	73	80

ELDINT--Load at Upper End of Load Interval

VE--Number of Trucks with Empty Vehicle Weight in this Interval by Truck Type (order of input must conform to order of truck type labels following the -TRUCK TYPE- directive)

KEYWORD: STEERING AXLES (optional)

DIRECTIVE (one card)

		NLDI		STARTS	
STEERING AXLES		15		F10.0	
1		20	25	31	40

NLDI--Number of Load Intervals in the Steering Axles Load Distribution Array, (<30) (right adjusted)

STARTS--Beginning of First Load Interval in the Steering Axle Load Distribution Array

STEERING AXLES (NLDI card required; maximum of 30 intervals)

ELDINT		ST (10)									
F10.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0
1	10	17	24	31	38	45	52	59	66	73	80

ELDINT--Load at Upper End of Load Interval

ST--Number of Steering Axles Weighted within this Interval by Truck Type (order of input must conform to order of truck type labels following the -TRUCK TYPE- directive)

KEYWORD: TRIDEMS (optional)

DIRECTIVE (one card)

		NLDI	STARTS	
TRIDEMS		15	F10.0	
1		20 25	31 40	

NLDI--Number of Load Intervals in the Tridem Axle Load Distribution Array, (<50) (right adjusted)

STARTS--Beginning of First Load Interval in the Tridem Axle Load Distribution Array

TRIDEM AXLES (NLKE cards required; maximum of 50 intervals)

ELDINT		ST (10)									
F10.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0	F7.0
1	10	17	24	31	38	45	52	59	66	73	80

ELDINT--Load at Upper End of Load Interval

TR--Number of Tridem Axles Weighted within this Interval by Truck Type (order of input must conform to order of truck type labels following the -TRUCK TYPE- directive)

KEYWORD: PERFORMANCE

DIRECTIVE (one card)

		PICON	PTERM	PIOV	OVLIF
PERFORMANCE		F10.0	F10.0	F10.0	F10.0
1		20	31 40	50	60 70

PICON--PSI at Initial Construction

PTERM--PSI Terminal

PIOV--PSI after Overlay

OVLIF--Overlay Design Life (years); if left blank a default value of 20 years in used

ATP	
F10.0	
1	10

ATP--Average Age in years at Terminal PSI for a Representative Section (default is 13). If default value wanted; put a blank card.

KEYWORD: OVERLAY

DIRECTIVE (one card)

OVERLAY

1

MISC. DATA (one card required)

PPVDSH	WPSH	WGSH			ACDENS	GRDENS	
F10.0	F10.0	F10.0	F10.0	F10.0	F10.0	F10.0	F10.0
1	10	20	30	40	50	60	70 80

PPVDSH--Percent Paved Shoulders

WPSH--Average Paved Shoulder Width per Lane (feet)

WGSH--Average Granular Shoulder Width per Lane (feet)

KEYWORD: NO MAINT (omit if -MODEL MAINT- directive is used)*

DIRECTIVE (one card)

NO MAINT

1

20

*Only one maintenance model may be used for each representative section. If one model is applicable for all sections the data need be input only with first representative section.

KEYWORD: MODEL MAINT (omit if -NO MAINT- directive is used)*

DIRECTIVE (one card)

	IARMS
MODEL MAINT	15
1	20 25

IARMS--Accelerated Routine Maintenance Spending Switch
(right adjusted)
= 0: do not accelerate
= 1: accelerate

KEYWORD: EXECUTE (this card must be the last card of each problem set; see -STOP- directive)

DIRECTIVE (one card)

EXECUTE

1

20

KEYWORD: OUTPUT

DIRECTIVE (one card)

OUTPUT
1 20

KEYWORD: STOP

DIRECTIVE (one card)

STOP
1 20

APPENDIX B:

USER-DEFINED VARIABLE DESCRIPTIONS: AUTOMATED DATA INPUT

DESCRIPTION OF FORM F-1: BASIC INPUT PARAMETERS FOR RENU3
(only used with automated input procedure)
-FLEXIBLE PAVEMENTS-

The program runs by regions. Before the program is run, the Form F-1 must be filled out for all Districts in that Region.

REGION Number of Region
NYAP Analysis period [years]
AGR Annual growth rate [percent per year] in ESALS
RTINT Interest rate [percent per year]
XHCIO Surfacing cost index
XHCIM Maintenance material cost index

LOAD LIMITS:

GVWL: Gross Vehicle Weight limit (Kips)
SAL: Single Axle Legal load limit (Kips)
TAL: Tandem Axle Legal load limit (Kips)
TRAL: Tridem Axle Legal load limit (Kips)

The first line corresponds to present limits and the second to proposed limits

TRUCKS CONSIDERED:

There are ten possible types of trucks:

- | | |
|-----------|------------|
| 1. 2D | 6. 2-S2 |
| 2. 3A | 7. 3-S1 |
| 3. 3-S2 | 8. 3-S3 |
| 4. 2-S1-2 | 9. 3-S1-2 |
| 5. 2-S1 | 10. 2-S2-2 |

Option: 1: Consider that type of truck
0: do not consider it

Present limit: Present steering axle weight limit for that type of truck.

Future limit: Future steering axle weight limit for that type of truck.

COST CALCULATION FOR FUTURE LIMITS:

1: Use load shifting procedure

0: do not use load shifting procedure

This option is used when impact of changing legal load limits is to be measured in terms of cost. In this case, two runs must be made. In the first one, do not use load shifting procedure, and in the second one do consider it leaving the other data as they were in the first run.

DISTRICT: District number.

One Form F-1 must be filled out for each district for the following part of the form only.

COMBINATION CODE

First column: 1 = Interstate 2 = Farm-to-Market 3 = State/U.S.

Second column: 1 = Hot Mix 2 = Black Base 3 = Overlaid

Third Column: 1 = Rural 2 = Urban

Forth Column: 1 = Low traffic 2 = High Traffic

	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>
Interstate	ADT < 7000	ADT < 10000	ADT > 7000	ADT > 10000
F.M.	ADT < 1000	ADT < 2500	ADT > 1000	ADT > 2500
U.S./State	ADT < 2500	ADT < 7000	ADT > 2500	ADT > 7000

XMNOTK Minimum overlay thickness [inches]

XXOTK Minimum overlay thickness [inches]

NDEL Number of years to overlay mileage in POTTS where distress types are the failure mode

JYR Time between seal coats

IYR Number of years to overlay mileage in POTTS where PSI loss is the failure mode

WLANE	Lane width (in feet; default value is 12)
PPVDSH	Percent of paved shoulder [default value is 95 for Interstate and US/State and 5 for FM]
WPSH	Average paved shoulder width per lane (feet)
WGSB	Average granular shoulder width per lane (feet)
IACR	Distress Option: 1 = low standard - overlay at 0.50 2 = moderate standard - overlay at 0.35; 3 = high standard - overlay at 0.17
PF	Asymptotic serviceability index
PFO	Asymptotic serviceability index for overlay
PTERM	Terminal PSI
PIOV	PSI after overlay
OMIT	1 = Omit combination; 2 = Include combination

To run the program a file with the data from Form F-1 must be created. When creating the data-file, note the following:

- (1) Each line on Form F-1 corresponds to one line in the data file
- (2) The combination code should not be included in the data file. Only the corresponding number in columns 1 and 2 should be entered.
- (3) When an input-variable value for a combination is the same as for the previous combination, the column space should be left blank; program automatically assumes previous value for that variable.
- (4) Enter "00" in columns, 1 and 2 at the end of each district data set. The last district data set should have an additional "00" line to mark the end of data input.

Region:
 1 2

FORM F-1: Basic Input Parameters for RENU3
 - FLEXIBLE PAVEMENTS -

General Parameters

NYAP AGR RTINT XHCIO XHCIM
 1 5 6 10 13 17 20 24 27 31

LOAD LIMITS:

	GVWL	SAL	TAL	TRAL
Present	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Future	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	1 8 9	16 17	24 25	32

TRUCKS CONSIDERED

Type	1	2	3	4	5	6	7	8	9	10
Option	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Present Limit	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Future Limit	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	1 8 16 24 32 40 48 56 64 72 80									

Calculate costs for future Limits? (Load shift procedure):

District:
 1 2

B-4

1	2	COMBINATION	OVERLAYS AND SEAL COATS					ROAD DESCRIPTORS					PERFORMANCE					78										
			4	8	10	14	16	17	19	21	23	25	27	32	34	38	40		44	46	50	52	52	54	58	60	64	66
No.			XMNOTK	XXMOTK	NDEL	JYR	IYR	WLANE	PPVD SH	WPSH	WGSH	IACR	PF	PFO	PTERM	PIOV	OMIT											
1		1 1 1 1																										
2		1 1 1 2																										
3		1 1 2 1																										
⋮		⋮																										
⋮		⋮																										
36		3 3 2 2																										
00																												

36 Lines

**DESCRIPTION OF FORM F-2: BASIC INPUT PARAMETERS FOR RENU3
-RIGID PAVEMENTS-**

Before the program is run, the Form F-2 must be filled out for all District.

NYAP Analysis period [years]
AGR Annual growth rate [percent per year] in ESALS
RTINT Interest rate [percent per year]
XHCIO Surfacing cost index
XHCIM Maintenance material cost index

LOAD LIMITS:

GVWL: Gross Vehicle Weight limit (Kips)
SAL: Single Axle Legal load limit (Kips)
TAL: Tandem Axle Legal load limit (Kips)
TRAL: Tridem Axle Legal load limit (Kips)

The first line corresponds to present limits and the second to proposed limits

TRUCKS CONSIDERED:

There are ten possible types of trucks:

- | | |
|-----------|------------|
| 1. 2D | 6. 2-S2 |
| 2. 3A | 7. 3-S1 |
| 3. 3-S2 | 8. 3-S3 |
| 4. 2-S1-2 | 9. 3-S1-2 |
| 5. 2-S1 | 10. 2-S2-2 |

Option: 1: Consider that type of truck

0: do not consider it

Present limit: Present steering axle weight limit for that type of truck.

Future limit: Future steering axle weight limit for that type of truck.

COST CALCULATION FOR FUTURE LIMITS:

- 1: Use load shifting procedure
0: do not use load shifting procedure

This option is used when impact of changing legal load limits is to be measured in terms of cost. In this case, two runs must be made. In the first one, do not use load shifting procedure, and in the second one do consider it leaving the other data as they were in the first run.

DISS: Number of failures at the time of survey

DCON: Date of survey condition (years)

DINT: Initial date of planning

DISTRICT: District number.

One Form F-1 must be filled out for each district for the following part of the form only.

COMBINATION CODE

First column: 1 = Interstate 2 = Farm-to-Market 3 = State/U.S.

Second column: 1 = Hot Mix 2 = Black Base 3 = Overlaid

Third Column: 1 = Rural 2 = Urban

Forth Column: 1 = Low traffic 2 = High Traffic

	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>
Interstate	ADT < 7000	ADT < 10000	ADT > 7000	ADT > 10000
F.M.	ADT < 1000	ADT < 2500	ADT > 1000	ADT > 2500
U.S./State	ADT < 2500	ADT < 7000	ADT > 2500	ADT > 7000

DATA FOR EACH DISTRICT

DISTRICT District number

OVERLAYS:

XMNOTK Minimum overlay thickness [inches]

MXOTK Maximum overlay thickness [inches]

FORM F-2: Basic Input Parameters for RENU3
 - RIGID PAVEMENTS -

General Parameters

NYAP 1 5 AGR 6 10 RTINT 13 17 XHCIO 20 24 XHCIM 27 31

LOAD LIMITS:

	GVWL	SAL	TAL	TRAL
Present	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Future	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	1 8 9	16 17	24 25	32

TRUCKS CONSIDERED

Type	1	2	3	4	5	6	7	8	9	10
Option	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Present Limit	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Future Limit	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	1 8	16	24	32	40	48	56	64	72	80

Calculate costs for future Limits? (Load shift procedure):
 1 2

DISS 1 10 DCON 11 20 DIN 21 25

1 DISTRICT	2	4 OVERLAYS		PAVEMENT DESCRIPTORS						MATERIALS									PERFORMANCE				
										LAYER 1			LAYER 2			LAYER 3							
										4 8	10 14	18	18 23	25 29	31 40	42 44	46 50	52 58					
XMNOTK	XXOTK	PT	XK	AGG	E	CODE	TH	ST	CODE	TH	ST	CODE	TH	ST	IACR	PF	PFO	PTERM	PIOV				
00																							

24 Lines

APPENDIX C:
RESULTS OF APPLICATION RUN

1.	RUN PARAMETERS	18	0	3.35	4.00	0.12	0.09	0.00											
2.	SYSTEM TITLE	0	0	0.00	0.00	0.00	0.00	0.00											
3.	PAVEMENT REHABILITATION AND MAINTENANCE COST ESTIMATES (BY DISTRICT)																		
4.	TEXAS TRANSPORTATION INSTITUTE																		
5.	SAMPLE RUN FOR FLEXIBLE PAVEMENTS																		
6.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00											
7.	FLEXIBLE - INTERST - HOTMIX - RURAL - HIGH TRAFFIC																		
8.	13	1	1	1	2	6	1.00	6.00	1	4	10	10	4835.00						
9.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	ACP	4.00	0.000	AGB	12.00	0.000	LTS	0.00	0.000		0.00	0.000							
12.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.	0.0	0.0	0.0	0.0	0.0	0.0	289.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.	TRUCK TYPE	4	0	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3											
17.	3-S1-2	2-S2-2																	
18.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0											
19.	4 1 0 0	4 1 0 0																	
20.	0	2.63	0.15	0.17	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
21.	LOAD LIMITS			0	0	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	80.00	20.00	34.00	56.00															
23.	120.00	22.40	36.00	56.00															
24.	13.	13.	12.	8.															
25.	16.	16.	16.	16.															
26.	SINGLE AXLES		11	0	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.	3.	6.	16.	39.	30.														
28.	7.	625.	262.	2015.	479.														
29.	8.	197.	46.	957.	116.														
30.	12.	535.	103.	2190.	535.														
31.	16.	284.	115.	2132.	282.														
32.	18.	86.	51.	1672.	76.														
33.	19.	25.	13.	546.	20.														
34.	20.	18.	11.	291.	26.														
35.	22.	14.	12.	125.	20.														
36.	24.	9.	4.	13.	5.														
37.	26.	3.	2.	4.	2.														
38.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	6.	0.	258.	3382.	0.														
40.	12.	1.	167.	5272.	0.														
41.	18.	0.	159.	5150.	0.														
42.	24.	0.	28.	1814.	0.														
43.	30.	0.	1.	1531.	0.														
44.	32.	0.	0.	875.	0.														
45.	33.	0.	0.	483.	0.														
46.	34.	0.	0.	373.	0.														
47.	36.	0.	0.	486.	0.														
48.	38.	0.	0.	217.	0.														
49.	40.	0.	0.	53.	0.														
50.	42.	0.	0.	14.	0.														
51.	44.	0.	0.	4.	0.														
52.	46.	0.	0.	1.	0.														
53.	50.	0.	0.	3.	0.														
54.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55.	10.	299.	4.	0.	0.														
56.	14.	547.	29.	2.	1.														
57.	20.	590.	188.	91.	3.														
58.	22.	145.	48.	64.	3.														
59.	24.	57.	37.	108.	5.														
60.	26.	71.	29.	293.	2.														

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61.	28.	53.	16.	554.	9.					
62.	30.	20.	18.	658.	13.					
63.	32.	12.	27.	583.	22.					
64.	34.	6.	20.	476.	28.					
65.	36.	2.	28.	362.	25.					
66.	38.	3.	38.	280.	15.					
67.	40.	1.	31.	289.	8.					
68.	45.	2.	59.	632.	41.					
69.	50.	0.	38.	581.	59.					
70.	55.	0.	8.	504.	57.					
71.	60.	0.	4.	507.	33.					
72.	65.	0.	2.	532.	28.					
73.	70.	0.	0.	682.	12.					
74.	72.	0.	0.	404.	7.					
75.	75.	0.	0.	692.	12.					
76.	80.	0.	0.	1042.	9.					
77.	85.	0.	0.	438.	3.					
78.	90.	0.	0.	81.	3.					
79.	95.	0.	0.	11.	0.					
80.	100.	0.	0.	3.	0.					
81.	105.	0.	0.	2.	0.					
82.	110.	0.	0.	1.	0.					
83.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
84.	10.	259.	4.	0.	0.					
85.	14.	0.	29.	2.	1.					
86.	20.	0.	104.	91.	3.					
87.	22.	0.	0.	0.	3.					
88.	24.	0.	0.	0.	5.					
89.	26.	0.	0.	0.	2.					
90.	28.	0.	0.	0.	0.					
91.	30.	0.	0.	0.	0.					
92.	32.	0.	0.	0.	0.					
93.	34.	0.	0.	0.	0.					
94.	36.	0.	0.	0.	0.					
95.	38.	0.	0.	0.	0.					
96.	40.	0.	0.	0.	0.					
97.	45.	0.	0.	0.	0.					
98.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
99.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
100.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - INTERST - HOTMIX - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	23904.00	4.91	0.00	201891.00	1406.00
2	58250.00	4.81	0.00	221728.00	1533.00
3	135076.00	4.68	0.00	241643.00	1671.00
4	284504.00	4.57	0.00	264117.00	1821.00
5	514606.00	4.47	0.00	289607.00	1985.00
6	777,000.00	3.9	0.0	3,000,000.00	4.00

183.	34.	0.	0.	373.	0.					
184.	36.	0.	0.	486.	0.					
185.	38.	0.	0.	217.	0.					
186.	40.	0.	0.	53.	0.					
187.	42.	0.	0.	14.	0.					
188.	44.	0.	0.	4.	0.					
189.	46.	0.	0.	1.	0.					
190.	50.	0.	0.	3.	0.					
191.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
192.	10.	299.	4.	0.	0.					
193.	14.	547.	29.	2.	1.					
194.	20.	590.	188.	91.	3.					
195.	22.	145.	48.	64.	3.					
196.	24.	57.	37.	108.	5.					
197.	26.	71.	29.	293.	2.					
198.	28.	53.	16.	554.	9.					
199.	30.	20.	18.	658.	13.					
200.	32.	12.	27.	583.	22.					
201.	34.	6.	20.	476.	28.					
202.	36.	2.	28.	362.	25.					
203.	38.	3.	38.	280.	15.					
204.	40.	1.	31.	289.	8.					
205.	45.	2.	59.	632.	41.					
206.	50.	0.	38.	581.	59.					
207.	55.	0.	8.	504.	57.					
208.	60.	0.	4.	507.	33.					
209.	65.	0.	2.	532.	28.					
210.	70.	0.	0.	682.	12.					
211.	72.	0.	0.	404.	7.					
212.	75.	0.	0.	692.	12.					
213.	80.	0.	0.	1042.	9.					
214.	85.	0.	0.	438.	3.					
215.	90.	0.	0.	81.	3.					
216.	95.	0.	0.	11.	0.					
217.	100.	0.	0.	3.	0.					
218.	105.	0.	0.	2.	0.					
219.	110.	0.	0.	1.	0.					
220.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
221.	10.	259.	4.	0.	0.					
222.	14.	0.	29.	2.	1.					
223.	20.	0.	104.	91.	3.					
224.	22.	0.	0.	0.	3.					
225.	24.	0.	0.	0.	5.					
226.	26.	0.	0.	0.	2.					
227.	28.	0.	0.	0.	0.					
228.	30.	0.	0.	0.	0.					
229.	32.	0.	0.	0.	0.					
230.	34.	0.	0.	0.	0.					
231.	36.	0.	0.	0.	0.					
232.	38.	0.	0.	0.	0.					
233.	40.	0.	0.	0.	0.					
234.	45.	0.	0.	0.	0.					
235.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
236.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
237.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

C-4

C-6

305.	16.	284.	115.	2132.	282.				
306.	18.	86.	51.	1672.	76.				
307.	19.	25.	13.	546.	20.				
308.	20.	18.	11.	291.	26.				
309.	22.	14.	12.	125.	20.				
310.	24.	9.	4.	13.	5.				
311.	26.	3.	2.	4.	2.				
312.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00
313.	6.	0.	258.	3382.	0.				
314.	12.	1.	167.	5272.	0.				
315.	18.	0.	159.	5150.	0.				
316.	24.	0.	28.	1814.	0.				
317.	30.	0.	1.	1531.	0.				
318.	32.	0.	0.	875.	0.				
319.	33.	0.	0.	483.	0.				
320.	34.	0.	0.	373.	0.				
321.	36.	0.	0.	486.	0.				
322.	38.	0.	0.	217.	0.				
323.	40.	0.	0.	53.	0.				
324.	42.	0.	0.	14.	0.				
325.	44.	0.	0.	4.	0.				
326.	46.	0.	0.	1.	0.				
327.	50.	0.	0.	3.	0.				
328.	GVW		28	0	10.00	0.00	0.00	0.00	0.00
329.	10.	299.	4.	0.	0.				
330.	14.	547.	29.	2.	1.				
331.	20.	590.	188.	91.	3.				
332.	22.	145.	48.	64.	3.				
333.	24.	57.	37.	108.	5.				
334.	26.	71.	29.	293.	2.				
335.	28.	53.	16.	554.	9.				
336.	30.	20.	18.	658.	13.				
337.	32.	12.	27.	583.	22.				
338.	34.	6.	20.	476.	28.				
339.	36.	2.	28.	362.	25.				
340.	38.	3.	38.	280.	15.				
341.	40.	1.	31.	289.	8.				
342.	45.	2.	59.	632.	41.				
343.	50.	0.	38.	581.	59.				
344.	55.	0.	8.	504.	57.				
345.	60.	0.	4.	507.	33.				
346.	65.	0.	2.	532.	28.				
347.	70.	0.	0.	682.	12.				
348.	72.	0.	0.	404.	7.				
349.	75.	0.	0.	692.	12.				
350.	80.	0.	0.	1042.	9.				
351.	85.	0.	0.	438.	3.				
352.	90.	0.	0.	81.	3.				
353.	95.	0.	0.	11.	0.				
354.	100.	0.	0.	3.	0.				
355.	105.	0.	0.	2.	0.				
356.	110.	0.	0.	1.	0.				
357.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
358.	10.	259.	4.	0.	0.				
359.	14.	0.	29.	2.	1.				
360.	20.	0.	104.	91.	3.				
361.	22.	0.	0.	0.	3.				
362.	24.	0.	0.	0.	5.				
363.	26.	0.	0.	0.	2.				
364.	28.	0.	0.	0.	0.				
365.	30.	0.	0.	0.	0.				

366.	32.	0.	0.	0.	0.				
367.	34.	0.	0.	0.	0.				
368.	36.	0.	0.	0.	0.				
369.	38.	0.	0.	0.	0.				
370.	40.	0.	0.	0.	0.				
371.	45.	0.	0.	0.	0.				
372.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
373.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
374.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
390.	1	343769.00	2.07	12.00	798601.00	375.00
391.	2	388434.00	2.28	12.00	903995.00	409.00
392.	3	438719.00	2.39	12.00	1018320.00	446.00
393.	4	491733.00	2.49	12.00	1145931.00	486.00
394.	5	545335.00	2.57	12.00	1288880.00	530.00
395.	6	599478.00	2.65	12.00	1449206.00	578.00
396.	7	655379.00	2.72	12.00	1629135.00	630.00
397.	8	714952.00	2.80	12.00	1831126.00	686.00
398.	9	780784.00	2.87	12.00	2057924.00	748.00
399.	10	856314.00	2.93	12.00	2312608.00	815.00
400.	11	945345.00	3.00	0.00	383279.00	889.00
401.	12	1050435.00	2.85	0.00	408352.00	969.00
402.	13	1172282.00	2.79	0.00	447205.00	1056.00
403.	14	1310903.00	2.75	0.00	492888.00	1151.00
404.	15	1466665.00	2.71	0.00	545136.00	1255.00
405.	16	1640435.00	2.68	0.00	604317.00	1368.00
406.	17	1833236.00	2.66	0.00	671044.00	1491.00
407.	18	2045691.00	2.64	0.00	746097.00	1625.00
410.	TOTAL		47.86	120.00		
411.	PRESENT COSTS	17279888.00			18734032.00	15507.00
412.	TOTAL LANE MILES		167.86			

417.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00		
418.	FLEXIBLE - FM - HOTMIX - URBAN - HIGH TRAFFIC									
419.	13 2 1 2 2 6 1.00 6.00 1 4 10 10 2226.00									
420.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0									
421.	0.0 0.0 0.0 0.0 0.0 0.0 0.0									
422.	ACP 4.00 0.000 AGB 10.00 0.000 LTS 6.00 0.000 0.00 0.000									
423.	AGE DISTRIBUTION 30 0 0.00 0.00 0.00 0.00									
424.	0.0 0.0 0.0 0.0 1.0 0.0 0.0 3.0 0.0 0.0 2.0 0.0 0.0 2.0 1.0 2.0 1.0									
425.	0.0 1.0 0.0 3.0 2.0 1.0 1.0 4.0 2.0 3.0 2.0 0.0 1.0 0.0 5.0									
426.	TRUCK TYPE 4 0 0.00 0.00 0.00 0.00									

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	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3		
427.										
428.	3-S1-2	2-S2-2								
429.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0		
430.	4 1 0 0	4 1 0 0								
431.	0	3.52	0.58	0.04	0.31	0.00	0.00	0.00	0.00	0.00
432.	LOAD LIMITS			0	0	0.00	0.00	0.00	0.00	0.00
433.	80.00	20.00	34.00	56.00						
434.	120.00	22.40	36.00	56.00						
435.	13.	13.	12.	8.						
436.	16.	16.	16.	16.						
437.	SINGLE AXLES		11	0	3.00	0.00	0.00	0.00	0.00	0.00
438.	3.	0.	4.	9.	6.					
439.	7.	169.	91.	847.	56.					
440.	8.	59.	16.	513.	15.					
441.	12.	177.	30.	976.	52.					
442.	16.	89.	29.	984.	43.					
443.	18.	21.	7.	603.	19.					
444.	19.	15.	1.	216.	4.					
445.	20.	10.	2.	109.	1.					
446.	22.	6.	2.	72.	4.					
447.	24.	5.	2.	15.	0.					
448.	26.	3.	0.	2.	0.					
449.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00
450.	6.	0.	91.	1484.	0.					
451.	12.	0.	60.	2174.	0.					
452.	18.	0.	29.	2225.	0.					
453.	24.	0.	2.	849.	0.					
454.	30.	0.	0.	806.	0.					
455.	32.	0.	0.	362.	0.					
456.	33.	0.	0.	174.	0.					
457.	34.	0.	0.	137.	0.					
458.	36.	0.	0.	154.	0.					
459.	38.	0.	0.	62.	0.					
460.	40.	0.	0.	21.	0.					
461.	42.	0.	0.	7.	0.					
462.	44.	0.	0.	2.	0.					
463.	46.	0.	0.	1.	0.					
464.	50.	0.	0.	1.	0.					
465.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
466.	10.	90.	2.	0.	0.					
467.	14.	167.	14.	2.	0.					
468.	20.	188.	72.	26.	0.					
469.	22.	31.	12.	27.	0.					
470.	24.	20.	14.	59.	1.					
471.	26.	26.	10.	110.	1.					
472.	28.	14.	7.	193.	1.					
473.	30.	9.	3.	277.	0.					
474.	32.	5.	10.	271.	4.					
475.	34.	2.	4.	268.	3.					
476.	36.	1.	6.	257.	1.					
477.	38.	1.	6.	176.	0.					
478.	40.	0.	3.	139.	5.					
479.	45.	0.	15.	206.	6.					
480.	50.	0.	4.	192.	6.					
481.	55.	0.	1.	189.	4.					
482.	60.	0.	0.	202.	5.					
483.	65.	0.	0.	287.	3.					
484.	70.	0.	0.	359.	6.					
485.	72.	0.	0.	150.	0.					
486.	75.	0.	0.	256.	3.					
487.	80.	0.	0.	39.	1.					

488.	85.	0.	0.	149.	0.					
489.	90.	0.	0.	48.	0.					
490.	95.	0.	0.	9.	0.					
491.	100.	0.	0.	3.	0.					
492.	105.	0.	0.	0.	0.					
493.	110.	0.	0.	1.	0.					
494.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
495.	10.	79.	2.	0.	0.					
496.	14.	0.	14.	2.	0.					
497.	20.	0.	34.	26.	0.					
498.	22.	0.	0.	0.	0.					
499.	24.	0.	0.	0.	1.					
500.	26.	0.	0.	0.	1.					
501.	28.	0.	0.	0.	0.					
502.	30.	0.	0.	0.	0.					
503.	32.	0.	0.	0.	0.					
504.	34.	0.	0.	0.	0.					
505.	36.	0.	0.	0.	0.					
506.	38.	0.	0.	0.	0.					
507.	40.	0.	0.	0.	0.					
508.	45.	0.	0.	0.	0.					
509.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
510.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
511.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
527.	1	32900.00	0.27	1.10	76537.00	647.00
528.	2	36936.00	0.30	1.10	86983.00	706.00
529.	3	41444.00	0.31	1.10	98194.00	769.00
530.	4	46220.00	0.33	1.10	110692.00	838.00
531.	5	51113.00	0.34	1.10	124692.00	914.00
532.	6	56106.00	0.35	1.10	140401.00	996.00
533.	7	61266.00	0.36	1.10	158045.00	1086.00
534.	8	66743.00	0.37	1.10	177867.00	1183.00
535.	9	72776.00	0.38	1.10	200144.00	1290.00
536.	10	79690.00	0.38	1.10	225184.00	1406.00
537.	11	87845.00	0.39	0.00	50258.00	1533.00
538.	12	97481.00	0.38	0.00	53748.00	1671.00
539.	13	108660.00	0.37	0.00	58996.00	1821.00
540.	14	121381.00	0.36	0.00	65154.00	1985.00
541.	15	135672.00	0.36	0.00	72193.00	2163.00
542.	16	151611.00	0.36	0.00	80169.00	2358.00
543.	17	169292.00	0.35	0.00	89169.00	2570.00
544.	18	188770.00	0.35	0.00	99302.00	2802.00
545.						
546.						
547.	TOTAL		6.30	11.00		
548.	PRESENT COSTS	1605906.00			1967728.00	26738.00

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TOTAL LANE MILES

17.30

FLEXIBLE			0	0	12.00	0.00	0.00	3.00	3.00									
FLEXIBLE - FM - BLACKB - RURAL - HIGH TRAFFIC																		
	13	2	2	1	2	6	1.00	6.00	1	4	10	10	1038.00					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
ACP	0.75	0.000	AGB	6.00	0.000	LTS	0.00	0.000			0.00	0.000						
AGE DISTRIBUTION				30	0	0.00	0.00	0.00			0.00	0.00						
	32.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TRUCK TYPE				4	0	0.00	0.00	0.00			0.00	0.00						
2D	3A		3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3										
	3-S1-2	2-S2-2																
	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0										
	4 1 0 0	4 1 0 0																
	0	2.63	0.15	0.17	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
LOAD LIMITS				0	0	0.00	0.00	0.00			0.00	0.00						
	80.00	20.00	34.00	56.00														
	120.00	22.40	36.00	56.00														
	13.	13.	12.	8.														
	16.	16.	16.	16.														
SINGLE AXLES				11	0	3.00	0.00	0.00			0.00	0.00						
	3.	6.	16.	39.	30.													
	7.	625.	262.	2015.	479.													
	8.	197.	46.	957.	116.													
	12.	535.	103.	2190.	535.													
	16.	284.	115.	2132.	282.													
	18.	86.	51.	1672.	76.													
	19.	25.	13.	546.	20.													
	20.	18.	11.	291.	26.													
	22.	14.	12.	125.	20.													
	24.	9.	4.	13.	5.													
	26.	3.	2.	4.	2.													
TANDEM AXLES				15	0	6.00	0.00	0.00			0.00	0.00						
	6.	0.	258.	3382.	0.													
	12.	1.	167.	5272.	0.													
	18.	0.	159.	5150.	0.													
	24.	0.	28.	1814.	0.													
	30.	0.	1.	1531.	0.													
	32.	0.	0.	875.	0.													
	33.	0.	0.	483.	0.													
	34.	0.	0.	373.	0.													
	36.	0.	0.	486.	0.													
	38.	0.	0.	217.	0.													
	40.	0.	0.	53.	0.													
	42.	0.	0.	14.	0.													
	44.	0.	0.	4.	0.													
	46.	0.	0.	1.	0.													
	50.	0.	0.	3.	0.													
GVW				28	0	10.00	0.00	0.00			0.00	0.00						
	10.	299.	4.	0.	0.													
	14.	547.	29.	2.	1.													
	20.	590.	188.	91.	3.													
	22.	145.	48.	64.	3.													
	24.	57.	37.	108.	5.													
	26.	71.	29.	293.	2.													
	28.	53.	16.	554.	9.													

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610.	30.	20.	18.	658.	13.					
611.	32.	12.	27.	583.	22.					
612.	34.	6.	20.	476.	28.					
613.	36.	2.	28.	362.	25.					
614.	38.	3.	38.	280.	15.					
615.	40.	1.	31.	289.	8.					
616.	45.	2.	59.	632.	41.					
617.	50.	0.	38.	581.	59.					
618.	55.	0.	8.	504.	57.					
619.	60.	0.	4.	507.	33.					
620.	65.	0.	2.	532.	28.					
621.	70.	0.	0.	682.	12.					
622.	72.	0.	0.	404.	7.					
623.	75.	0.	0.	692.	12.					
624.	80.	0.	0.	1042.	9.					
625.	85.	0.	0.	438.	3.					
626.	90.	0.	0.	81.	3.					
627.	95.	0.	0.	11.	0.					
628.	100.	0.	0.	3.	0.					
629.	105.	0.	0.	2.	0.					
630.	110.	0.	0.	1.	0.					
631.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
632.	10.	259.	4.	0.	0.					
633.	14.	0.	29.	2.	1.					
634.	20.	0.	104.	91.	3.					
635.	22.	0.	0.	0.	3.					
636.	24.	0.	0.	0.	5.					
637.	26.	0.	0.	0.	2.					
638.	28.	0.	0.	0.	0.					
639.	30.	0.	0.	0.	0.					
640.	32.	0.	0.	0.	0.					
641.	34.	0.	0.	0.	0.					
642.	36.	0.	0.	0.	0.					
643.	38.	0.	0.	0.	0.					
644.	40.	0.	0.	0.	0.					
645.	45.	0.	0.	0.	0.					
646.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
647.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
648.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - FM - BLACKB - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
661.						
662.						
663.						
664.	1	14.00	0.00	0.00	9.00	177.00
665.	2	37.00	0.00	0.00	21.00	193.00
666.	3	95.00	0.00	0.00	32.00	210.00
667.	4	244.00	0.00	0.00	44.00	229.00
668.	5	624.00	0.00	0.00	57.00	250.00
669.	6	1582.00	0.00	0.00	71.00	273.00
670.	7	3919.00	0.00	0.00	87.00	297.00

671.	8	9231.00	0.00	0.00	106.00	324.00
672.	9	19739.00	0.00	0.00	126.00	353.00
673.	10	36231.00	0.00	0.00	150.00	385.00
674.	11	55530.00	0.00	0.00	177.00	419.00
675.	12	73057.00	0.00	0.00	207.00	457.00
676.	13	87258.00	0.00	0.00	242.00	498.00
677.	14	99119.00	0.00	0.00	282.00	543.00
678.	15	109995.00	0.00	0.00	326.00	592.00
679.	16	120817.00	0.00	0.00	376.00	645.00
680.	17	132117.00	0.00	0.00	434.00	703.00
681.	18	144204.00	0.00	0.00	499.00	766.00

682.						
683.						
684.	TOTAL		0.02	0.00		
685.	PRESENT COSTS	893813.00			3246.00	7314.00
686.	TOTAL LANE MILES		0.02			

687.																	
688.																	
689.																	
690.																	
691.	FLEXIBLE			0	0	12.00		0.00		0.00		3.00		3.00			
692.	FLEXIBLE - FM - OVRLAY - RURAL - LOW TRAFFIC																
693.	13	2	3	1	1	6	1.00	6.00	1	4	10	10	187.00				
694.		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
695.		0.0	0.0	0.0	0.0	0.0		0.0									
696.	ACP	2.00	0.000	ATB	2.00	0.000	AGB	8.00	0.000	LTS	0.00	0.000					
697.	AGE DISTRIBUTION			30		0		0.00		0.00		0.00		0.00		0.00	
698.		0.0	0.0	0.0	0.0	0.0		77.0	86.0	9.0	112.0	24.0	31.0	67.0	25.0	4.0	29.0
699.		44.0	60.0	57.0	32.0	75.0		38.0	59.0	85.0	96.0	120.0	125.0	142.0	59.0	103.0	1309.0
700.	TRUCK TYPE			4		0		0.00		0.00		0.00		0.00			
701.	2D		3A		3-S2		2-S1-2		2-S1		2-S2		3-S1		3-S3		
702.		3-S1-2		2-S2-2													
703.		2	0	0	0	1	1	0	0	1	2	0	0	5	0	0	0
704.		4	1	0	0	4	1	0	0								
705.		0	2.63	0.15	0.17	0.96	0.00	0.00	0.00	0.00	0.00	0.00					
706.	LOAD LIMITS					0	0	0.00		0.00		0.00		0.00		0.00	
707.		80.00		20.00		34.00		56.00									
708.		120.00		22.40		36.00		56.00									
709.		13.		13		12.		8									
710.		16.		16		16.		16.									
711.	SINGLE AXLES					11		0		3.00		0.00		0.00		0.00	
712.		3.		6.		16.		39.		30.							
713.		7.		625.		262.		2015.		479.							
714.		8.		197.		46.		957.		116.							
715.		12.		535.		103.		2190.		535.							
716.		16.		284.		115.		2132.		282.							
717.		18.		86.		51.		1672.		76.							
718.		19.		25.		13.		546.		20.							
719.		20.		18.		11.		291.		26.							
720.		22.		14.		12.		125.		20.							
721.		24.		9.		4.		13.		5.							
722.		26.		3.		2.		4.		2.							
723.	TANDEM AXLES					15		0		6.00		0.00		0.00		0.00	
724.		6.		0.		258.		3382.		0.							
725.		12.		1.		167.		5272.		0.							
726.		18.		0.		159.		5150.		0.							
727.		24.		0.		28.		1814.		0.							
728.		30.		0.		1.		1531.		0.							
729.		32.		0.		0.		875.		0.							
730.		33.		0.		0.		0.		0.							

732.	36.	0.	0.	486.	0.					
733.	38.	0.	0.	217.	0.					
734.	40.	0.	0.	53.	0.					
735.	42.	0.	0.	14.	0.					
736.	44.	0.	0.	4.	0.					
737.	46.	0.	0.	1.	0.					
738.	50.	0.	0.	3.	0.					
739.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
740.	10.	299.	4.	0.	0.					
741.	14.	547.	29.	2.	1.					
742.	20.	590.	188.	91.	3.					
743.	22.	145.	48.	64.	3.					
744.	24.	57.	37.	108.	5.					
745.	26.	71.	29.	293.	2.					
746.	28.	53.	16.	554.	9.					
747.	30.	20.	18.	658.	13.					
748.	32.	12.	27.	583.	22.					
749.	34.	6.	20.	476.	28.					
750.	36.	2.	28.	362.	25.					
751.	38.	3.	38.	280.	15.					
752.	40.	1.	31.	289.	8.					
753.	45.	2.	59.	632.	41.					
754.	50.	0.	38.	581.	59.					
755.	55.	0.	8.	504.	57.					
756.	60.	0.	4.	507.	33.					
757.	65.	0.	2.	532.	28.					
758.	70.	0.	0.	682.	12.					
759.	72.	0.	0.	404.	7.					
760.	75.	0.	0.	692.	12.					
761.	80.	0.	0.	1042.	9.					
762.	85.	0.	0.	438.	3.					
763.	90.	0.	0.	81.	3.					
764.	95.	0.	0.	11.	0.					
765.	100.	0.	0.	3.	0.					
766.	105.	0.	0.	2.	0.					
767.	110.	0.	0.	1.	0.					
768.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
769.	10.	259.	4.	0.	0.					
770.	14.	0.	29.	2.	1.					
771.	20.	0.	104.	91.	3.					
772.	22.	0.	0.	0.	3.					
773.	24.	0.	0.	0.	5.					
774.	26.	0.	0.	0.	2.					
775.	28.	0.	0.	0.	0.					
776.	30.	0.	0.	0.	0.					
777.	32.	0.	0.	0.	0.					
778.	34.	0.	0.	0.	0.					
779.	36.	0.	0.	0.	0.					
780.	38.	0.	0.	0.	0.					
781.	40.	0.	0.	0.	0.					
782.	45.	0.	0.	0.	0.					
783.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
784.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
785.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

DISTRICT: 13.
PRESENT LIMITS

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854.	18.	86.	51.	1672.	76.					
855.	19.	25.	13.	546.	20.					
856.	20.	18.	11.	291.	26.					
857.	22.	14.	12.	125.	20.					
858.	24.	9.	4.	13.	5.					
859.	26.	3.	2.	4.	2.					
860.	TANDEM	AXLES	15	0	6.00	0.00	0.00	0.00	0.00	0.00
861.	6.	0.	258.	3382.	0.					
862.	12.	1.	167.	5272.	0.					
863.	18.	0.	159.	5150.	0.					
864.	24.	0.	28.	1814.	0.					
865.	30.	0.	1.	1531.	0.					
866.	32.	0.	0.	875.	0.					
867.	33.	0.	0.	483.	0.					
868.	34.	0.	0.	373.	0.					
869.	36.	0.	0.	486.	0.					
870.	38.	0.	0.	217.	0.					
871.	40.	0.	0.	53.	0.					
872.	42.	0.	0.	14.	0.					
873.	44.	0.	0.	4.	0.					
874.	46.	0.	0.	1.	0.					
875.	50.	0.	0.	3.	0.					
876.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
877.	10.	299.	4.	0.	0.					
878.	14.	547.	29.	2.	1.					
879.	20.	590.	188.	91.	3.					
880.	22.	145.	48.	64.	3.					
881.	24.	57.	37.	108.	5.					
882.	26.	71.	29.	293.	2.					
883.	28.	53.	16.	554.	9.					
884.	30.	20.	18.	658.	13.					
885.	32.	12.	27.	583.	22.					
886.	34.	6.	20.	476.	28.					
887.	36.	2.	28.	362.	25.					
888.	38.	3.	38.	280.	15.					
889.	40.	1.	31.	289.	8.					
890.	45.	2.	59.	632.	41.					
891.	50.	0.	38.	581.	59.					
892.	55.	0.	8.	504.	57.					
893.	60.	0.	4.	507.	33.					
894.	65.	0.	2.	532.	28.					
895.	70.	0.	0.	682.	12.					
896.	72.	0.	0.	404.	7.					
897.	75.	0.	0.	692.	12.					
898.	80.	0.	0.	1042.	9.					
899.	85.	0.	0.	438.	3.					
900.	90.	0.	0.	81.	3.					
901.	95.	0.	0.	11.	0.					
902.	100.	0.	0.	3.	0.					
903.	105.	0.	0.	2.	0.					
904.	110.	0.	0.	1.	0.					
905.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
906.	10.	259.	4.	0.	0.					
907.	14.	0.	29.	2.	1.					
908.	20.	0.	104.	91.	3.					
909.	22.	0.	0.	0.	3.					
910.	24.	0.	0.	0.	5.					
911.	26.	0.	0.	0.	2.					
912.	28.	0.	0.	0.	0.					
913.	30.	0.	0.	0.	0.					
914.	32.	0.	0.	0.	0.					

915.	34.	0.	0.	0.	0.				
916.	36.	0.	0.	0.	0.				
917.	38.	0.	0.	0.	0.				
918.	40.	0.	0.	0.	0.				
919.	45.	0.	0.	0.	0.				
920.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
921.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
922.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPDT PDT	REHAB COST (\$)	PREV MAINT COST (\$)	
938.	1	452155.00	0.01 31.10	1848824.00	106.00
939.	2	502344.00	0.01 31.10	2070692.00	116.00
940.	3	558353.00	0.01 31.10	2319186.00	126.00
941.	4	620133.00	0.01 31.10	2597500.00	138.00
942.	5	687268.00	0.01 31.10	2909217.00	150.00
943.	6	758850.00	0.01 31.10	3258340.00	164.00
944.	7	834877.00	0.01 31.10	3649365.00	178.00
945.	8	917579.00	0.01 31.10	4087316.00	194.00
946.	9	1011666.00	0.01 31.10	4577822.00	212.00
947.	10	1124452.00	0.01 31.10	5127200.00	231.00
948.	11	1264422.00	0.01 0.00	1073.00	252.00
949.	12	1437197.00	0.01 0.00	1252.00	274.00
950.	13	1643941.00	0.01 0.00	1458.00	299.00
951.	14	1884154.00	0.01 0.00	1699.00	326.00
952.	15	2158161.00	0.01 0.00	1968.00	355.00
953.	16	2467395.00	0.01 0.00	2281.00	387.00
954.	17	2813520.00	0.01 0.00	2635.00	422.00
955.	18	3196909.00	0.01 0.00	3044.00	460.00
958.	TOTAL PRESENT COSTS	24333360.00	0.14 311.00	32460816.00	4390.00
960.	TOTAL LANE MILES		311.14		

FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00									
965.	FLEXIBLE															
966.	FLEXIBLE - FM - OVRLAY - URBAN - LOW TRAFFIC															
967.	13 2 3 2 1 6 1.00 6.00 1 4 10 10 662.00															
968.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
969.	0.0 0.0 0.0 0.0 0.0 0.0 0.0															
970.	ACP 2.00 0.000 ATB 2.00 0.000 AGB 8.00 0.000 LTS 6.00 0.000															
971.	AGE DISTRIBUTION 30 0 0.00 0.00 0.00 0.00															
972.	0.0 0.0 0.0 0.0 0.0 1.0 1.0 0.0 1.0 0.0 0.0 0.0 1.0 0.0 0.0 0.0															
973.	0.0 1.0 1.0 0.0 0.0 0.0 1.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 12.0															
974.	TRUCK TYPE 4 0 0.00 0.00 0.00 0.00 0.00															
975.	2D -S2 2-S 52 3-S 3															

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976.	3-S1-2	2-S2-2												
977.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0						
978.	4 1 0 0	4 1 0 0												
979.	0	3.52	0.58	0.04	0.31	0.00	0.00	0.00	0.00	0.00	0.00			
980.	LOAD LIMITS			0	0	0.00	0.00	0.00	0.00	0.00	0.00			
981.	80.00	20.00		34.00		56.00								0.00
982.	120.00	22.40		36.00		56.00								
983.	13.	13.	12.	8.										
984.	16.	16.	16.	16.										
985.	SINGLE AXLES		11	0	3.00		0.00	0.00	0.00	0.00	0.00			0.00
986.	3.	0.	4.	9.	6.									
987.	7.	169.	91.	847.	56.									
988.	8.	59.	16.	513.	15.									
989.	12.	177.	30.	976.	52.									
990.	16.	89.	29.	984.	43.									
991.	18.	21.	7.	603.	19.									
992.	19.	15.	1.	216.	4.									
993.	20.	10.	2.	109.	1.									
994.	22.	6.	2.	72.	4.									
995.	24.	5.	2.	15.	0.									
996.	26.	3.	0.	2.	0.									
997.	TANDEM AXLES		15	0	6.00		0.00	0.00	0.00	0.00	0.00			0.00
998.	6.	0.	91.	1484.	0.									
999.	12.	0.	60.	2174.	0.									
1000.	18.	0.	29.	2225.	0.									
1001.	24.	0.	2.	849.	0.									
1002.	30.	0.	0.	806.	0.									
1003.	32.	0.	0.	362.	0.									
1004.	33.	0.	0.	174.	0.									
1005.	34.	0.	0.	137.	0.									
1006.	36.	0.	0.	154.	0.									
1007.	38.	0.	0.	62.	0.									
1008.	40.	0.	0.	21.	0.									
1009.	42.	0.	0.	7.	0.									
1010.	44.	0.	0.	2.	0.									
1011.	46.	0.	0.	1.	0.									
1012.	50.	0.	0.	1.	0.									
1013.	GVW		28	0	10.00		0.00	0.00	0.00	0.00	0.00			0.00
1014.	10.	90.	2.	0	0.									
1015.	14.	167.	14.	2	0									
1016.	20.	188.	72.	26	0.									
1017.	22.	31.	12.	27	0.									
1018.	24.	20	14.	59	1.									
1019.	26.	26	10.	110.	1.									
1020.	28.	14.	7.	193.	1.									
1021.	30.	9.	3.	277.	0.									
1022.	32.	5.	10.	271.	4.									
1023.	34.	2.	4.	268.	3.									
1024.	36.	1.	6.	257.	1.									
1025.	38.	1.	6.	176.	0.									
1026.	40.	0.	3.	139.	5.									
1027.	45.	0.	15.	206.	6.									
1028.	50.	0.	4.	192.	6.									
1029.	55.	0.	1.	189.	4.									
1030.	60.	0.	0.	202.	5.									
1031.	65.	0.	0.	287.	3.									
1032.	70.	0.	0.	359.	6.									
1033.	72.	0.	0.	150.	0.									
1034.	75.	0.	0.	256.	3.									
1035.	80.	0.	0.	399.	1.									
1036.	85.	0.	0.	149.	0.									

1037.	90.	0.	0.	48.	0.					
1038.	95.	0.	0.	9.	0.					
1039.	100.	0.	0.	3.	0.					
1040.	105.	0.	0.	0.	0.					
1041.	110.	0.	0.	1.	0.					
1042.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
1043.	10.	79.	2.	0.	0.					
1044.	14.	0.	14.	2.	0.					
1045.	20.	0.	34.	26.	0.					
1046.	22.	0.	0.	0.	0.					
1047.	24.	0.	0.	0.	1.					
1048.	26.	0.	0.	0.	1.					
1049.	28.	0.	0.	0.	0.					
1050.	30.	0.	0.	0.	0.					
1051.	32.	0.	0.	0.	0.					
1052.	34.	0.	0.	0.	0.					
1053.	36.	0.	0.	0.	0.					
1054.	38.	0.	0.	0.	0.					
1055.	40.	0.	0.	0.	0.					
1056.	45.	0.	0.	0.	0.					
1057.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
1058.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
1059.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

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DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - URBAN - LOW TRAFFIC

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YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
1072.						
1073.						
1074.						
1075.	1	25282.00	0.00	1.70	101060.00	93.00
1076.	2	28021.00	0.00	1.70	113188.00	101.00
1077.	3	31127.00	0.00	1.70	126771.00	111.00
1078.	4	34625.00	0.00	1.70	141984.00	121.00
1079.	5	38484.00	0.00	1.70	159023.00	131.00
1080.	6	42611.00	0.00	1.70	178106.00	143.00
1081.	7	46967.00	0.00	1.70	199480.00	156.00
1082.	8	51665.00	0.00	1.70	223419.00	170.00
1083.	9	56974.00	0.00	1.70	250230.00	186.00
1084.	10	63305.00	0.00	1.70	280260.00	202.00
1085.	11	71128.00	0.00	0.00	53.00	220.00
1086.	12	80757.00	0.00	0.00	62.00	240.00
1087.	13	92257.00	0.00	0.00	72.00	262.00
1088.	14	105604.00	0.00	0.00	83.00	285.00
1089.	15	120818.00	0.00	0.00	97.00	311.00
1090.	16	137978.00	0.00	0.00	112.00	339.00
1091.	17	157177.00	0.00	0.00	130.00	370.00
1092.	18	178439.00	0.00	0.00	149.00	403.00

1093.					
1094.					
1095.	TOTAL		0.01	17.00	
1096.	PR	163210.00			1774270.00
	ST				3011.00
	CO				
	TT				
	LE				
	MI				
	ES				

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FLEXIBLE				0	0	12.00		0.00		0.00		3.00		3.00			
FLEXIBLE - FM - OVRLAY - URBAN - HIGH TRAFFIC																	
13	2	3	2	2	6	1.00	6.00	1	4	10	10	1531.00					
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACP	3.00	0.000	ATB	4.00	0.000	AGB	10.00	0.000	LTS	6.00	0.000						
AGE DISTRIBUTION				30	0	0.00		0.00		0.00		0.00		0.00			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	6.0
TRUCK TYPE				4	0	0.00		0.00		0.00		0.00		0.00			
2D	3A		3-S2	2-S1-2	2-S1		2-S2	3-S1		3-S3							
3-S1-2	2-S2-2																
2 0 0 0	1 1 0 0		1 2 0 0	5 0 0 0	3 0 0 0		2 1 0 0	2010 0 0		1020 0 0							
4 1 0 0	4 1 0 0																
0	3.52	0.58	0.04	0.31	0.00	0.00	0.00	0.00	0.00	0.00							
LOAD LIMITS				0	0	0.00		0.00		0.00		0.00		0.00			
80.00		20.00		34.00		56.00											
120.00		22.40		36.00		56.00											
13.	13.		12.	8.													
16.	16.		16.	16.													
SINGLE AXLES				11	0	3.00		0.00		0.00		0.00		0.00			
3.	0.		4.	9.	6.												
7.	169.		91.	847.	56.												
8.	59.		16.	513.	15.												
12.	177.		30.	976.	52.												
16.	89.		29.	984.	43.												
18.	21.		7.	603.	19.												
19.	15.		1.	216.	4.												
20.	10.		2.	109.	1.												
22.	6.		2.	72.	4.												
24.	5.		2.	15.	0.												
26.	3.		0.	2.	0.												
TANDEM AXLES				15	0	6.00		0.00		0.00		0.00		0.00			
6.	0.		91.	1484.	0.												
12.	0.		60.	2174.	0.												
18.	0.		29.	2225.	0.												
24.	0.		2.	849.	0.												
30.	0.		0.	806.	0.												
32.	0.		0.	362.	0.												
33.	0.		0.	174.	0.												
34.	0.		0.	137.	0.												
36.	0.		0.	154.	0.												
38.	0.		0.	62.	0.												
40.	0.		0.	21.	0.												
42.	0.		0.	7.	0.												
44.	0.		0.	2.	0.												
46.	0.		0.	1.	0.												
50.	0.		0.	1.	0.												
GVW				28	0	10.00		0.00		0.00		0.00		0.00			
10.	90.		2.	0.	0.												
14.	167.		14.	2.	0.												
20.	188.		72.	26.	0.												
22.	31.		12.	27.	0.												
24.	20.		14.	59.	1.												
26.	26.		10.	110.	1.												
28.	14.		7.	193.	1.												
30.	9.		3.	277.	0.												

1159.	32.	5.	10.	271.	4.					
1160.	34.	2.	4.	268.	3.					
1161.	36.	1.	6.	257.	1.					
1162.	38.	1.	6.	176.	0.					
1163.	40.	0.	3.	139.	5.					
1164.	45.	0.	15.	206.	6.					
1165.	50.	0.	4.	192.	6.					
1166.	55.	0.	1.	189.	4.					
1167.	60.	0.	0.	202.	5.					
1168.	65.	0.	0.	287.	3.					
1169.	70.	0.	0.	359.	6.					
1170.	72.	0.	0.	150.	0.					
1171.	75.	0.	0.	256.	3.					
1172.	80.	0.	0.	399.	1.					
1173.	85.	0.	0.	149.	0.					
1174.	90.	0.	0.	48.	0.					
1175.	95.	0.	0.	9.	0.					
1176.	100.	0.	0.	3.	0.					
1177.	105.	0.	0.	0.	0.					
1178.	110.	0.	0.	1.	0.					
1179.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
1180.	10.	79.	2.	0.	0.					
1181.	14.	0.	14.	2.	0.					
1182.	20.	0.	34.	26.	0.					
1183.	22.	0.	0.	0.	0.					
1184.	24.	0.	0.	0.	1.					
1185.	26.	0.	0.	0.	1.					
1186.	28.	0.	0.	0.	0.					
1187.	30.	0.	0.	0.	0.					
1188.	32.	0.	0.	0.	0.					
1189.	34.	0.	0.	0.	0.					
1190.	36.	0.	0.	0.	0.					
1191.	38.	0.	0.	0.	0.					
1192.	40.	0.	0.	0.	0.					
1193.	45.	0.	0.	0.	0.					
1194.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
1195.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
1196.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

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1199.
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DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPQT POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	9695.00	0.00 0.90	53518.00	215.00
2	10798.00	0.00 0.90	59941.00	235.00
3	12022.00	0.00 0.90	67135.00	256.00
4	13303.00	0.00 0.90	75193.00	279.00
5	14626.00	0.00 0.90	84218.00	304.00
6	16024.00	0.00 0.90	94326.00	331.00
7	17544.00	0.00 0.90	105647.00	361.00
192	192	10 90	118 100	00

1220.	9	21278.00	0.00	0.90	132530.00	429.00
1221.	10	23800.00	0.00	0.90	148438.00	468.00
1222.	11	27053.00	0.00	0.00	104.00	510.00
1223.	12	31190.00	0.00	0.00	122.00	556.00
1224.	13	36234.00	0.00	0.00	142.00	606.00
1225.	14	42163.00	0.00	0.00	166.00	660.00
1226.	15	48978.00	0.00	0.00	193.00	720.00
1227.	16	56713.00	0.00	0.00	224.00	784.00
1228.	17	65406.00	0.00	0.00	260.00	855.00
1229.	18	75058.00	0.00	0.00	301.00	932.00

1231.						
1232.	TOTAL		0.01	9.00		
1233.	PRESENT COSTS	541141.00			940785.00	8895.00
1234.	TOTAL LANE MILES		9.01			

1238.	-----															
1239.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00								
1240.	FLEXIBLE - US/STAT - HOTMIX - RURAL - LOW TRAFFIC															
1241.	13 3 1 1 1 6 1.00 6.00 1 4 10 10 744.00															
1242.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
1243.	0.0 0.0 0.0 0.0 0.0 0.0 0.0															
1244.	ACP 2.00 0.000 AGB 8.00 0.000 LTS 0.00 0.000 0.00 0.000															
1245.	AGE DISTRIBUTION 30 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00															
1246.	0.0 0.0 0.0 0.0 0.0 20.0 69.0 82.0 49.0 4.0 25.0 12.0 7.0 61.0 10.0															
1247.	28.0 49.0 65.0 39.0 61.0 45.0 12.0 44.0 29.0 24.0 37.0 68.0 40.0 36.0 93.0															
1248.	TRUCK TYPE 4 0 0.00 0.00 0.00 0.00 0.00 0.00															
1249.	2D 3A 3-S2 2-S1-2 2-S1 2-S2 3-S1 3-S3															
1250.	3-S1-2 2-S2-2															
1251.	2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0 2010 0 0 1020 0 0															
1252.	4 1 0 0 4 1 0 0															
1253.	0 2.63 0.15 0.17 0.96 0.00 0.00 0.00 0.00 0.00 0.00 0.00															
1254.	LOAD LIMITS 0 0 0.00 0.00 0.00 0.00 0.00															
1255.	80.00 20.00 34.00 56.00															
1256.	120.00 22.40 36.00 56.00															
1257.	13. 13. 12. 8.															
1258.	16. 16. 16. 16.															
1259.	SINGLE AXLES 11 0 3.00 0.00 0.00 0.00 0.00															
1260.	3. 6. 16. 39. 30.															
1261.	7. 625. 262. 2015. 479.															
1262.	8. 197. 46. 957. 116.															
1263.	12. 535. 103. 2190. 535.															
1264.	16. 284. 115. 2132. 282.															
1265.	18. 86. 51. 1672. 76.															
1266.	19. 25. 13. 546. 20.															
1267.	20. 18. 11. 291. 26.															
1268.	22. 14. 12. 125. 20.															
1269.	24. 9. 4. 13. 5.															
1270.	26. 3. 2. 4. 2.															
1271.	TANDEM AXLES 15 0 6.00 0.00 0.00 0.00 0.00															
1272.	6. 0. 258. 3382. 0.															
1273.	12. 1. 167. 5272. 0.															
1274.	18. 0. 159. 5150. 0.															
1275.	24. 0. 28. 1814. 0.															
1276.	30. 0. 1. 1531. 0.															
1277.	32. 0. 0. 875. 0.															
1278.	33. 0. 0. 483. 0.															
1279.	34. 0. 0. 373. 0.															
1280.	36. 0. 0. 486. 0.															

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1281.	38.	0.	0.	217.	0.				
1282.	40.	0.	0.	53.	0.				
1283.	42.	0.	0.	14.	0.				
1284.	44.	0.	0.	4.	0.				
1285.	46.	0.	0.	1.	0.				
1286.	50.	0.	0.	3.	0.				
1287.	GVW		28	0	10.00	0.00	0.00	0.00	0.00
1288.	10.	299.	4.	0.	0.				
1289.	14.	547.	29.	2.	1.				
1290.	20.	590.	188.	91.	3.				
1291.	22.	145.	48.	64.	3.				
1292.	24.	57.	37.	108.	5.				
1293.	26.	71.	29.	293.	2.				
1294.	28.	53.	16.	554.	9.				
1295.	30.	20.	18.	658.	13.				
1296.	32.	12.	27.	583.	22.				
1297.	34.	6.	20.	476.	28.				
1298.	36.	2.	28.	362.	25.				
1299.	38.	3.	38.	280.	15.				
1300.	40.	1.	31.	289.	8.				
1301.	45.	2.	59.	632.	41.				
1302.	50.	0.	38.	581.	59.				
1303.	55.	0.	8.	504.	57.				
1304.	60.	0.	4.	507.	33.				
1305.	65.	0.	2.	532.	28.				
1306.	70.	0.	0.	682.	12.				
1307.	72.	0.	0.	404.	7.				
1308.	75.	0.	0.	692.	12.				
1309.	80.	0.	0.	1042.	9.				
1310.	85.	0.	0.	438.	3.				
1311.	90.	0.	0.	81.	3.				
1312.	95.	0.	0.	11.	0.				
1313.	100.	0.	0.	3.	0.				
1314.	105.	0.	0.	2.	0.				
1315.	110.	0.	0.	1.	0.				
1316.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
1317.	10.	259.	4.	0.	0.				
1318.	14.	0.	29.	2.	1.				
1319.	20.	0.	104.	91.	3.				
1320.	22.	0.	0.	0.	3.				
1321.	24.	0.	0.	0.	5.				
1322.	26.	0.	0.	0.	2.				
1323.	28.	0.	0.	0.	0.				
1324.	30.	0.	0.	0.	0.				
1325.	32.	0.	0.	0.	0.				
1326.	34.	0.	0.	0.	0.				
1327.	36.	0.	0.	0.	0.				
1328.	38.	0.	0.	0.	0.				
1329.	40.	0.	0.	0.	0.				
1330.	45.	0.	0.	0.	0.				
1331.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
1332.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
1333.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 13.
PRESENT LIMITS

1342. FLEXIBLE - US/STAT - HOTMIX - RURAL - LOW TRAFFIC

1343.	1344.	1345.	1346.	1347.	1348.	1349.	1350.	1351.	1352.	1353.	1354.	1355.	1356.	1357.	1358.	1359.	1360.	1361.	1362.	1363.	1364.	1365.	1366.
YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)																		
1	694075.00	3.63	29.80	1920461.00	216.00																		
2	786969.00	3.94	29.80	2165642.00	236.00																		
3	897536.00	4.12	29.80	2434315.00	257.00																		
4	1021859.00	4.26	29.80	2734583.00	280.00																		
5	1151857.00	4.38	29.80	3070936.00	305.00																		
6	1281772.00	4.50	29.80	3448022.00	333.00																		
7	1411884.00	4.61	29.80	3870939.00	363.00																		
8	1546946.00	4.72	29.80	4345355.00	396.00																		
9	1693685.00	4.83	29.80	4877594.00	431.00																		
10	1860154.00	4.93	29.80	5474756.00	470.00																		
11	2054703.00	5.03	0.00	643343.00	512.00																		
12	2282903.00	4.78	0.00	684501.00	558.00																		
13	2546441.00	4.67	0.00	748595.00	609.00																		
14	2845559.00	4.59	0.00	823901.00	663.00																		
15	3181198.00	4.53	0.00	909949.00	723.00																		
16	3555311.00	4.47	0.00	1007303.00	788.00																		
17	3970140.00	4.43	0.00	1116965.00	859.00																		
18	4427079.00	4.39	0.00	1240180.00	936.00																		

1367.	1368.	1369.	1370.	1371.	1372.	1373.	1374.	1375.
TOTAL PRESENT COSTS	37210016.00	80.82	298.00	41517248.00	8935.00			
TOTAL LANE MILES		378.82						

1376.	1377.	1378.	1379.	1380.	1381.	1382.	1383.	1384.	1385.	1386.	1387.	1388.	1389.	1390.	1391.	1392.	1393.	1394.	1395.	1396.	1397.	1398.	1399.	1400.	1401.	
FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00																			
FLEXIBLE - US/STAT - HOTMIX - RURAL - HIGH TRAFFIC																										
13	3	1	1	2	6	1.00	6.00	1	4	10	10	2197.00														
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ACP	4.00	0.000	AGB	12.00	0.000	LTS	0.00	0.000	0.00	0.000	0.00	0.000														
AGE DISTRIBUTION			30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	76.0	91.0	54.0	5.0	27.0	13.0	7.0	67.0	11.0										
31.0	54.0	72.0	43.0	68.0	50.0	13.0	49.0	32.0	26.0	41.0	76.0	45.0	40.0	103.0												
TRUCK TYPE			4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3																			
3-S1-2	2-S2-2																									
2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0																			
4 1 0 0	4 1 0 0																									
0	2.63	0.15	0.17	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
LOAD LIMITS			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
80.00		20.00		34.00		56.00																				
120.00		22.40		36.00		56.00																				
13.	13.	12.		8.																						
16.	16.	16.		16.																						
SINGLE AXLES			11	0	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3.	6.	16.		39.		30.																				
7.	625.	262.		2015.		479.																				
8.	197.	46.		957.		116.																				
12.	535.	103.		2190.		535.																				
16.	284.	115.		2132.		282.																				
18.	86.	51.		1672.		76.																				

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1403.	19.	25.	13.	546.	20.					
1404.	20.	18.	11.	291.	26.					
1405.	22.	14.	12.	125.	20.					
1406.	24.	9.	4.	13.	5.					
1407.	26.	3.	2.	4.	2.					
1408.	TANDEM			15	0	6.00	0.00	0.00	0.00	0.00
1409.	AXLES									
1409.	6.	0.	258.	3382.	0.					
1410.	12.	1.	167.	5272.	0.					
1411.	18.	0.	159.	5150.	0.					
1412.	24.	0.	28.	1814.	0.					
1413.	30.	0.	1.	1531.	0.					
1414.	32.	0.	0.	875.	0.					
1415.	33.	0.	0.	483.	0.					
1416.	34.	0.	0.	373.	0.					
1417.	36.	0.	0.	486.	0.					
1418.	38.	0.	0.	217.	0.					
1419.	40.	0.	0.	53.	0.					
1420.	42.	0.	0.	14.	0.					
1421.	44.	0.	0.	4.	0.					
1422.	46.	0.	0.	1.	0.					
1423.	50.	0.	0.	3.	0.					
1424.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
1425.	10.	299.	4.	0.	0.					
1426.	14.	547.	29.	2.	1.					
1427.	20.	590.	188.	91.	3.					
1428.	22.	145.	48.	64.	3.					
1429.	24.	57.	37.	108.	5.					
1430.	26.	71.	29.	293.	2.					
1431.	28.	53.	16.	554.	9.					
1432.	30.	20.	18.	658.	13.					
1433.	32.	12.	27.	583.	22.					
1434.	34.	6.	20.	476.	28.					
1435.	36.	2.	28.	362.	25.					
1436.	38.	3.	38.	280.	15.					
1437.	40.	1.	31.	289.	8.					
1438.	45.	2.	59.	632.	41.					
1439.	50.	0.	38.	581.	59.					
1440.	55.	0.	8.	504.	57.					
1441.	60.	0.	4.	507.	33.					
1442.	65.	0.	2.	532.	28.					
1443.	70.	0.	0.	682.	12.					
1444.	72.	0.	0.	404.	7.					
1445.	75.	0.	0.	692.	12.					
1446.	80.	0.	0.	1042.	9.					
1447.	85.	0.	0.	438.	3.					
1448.	90.	0.	0.	81.	3.					
1449.	95.	0.	0.	11.	0.					
1450.	100.	0.	0.	3.	0.					
1451.	105.	0.	0.	2.	0.					
1452.	110.	0.	0.	1.	0.					
1453.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
1454.	10.	259.	4.	0.	0.					
1455.	14.	0.	29.	2.	1.					
1456.	20.	0.	104.	91.	3.					
1457.	22.	0.	0.	0.	3.					
1458.	24.	0.	0.	0.	5.					
1459.	26.	0.	0.	0.	2.					
1460.	28.	0.	0.	0.	0.					
1461.	30.	0.	0.	0.	0.					
1462.	32.	0.	0.	0.	0.					
1463.	34.	0.	0.	0.	0.					

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1525.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0		
1526.	4 1 0 0	4 1 0 0								
1527.	0	1.42	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1528.	LOAD LIMITS		0	0	0.00		0.00		0.00	0.00
1529.	80.00	20.00	34.00	56.00				0.00		0.00
1530.	120.00	22.40	36.00	56.00						
1531.	13.	13.	12.	8.						
1532.	16.	16.	16.	16.						
1533.	SINGLE AXLES		11	0	3.00		0.00	0.00	0.00	0.00
1534.	3.	0.	4.	9.	6.					
1535.	7.	169.	91.	847.	56.					
1536.	8.	59.	16.	513.	15.					
1537.	12.	177.	30.	976.	52.					
1538.	16.	89.	29.	984.	43.					
1539.	18.	21.	7.	603.	19.					
1540.	19.	15.	1.	216.	4.					
1541.	20.	10.	2.	109.	1.					
1542.	22.	6.	2.	72.	4.					
1543.	24.	5.	2.	15.	0.					
1544.	26.	3.	0.	2.	0.					
1545.	TANDEM AXLES		15	0	6.00		0.00	0.00	0.00	0.00
1546.	6.	0.	91.	1484.	0.					
1547.	12.	0.	60.	2174.	0.					
1548.	18.	0.	29.	2225.	0.					
1549.	24.	0.	2.	849.	0.					
1550.	30.	0.	0.	806.	0.					
1551.	32.	0.	0.	362.	0.					
1552.	33.	0.	0.	174.	0.					
1553.	34.	0.	0.	137.	0.					
1554.	36.	0.	0.	154.	0.					
1555.	38.	0.	0.	62.	0.					
1556.	40.	0.	0.	21.	0.					
1557.	42.	0.	0.	7.	0.					
1558.	44.	0.	0.	2.	0.					
1559.	46.	0.	0.	1.	0.					
1560.	50.	0.	0.	1.	0.					
1561.	GVW		28	0	10.00		0.00	0.00	0.00	0.00
1562.	10.	90.	2.	0.	0.					
1563.	14.	167.	14.	2.	0.					
1564.	20.	188.	72.	26.	0.					
1565.	22.	31.	12.	27.	0.					
1566.	24.	20.	14.	59.	1.					
1567.	26.	26.	10.	110.	1.					
1568.	28.	14.	7.	193.	1.					
1569.	30.	9.	3.	277.	0.					
1570.	32.	5.	10.	271.	4.					
1571.	34.	2.	4.	268.	3.					
1572.	36.	1.	6.	257.	1.					
1573.	38.	1.	6.	176.	0.					
1574.	40.	0.	3.	139.	5.					
1575.	45.	0.	15.	206.	6.					
1576.	50.	0.	4.	192.	6.					
1577.	55.	0.	1.	189.	4.					
1578.	60.	0.	0.	202.	5.					
1579.	65.	0.	0.	287.	3.					
1580.	70.	0.	0.	359.	6.					
1581.	72.	0.	0.	150.	0.					
1582.	75.	0.	0.	256.	3.					
1583.	80.	0.	0.	399.	1.					
1584.	85.	0.	0.	49.	0.					

926

1586.	95.	0.	0.	9.	0.				
1587.	100.	0.	0.	3.	0.				
1588.	105.	0.	0.	0.	0.				
1589.	110.	0.	0.	1.	0.				
1590.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
1591.	10.	79.	2.	0.	0.				
1592.	14.	0.	14.	2.	0.				
1593.	20.	0.	34.	26.	0.				
1594.	22.	0.	0.	0.	0.				
1595.	24.	0.	0.	0.	1.				
1596.	26.	0.	0.	0.	1.				
1597.	28.	0.	0.	0.	0.				
1598.	30.	0.	0.	0.	0.				
1599.	32.	0.	0.	0.	0.				
1600.	34.	0.	0.	0.	0.				
1601.	36.	0.	0.	0.	0.				
1602.	38.	0.	0.	0.	0.				
1603.	40.	0.	0.	0.	0.				
1604.	45.	0.	0.	0.	0.				
1605.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
1606.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
1607.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

1608.
1609.
1610.
1611.
1612.

DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - US/STAT - HOTMIX - URBAN - LOW TRAFFIC

1613.
1614.
1615.
1616.
1617.
1618.
1619.

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
1620.						
1621.						
1622.						
1623.	1	51206.00	0.28	2.30	148074.00	620.00
1624.	2	58042.00	0.30	2.30	167041.00	676.00
1625.	3	66166.00	0.32	2.30	187809.00	736.00
1626.	4	75253.00	0.33	2.30	211016.00	803.00
1627.	5	84698.00	0.34	2.30	237013.00	875.00
1628.	6	94112.00	0.35	2.30	266159.00	954.00
1629.	7	103558.00	0.36	2.30	298850.00	1039.00
1630.	8	113403.00	0.37	2.30	335523.00	1133.00
1631.	9	124143.00	0.37	2.30	376670.00	1235.00
1632.	10	136377.00	0.38	2.30	422840.00	1346.00
1633.	11	150731.00	0.39	0.00	50040.00	1467.00
1634.	12	167626.00	0.37	0.00	53168.00	1599.00
1635.	13	187183.00	0.36	0.00	58117.00	1743.00
1636.	14	209414.00	0.36	0.00	63943.00	1900.00
1637.	15	234387.00	0.35	0.00	70608.00	2071.00
1638.	16	262244.00	0.35	0.00	78151.00	2257.00
1639.	17	293151.00	0.34	0.00	86651.00	2461.00
1640.	18	327208.00	0.34	0.00	96203.00	2682.00
1641.						
1642.						
1643.	TOTAL		6.25	23.00		
1644.	PRESENT COSTS	2738902.00			3207876.00	25597.00
1645.	TOTAL LANE MILES		29.25			

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1708.	34.	2.	4.	268.	3.				
1709.	36.	1.	6.	257.	1.				
1710.	38.	1.	6.	176.	0.				
1711.	40.	0.	3.	139.	5.				
1712.	45.	0.	15.	206.	6.				
1713.	50.	0.	4.	192.	6.				
1714.	55.	0.	1.	189.	4.				
1715.	60.	0.	0.	202.	5.				
1716.	65.	0.	0.	287.	3.				
1717.	70.	0.	0.	359.	6.				
1718.	72.	0.	0.	150.	0.				
1719.	75.	0.	0.	256.	3.				
1720.	80.	0.	0.	399.	1.				
1721.	85.	0.	0.	149.	0.				
1722.	90.	0.	0.	48.	0.				
1723.	95.	0.	0.	9.	0.				
1724.	100.	0.	0.	3.	0.				
1725.	105.	0.	0.	0.	0.				
1726.	110.	0.	0.	1.	0.				
1727.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
1728.	10.	79.	2.	0.	0.				
1729.	14.	0.	14.	2.	0.				
1730.	20.	0.	34.	26.	0.				
1731.	22.	0.	0.	0.	0.				
1732.	24.	0.	0.	0.	1.				
1733.	26.	0.	0.	0.	1.				
1734.	28.	0.	0.	0.	0.				
1735.	30.	0.	0.	0.	0.				
1736.	32.	0.	0.	0.	0.				
1737.	34.	0.	0.	0.	0.				
1738.	36.	0.	0.	0.	0.				
1739.	38.	0.	0.	0.	0.				
1740.	40.	0.	0.	0.	0.				
1741.	45.	0.	0.	0.	0.				
1742.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
1743.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
1744.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

1746.
1747.
1748.
1749.

1750. DISTRICT: 13.
1751. PRESENT LIMITS

1752. FLEXIBLE - US/STAT - HOTMIX - URBAN - HIGH TRAFFIC

1753.
1754.
1755.

1756.	YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
1760.	1	96563.00	0.70	4.20	278348.00	1034.00
1761.	2	109391.00	0.76	4.20	314696.00	1127.00
1762.	3	124651.00	0.80	4.20	354227.00	1228.00
1763.	4	141801.00	0.82	4.20	398370.00	1339.00
1764.	5	159725.00	0.85	4.20	447820.00	1459.00
1765.	6	177603.00	0.87	4.20	503279.00	1590.00
1766.	7	195454.00	0.90	4.20	565510.00	1733.00
1767.	8	213939.00	0.92	4.20	635358.00	1889.00
1768.	9	234009.00	0.94	4.20	713769.00	2060.00

1769.	10	256808.00	0.96	4.20	801800.00	2245.00
1770.	11	283521.00	0.98	0.00	125270.00	2447.00
1771.	12	314934.00	0.93	0.00	133487.00	2667.00
1772.	13	351275.00	0.91	0.00	146146.00	2907.00
1773.	14	392563.00	0.90	0.00	161013.00	3169.00
1774.	15	438919.00	0.89	0.00	178007.00	3454.00
1775.	16	490604.00	0.88	0.00	197245.00	3765.00
1776.	17	547924.00	0.87	0.00	218928.00	4104.00
1777.	18	611071.00	0.86	0.00	243308.00	4473.00

1780.	TOTAL		15.73	42.00		
1781.	PRESENT COSTS	5140755.00			6416581.00	42690.00
1782.	TOTAL LANE MILES		57.73			

1787.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00									
1788.	FLEXIBLE - US/STAT - BLACKB - RURAL - LOW TRAFFIC																
1789.	13 3 2 1 1	6	1.00	6.00	1	4	10	10	396.00								
1790.	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1791.	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1792.	ACP 0.75 0.000 AGB	6.00	0.000	LTS	0.00	0.000		0.00	0.000								
1793.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1794.	1.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1795.	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1796.	TRUCK TYPE	4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1797.	2D 3A 3-S2 2-S1-2 2-S1 2-S2 3-S1 3-S3																
1798.	3-S1-2 2-S2-2																
1799.	2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0 2010 0 0 1020 0 0																
1800.	4 1 0 0 4 1 0 0																
1801.	0 2.63 0.15 0.17	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1802.	LOAD LIMITS	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1803.	80.00 20.00 34.00 56.00																
1804.	120.00 22.40 36.00 56.00																
1805.	13 13 12 8																
1806.	16 16 16 16																
1807.	SINGLE AXLES	11	0	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1808.	3 6 16 39 30																
1809.	7 625 262 2015 479																
1810.	8 197 46 957 116																
1811.	12 535 103 2190 535																
1812.	16 284 115 2132 282																
1813.	18 86 51 1672 76																
1814.	19 25 13 546 20																
1815.	20 18 11 291 26																
1816.	22 14 12 125 20																
1817.	24 9 4 13 5																
1818.	26 3 2 4 2																
1819.	TANDEM AXLES	15	0	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1820.	6 0 258 3382 0																
1821.	12 1 167 5272 0																
1822.	18 0 159 5150 0																
1823.	24 0 28 1814 0																
1824.	30 0 1 1531 0																
1825.	32 0 0 875 0																
1826.	33 0 0 483 0																
1827.	34 0 0 373 0																
1828.	36 0 0 217 0																

C-20

1830.		40.	0.	0.	53.	0.				
1831.		42.	0.	0.	14.	0.				
1832.		44.	0.	0.	4.	0.				
1833.		46.	0.	0.	1.	0.				
1834.		50.	0.	0.	3.	0.				
1835.	GVW			28	0	10.00	0.00	0.00	0.00	0.00
1836.		10.	299.	4.	0.	0.				
1837.		14.	547.	29.	2.	1.				
1838.		20.	590.	188.	91.	3.				
1839.		22.	145.	48.	64.	3.				
1840.		24.	57.	37.	108.	5.				
1841.		26.	71.	29.	293.	2.				
1842.		28.	53.	16.	554.	9.				
1843.		30.	20.	18.	658.	13.				
1844.		32.	12.	27.	583.	22.				
1845.		34.	6.	20.	476.	28.				
1846.		36.	2.	28.	362.	25.				
1847.		38.	3.	38.	280.	15.				
1848.		40.	1.	31.	289.	8.				
1849.		45.	2.	59.	632.	41.				
1850.		50.	0.	38.	581.	59.				
1851.		55.	0.	8.	504.	57.				
1852.		60.	0.	4.	507.	33.				
1853.		65.	0.	2.	532.	28.				
1854.		70.	0.	0.	682.	12.				
1855.		72.	0.	0.	404.	7.				
1856.		75.	0.	0.	692.	12.				
1857.		80.	0.	0.	1042.	9.				
1858.		85.	0.	0.	438.	3.				
1859.		90.	0.	0.	81.	3.				
1860.		95.	0.	0.	11.	0.				
1861.		100.	0.	0.	3.	0.				
1862.		105.	0.	0.	2.	0.				
1863.		110.	0.	0.	1.	0.				
1864.	EMPTY			14	0	10.00	0.00	0.00	0.00	0.00
1865.		10.	259.	4.	0.	0.				
1866.		14.	0.	29.	2.	1.				
1867.		20.	0.	104.	91.	3.				
1868.		22.	0.	0.	0.	3.				
1869.		24.	0.	0.	0.	5.				
1870.		26.	0.	0.	0.	2.				
1871.		28.	0.	0.	0.	0.				
1872.		30.	0.	0.	0.	0.				
1873.		32.	0.	0.	0.	0.				
1874.		34.	0.	0.	0.	0.				
1875.		36.	0.	0.	0.	0.				
1876.		38.	0.	0.	0.	0.				
1877.		40.	0.	0.	0.	0.				
1878.		45.	0.	0.	0.	0.				
1879.	PERFORMANCE			0	0	0.00	3.05	4.70	0.00	0.00
1880.	OVERLAY			0	0	95.00	4.75	0.25	0.00	0.00
1881.	EXECUTE			0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 13.
PRESENT LIMITS

1952.	20.	18.	11.	291.	26.					
1953.	22.	14.	12.	125.	20.					
1954.	24.	9.	4.	13.	5.					
1955.	26.	3.	2.	4.	2.					
1956.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00
1957.	6.	0.	258.	3382.	0.					
1958.	12.	1.	167.	5272.	0.					
1959.	18.	0.	159.	5150.	0.					
1960.	24.	0.	28.	1814.	0.					
1961.	30.	0.	1.	1531.	0.					
1962.	32.	0.	0.	875.	0.					
1963.	33.	0.	0.	483.	0.					
1964.	34.	0.	0.	373.	0.					
1965.	36.	0.	0.	486.	0.					
1966.	38.	0.	0.	217.	0.					
1967.	40.	0.	0.	53.	0.					
1968.	42.	0.	0.	14.	0.					
1969.	44.	0.	0.	4.	0.					
1970.	46.	0.	0.	1.	0.					
1971.	50.	0.	0.	3.	0.					
1972.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
1973.	10.	299.	4.	0.	0.					
1974.	14.	547.	29.	2.	1.					
1975.	20.	590.	188.	91.	3.					
1976.	22.	145.	48.	64.	3.					
1977.	24.	57.	37.	108.	5.					
1978.	26.	71.	29.	293.	2.					
1979.	28.	53.	16.	554.	9.					
1980.	30.	20.	18.	658.	13.					
1981.	32.	12.	27.	583.	22.					
1982.	34.	6.	20.	476.	28.					
1983.	36.	2.	28.	362.	25.					
1984.	38.	3.	38.	280.	15.					
1985.	40.	1.	31.	289.	8.					
1986.	45.	2.	59.	632.	41.					
1987.	50.	0.	38.	581.	59.					
1988.	55.	0.	8.	504.	57.					
1989.	60.	0.	4.	507.	33.					
1990.	65.	0.	2.	532.	28.					
1991.	70.	0.	0.	682.	12.					
1992.	72.	0.	0.	404.	7.					
1993.	75.	0.	0.	692.	12.					
1994.	80.	0.	0.	1042.	9.					
1995.	85.	0.	0.	438.	3.					
1996.	90.	0.	0.	81.	3.					
1997.	95.	0.	0.	11.	0.					
1998.	100.	0.	0.	3.	0.					
1999.	105.	0.	0.	2.	0.					
2000.	110.	0.	0.	1.	0.					
2001.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
2002.	10.	259.	4.	0.	0.					
2003.	14.	0.	29.	2.	1.					
2004.	20.	0.	104.	91.	3.					
2005.	22.	0.	0.	0.	3.					
2006.	24.	0.	0.	0.	5.					
2007.	26.	0.	0.	0.	2.					
2008.	28.	0.	0.	0.	0.					
2009.	30.	0.	0.	0.	0.					
2010.	32.	0.	0.	0.	0.					
2011.	34.	0.	0.	0.	0.					
2012.	36.	0.	0.	0.	0.					

2013.	38.	0.	0.	0.	0.				
2014.	40.	0.	0.	0.	0.				
2015.	45.	0.	0.	0.	0.				
2016.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
2017.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
2018.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

2019.
2020.
2021.
2022.
2023.

DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - US/STAT - OVRLAY - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
2031.						
2032.						
2033.						
2034.	1	223797.00	0.00	17.70	1052176.00	75.00
2035.	2	252900.00	0.00	17.70	1178440.00	82.00
2036.	3	283512.00	0.00	17.70	1319857.00	89.00
2037.	4	316042.00	0.00	17.70	1478246.00	97.00
2038.	5	350675.00	0.00	17.70	1655641.00	106.00
2039.	6	387111.00	0.00	17.70	1854324.00	115.00
2040.	7	425594.00	0.00	17.70	2076851.00	125.00
2041.	8	467399.00	0.00	17.70	2326082.00	137.00
2042.	9	514836.00	0.00	17.70	2605224.00	149.00
2043.	10	571382.00	0.00	17.70	2917863.00	162.00
2044.	11	641048.00	0.00	0.00	391.00	177.00
2045.	12	726504.00	0.00	0.00	457.00	193.00
2046.	13	828326.00	0.00	0.00	532.00	210.00
2047.	14	946312.00	0.00	0.00	621.00	229.00
2048.	15	1080647.00	0.00	0.00	718.00	250.00
2049.	16	1232050.00	0.00	0.00	832.00	273.00
2050.	17	1401343.00	0.00	0.00	963.00	297.00
2051.	18	1588753.00	0.00	0.00	1110.00	324.00
2052.						
2053.						
2054.	TOTAL		0.05	177.00		
2055.	PRESENT COSTS	12238231.00			18470272.00	3090.00
2056.	TOTAL LANE MILES			177.05		

2057.
2058.
2059.
2060.

FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00
2061.							
2062.	FLEXIBLE - US/STAT - OVRLAY - RURAL - HIGH TRAFFIC						
2063.	13	3	3	1	2	6	1.00 6.00
2064.	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0 0.0 0.0 0.0 0.0
2065.	0.0	0.0	0.0	0.0	0.0	0.0	
2066.	ACP	3.00	0.000	ATB	4.00	0.000	AGB
2067.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00
2068.	0.0	0.0	0.0	0.0	0.0	0.0	1.0 0.0 0.0 2.0 0.0 2.0 1.0 0.0 0.0
2069.	0.0	0.0	0.0	0.0	0.0	1.0	1.0 0.0 0.0 1.0 2.0 0.0 2.0 1.0 8.0
2070.	TRUCK TYPE		4	0	0.00	0.00	0.00
2071.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1
2072.	3	2	52-2				

2135.	100.	0.	0.	3.	0.				
2136.	105.	0.	0.	2.	0.				
2137.	110.	0.	0.	1.	0.				
2138.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
2139.	10.	259.	4.	0.	0.				
2140.	14.	0.	29.	2.	1.				
2141.	20.	0.	104.	91.	3.				
2142.	22.	0.	0.	0.	3.				
2143.	24.	0.	0.	0.	5.				
2144.	26.	0.	0.	0.	2.				
2145.	28.	0.	0.	0.	0.				
2146.	30.	0.	0.	0.	0.				
2147.	32.	0.	0.	0.	0.				
2148.	34.	0.	0.	0.	0.				
2149.	36.	0.	0.	0.	0.				
2150.	38.	0.	0.	0.	0.				
2151.	40.	0.	0.	0.	0.				
2152.	45.	0.	0.	0.	0.				
2153.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
2154.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
2155.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

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DISTRICT: 13.
PRESENT LIMITS

FLEXIBLE - US/STAT - OVRLAY - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	16992.00	0.00	1.40	83267.00	221.00
2	19169.00	0.00	1.40	93261.00	240.00
3	21440.00	0.00	1.40	104455.00	262.00
4	23828.00	0.00	1.40	116993.00	286.00
5	26346.00	0.00	1.40	131036.00	311.00
6	28990.00	0.00	1.40	146765.00	339.00
7	31804.00	0.00	1.40	164382.00	370.00
8	34893.00	0.00	1.40	184115.00	403.00
9	38431.00	0.00	1.40	206216.00	439.00
10	42683.00	0.00	1.40	230970.00	479.00
11	47959.00	0.00	0.00	240.00	522.00
12	54467.00	0.00	0.00	281.00	569.00
13	62248.00	0.00	0.00	327.00	620.00
14	71283.00	0.00	0.00	381.00	676.00
15	81585.00	0.00	0.00	442.00	737.00
16	93208.00	0.00	0.00	512.00	803.00
17	106214.00	0.00	0.00	593.00	876.00
18	120618.00	0.00	0.00	685.00	954.00
TOTAL PRESENT COSTS	922158.00	0.03	14.00	1464921.00	9107.00
TOTAL LANE MILES		14.03			

2257.	36.	1.	6.	257.	1.					
2258.	38.	1.	6.	176.	0.					
2259.	40.	0.	3.	139.	5.					
2260.	45.	0.	15.	206.	6.					
2261.	50.	0.	4.	192.	6.					
2262.	55.	0.	1.	189.	4.					
2263.	60.	0.	0.	202.	5.					
2264.	65.	0.	0.	287.	3.					
2265.	70.	0.	0.	359.	6.					
2266.	72.	0.	0.	150.	0.					
2267.	75.	0.	0.	256.	3.					
2268.	80.	0.	0.	399.	1.					
2269.	85.	0.	0.	149.	0.					
2270.	90.	0.	0.	48.	0.					
2271.	95.	0.	0.	9.	0.					
2272.	100.	0.	0.	3.	0.					
2273.	105.	0.	0.	0.	0.					
2274.	110.	0.	0.	1.	0.					
2275.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
2276.	10.	79.	2.	0.	0.					
2277.	14.	0.	14.	2.	0.					
2278.	20.	0.	34.	26.	0.					
2279.	22.	0.	0.	0.	0.					
2280.	24.	0.	0.	0.	1.					
2281.	26.	0.	0.	0.	1.					
2282.	28.	0.	0.	0.	0.					
2283.	30.	0.	0.	0.	0.					
2284.	32.	0.	0.	0.	0.					
2285.	34.	0.	0.	0.	0.					
2286.	36.	0.	0.	0.	0.					
2287.	38.	0.	0.	0.	0.					
2288.	40.	0.	0.	0.	0.					
2289.	45.	0.	0.	0.	0.					
2290.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
2291.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
2292.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

2293.
2294.
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DISTRICT: 13.
PRESENT LIMITS

2298.
2299.
2300. FLEXIBLE - US/STAT - OVRLAY - URBAN - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
2301.						
2302.						
2303.						
2304.						
2305.						
2306.						
2307.						
2308.	1	1725.00	0.00	0.20	11889.00	245.00
2309.	2	1881.00	0.00	0.20	13316.00	267.00
2310.	3	2050.00	0.00	0.20	14913.00	291.00
2311.	4	2235.00	0.00	0.20	16703.00	317.00
2312.	5	2438.00	0.00	0.20	18707.00	345.00
2313.	6	2661.00	0.00	0.20	20952.00	376.00
2314.	7	2909.00	0.00	0.20	23467.00	410.00
2315.	8	3193.00	0.00	0.20	26283.00	447.00
2316.	9	3532.00	0.00	0.20	29437.00	487.00
2317.	10	3961.00	0.00	0.20	32111.00	527.00

2318.	11	4522.00	0.00	0.00	4.00	579.00
2319.	12	5242.00	0.00	0.00	4.00	631.00
2320.	13	6125.00	0.00	0.00	5.00	688.00
2321.	14	7167.00	0.00	0.00	6.00	750.00
2322.	15	8367.00	0.00	0.00	7.00	817.00
2323.	16	9732.00	0.00	0.00	8.00	891.00
2324.	17	11268.00	0.00	0.00	9.00	971.00
2325.	18	12974.00	0.00	0.00	10.00	1058.00

2328.	TOTAL		0.00	2.00		
2329.	PRESENT COSTS	91982.00	-----		208690.00	10101.00
2330.	TOTAL LANE MILES			2.00		

2334.	-----															
2335.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00								
2336.	FLEXIBLE - INTERST - HOTMIX - RURAL - LOW TRAFFIC															
2337.	15	1	1	1	6	1.00	6.00	1	4	10	10	1233.00				
2338.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2339.	0.0	0.0	0.0	0.0	0.0	0.0	0.0									
2340.	ACP	2.00	0.000	AGB	8.00	0.000	LTS	0.00	0.000		0.00	0.000				
2341.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
2342.	0.0	0.0	0.0	0.0	0.0	54.0	39.0	32.0	77.0	22.0	25.0	59.0	37.0	42.0	38.0	
2343.	20.0	27.0	22.0	31.0	37.0	27.0	36.0	3.0	1.0	0.0	0.0	15.0	13.0	0.0	14.0	
2344.	TRUCK TYPE	4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
2345.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3								
2346.	3-S1-2	2-S2-2														
2347.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0								
2348.	4 1 0 0	4 1 0 0														
2349.	0	3.16	0.43	0.15	1.08	0.00	0.00	0.00	0.00	0.00	0.00					
2350.	LOAD LIMITS															
2351.	80.00	20.00	34.00	56.00												
2352.	120.00	22.40	36.00	56.00												
2353.	13	13	12	8												
2354.	16	16	16	16												
2355.	SINGLE AXLES		11	0	3.00	0.00	0.00	0.00	0.00	0.00						
2356.	3	1	3	11	2											
2357.	7	428	212	1284	162											
2358.	8	172	42	1525	66											
2359.	12	547	93	3235	241											
2360.	16	296	74	2765	236											
2361.	18	123	24	2294	65											
2362.	19	33	9	703	32											
2363.	20	19	5	288	19											
2364.	22	22	2	135	12											
2365.	24	9	0	22	1											
2366.	26	2	0	5	0											
2367.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00						
2368.	6	0	203	3577	0											
2369.	12	0	164	5035	1											
2370.	18	0	82	7739	1											
2371.	24	0	7	2095	0											
2372.	30	0	0	2140	0											
2373.	32	0	0	1263	0											
2374.	33	0	0	690	0											
2375.	34	0	0	492	0											
2376.	36	0	0	649	0											
2377.	38	0	0	232	0											
2378.	40	0	0	88	0											

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2379		42.	0.	0.	19.	0.				
2380		44.	0.	0.	10.	0.				
2381		46.	0.	0.	1.	0.				
2382		50.	0.	0.	2.	0.				
2383	GVW			28	0	10.00	0.00	0.00	0.00	0.00
2384		10.	205.	1.	0.	0.				
2385		14.	472.	7.	1.	0.				
2386		20.	551.	145.	31.	1.				
2387		22.	103.	70.	38.	0.				
2388		24.	127.	36.	54.	1.				
2389		26.	106.	25.	78.	3.				
2390		28.	51.	21.	191.	1.				
2391		30.	23.	15.	369.	1.				
2392		32.	10.	23.	656.	6.				
2393		34.	4.	18.	828.	7.				
2394		36.	0.	15.	821.	5.				
2395		38.	0.	15.	609.	10.				
2396		40.	0.	20.	408.	15.				
2397		45.	0.	28.	779.	20.				
2398		50.	0.	14.	681.	19.				
2399		55.	0.	7.	597.	22.				
2400		60.	0.	0.	614.	20.				
2401		65.	0.	0.	663.	21.				
2402		70.	0.	0.	1060.	18.				
2403		72.	0.	0.	578.	7.				
2404		75.	0.	0.	1047.	12.				
2405		80.	0.	0.	1367.	15.				
2406		85.	0.	0.	468.	5.				
2407		90.	0.	0.	110.	1.				
2408		95.	0.	0.	21.	0.				
2409		100.	0.	0.	8.	0.				
2410		105.	0.	0.	4.	0.				
2411		110.	0.	0.	6.	0.				
2412	EMPTY			14	0	10.00	0.00	0.00	0.00	0.00
2413		10.	165.	1.	0.	0.				
2414		14.	0.	7.	1.	0.				
2415		20.	0.	61.	31.	1.				
2416		22.	0.	0.	0.	0.				
2417		24.	0.	0.	0.	1.				
2418		26.	0.	0.	0.	1.				
2419		28.	0.	0.	0.	0.				
2420		30.	0.	0.	0.	0.				
2421		32.	0.	0.	0.	0.				
2422		34.	0.	0.	0.	0.				
2423		36.	0.	0.	0.	0.				
2424		38.	0.	0.	0.	0.				
2425		40.	0.	0.	0.	0.				
2426		45.	0.	0.	0.	0.				
2427	PERFORMANCE			0	0	0.00	3.05	4.70	0.00	0.00
2428	OVERLAY			0	0	95.00	4.75	0.25	0.00	0.00
2429	EXECUTE			0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE INTEREST - HOTMIX - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
2440.						
2441.						
2442.						
2443.						
2444.						
2445.	1	1272248.00	4.73	4.20	444060.00	359.00
2446.	2	1498139.00	4.78	4.20	500021.00	391.00
2447.	3	1752031.00	4.78	4.20	559883.00	426.00
2448.	4	2026974.00	4.77	4.20	626619.00	464.00
2449.	5	2313147.00	4.77	4.20	701353.00	506.00
2450.	6	2598403.00	4.76	4.20	785163.00	552.00
2451.	7	2876208.00	4.76	4.20	879202.00	601.00
2452.	8	3152093.00	4.76	4.20	984747.00	656.00
2453.	9	3438115.00	4.76	4.20	1103225.00	715.00
2454.	10	3746771.00	4.77	4.20	1236227.00	779.00
2455.	11	4088794.00	4.78	0.00	610177.00	849.00
2456.	12	4471229.00	4.69	0.00	671777.00	925.00
2457.	13	4897196.00	4.65	0.00	745392.00	1009.00
2458.	14	5368417.00	4.62	0.00	828821.00	1099.00
2459.	15	5887126.00	4.59	0.00	922771.00	1198.00
2460.	16	6456532.00	4.57	0.00	1028343.00	1306.00
2461.	17	7080383.00	4.55	0.00	1146863.00	1424.00
2462.	18	7762497.00	4.53	0.00	1279841.00	1552.00
2463.						
2464.						
2465.	TOTAL		84.61	42.00		
2466.	PRESENT COSTS	70686224.00			15054485.00	14811.00
2467.	TOTAL LANE MILES		126.61			

FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00									
FLEXIBLE - INTERST - HOTMIX - RURAL - HIGH TRAFFIC																
2473.	15	1	1	1	2	6	1.00	6.00	1	4	10	10	3252.00			
2475.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2476.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
2477.	ACP	4.00	0.000	AGB	12.00	0.000	LTS	0.00	0.000	0.00	0.000					
2478.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
2479.	0.0	0.0	0.0	0.0	0.0	84.0	60.0	49.0	119.0	34.0	39.0	91.0	57.0	65.0	59.0	
2480.	31.0	42.0	34.0	48.0	57.0	42.0	56.0	5.0	1.0	0.0	0.0	24.0	19.0	0.0	21.0	
2481.	TRUCK TYPE	4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
2482.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3								
2483.	3-S1-2	2-S2-2														
2484.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0								
2485.	4 1 0 0	4 1 0 0														
2486.	0	3.16	0.43	0.15	1.08	0.00	0.00	0.00	0.00	0.00	0.00					
2487.	LOAD LIMITS	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
2488.	80.00	20.00	34.00	56.00												
2489.	120.00	22.40	36.00	56.00												
2490.	13.	13.	12.	8.												
2491.	16.	16.	16.	16.												
2492.	SINGLE AXLES	11	0	3.00	0.00	0.00	0.00	0.00	0.00	0.00						
2493.	3.	1.	3.	11.	2.											
2494.	7.	428.	212.	1284.	162.											
2495.	8.	172.	42.	1525.	66.											
2496.	12.	547.	93.	3235.	241.											
2497.	16.	296.	74.	2765.	236.											
2498.	18.	123.	24.	2294.	65.											
2499.	19.	33.	9.	703.	32.											
2500.	20.	19.	5.	288.	19.											

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2501.	22.	22.	2.	135.	12.				
2502.	24.	9.	0.	22.	1.				
2503.	26.	2.	0.	5.	0.				
2504.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00
2505.	6.	0.	203.	3577.	0.				
2506.	12.	0.	164.	5035.	1.				
2507.	18.	0.	82.	7739.	1.				
2508.	24.	0.	7.	2095.	0.				
2509.	30.	0.	0.	2140.	0.				
2510.	32.	0.	0.	1263.	0.				
2511.	33.	0.	0.	690.	0.				
2512.	34.	0.	0.	492.	0.				
2513.	36.	0.	0.	649.	0.				
2514.	38.	0.	0.	232.	0.				
2515.	40.	0.	0.	88.	0.				
2516.	42.	0.	0.	19.	0.				
2517.	44.	0.	0.	10.	0.				
2518.	46.	0.	0.	1.	0.				
2519.	50.	0.	0.	2.	0.				
2520.	GVW		28	0	10.00	0.00	0.00	0.00	0.00
2521.	10.	205.	1.	0.	0.				
2522.	14.	472.	7.	1.	0.				
2523.	20.	551.	145.	31.	1.				
2524.	22.	103.	70.	38.	0.				
2525.	24.	127.	36.	54.	1.				
2526.	26.	106.	25.	78.	3.				
2527.	28.	51.	21.	191.	1.				
2528.	30.	23.	15.	369.	1.				
2529.	32.	10.	23.	656.	6.				
2530.	34.	4.	18.	828.	7.				
2531.	36.	0.	15.	821.	5.				
2532.	38.	0.	15.	609.	10.				
2533.	40.	0.	20.	408.	15.				
2534.	45.	0.	28.	779.	20.				
2535.	50.	0.	14.	681.	19.				
2536.	55.	0.	7.	597.	22.				
2537.	60.	0.	0.	614.	20.				
2538.	65.	0.	0.	663.	21.				
2539.	70.	0.	0.	1060.	18.				
2540.	72.	0.	0.	578.	7.				
2541.	75.	0.	0.	1047.	12.				
2542.	80.	0.	0.	1367.	15.				
2543.	85.	0.	0.	468.	5.				
2544.	90.	0.	0.	110.	1.				
2545.	95.	0.	0.	21.	0.				
2546.	100.	0.	0.	8.	0.				
2547.	105.	0.	0.	4.	0.				
2548.	110.	0.	0.	6.	0.				
2549.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
2550.	10.	165.	1.	0.	0.				
2551.	14.	0.	7.	1.	0.				
2552.	20.	0.	61.	31.	1.				
2553.	22.	0.	0.	0.	0.				
2554.	24.	0.	0.	0.	1.				
2555.	26.	0.	0.	0.	1.				
2556.	28.	0.	0.	0.	0.				
2557.	30.	0.	0.	0.	0.				
2558.	32.	0.	0.	0.	0.				
2559.	34.	0.	0.	0.	0.				
2560.	36.	0.	0.	0.	0.				
2561.	38.	0.	0.	0.	0.				

2623.	0	3.16	0.43	0.15	1.08	0.00	0.00	0.00	0.00	0.00	0.00		
2624.	LOAD LIMITS				0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2625.	80.00		20.00		34.00		56.00					0.00	0.00
2626.	120.00		22.40		36.00		56.00						
2627.	13.		13.		12.		8.						
2628.	16.		16.		16.		16.						
2629.	SINGLE AXLES				11	0	3.00		0.00	0.00	0.00	0.00	0.00
2630.	3.		0.		4.		9.						
2631.	7.		169.		91.		847.						
2632.	8.		59.		16.		513.						
2633.	12.		177.		30.		976.						
2634.	16.		89.		29.		984.						
2635.	18.		21.		7.		603.						
2636.	19.		15.		1.		216.						
2637.	20.		10.		2.		109.						
2638.	22.		6.		2.		72.						
2639.	24.		5.		2.		15.						
2640.	26.		3.		0.		2.						
2641.	TANDEM AXLES				15	0	6.00		0.00	0.00	0.00	0.00	0.00
2642.	6.		0.		91.		1484.						
2643.	12.		0.		60.		2174.						
2644.	18.		0.		29.		2225.						
2645.	24.		0.		2.		849.						
2646.	30.		0.		0.		806.						
2647.	32.		0.		0.		362.						
2648.	33.		0.		0.		174.						
2649.	34.		0.		0.		137.						
2650.	36.		0.		0.		154.						
2651.	38.		0.		0.		62.						
2652.	40.		0.		0.		21.						
2653.	42.		0.		0.		7.						
2654.	44.		0.		0.		2.						
2655.	46.		0.		0.		1.						
2656.	50.		0.		0.		1.						
2657.	GVW				28	0	10.00		0.00	0.00	0.00	0.00	0.00
2658.	10.		90.		2.		0.						
2659.	14.		167.		14.		2.						
2660.	20.		188.		72.		26.						
2661.	22.		31.		12.		27.						
2662.	24.		20.		14.		59.						
2663.	26.		26.		10.		110.						
2664.	28.		14.		7.		193.						
2665.	30.		9.		3.		277.						
2666.	32.		5.		10.		271.						
2667.	34.		2.		4.		268.						
2668.	36.		1.		6.		257.						
2669.	38.		1.		6.		176.						
2670.	40.		0.		3.		139.						
2671.	45.		0.		15.		206.						
2672.	50.		0.		4.		192.						
2673.	55.		0.		1.		189.						
2674.	60.		0.		0.		202.						
2675.	65.		0.		0.		287.						
2676.	70.		0.		0.		359.						
2677.	72.		0.		0.		150.						
2678.	75.		0.		0.		256.						
2679.	80.		0.		0.		399.						
2680.	85.		0.		0.		149.						
2681.	90.		0.		0.		48.						
2682.	95.		0.		0.		9.						
2683.	100.		0.		0.		3.						

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2684.	105.	0.	0.	0.	0.					
2685.	110.	0.	0.	1.	0.					
2686.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
2687.	10.	79.	2.	0.	0.					
2688.	14.	0.	14.	2.	0.					
2689.	20.	0.	34.	26.	0.					
2690.	22.	0.	0.	0.	0.					
2691.	24.	0.	0.	0.	1.					
2692.	26.	0.	0.	0.	1.					
2693.	28.	0.	0.	0.	0.					
2694.	30.	0.	0.	0.	0.					
2695.	32.	0.	0.	0.	0.					
2696.	34.	0.	0.	0.	0.					
2697.	36.	0.	0.	0.	0.					
2698.	38.	0.	0.	0.	0.					
2699.	40.	0.	0.	0.	0.					
2700.	45.	0.	0.	0.	0.					
2701.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
2702.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
2703.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

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DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - INTERST - HOTMIX - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	REHAB POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	1861811.00	32.02	6.20	1685826.00	3393.00
2	2137776.00	31.04	6.20	1981179.00	3698.00
3	2437275.00	34.91	6.20	2264045.00	4031.00
4	2748745.00	35.56	6.20	2573172.00	4394.00
5	3058076.00	36.12	6.20	2918048.00	4789.00
6	3349636.00	36.63	6.20	3305615.00	5220.00
7	3616758.00	37.13	6.20	3742605.00	5690.00
8	3869382.00	37.62	6.20	4236217.00	6202.00
9	4126938.00	38.11	6.20	4794363.00	6760.00
10	4411383.00	38.60	6.20	5425889.00	7369.00
11	4742876.00	39.10	0.00	4996176.00	8032.00
12	5132754.00	39.06	0.00	5590381.00	8755.00
13	5581705.00	39.23	0.00	6287966.00	9543.00
14	6086525.00	39.46	0.00	7083109.00	10402.00
15	6645512.00	39.72	0.00	7985830.00	11338.00
16	7259431.00	40.01	0.00	9009356.00	12358.00
17	7930641.00	40.32	0.00	10169238.00	13470.00
18	8661989.00	40.65	0.00	11483311.00	14683.00
TOTAL		678.28	62.00		
PRESENT COSTS	83659120.00			95532224.00	140127.00
TOTAL LANE MILES		740.28			

2745.	-----																
2746.	FLEXIBLE			0	0	12.00		0.00		0.00		3.00		3.00			
2747.	FLEXIBLE - FM - HOTMIX - RURAL - LOW TRAFFIC																
2748.	15	2	1	1	1	6	1.00	6.00	1	4	10	10	240.00				
2749.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2750.	0.0	0.0	0.0	0.0	0.0	0.0											
2751.	ACP	2.00	0.000	AGB	8.00	0.000	LTS	0.00	0.000			0.00	0.000				
2752.	AGE DISTRIBUTION			30	0	0.00		0.00				0.00		0.00			0.00
2753.	0.0	0.0	0.0	0.0	0.0	0.0	12.0	9.0	46.0	31.0	1.0	9.0	9.0	23.0	37.0	8.0	
2754.	14.0	31.0	89.0	48.0	241.0	45.0	32.0	64.0	68.0	2.0	6.0	2.0	0.0	15.0	43.0		
2755.	TRUCK TYPE			4	0	0.00		0.00				0.00		0.00			0.00
2756.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3									
2757.	3-S1-2	2-S2-2															
2758.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0									
2759.	4 1 0 0	4 1 0 0															
2760.	0	3.16	0.43	0.15	1.08	0.00	0.00	0.00	0.00	0.00	0.00						
2761.	LOAD LIMITS			0	0	0.00		0.00				0.00		0.00			0.00
2762.	80.00	20.00	34.00	56.00													
2763.	120.00	22.40	36.00	56.00													
2764.	13.	13.	12.	8.													
2765.	16.	16.	16.	16.													
2766.	SINGLE AXLES			11	0	3.00		0.00		0.00		0.00		0.00			0.00
2767.	3.	1.	3.	11.	2.												
2768.	7.	428.	212.	1284.	162.												
2769.	8.	172.	42.	1525.	66.												
2770.	12.	547.	93.	3235.	241.												
2771.	16.	296.	74.	2765.	236.												
2772.	18.	123.	24.	2294.	65.												
2773.	19.	33.	9.	703.	32.												
2774.	20.	19.	5.	288.	19.												
2775.	22.	22.	2.	135.	12.												
2776.	24.	9.	0.	22.	1.												
2777.	26.	2.	0.	5.	0.												
2778.	TANDEM AXLES			15	0	6.00		0.00		0.00		0.00		0.00			0.00
2779.	6.	0.	203.	3577.	0.												
2780.	12.	0.	164.	5035.	1.												
2781.	18.	0.	82.	7739.	1.												
2782.	24.	0.	7.	2095.	0.												
2783.	30.	0.	0.	2140.	0.												
2784.	32.	0.	0.	1263.	0.												
2785.	33.	0.	0.	690.	0.												
2786.	34.	0.	0.	492.	0.												
2787.	36.	0.	0.	649.	0.												
2788.	38.	0.	0.	232.	0.												
2789.	40.	0.	0.	88.	0.												
2790.	42.	0.	0.	19.	0.												
2791.	44.	0.	0.	10.	0.												
2792.	46.	0.	0.	1.	0.												
2793.	50.	0.	0.	2.	0.												
2794.	GVW			28	0	10.00		0.00		0.00		0.00		0.00			0.00
2795.	10.	205.	1.	0.	0.												
2796.	14.	472.	7.	1.	0.												
2797.	20.	551.	145.	31.	1.												
2798.	22.	103.	70.	38.	0.												
2799.	24.	127.	36.	54.	1.												
2800.	26.	106.	25.	78.	3.												
2801.	28.	51.	21.	191.	1.												
2802.	30.	23.	15.	369.	1.												
2803.	32.	10.	23.	656.	6.												
2804.	34.	4.	18.	228.	7.												
2805.	36.	0.	15.	21.	5.												

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2806.	38.	0.	15.	609.	10.					
2807.	40.	0.	20.	408.	15.					
2808.	45.	0.	28.	779.	20.					
2809.	50.	0.	14.	681.	19.					
2810.	55.	0.	7.	597.	22.					
2811.	60.	0.	0.	614.	20.					
2812.	65.	0.	0.	663.	21.					
2813.	70.	0.	0.	1060.	18.					
2814.	72.	0.	0.	578.	7.					
2815.	75.	0.	0.	1047.	12.					
2816.	80.	0.	0.	1367.	15.					
2817.	85.	0.	0.	468.	5.					
2818.	90.	0.	0.	110.	1.					
2819.	95.	0.	0.	21.	0.					
2820.	100.	0.	0.	8.	0.					
2821.	105.	0.	0.	4.	0.					
2822.	110.	0.	0.	6.	0.					
2823.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
2824.	10.	165.	1.	0.	0.					
2825.	14.	0.	7.	1.	0.					
2826.	20.	0.	61.	31.	1.					
2827.	22.	0.	0.	0.	0.					
2828.	24.	0.	0.	0.	1.					
2829.	26.	0.	0.	0.	1.					
2830.	28.	0.	0.	0.	0.					
2831.	30.	0.	0.	0.	0.					
2832.	32.	0.	0.	0.	0.					
2833.	34.	0.	0.	0.	0.					
2834.	36.	0.	0.	0.	0.					
2835.	38.	0.	0.	0.	0.					
2836.	40.	0.	0.	0.	0.					
2837.	45.	0.	0.	0.	0.					
2838.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
2839.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
2840.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT POT	REHAB COST (\$)	PREV MAINT COST (\$)
2853.				
2854.				
2855.				
2856.	1	828892.00	1.89 6.80	481781.00 70.00
2857.	2	922264.00	1.92 6.80	541048.00 76.00
2858.	3	1027753.00	1.93 6.80	606454.00 83.00
2859.	4	1142558.00	1.93 6.80	679581.00 90.00
2860.	5	1263149.00	1.94 6.80	761462.00 99.00
2861.	6	1388298.00	1.94 6.80	853192.00 107.00
2862.	7	1519128.00	1.95 6.80	955977.00 117.00
2863.	8	1658218.00	1.95 6.80	1071170.00 128.00
2864.	9	1808808.00	1.96 6.80	1200278.00 139.00
2865.	10	1974508.00	1.96 6.80	1344983.00 152.00
2866.	11	2158963.00	1.97 0.00	2158963.00 165.00

2867.	12	2364914.00	1.93	0.00	275905.00	180.00
2868.	13	2593879.00	1.91	0.00	305377.00	196.00
2869.	14	2846991.00	1.89	0.00	338828.00	214.00
2870.	15	3125683.00	1.87	0.00	376477.00	233.00
2871.	16	3431826.00	1.86	0.00	418731.00	254.00
2872.	17	3767517.00	1.85	0.00	466082.00	277.00
2873.	18	4134768.00	1.84	0.00	519106.00	302.00

2874.						
2875.						
2876.	TOTAL		34.48	68.00		
2877.	PRESENT COSTS	37958064.00			11448255.00	2882.00
2878.	TOTAL LANE MILES		102.48			

2882.	-----																	
2883.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00										
2884.	FLEXIBLE - FM - HOTMIX - RURAL - HIGH TRAFFIC																	
2885.	15	2	1	1	2	6	1.00	6.00	1	4	10	10	1245.00					
2886.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2887.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2888.	ACP	4.00	0.000	AGB	12.00	0.000	LTS	0.00	0.000	0.00	0.000	0.00	0.000					
2889.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2890.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.0	15.0	10.0	0.0	3.0	3.0	8.0	12.0	3.0	
2891.	5.0	10.0	30.0	16.0	80.0	15.0	11.0	21.0	22.0	1.0	2.0	0.0	0.0	5.0	14.0			
2892.	TRUCK TYPE	4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
2893.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3										
2894.	3-S1-2	2-S2-2																
2895.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0										
2896.	4 1 0 0	4 1 0 0																
2897.	0	3.16	0.43	0.15	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
2898.	LOAD LIMITS	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
2899.	80.00	20.00	34.00	56.00														
2900.	120.00	22.40	36.00	56.00														
2901.	13.	13.	12.	8.														
2902.	16.	16.	16.	16.														
2903.	SINGLE AXLES	11	0	3.00	0.00	0.00	0.00	0.00										
2904.	3.	1.	3.	11.	2.													
2905.	7.	428.	212.	1284.	162.													
2906.	8.	172.	42.	1525.	66.													
2907.	12.	547.	93.	3235.	241.													
2908.	16.	296.	74.	2765.	236.													
2909.	18.	123.	24.	2294.	65.													
2910.	19.	33.	9.	703.	32.													
2911.	20.	19.	5.	288.	19.													
2912.	22.	22.	2.	135.	12.													
2913.	24.	9.	0.	22.	1.													
2914.	26.	2.	0.	5.	0.													
2915.	TANDEM AXLES	15	0	6.00	0.00	0.00	0.00	0.00	0.00									
2916.	6.	0.	203.	3577.	0													
2917.	12	0.	164.	5035.	1.													
2918.	18.	0.	82.	7739.	1.													
2919.	24.	0.	7.	2095.	0.													
2920.	30.	0.	0.	2140.	0.													
2921.	32.	0.	0.	1263.	0.													
2922.	33.	0.	0.	690.	0.													
2923.	34.	0.	0.	492.	0.													
2924.	36.	0.	0.	649.	0.													
2925.	38.	0.	0.	232.	0.													
2926.	40	0.	0.	98.	0.													
2927.	42	0.	0.	19.	0.													

2928.		44.	0.	0.	10.	0.				
2929.		46.	0.	0.	1.	0.				
2930.		50.	0.	0.	2.	0.				
2931.	GVW			28	0	10.00	0.00	0.00	0.00	0.00
2932.		10.	205.	1.	0.	0.				
2933.		14.	472.	7.	1.	0.				
2934.		20.	551.	145.	31.	1.				
2935.		22.	103.	70.	38.	0.				
2936.		24.	127.	36.	54.	1.				
2937.		26.	106.	25.	78.	3.				
2938.		28.	51.	21.	191.	1.				
2939.		30.	23.	15.	369.	1.				
2940.		32.	10.	23.	656.	6.				
2941.		34.	4.	18.	828.	7.				
2942.		36.	0.	15.	821.	5.				
2943.		38.	0.	15.	609.	10.				
2944.		40.	0.	20.	408.	15.				
2945.		45.	0.	28.	779.	20.				
2946.		50.	0.	14.	681.	19.				
2947.		55.	0.	7.	597.	22.				
2948.		60.	0.	0.	614.	20.				
2949.		65.	0.	0.	663.	21.				
2950.		70.	0.	0.	1060.	18.				
2951.		72.	0.	0.	578.	7.				
2952.		75.	0.	0.	1047.	12.				
2953.		80.	0.	0.	1367.	15.				
2954.		85.	0.	0.	468.	5.				
2955.		90.	0.	0.	110.	1.				
2956.		95.	0.	0.	21.	0.				
2957.		100.	0.	0.	8.	0.				
2958.		105.	0.	0.	4.	0.				
2959.		110.	0.	0.	6.	0.				
2960.	EMPTY			14	0	10.00	0.00	0.00	0.00	0.00
2961.		10.	165.	1.	0.	0.				
2962.		14.	0.	7.	1.	0.				
2963.		20.	0.	61.	31.	1.				
2964.		22.	0.	0.	0.	0.				
2965.		24.	0.	0.	0.	1.				
2966.		26.	0.	0.	0.	1.				
2967.		28.	0.	0.	0.	0.				
2968.		30.	0.	0.	0.	0.				
2969.		32.	0.	0.	0.	0.				
2970.		34.	0.	0.	0.	0.				
2971.		36.	0.	0.	0.	0.				
2972.		38.	0.	0.	0.	0.				
2973.		40.	0.	0.	0.	0.				
2974.		45.	0.	0.	0.	0.				
2975.	PERFORMANCE			0	0	0.00	3.05	4.70	0.00	0.00
2976.	OVERLAY			0	0	95.00	4.75	0.25	0.00	0.00
2977.	EXECUTE			0	0	0.00	0.00	0.00	0.00	0.00

2978.
 2979.
 2980.
 2981.
 2982.
 2983. DISTRICT: 15.
 2984. PRESENT LIMITS
 2985.
 2986. FLEXIBLE - FM - HOTMIX - RURAL - HIGH TRAFFIC
 2987.
 2988.

3050.		24.	5.	2.	15.	0.					
3051.		26.	3.	0.	2.	0.					
3052.	TANDEM	AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00
3053.		6.	0.	91.	1484.	0.					
3054.		12.	0.	60.	2174.	0.					
3055.		18.	0.	29.	2225.	0.					
3056.		24.	0.	2.	849.	0.					
3057.		30.	0.	0.	806.	0.					
3058.		32.	0.	0.	362.	0.					
3059.		33.	0.	0.	174.	0.					
3060.		34.	0.	0.	137.	0.					
3061.		36.	0.	0.	154.	0.					
3062.		38.	0.	0.	62.	0.					
3063.		40.	0.	0.	21.	0.					
3064.		42.	0.	0.	7.	0.					
3065.		44.	0.	0.	2.	0.					
3066.		46.	0.	0.	1.	0.					
3067.		50.	0.	0.	1.	0.					
3068.	GVW			28	0	10.00	0.00	0.00	0.00	0.00	0.00
3069.		10.	90.	2.	0.	0.					
3070.		14.	167.	14.	2.	0.					
3071.		20.	188.	72.	26.	0.					
3072.		22.	31.	12.	27.	0.					
3073.		24.	20.	14.	59.	1.					
3074.		26.	26.	10.	110.	1.					
3075.		28.	14.	7.	193.	1.					
3076.		30.	9.	3.	277.	0.					
3077.		32.	5.	10.	271.	4.					
3078.		34.	2.	4.	268.	3.					
3079.		36.	1.	6.	257.	1.					
3080.		38.	1.	6.	176.	0.					
3081.		40.	0.	3.	139.	5.					
3082.		45.	0.	15.	206.	6.					
3083.		50.	0.	4.	192.	6.					
3084.		55.	0.	1.	189.	4.					
3085.		60.	0.	0.	202.	5.					
3086.		65.	0.	0.	287.	3.					
3087.		70.	0.	0.	359.	6.					
3088.		72.	0.	0.	150.	0.					
3089.		75.	0.	0.	256.	3.					
3090.		80.	0.	0.	399.	1.					
3091.		85.	0.	0.	149.	0.					
3092.		90.	0.	0.	48.	0.					
3093.		95.	0.	0.	9.	0.					
3094.		100.	0.	0.	3.	0.					
3095.		105.	0.	0.	0.	0.					
3096.		110.	0.	0.	1.	0.					
3097.	EMPTY			14	0	10.00	0.00	0.00	0.00	0.00	0.00
3098.		10.	79.	2.	0.	0.					
3099.		14.	0.	14.	2.	0.					
3100.		20.	0.	34.	26.	0.					
3101.		22.	0.	0.	0.	0.					
3102.		24.	0.	0.	0.	1.					
3103.		26.	0.	0.	0.	1.					
3104.		28.	0.	0.	0.	0.					
3105.		30.	0.	0.	0.	0.					
3106.		32.	0.	0.	0.	0.					
3107.		34.	0.	0.	0.	0.					
3108.		36.	0.	0.	0.	0.					
3109.		38.	0.	0.	0.	0.					
3110.		40.	0.	0.	0.	0.					

3172.	LOAD LIMITS		0	0	0.00	0.00	0.00	0.00	0.00
3173.		80.00	20.00	34.00	56.00				
3174.		120.00	22.40	36.00	56.00				
3175.		13.	13.	12.	8.				
3176.		16.	16.	16.	16.				
3177.	SINGLE AXLES			11	0	3.00	0.00	0.00	0.00
3178.		3.	0.	4.	9.	6.			
3179.		7.	169.	91.	847.	56.			
3180.		8.	59.	16.	513.	15.			
3181.		12.	177.	30.	976.	52.			
3182.		16.	89.	29.	984.	43.			
3183.		18.	21.	7.	603.	19.			
3184.		19.	15.	1.	216.	4.			
3185.		20.	10.	2.	109.	1.			
3186.		22.	6.	2.	72.	4.			
3187.		24.	5.	2.	15.	0.			
3188.		26.	3.	0.	2.	0.			
3189.	TANDEM AXLES			15	0	6.00	0.00	0.00	0.00
3190.		6.	0.	91.	1484.	0.			
3191.		12.	0.	60.	2174.	0.			
3192.		18.	0.	29.	2225.	0.			
3193.		24.	0.	2.	849.	0.			
3194.		30.	0.	0.	806.	0.			
3195.		32.	0.	0.	362.	0.			
3196.		33.	0.	0.	174.	0.			
3197.		34.	0.	0.	137.	0.			
3198.		36.	0.	0.	154.	0.			
3199.		38.	0.	0.	62.	0.			
3200.		40.	0.	0.	21.	0.			
3201.		42.	0.	0.	7.	0.			
3202.		44.	0.	0.	2.	0.			
3203.		46.	0.	0.	1.	0.			
3204.		50.	0.	0.	1.	0.			
3205.	GVW			28	0	10.00	0.00	0.00	0.00
3206.		10.	90.	2.	0.	0.			
3207.		14.	167.	14.	2.	0.			
3208.		20.	188.	72.	26.	0.			
3209.		22.	31.	12.	27.	0.			
3210.		24.	20.	14.	59.	1.			
3211.		26.	26.	10.	110.	1.			
3212.		28.	14.	7.	193.	1.			
3213.		30.	9.	3.	277.	0.			
3214.		32.	5.	10.	271.	4.			
3215.		34.	2.	4.	268.	3.			
3216.		36.	1.	6.	257.	1.			
3217.		38.	1.	6.	176.	0.			
3218.		40.	0.	3.	139.	5.			
3219.		45.	0.	15.	206.	6.			
3220.		50.	0.	4.	192.	6.			
3221.		55.	0.	1.	189.	4.			
3222.		60.	0.	0.	202.	5.			
3223.		65.	0.	0.	287.	3.			
3224.		70.	0.	0.	359.	6.			
3225.		72.	0.	0.	150.	0.			
3226.		75.	0.	0.	256.	3.			
3227.		80.	0.	0.	399.	1.			
3228.		85.	0.	0.	149.	0.			
3229.		90.	0.	0.	48.	0.			
3230.		95.	0.	0.	9.	0.			
3231.		100.	0.	0.	3.	0.			

3233.									
3234.	EMPTY	110.	0.	0.	1.	0.			
3235.		10.	79.	2.	0.	0.	0.00	0.00	0.00
3236.		14.	0.	14.	2.	0.			
3237.		20.	0.	34.	26.	0.			
3238.		22.	0.	0.	0.	0.			
3239.		24.	0.	0.	0.	1.			
3240.		26.	0.	0.	0.	1.			
3241.		28.	0.	0.	0.	0.			
3242.		30.	0.	0.	0.	0.			
3243.		32.	0.	0.	0.	0.			
3244.		34.	0.	0.	0.	0.			
3245.		36.	0.	0.	0.	0.			
3246.		38.	0.	0.	0.	0.			
3247.		40.	0.	0.	0.	0.			
3248.		45.	0.	0.	0.	0.			
3249.	PERFORMANCE			0	0	0.00	3.05	4.70	0.00
3250.	OVERLAY			0	0	95.00	4.75	0.25	0.00
3251.	EXECUTE			0	0	0.00	0.00	0.00	0.00

DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
3264.						
3265.						
3266.						
3267.	1	181198.00	2.82	1.40	199262.00	1225.00
3268.	2	199140.00	2.95	1.40	229027.00	1336.00
3269.	3	219218.00	3.01	1.40	259491.00	1456.00
3270.	4	240780.00	3.05	1.40	293174.00	1587.00
3271.	5	263050.00	3.09	1.40	330818.00	1730.00
3272.	6	285746.00	3.12	1.40	373048.00	1885.00
3273.	7	309082.00	3.16	1.40	420514.00	2055.00
3274.	8	333625.00	3.19	1.40	473913.00	2240.00
3275.	9	360169.00	3.22	1.40	534029.00	2441.00
3276.	10	389708.00	3.25	1.40	601729.00	2661.00
3277.	11	423287.00	3.28	0.00	419537.00	2901.00
3278.	12	461595.00	3.25	0.00	465354.00	3162.00
3279.	13	504824.00	3.24	0.00	520044.00	3446.00
3280.	14	552982.00	3.24	0.00	582260.00	3756.00
3281.	15	606180.00	3.25	0.00	652624.00	4094.00
3282.	16	664672.00	3.25	0.00	732044.00	4463.00
3283.	17	728801.00	3.26	0.00	821602.00	4865.00
3284.	18	798923.00	3.27	0.00	922550.00	5302.00
3285.						
3286.						
3287.	TOTAL		56.89	14.00		
3288.	PRESENT COSTS	7522980.00			8831020.00	50605.00
3289.	TOTAL LANE MILES		70.89			

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3355.	40.	0.	20.	408.	15.					
3356.	45.	0.	28.	779.	20.					
3357.	50.	0.	14.	681.	19.					
3358.	55.	0.	7.	597.	22.					
3359.	60.	0.	0.	614.	20.					
3360.	65.	0.	0.	663.	21.					
3361.	70.	0.	0.	1060.	18.					
3362.	72.	0.	0.	578.	7.					
3363.	75.	0.	0.	1047.	12.					
3364.	80.	0.	0.	1367.	15.					
3365.	85.	0.	0.	468.	5.					
3366.	90.	0.	0.	110.	1.					
3367.	95.	0.	0.	21.	0.					
3368.	100.	0.	0.	8.	0.					
3369.	105.	0.	0.	4.	0.					
3370.	110.	0.	0.	6.	0.					
3371.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
3372.	10.	165.	1.	0.	0.					
3373.	14.	0.	7.	1.	0.					
3374.	20.	0.	61.	31.	1.					
3375.	22.	0.	0.	0.	0.					
3376.	24.	0.	0.	0.	1.					
3377.	26.	0.	0.	0.	1.					
3378.	28.	0.	0.	0.	0.					
3379.	30.	0.	0.	0.	0.					
3380.	32.	0.	0.	0.	0.					
3381.	34.	0.	0.	0.	0.					
3382.	36.	0.	0.	0.	0.					
3383.	38.	0.	0.	0.	0.					
3384.	40.	0.	0.	0.	0.					
3385.	45.	0.	0.	0.	0.					
3386.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
3387.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
3388.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 15.
 PRESENT LIMITS
 FLEXIBLE - FM - OVRLAY - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
3401.						
3402.						
3403.						
3404.	1	2831732.00	0.00	145.20	8630906.00	24.00
3405.	2	3197340.00	0.00	145.20	9666619.00	26.00
3406.	3	3605519.00	0.00	145.20	10826617.00	28.00
3407.	4	4047887.00	0.00	145.20	12125818.00	31.00
3408.	5	4515694.00	0.00	145.20	13580923.00	34.00
3409.	6	5001189.00	0.00	145.20	15210640.00	37.00
3410.	7	5506510.00	0.01	145.20	17035904.00	40.00
3411.	8	6047200.00	0.01	145.20	19080240.00	43.00
3412.	9	6649917.00	0.01	145.20	21369888.00	47.00
3413.	10	7352155.00	0.01	145.20	23934304.00	52.00
3414.	11	8195929.00	0.01	0.00	763.00	56.00
3415.	12	9209433.00	0.01	0.00	893.00	61.00

3416.	13	10399892.00	0.01	0.00	1044.00	67.00
3417.	14	11766768.00	0.01	0.00	1203.00	73.00
3418.	15	13313452.00	0.01	0.00	1401.00	79.00
3419.	16	15048643.00	0.01	0.00	1610.00	87.00
3420.	17	16982288.00	0.01	0.00	1870.00	94.00
3421.	18	19118544.00	0.01	0.00	2143.00	103.00

3422.						
3423.						
3424.	TOTAL		0.10	1452.00		
3425.	PRESENT COSTS	152790000.00			151472672.00	982.00
3426.	TOTAL LANE MILES			1452.10		

3430.	-----															
3431.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00								
3432.	FLEXIBLE - FM - OVRLAY - RURAL - HIGH TRAFFIC															
3433.	15 2 3 1 2 6 1.00 6.00 1 4 10 10 1113.00															
3434.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
3435.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
3436.	ACP 3.00 0.000 ATB 4.00 0.000 AGB 12.00 0.000 LTS 0.00 0.000															
3437.	AGE DISTRIBUTION 30 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00															
3438.	0.0 0.0 0.0 0.0 0.0 0.0 9.0 21.0 5.0 27.0 17.0 8.0 9.0 2.0 8.0 12.0															
3439.	14.0 9.0 17.0 15.0 11.0 14.0 18.0 14.0 15.0 9.0 16.0 25.0 18.0 4.0 135.0															
3440.	TRUCK TYPE 4 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00															
3441.	2D 3A 3-S2 2-S1-2 2-S1 2-S2 3-S1 3-S3															
3442.	3-S1-2 2-S2-2															
3443.	2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0 2010 0 0 1020 0 0															
3444.	4 1 0 0 4 1 0 0															
3445.	0 3.16 0.43 0.15 1.08 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00															
3446.	LOAD LIMITS 0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00															
3447.	80.00 20.00 34.00 56.00															
3448.	120.00 22.40 36.00 56.00															
3449.	13. 13. 12. 8.															
3450.	16. 16. 16. 16.															
3451.	SINGLE AXLES 11 0 3.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00															
3452.	3. 1. 3. 11. 2.															
3453.	7. 428. 212. 1284. 162.															
3454.	8. 172. 42. 1525. 66.															
3455.	12. 547. 93. 3235. 241.															
3456.	16. 296. 74. 2765. 236.															
3457.	18. 123. 24. 2294. 65.															
3458.	19. 33. 9. 703. 32.															
3459.	20. 19. 5. 288. 19.															
3460.	22. 22. 2. 135. 12.															
3461.	24. 9. 0. 22. 1.															
3462.	26. 2. 0. 5. 0.															
3463.	TANDEM AXLES 15 0 6.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00															
3464.	6. 0. 203. 3577. 0.															
3465.	12. 0. 164. 5035. 1.															
3466.	18. 0. 82. 7739. 1.															
3467.	24. 0. 7. 2095. 0.															
3468.	30. 0. 0. 2140. 0.															
3469.	32. 0. 0. 1263. 0.															
3470.	33. 0. 0. 690. 0.															
3471.	34. 0. 0. 492. 0.															
3472.	36. 0. 0. 649. 0.															
3473.	38. 0. 0. 232. 0.															
3474.	40. 0. 0. 88. 0.															
3475.	42. 0. 0. 19. 0.															
3476.	44. 0. 0. 10. 0.															

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3477.		46.	0.	0.	1.	0.					
3478.		50.	0.	0.	2.	0.					
3479.	GVW			28	0	10.00	0.00	0.00	0.00	0.00	
3480.		10.	205.	1.	0.	0.					
3481.		14.	472.	7.	1.	0.					
3482.		20.	551.	145.	31.	1.					
3483.		22.	103.	70.	38.	0.					
3484.		24.	127.	36.	54.	1.					
3485.		26.	106.	25.	78.	3.					
3486.		28.	51.	21.	191.	1.					
3487.		30.	23.	15.	369.	1.					
3488.		32.	10.	23.	656.	6.					
3489.		34.	4.	18.	828.	7.					
3490.		36.	0.	15.	821.	5.					
3491.		38.	0.	15.	609.	10.					
3492.		40.	0.	20.	408.	15.					
3493.		45.	0.	28.	779.	20.					
3494.		50.	0.	14.	681.	19.					
3495.		55.	0.	7.	597.	22.					
3496.		60.	0.	0.	614.	20.					
3497.		65.	0.	0.	663.	21.					
3498.		70.	0.	0.	1060.	18.					
3499.		72.	0.	0.	578.	7.					
3500.		75.	0.	0.	1047.	12.					
3501.		80.	0.	0.	1367.	15.					
3502.		85.	0.	0.	468.	5.					
3503.		90.	0.	0.	110.	1.					
3504.		95.	0.	0.	21.	0.					
3505.		100.	0.	0.	8.	0.					
3506.		105.	0.	0.	4.	0.					
3507.		110.	0.	0.	6.	0.					
3508.	EMPTY			14	0	10.00	0.00	0.00	0.00	0.00	
3509.		10.	165.	1.	0.	0.					
3510.		14.	0.	7.	1.	0.					
3511.		20.	0.	61.	31.	1.					
3512.		22.	0.	0.	0.	0.					
3513.		24.	0.	0.	0.	1.					
3514.		26.	0.	0.	0.	1.					
3515.		28.	0.	0.	0.	0.					
3516.		30.	0.	0.	0.	0.					
3517.		32.	0.	0.	0.	0.					
3518.		34.	0.	0.	0.	0.					
3519.		36.	0.	0.	0.	0.					
3520.		38.	0.	0.	0.	0.					
3521.		40.	0.	0.	0.	0.					
3522.		45.	0.	0.	0.	0.					
3523.	PERFORMANCE			0	0	0.00	3.05	4.70	0.00	0.00	
3524.	OVERLAY			0	0	95.00	4.75	0.25	0.00	0.00	
3525.	EXECUTE			0	0	0.00	0.00	0.00	0.00	0.00	

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DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - RURAL - HIGH TRAFFIC

3599.		26.	3.	0.	2.	0.					
3600.	TANDEM	AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00
3601.		6.	0.	91.	1484.	0.					
3602.		12.	0.	60.	2174.	0.					
3603.		18.	0.	29.	2225.	0.					
3604.		24.	0.	2.	849.	0.					
3605.		30.	0.	0.	806.	0.					
3606.		32.	0.	0.	362.	0.					
3607.		33.	0.	0.	174.	0.					
3608.		34.	0.	0.	137.	0.					
3609.		36.	0.	0.	154.	0.					
3610.		38.	0.	0.	62.	0.					
3611.		40.	0.	0.	21.	0.					
3612.		42.	0.	0.	7.	0.					
3613.		44.	0.	0.	2.	0.					
3614.		46.	0.	0.	1.	0.					
3615.		50.	0.	0.	1.	0.					
3616.	GVW			28	0	10.00	0.00	0.00	0.00	0.00	0.00
3617.		10.	90.	2.	0.	0.					
3618.		14.	167.	14.	2.	0.					
3619.		20.	188.	72.	26.	0.					
3620.		22.	31.	12.	27.	0.					
3621.		24.	20.	14.	59.	1.					
3622.		26.	26.	10.	110.	1.					
3623.		28.	14.	7.	193.	1.					
3624.		30.	9.	3.	277.	0.					
3625.		32.	5.	10.	271.	4.					
3626.		34.	2.	4.	268.	3.					
3627.		36.	1.	6.	257.	1.					
3628.		38.	1.	6.	176.	0.					
3629.		40.	0.	3.	139.	5.					
3630.		45.	0.	15.	206.	6.					
3631.		50.	0.	4.	192.	6.					
3632.		55.	0.	1.	189.	4.					
3633.		60.	0.	0.	202.	5.					
3634.		65.	0.	0.	287.	3.					
3635.		70.	0.	0.	359.	6.					
3636.		72.	0.	0.	150.	0.					
3637.		75.	0.	0.	256.	3.					
3638.		80.	0.	0.	399.	1.					
3639.		85.	0.	0.	149.	0.					
3640.		90.	0.	0.	48.	0.					
3641.		95.	0.	0.	9.	0.					
3642.		100.	0.	0.	3.	0.					
3643.		105.	0.	0.	0.	0.					
3644.		110.	0.	0.	1.	0.					
3645.	EMPTY			14	0	10.00	0.00	0.00	0.00	0.00	0.00
3646.		10.	79.	2.	0.	0.					
3647.		14.	0.	14.	2.	0.					
3648.		20.	0.	34.	26.	0.					
3649.		22.	0.	0.	0.	0.					
3650.		24.	0.	0.	0.	1.					
3651.		26.	0.	0.	0.	1.					
3652.		28.	0.	0.	0.	0.					
3653.		30.	0.	0.	0.	0.					
3654.		32.	0.	0.	0.	0.					
3655.		34.	0.	0.	0.	0.					
3656.		36.	0.	0.	0.	0.					
3657.		38.	0.	0.	0.	0.					
3658.		40.	0.	0.	0.	0.					
3659.		45.	0.	0.	0.	0.					

3721.	80.00	20.00	34.00	56.00					
3722.	120.00	22.40	36.00	56.00					
3723.	13.	13.	12.	8.					
3724.	16.	16.	16.	16.					
3725.	SINGLE AXLES		11	0	3.00	0.00	0.00	0.00	0.00
3726.	3.	0.	4.	9.	6.				
3727.	7.	169.	91.	847.	56.				
3728.	8.	59.	16.	513.	15.				
3729.	12.	177.	30.	976.	52.				
3730.	16.	89.	29.	984.	43.				
3731.	18.	21.	7.	603.	19.				
3732.	19.	15.	1.	216.	4.				
3733.	20.	10.	2.	109.	1.				
3734.	22.	6.	2.	72.	4.				
3735.	24.	5.	2.	15.	0.				
3736.	26.	3.	0.	2.	0.				
3737.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00
3738.	6.	0.	91.	1484.	0.				
3739.	12.	0.	60.	2174.	0.				
3740.	18.	0.	29.	2225.	0.				
3741.	24.	0.	2.	849.	0.				
3742.	30.	0.	0.	806.	0.				
3743.	32.	0.	0.	362.	0.				
3744.	33.	0.	0.	174.	0.				
3745.	34.	0.	0.	137.	0.				
3746.	36.	0.	0.	154.	0.				
3747.	38.	0.	0.	62.	0.				
3748.	40.	0.	0.	21.	0.				
3749.	42.	0.	0.	7.	0.				
3750.	44.	0.	0.	2.	0.				
3751.	46.	0.	0.	1.	0.				
3752.	50.	0.	0.	1.	0.				
3753.	GVW		28	0	10.00	0.00	0.00	0.00	0.00
3754.	10.	90.	2.	0.	0.				
3755.	14.	167.	14.	2.	0.				
3756.	20.	188.	72.	26.	0.				
3757.	22.	31.	12.	27.	0.				
3758.	24.	20.	14.	59.	1.				
3759.	26.	26.	10.	110.	1.				
3760.	28.	14.	7.	193.	1.				
3761.	30.	9.	3.	277.	0.				
3762.	32.	5.	10.	271.	4.				
3763.	34.	2.	4.	268.	3.				
3764.	36.	1.	6.	257.	1.				
3765.	38.	1.	6.	176.	0.				
3766.	40.	0.	3.	139.	5.				
3767.	45.	0.	15.	206.	6.				
3768.	50.	0.	4.	192.	6.				
3769.	55.	0.	1.	189.	4.				
3770.	60.	0.	0.	202.	5.				
3771.	65.	0.	0.	287.	3.				
3772.	70.	0.	0.	359.	6.				
3773.	72.	0.	0.	150.	0.				
3774.	75.	0.	0.	256.	3.				
3775.	80.	0.	0.	399.	1.				
3776.	85.	0.	0.	149.	0.				
3777.	90.	0.	0.	48.	0.				
3778.	95.	0.	0.	9.	0.				
3779.	100.	0.	0.	3.	0.				
3780.	105.	0.	0.	10.	0.				
3781.	110.	0.	0.	1.	0.				

3782.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
3783.	10.	79.	2.	0.	0.				
3784.	14.	0.	14.	2.	0.				
3785.	20.	0.	34.	26.	0.				
3786.	22.	0.	0.	0.	0.				
3787.	24.	0.	0.	0.	1.				
3788.	26.	0.	0.	0.	1.				
3789.	28.	0.	0.	0.	0.				
3790.	30.	0.	0.	0.	0.				
3791.	32.	0.	0.	0.	0.				
3792.	34.	0.	0.	0.	0.				
3793.	36.	0.	0.	0.	0.				
3794.	38.	0.	0.	0.	0.				
3795.	40.	0.	0.	0.	0.				
3796.	45.	0.	0.	0.	0.				
3797.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
3798.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
3799.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

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DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	57376.00	0.04	3.00	180100.00	527.00
2	64670.00	0.05	3.00	201801.00	574.00
3	72870.00	0.05	3.00	226121.00	626.00
4	81758.00	0.05	3.00	253374.00	682.00
5	91112.00	0.05	3.00	283917.00	743.00
6	100775.00	0.05	3.00	318146.00	810.00
7	110822.00	0.06	3.00	356508.00	883.00
8	121582.00	0.06	3.00	399503.00	963.00
9	133603.00	0.06	3.00	447689.00	1049.00
10	147653.00	0.06	3.00	501697.00	1144.00
11	164599.00	0.07	0.00	8392.00	1247.00
12	185020.00	0.07	0.00	9771.00	1359.00
13	209055.00	0.07	0.00	11356.00	1481.00
14	236684.00	0.07	0.00	13173.00	1614.00
15	267966.00	0.08	0.00	15254.00	1760.00
16	303075.00	0.08	0.00	17634.00	1918.00
17	342205.00	0.08	0.00	20351.00	2090.00
18	385435.00	0.08	0.00	23452.00	2279.00
TOTAL PRESENT COSTS	3076260.00	1.12	30.00	3288239.00	21749.00
TOTAL LANE MILES		31.12			
FLEXIBLE	0 0 12.00	0.00	0.00	3.00	3.00

3904.	45.	0.	28.	779.	20.					
3905.	50.	0.	14.	681.	19.					
3906.	55.	0.	7.	597.	22.					
3907.	60.	0.	0.	614.	20.					
3908.	65.	0.	0.	663.	21.					
3909.	70.	0.	0.	1060.	18.					
3910.	72.	0.	0.	578.	7.					
3911.	75.	0.	0.	1047.	12.					
3912.	80.	0.	0.	1367.	15.					
3913.	85.	0.	0.	468.	5.					
3914.	90.	0.	0.	110.	1.					
3915.	95.	0.	0.	21.	0.					
3916.	100.	0.	0.	8.	0.					
3917.	105.	0.	0.	4.	0.					
3918.	110.	0.	0.	6.	0.					
3919.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
3920.	10.	165.	1.	0.	0.					
3921.	14.	0.	7.	1.	0.					
3922.	20.	0.	61.	31.	1.					
3923.	22.	0.	0.	0.	0.					
3924.	24.	0.	0.	0.	1.					
3925.	26.	0.	0.	0.	1.					
3926.	28.	0.	0.	0.	0.					
3927.	30.	0.	0.	0.	0.					
3928.	32.	0.	0.	0.	0.					
3929.	34.	0.	0.	0.	0.					
3930.	36.	0.	0.	0.	0.					
3931.	38.	0.	0.	0.	0.					
3932.	40.	0.	0.	0.	0.					
3933.	45.	0.	0.	0.	0.					
3934.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
3935.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
3936.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - US/STAT - HOTMIX - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
3951.						
3952.	1	687578.00	3.39	21.10	1393752.00	206.00
3953.	2	784326.00	3.60	21.10	1570658.00	225.00
3954.	3	888758.00	3.71	21.10	1764573.00	245.00
3955.	4	1000470.00	3.79	21.10	1981282.00	267.00
3956.	5	1117542.00	3.87	21.10	2224020.00	291.00
3957.	6	1237375.00	3.94	21.10	2496121.00	317.00
3958.	7	1359754.00	4.01	21.10	2801260.00	346.00
3959.	8	1487792.00	4.08	21.10	3143512.00	377.00
3960.	9	1626560.00	4.14	21.10	3527434.00	411.00
3961.	10	1782284.00	4.21	21.10	3958130.00	448.00
3962.	11	1961412.00	4.27	0.00	546002.00	488.00
3963.	12	2168334.00	4.09	0.00	586015.00	532.00
3964.	13	2404574.00	4.01	0.00	643172.00	580.00

4026.		50.	0.	0.	2.	0.					
4027.	GVW			28	0	10.00	0.00	0.00	0.00	0.00	
4028.		10.	205.	1.	0.	0.					
4029.		14.	472.	7.	1.	0.					
4030.		20.	551.	145.	31.	1.					
4031.		22.	103.	70.	38.	0.					
4032.		24.	127.	36.	54.	1.					
4033.		26.	106.	25.	78.	3.					
4034.		28.	51.	21.	191.	1.					
4035.		30.	23.	15.	369.	1.					
4036.		32.	10.	23.	656.	6.					
4037.		34.	4.	18.	828.	7.					
4038.		36.	0.	15.	821.	5.					
4039.		38.	0.	15.	609.	10.					
4040.		40.	0.	20.	408.	15.					
4041.		45.	0.	28.	779.	20.					
4042.		50.	0.	14.	681.	19.					
4043.		55.	0.	7.	597.	22.					
4044.		60.	0.	0.	614.	20.					
4045.		65.	0.	0.	663.	21.					
4046.		70.	0.	0.	1060.	18.					
4047.		72.	0.	0.	578.	7.					
4048.		75.	0.	0.	1047.	12.					
4049.		80.	0.	0.	1367.	15.					
4050.		85.	0.	0.	468.	5.					
4051.		90.	0.	0.	110.	1.					
4052.		95.	0.	0.	21.	0.					
4053.		100.	0.	0.	8.	0.					
4054.		105.	0.	0.	4.	0.					
4055.		110.	0.	0.	6.	0.					
4056.	EMPTY			14	0	10.00	0.00	0.00	0.00	0.00	
4057.		10.	165.	1.	0.	0					
4058.		14.	0.	7.	1.	0.					
4059.		20.	0.	61.	31.	1.					
4060.		22.	0.	0.	0.	0.					
4061.		24.	0.	0.	0.	1.					
4062.		26.	0.	0.	0.	1.					
4063.		28.	0.	0.	0.	0.					
4064.		30.	0.	0.	0.	0.					
4065.		32.	0.	0.	0.	0.					
4066.		34.	0.	0.	0.	0.					
4067.		36.	0.	0.	0.	0.					
4068.		38.	0.	0.	0.	0.					
4069.		40.	0.	0.	0.	0.					
4070.		45.	0.	0.	0.	0.					
4071.	PERFORMANCE			0	0	0.00	3.05	4.70	0.00	0.00	
4072.	OVERLAY			0	0	95.00	4.75	0.25	0.00	0.00	
4073.	EXECUTE			0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - US/STAT - HOTMIX - RURAL - HIGH TRAFFIC

4085. YFAD ROUT MAINT REHAB MILES REHAB PREV MAINT

4148.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00
4149.		6.	0.	91.	1484.	0.			
4150.		12.	0.	60.	2174.	0.			
4151.		18.	0.	29.	2225.	0.			
4152.		24.	0.	2.	849.	0.			
4153.		30.	0.	0.	806.	0.			
4154.		32.	0.	0.	362.	0.			
4155.		33.	0.	0.	174.	0.			
4156.		34.	0.	0.	137.	0.			
4157.		36.	0.	0.	154.	0.			
4158.		38.	0.	0.	62.	0.			
4159.		40.	0.	0.	21.	0.			
4160.		42.	0.	0.	7.	0.			
4161.		44.	0.	0.	2.	0.			
4162.		46.	0.	0.	1.	0.			
4163.		50.	0.	0.	1.	0.			
4164.	GVW			28	0	10.00	0.00	0.00	0.00
4165.		10.	90.	2.	0.	0.			
4166.		14.	167.	14.	2.	0.			
4167.		20.	188.	72.	26.	0.			
4168.		22.	31.	12.	27.	0.			
4169.		24.	20.	14.	59.	1.			
4170.		26.	26.	10.	110.	1.			
4171.		28.	14.	7.	193.	1.			
4172.		30.	9.	3.	277.	0.			
4173.		32.	5.	10.	271.	4.			
4174.		34.	2.	4.	268.	3.			
4175.		36.	1.	6.	257.	1.			
4176.		38.	1.	6.	176.	0.			
4177.		40.	0.	3.	139.	5.			
4178.		45.	0.	15.	206.	6.			
4179.		50.	0.	4.	192.	6.			
4180.		55.	0.	1.	189.	4.			
4181.		60.	0.	0.	202.	5.			
4182.		65.	0.	0.	287.	3.			
4183.		70.	0.	0.	359.	6.			
4184.		72.	0.	0.	150.	0.			
4185.		75.	0.	0.	256.	3.			
4186.		80.	0.	0.	399.	1.			
4187.		85.	0.	0.	149.	0.			
4188.		90.	0.	0.	48.	0.			
4189.		95.	0.	0.	9.	0.			
4190.		100.	0.	0.	3.	0.			
4191.		105.	0.	0.	0.	0.			
4192.		110.	0.	0.	1.	0.			
4193.	EMPTY			14	0	10.00	0.00	0.00	0.00
4194.		10.	79.	2.	0.	0.			
4195.		14.	0.	14.	2.	0.			
4196.		20.	0.	34.	26.	0.			
4197.		22.	0.	0.	0.	0.			
4198.		24.	0.	0.	0.	1.			
4199.		26.	0.	0.	0.	1.			
4200.		28.	0.	0.	0.	0.			
4201.		30.	0.	0.	0.	0.			
4202.		32.	0.	0.	0.	0.			
4203.		34.	0.	0.	0.	0.			
4204.		36.	0.	0.	0.	0.			
4205.		38.	0.	0.	0.	0.			
4206.		40.	0.	0.	0.	0.			
4207.		45.	0.	0.	0.	0.			
4208.	PERFORMANCE			0	0	0.00	3.05	4.70	0.00

4270.	120.00	22.40	36.00	56.00					
4271.	13.	13.	12.	8.					
4272.	16.	16.	16.	16.					
4273.	SINGLE AXLES		11	0	3.00	0.00	0.00	0.00	0.00
4274.	3.	0.	4.	9	6.				
4275.	7.	169.	91.	847.	56.				
4276.	8.	59.	16.	513.	15.				
4277.	12.	177.	30.	976.	52.				
4278.	16.	89.	29.	984.	43.				
4279.	18.	21.	7.	603.	19.				
4280.	19.	15.	1.	216.	4.				
4281.	20.	10.	2.	109.	1.				
4282.	22.	6.	2.	72.	4.				
4283.	24.	5.	2.	15.	0.				
4284.	26.	3.	0.	2.	0.				
4285.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00
4286.	6.	0.	91.	1484.	0.				
4287.	12.	0.	60.	2174.	0.				
4288.	18.	0.	29.	2225.	0.				
4289.	24.	0.	2.	849.	0.				
4290.	30.	0.	0.	806.	0.				
4291.	32.	0.	0.	362.	0.				
4292.	33.	0.	0.	174.	0.				
4293.	34.	0.	0.	137.	0.				
4294.	36.	0.	0.	154.	0.				
4295.	38.	0.	0.	62.	0.				
4296.	40.	0.	0.	21.	0.				
4297.	42.	0.	0.	7.	0.				
4298.	44.	0.	0.	2.	0.				
4299.	46.	0.	0.	1.	0.				
4300.	50.	0.	0.	1.	0.				
4301.	GVW		28	0	10.00	0.00	0.00	0.00	0.00
4302.	10.	90.	2.	0.	0.				
4303.	14.	167.	14.	2.	0.				
4304.	20.	188.	72.	26.	0.				
4305.	22.	31.	12.	27.	0.				
4306.	24.	20.	14.	59.	1.				
4307.	26.	26.	10.	110.	1.				
4308.	28.	14.	7.	193.	1.				
4309.	30.	9.	3.	277.	0.				
4310.	32.	5.	10.	271.	4.				
4311.	34.	2.	4.	268.	3.				
4312.	36.	1.	6.	257.	1.				
4313.	38.	1.	6.	176.	0.				
4314.	40.	0.	3.	139.	5.				
4315.	45.	0.	15.	206.	6.				
4316.	50.	0.	4.	192.	6.				
4317.	55.	0.	1.	189.	4.				
4318.	60.	0.	0.	202.	5.				
4319.	65.	0.	0.	287.	3.				
4320.	70.	0.	0.	359.	6.				
4321.	72.	0.	0.	150.	0.				
4322.	75.	0.	0.	256.	3.				
4323.	80.	0.	0.	399.	1.				
4324.	85.	0.	0.	149.	0.				
4325.	90.	0.	0.	48.	0.				
4326.	95.	0.	0.	9.	0.				
4327.	100.	0.	0.	3.	0.				
4328.	105.	0.	0.	0.	0.				
4329.	110.	0.	0.	1.	0.				
4330.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00

4331.	10.	79.	2.	0.	0.				
4332.	14.	0.	14.	2.	0.				
4333.	20.	0.	34.	26.	0.				
4334.	22.	0.	0.	0.	0.				
4335.	24.	0.	0.	0.	1.				
4336.	26.	0.	0.	0.	1.				
4337.	28.	0.	0.	0.	0.				
4338.	30.	0.	0.	0.	0.				
4339.	32.	0.	0.	0.	0.				
4340.	34.	0.	0.	0.	0.				
4341.	36.	0.	0.	0.	0.				
4342.	38.	0.	0.	0.	0.				
4343.	40.	0.	0.	0.	0.				
4344.	45.	0.	0.	0.	0.				
4345.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
4346.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
4347.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

4348.
4349.
4350.
4351.
4352.

DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - US/STAT - HOTMIX - URBAN - HIGH TRAFFIC

4353.
4354.
4355.

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
4360.						
4361.						
4362.						
4363.	1	500073.00	9.16	15.50	1298042.00	1433.00
4364.	2	565367.00	9.90	15.50	1488221.00	1563.00
4365.	3	634913.00	10.29	15.50	1686803.00	1703.00
4366.	4	708323.00	10.61	15.50	1907388.00	1856.00
4367.	5	784183.00	10.89	15.50	2154437.00	2023.00
4368.	6	860651.00	11.15	15.50	2431935.00	2206.00
4369.	7	937613.00	11.40	15.50	2744052.00	2404.00
4370.	8	1017371.00	11.64	15.50	3095369.00	2620.00
4371.	9	1103758.00	11.88	15.50	3490968.00	2856.00
4372.	10	1201643.00	12.11	15.50	3936556.00	3113.00
4373.	11	1316120.00	12.34	0.00	1577047.00	3394.00
4374.	12	1450488.00	11.95	0.00	1710632.00	3699.00
4375.	13	1605539.00	11.80	0.00	1891443.00	4032.00
4376.	14	1781142.00	11.70	0.00	2101151.00	4395.00
4377.	15	1977605.00	11.64	0.00	2340119.00	4790.00
4378.	16	2195886.00	11.59	0.00	2610713.00	5221.00
4379.	17	2437220.00	11.56	0.00	2916286.00	5691.00
4380.	18	2702535.00	11.54	0.00	3260822.00	6204.00
4381.						
4382.						
4383.	TOTAL		203.15	155.00		
4384.	PRESENT COSTS	23780416.00			42641888.00	59203.00
4385.	TOTAL LANE MILES		358.15			

4386.									
4387.									
4388.									
4389.									
4390.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00	
4391.	FLEXIBLE - US/STAT - OVRLAY - RURAL - LOW TRAFFIC								

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4392.	15	3	3	1	1	6	1.00	6.00	1	4	10	10	477.00						
4393.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4394.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4395.	ACP	2.00	0.000	ATB	2.00	0.000	AGB	8.00	0.000	LTS	0.00	0.000							
4396.	AGE DISTRIBUTION				30	0	0.00		0.00		0.00		0.00	0.00					
4397.		0.0	0.0	0.0	0.0	0.0	0.0	11.0	53.0	24.0	44.0	0.0	34.0	10.0	0.0	8.0	0.0		
4398.		9.0	53.0	16.0	0.0	28.0	0.0	0.0	0.0	1.0	74.0	57.0	30.0	35.0	69.0	75.0	277.0		
4399.	TRUCK TYPE				4	0	0.00		0.00		0.00		0.00						
4400.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3											
4401.	3-S1-2	2-S2-2																	
4402.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0											
4403.	4 1 0 0	4 1 0 0																	
4404.	0	3.38	1.17	0.11	0.19	0.00	0.00	0.00	0.00	0.00	0.00								
4405.	LOAD LIMITS			0	0	0.00	0.00	0.00	0.00	0.00			0.00						
4406.		80.00	20.00	34.00	56.00														
4407.		120.00	22.40	36.00	56.00														
4408.		13.	13.	12.	8.														
4409.		16.	16.	16.	16.														
4410.	SINGLE AXLES			11	0	3.00		0.00		0.00		0.00		0.00					
4411.		3.	1.	3.	11.	2.													
4412.		7.	428.	212.	1284.	162.													
4413.		8.	172.	42.	1525.	66.													
4414.		12.	547.	93.	3235.	241.													
4415.		16.	296.	74.	2765.	236.													
4416.		18.	123.	24.	2294.	65.													
4417.		19.	33.	9.	703.	32.													
4418.		20.	19.	5.	288.	19.													
4419.		22.	22.	2.	135.	12.													
4420.		24.	9.	0.	22.	1.													
4421.		26.	2.	0.	5.	0.													
4422.	TANDEM AXLES			15	0	6.00		0.00		0.00		0.00		0.00					
4423.		6.	0.	203.	3577.	0.													
4424.		12.	0.	164.	5035.	1.													
4425.		18.	0.	82.	7739.	1.													
4426.		24.	0.	7.	2095.	0.													
4427.		30.	0.	0.	2140.	0.													
4428.		32.	0.	0.	1263.	0.													
4429.		33.	0.	0.	690.	0.													
4430.		34.	0.	0.	492.	0.													
4431.		36.	0.	0.	649.	0.													
4432.		38.	0.	0.	232.	0.													
4433.		40.	0.	0.	88.	0.													
4434.		42.	0.	0.	19.	0.													
4435.		44.	0.	0.	10.	0.													
4436.		46.	0.	0.	1.	0.													
4437.		50.	0.	0.	2.	0.													
4438.	GVW			28	0	10.00		0.00		0.00		0.00		0.00					
4439.		10.	205.	1.	0.	0.													
4440.		14.	472.	7.	1.	0.													
4441.		20.	551.	145.	31.	1.													
4442.		22.	103.	70.	38.	0.													
4443.		24.	127.	36.	54.	1.													
4444.		26.	106.	25.	78.	3.													
4445.		28.	51.	21.	191.	1.													
4446.		30.	23.	15.	369.	1.													
4447.		32.	10.	23.	656.	6.													
4448.		34.	4.	18.	828.	7.													
4449.		36.	0.	15.	821.	5.													
4450.		38.	0.	15.	609.	10.													
4451.		40.	0.	20.	408.	15.													
4452.		45.	0.	28.	779.	20.													

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4453.	50.	0.	14.	681.	19.				
4454.	55.	0.	7.	597.	22.				
4455.	60.	0.	0.	614.	20.				
4456.	65.	0.	0.	663.	21.				
4457.	70.	0.	0.	1060.	18.				
4458.	72.	0.	0.	578.	7.				
4459.	75.	0.	0.	1047.	12.				
4460.	80.	0.	0.	1367.	15.				
4461.	85.	0.	0.	468.	5.				
4462.	90.	0.	0.	110.	1.				
4463.	95.	0.	0.	21.	0.				
4464.	100.	0.	0.	8.	0.				
4465.	105.	0.	0.	4.	0.				
4466.	110.	0.	0.	6.	0.				
4467.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
4468.	10.	165.	1.	0.	0.				
4469.	14.	0.	7.	1.	0.				
4470.	20.	0.	61.	31.	1.				
4471.	22.	0.	0.	0.	0.				
4472.	24.	0.	0.	0.	1.				
4473.	26.	0.	0.	0.	1.				
4474.	28.	0.	0.	0.	0.				
4475.	30.	0.	0.	0.	0.				
4476.	32.	0.	0.	0.	0.				
4477.	34.	0.	0.	0.	0.				
4478.	36.	0.	0.	0.	0.				
4479.	38.	0.	0.	0.	0.				
4480.	40.	0.	0.	0.	0.				
4481.	45.	0.	0.	0.	0.				
4482.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
4483.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
4484.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - US/SIAT - OVRLAY - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
4500.	1	676949.00	0.00	54.30	3227811.00	67.00
4501.	2	759697.00	0.01	54.30	3615156.00	73.00
4502.	3	854447.00	0.01	54.30	4048983.00	80.00
4503.	4	959639.00	0.01	54.30	4534872.00	87.00
4504.	5	1071654.00	0.01	54.30	5079074.00	95.00
4505.	6	1187533.00	0.01	54.30	5688576.00	103.00
4506.	7	1308038.00	0.01	54.30	6371222.00	113.00
4507.	8	1437715.00	0.01	54.30	7135793.00	123.00
4508.	9	1584164.00	0.01	54.30	7992113.00	134.00
4509.	10	1758331.00	0.01	54.30	8951199.00	146.00
4510.	11	1972669.00	0.01	0.00	949.00	159.00
4511.	12	2235436.00	0.01	0.00	1106.00	173.00
4512.	13	2548436.00	0.01	0.00	1290.00	189.00
4513.	14	2911060.00	0.01	0.00	1499.00	206.00

4514.	15	3323901.00	0.01	0.00	1736.00	224.00
4515.	16	3789159.00	0.01	0.00	2016.00	244.00
4516.	17	4309375.00	0.01	0.00	2329.00	266.00
4517.	18	4885249.00	0.01	0.00	2688.00	290.00

4520.	TOTAL		0.13	543.00		
4521.	PRESENT COSTS	37573408.00			56658336.00	2772.00
4522.	TOTAL LANE MILES			543.13		

4527.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00									
4528.	FLEXIBLE - US/STAT - OVRLAY - RURAL - HIGH TRAFFIC																
4529.	15 3 3 1 2 6 1.00 6.00 1 4 10 10 2134.00																
4530.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0																
4531.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0																
4532.	ACP 3.00 0.000 ATB 4.00 0.000 AGB 12.00 0.000 LTS 0.00 0.000																
4533.	AGE DISTRIBUTION 30 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																
4534.	0.0 0.0 0.0 0.0 0.0 0.0 2.0 9.0 4.0 7.0 0.0 6.0 2.0 0.0 1.0 0.0 0.0																
4535.	1.0 9.0 3.0 0.0 5.0 0.0 0.0 0.0 0.0 12.0 9.0 5.0 6.0 12.0 13.0 46.0 0.0 0.0																
4536.	TRUCK TYPE 4 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																
4537.	2D 3A 3-S2 2-S1-2 2-S1 2-S2 3-S1 3 S3																
4538.	3-S1-2 2-S2-2																
4539.	2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0 2010 0 0 1020 0 0																
4540.	4 1 0 0 4 1 0 0																
4541.	0 3.38 1.17 0.11 0.19 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																
4542.	LOAD LIMITS 0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																
4543.	80.00 20.00 34.00 56.00																
4544.	120.00 22.40 36.00 56.00																
4545.	13. 13. 12. 8.																
4546.	16. 16. 16. 16.																
4547.	SINGLE AXLES 11 0 3 00 0.00 0.00 0.00 0.00 0.00 0.00																
4548.	3. 1. 3. 11. 2.																
4549.	7. 428. 212. 1284. 162.																
4550.	8. 172. 42. 1525. 66.																
4551.	12. 547. 93. 3235. 241.																
4552.	16. 296. 74. 2765. 236.																
4553.	18. 123. 24. 2294. 65.																
4554.	19. 33. 9. 703. 32.																
4555.	20. 19. 5. 288. 19.																
4556.	22. 22. 2. 135. 12.																
4557.	24. 9. 0. 22. 1.																
4558.	26. 2. 0. 5. 0.																
4559.	TANDEM AXLES 15 0 6 00 0.00 0.00 0.00 0.00 0.00 0.00																
4560.	6. 0. 203. 3577. 0.																
4561.	12. 0. 164. 5035. 1.																
4562.	18. 0. 82. 7739. 1.																
4563.	24. 0. 7. 2095. 0.																
4564.	30. 0. 0. 2140. 0.																
4565.	32. 0. 0. 1263. 0.																
4566.	33. 0. 0. 690. 0.																
4567.	34. 0. 0. 492. 0.																
4568.	36. 0. 0. 649. 0.																
4569.	38. 0. 0. 232. 0.																
4570.	40. 0. 0. 88. 0.																
4571.	42. 0. 0. 19. 0.																
4572.	44. 0. 0. 10. 0.																
4573.	46. 0. 0. 1. 0.																
4574.	50. 0. 0. 2. 0.																

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4575.	GVW		28	0	10.00	0.00	0.00	0.00	0.00
4576.		10.	205.	1.	0.	0.			
4577.		14.	472.	7.	1.	0.			
4578.		20.	551.	145.	31.	1.			
4579.		22.	103.	70.	38.	0.			
4580.		24.	127.	36.	54.	1.			
4581.		26.	106.	25.	78.	3.			
4582.		28.	51.	21.	191.	1.			
4583.		30.	23.	15.	369.	1.			
4584.		32.	10.	23.	656.	6.			
4585.		34.	4.	18.	828.	7.			
4586.		36.	0.	15.	821.	5.			
4587.		38.	0.	15.	609.	10.			
4588.		40.	0.	20.	408.	15.			
4589.		45.	0.	28.	779.	20.			
4590.		50.	0.	14.	681.	19.			
4591.		55.	0.	7.	597.	22.			
4592.		60.	0.	0.	614.	20.			
4593.		65.	0.	0.	663.	21.			
4594.		70.	0.	0.	1060.	18.			
4595.		72.	0.	0.	578.	7.			
4596.		75.	0.	0.	1047.	12.			
4597.		80.	0.	0.	1367.	15.			
4598.		85.	0.	0.	468.	5.			
4599.		90.	0.	0.	110.	1.			
4600.		95.	0.	0.	21.	0.			
4601.		100.	0.	0.	8.	0.			
4602.		105.	0.	0.	4.	0.			
4603.		110.	0.	0.	6.	0.			
4604.	EMPTY			14	0	10.00	0.00	0.00	0.00
4605.		10.	165.	1.	0.	0.			
4606.		14.	0.	7.	1.	0.			
4607.		20.	0.	61.	31.	1.			
4608.		22.	0.	0.	0.	0.			
4609.		24.	0.	0.	0.	1.			
4610.		26.	0.	0.	0.	1.			
4611.		28.	0.	0.	0.	0.			
4612.		30.	0.	0.	0.	0.			
4613.		32.	0.	0.	0.	0.			
4614.		34.	0.	0.	0.	0.			
4615.		36.	0.	0.	0.	0.			
4616.		38.	0.	0.	0.	0.			
4617.		40.	0.	0.	0.	0.			
4618.		45.	0.	0.	0.	0.			
4619.	PERFORMANCE			0	0	0.00	3.05	4.70	0.00
4620.	OVERLAY			0	0	95.00	4.75	0.25	0.00
4621.	EXECUTE			0	0	0.00	0.00	0.00	0.00

DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - US/STAT - OVRLAY - RURAL - HIGH TRAFFIC

4634	IR	OUT	ST	REHAB	RES	REHAB	PREV
		COST (\$)		NPOT	POT	COST (\$)	COST (\$)

4697.	6.	0.	91.	1484.	0.					
4698.	12.	0.	60.	2174.	0.					
4699.	18.	0.	29.	2225.	0.					
4700.	24.	0.	2.	849.	0.					
4701.	30.	0.	0.	806.	0.					
4702.	32.	0.	0.	362.	0.					
4703.	33.	0.	0.	174.	0.					
4704.	34.	0.	0.	137.	0.					
4705.	36.	0.	0.	154.	0.					
4706.	38.	0.	0.	62.	0.					
4707.	40.	0.	0.	21.	0.					
4708.	42.	0.	0.	7.	0.					
4709.	44.	0.	0.	2.	0.					
4710.	46.	0.	0.	1.	0.					
4711.	50.	0.	0.	1.	0.					
4712.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
4713.	10.	90.	2.	0.	0.					
4714.	14.	167.	14.	2.	0.					
4715.	20.	188.	72.	26.	0.					
4716.	22.	31.	12.	27.	0.					
4717.	24.	20.	14.	59.	1.					
4718.	26.	26.	10.	110.	1.					
4719.	28.	14.	7.	193.	1.					
4720.	30.	9.	3.	277.	0.					
4721.	32.	5.	10.	271.	4.					
4722.	34.	2.	4.	268.	3.					
4723.	36.	1.	6.	257.	1.					
4724.	38.	1.	6.	176.	0.					
4725.	40.	0.	3.	139.	5.					
4726.	45.	0.	15.	206.	6.					
4727.	50.	0.	4.	192.	6.					
4728.	55.	0.	1.	189.	4.					
4729.	60.	0.	0.	202.	5.					
4730.	65.	0.	0.	287.	3.					
4731.	70.	0.	0.	359.	6.					
4732.	72.	0.	0.	150.	0.					
4733.	75.	0.	0.	256.	3.					
4734.	80.	0.	0.	399.	1.					
4735.	85.	0.	0.	149.	0.					
4736.	90.	0.	0.	48.	0.					
4737.	95.	0.	0.	9.	0.					
4738.	100.	0.	0.	3.	0.					
4739.	105.	0.	0.	0.	0.					
4740.	110.	0.	0.	1.	0.					
4741.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
4742.	10.	79.	2.	0.	0.					
4743.	14.	0.	14.	2.	0.					
4744.	20.	0.	34.	26.	0.					
4745.	22.	0.	0.	0.	0.					
4746.	24.	0.	0.	0.	1.					
4747.	26.	0.	0.	0.	1.					
4748.	28.	0.	0.	0.	0.					
4749.	30.	0.	0.	0.	0.					
4750.	32.	0.	0.	0.	0.					
4751.	34.	0.	0.	0.	0.					
4752.	36.	0.	0.	0.	0.					
4753.	38.	0.	0.	0.	0.					
4754.	40.	0.	0.	0.	0.					
4755.	45.	0.	0.	0.	0.					
4756.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
4757.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00

4819.	13.	13.	12.	8.					
4820.	16.	16.	16.	16.					
4821.	SINGLE AXLES		11	0	3.00	0.00	0.00	0.00	0.00
4822.	3.	0.	4.	9.	6.				
4823.	7.	169.	91.	847.	56.				
4824.	8.	59.	16.	513.	15.				
4825.	12.	177.	30.	976.	52.				
4826.	16.	89.	29.	984.	43.				
4827.	18.	21.	7.	603.	19.				
4828.	19.	15.	1.	216.	4.				
4829.	20.	10.	2.	109.	1.				
4830.	22.	6.	2.	72.	4.				
4831.	24.	5.	2.	15.	0.				
4832.	26.	3.	0.	2.	0.				
4833.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00
4834.	6.	0.	91.	1484.	0.				
4835.	12.	0.	60.	2174.	0.				
4836.	18.	0.	29.	2225.	0.				
4837.	24.	0.	2.	849.	0.				
4838.	30.	0.	0.	806.	0.				
4839.	32.	0.	0.	362.	0.				
4840.	33.	0.	0.	174.	0.				
4841.	34.	0.	0.	137.	0.				
4842.	36.	0.	0.	154.	0.				
4843.	38.	0.	0.	62.	0.				
4844.	40.	0.	0.	21.	0.				
4845.	42.	0.	0.	7.	0.				
4846.	44.	0.	0.	2.	0.				
4847.	46.	0.	0.	1.	0.				
4848.	50.	0.	0.	1.	0.				
4849.	GVW		28	0	10.00	0.00	0.00	0.00	0.00
4850.	10.	90.	2.	0.	0.				
4851.	14.	167.	14.	2.	0.				
4852.	20.	188.	72.	26.	0.				
4853.	22.	31.	12.	27.	0.				
4854.	24.	20.	14.	59.	1.				
4855.	26.	26.	10.	110.	1.				
4856.	28.	14.	7.	193.	1.				
4857.	30.	9.	3.	277.	0.				
4858.	32.	5.	10.	271.	4.				
4859.	34.	2.	4.	268.	3.				
4860.	36.	1.	6.	257.	1.				
4861.	38.	1.	6.	176.	0.				
4862.	40.	0.	3.	139.	5.				
4863.	45.	0.	15.	206.	6.				
4864.	50.	0.	4.	192.	6.				
4865.	55.	0.	1.	189.	4.				
4866.	60.	0.	0.	202.	5.				
4867.	65.	0.	0.	287.	3.				
4868.	70.	0.	0.	359.	6.				
4869.	72.	0.	0.	150.	0.				
4870.	75.	0.	0.	256.	3.				
4871.	80.	0.	0.	399.	1.				
4872.	85.	0.	0.	149.	0.				
4873.	90.	0.	0.	48.	0.				
4874.	95.	0.	0.	9.	0.				
4875.	100.	0.	0.	3.	0.				
4876.	105.	0.	0.	0.	0.				
4877.	110.	0.	0.	1.	0.				
4878.	EM		14	0	0.00	0.00	0.00	0.00	0.00

4880.	14.	0.	14.	2.	0.				
4881.	20.	0.	34.	26.	0.				
4882.	22.	0.	0.	0.	0.				
4883.	24.	0.	0.	0.	1.				
4884.	26.	0.	0.	0.	1.				
4885.	28.	0.	0.	0.	0.				
4886.	30.	0.	0.	0.	0.				
4887.	32.	0.	0.	0.	0.				
4888.	34.	0.	0.	0.	0.				
4889.	36.	0.	0.	0.	0.				
4890.	38.	0.	0.	0.	0.				
4891.	40.	0.	0.	0.	0.				
4892.	45.	0.	0.	0.	0.				
4893.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
4894.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
4895.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

4896.
4897.
4898.
4899.

4900.
4901.
4902.

DISTRICT: 15.
PRESENT LIMITS

FLEXIBLE - US/STAT - OVRLAY - URBAN - HIGH TRAFFIC

4903.
4904.
4905.
4906.
4907.

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
4908.						
4909.						
4910.						
4911.	1	10405.00	0.01	0.90	53772.00	627.00
4912.	2	11741.00	0.01	0.90	60238.00	683.00
4913.	3	13233.00	0.01	0.90	67482.00	745.00
4914.	4	14851.00	0.01	0.90	75598.00	812.00
4915.	5	16553.00	0.01	0.90	84691.00	885.00
4916.	6	18303.00	0.01	0.90	94879.00	964.00
4917.	7	20126.00	0.01	0.90	106294.00	1051.00
4918.	8	22100.00	0.01	0.90	119084.00	1146.00
4919.	9	24346.00	0.01	0.90	133414.00	1249.00
4920.	10	27042.00	0.01	0.90	149471.00	1361.00
4921.	11	30390.00	0.01	0.00	1312.00	1484.00
4922.	12	34525.00	0.01	0.00	1533.00	1617.00
4923.	13	39474.00	0.01	0.00	1788.00	1763.00
4924.	14	45223.00	0.01	0.00	2080.00	1921.00
4925.	15	51781.00	0.01	0.00	2415.00	2094.00
4926.	16	59180.00	0.01	0.00	2799.00	2283.00
4927.	17	67460.00	0.01	0.00	3239.00	2488.00
4928.	18	76630.00	0.01	0.00	3740.00	2712.00
4929.						
4930.						
4931.	TOTAL		0.18	9.00		
4932.	PRESENT COSTS	583363.00			963829.00	25885.00
4933.	TOTAL LANE MILES		9.18			

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4935.
4936.
4937.

4938.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00
4939.	FLEXIBLE - INTERST - HOTMIX - RURAL - LOW TRAFFIC							
4940.		16	1	1	1	1	6	1.00
				6	1.00	6.00	1	4
				10	10	10	1534.00	

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5002.	55.	0.	8.	504.	57.					
5003.	60.	0.	4.	507.	33.					
5004.	65.	0.	2.	532.	28.					
5005.	70.	0.	0.	682.	12.					
5006.	72.	0.	0.	404.	7.					
5007.	75.	0.	0.	692.	12.					
5008.	80.	0.	0.	1042.	9.					
5009.	85.	0.	0.	438.	3.					
5010.	90.	0.	0.	81.	3.					
5011.	95.	0.	0.	11.	0.					
5012.	100.	0.	0.	3.	0.					
5013.	105.	0.	0.	2.	0.					
5014.	110.	0.	0.	1.	0.					
5015.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
5016.	10.	259.	4.	0.	0.					
5017.	14.	0.	29.	2.	1.					
5018.	20.	0.	104.	91.	3.					
5019.	22.	0.	0.	0.	3.					
5020.	24.	0.	0.	0.	5.					
5021.	26.	0.	0.	0.	2.					
5022.	28.	0.	0.	0.	0.					
5023.	30.	0.	0.	0.	0.					
5024.	32.	0.	0.	0.	0.					
5025.	34.	0.	0.	0.	0.					
5026.	36.	0.	0.	0.	0.					
5027.	38.	0.	0.	0.	0.					
5028.	40.	0.	0.	0.	0.					
5029.	45.	0.	0.	0.	0.					
5030.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
5031.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
5032.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

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5037. DISTRICT: 16
5038. PRESENT LIMITS
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5040. FLEXIBLE INTERST HOTMIX - RURAL - LOW TRAFFIC
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5045.	YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
5046.						
5047.						
5048.	1	515485.00	2.44	0.30	118052.00	446.00
5049.	2	590909.00	2.44	0.30	132268.00	486.00
5050.	3	677881.00	2.42	0.30	147091.00	530.00
5051.	4	780365.00	2.40	0.30	163562.00	578.00
5052.	5	894942.00	2.38	0.30	181987.00	630.00
5053.	6	1011345.00	2.36	0.30	202636.00	686.00
5054.	7	1123011.00	2.35	0.30	225793.00	748.00
5055.	8	1231378.00	2.33	0.30	251771.00	816.00
5056.	9	1341573.00	2.32	0.30	280915.00	889.00
5057.	10	1458701.00	2.32	0.30	313615.00	969.00
5058.	11	1586796.00	2.31	0.00	294924.00	1056.00
5059.	12	1728422.00	2.29	0.00	328268.00	1151.00
5060.	13	1884777.00	2.28	0.00	366085.00	1255.00
5061.	14	2056559.00	2.28	0.00	408586.00	1368.00
5062.	15	2244600.00	2.27	0.00	456307.00	1491.00

C-225

5124.	10.	299.	4.	0.	0.					
5125.	14.	547.	29.	2.	1.					
5126.	20.	590.	188.	91.	3.					
5127.	22.	145.	48.	64.	3.					
5128.	24.	57.	37.	108.	5.					
5129.	26.	71.	29.	293.	2.					
5130.	28.	53.	16.	554.	9.					
5131.	30.	20.	18.	658.	13.					
5132.	32.	12.	27.	583.	22.					
5133.	34.	6.	20.	476.	28.					
5134.	36.	2.	28.	362.	25.					
5135.	38.	3.	38.	280.	15.					
5136.	40.	1.	31.	289.	8.					
5137.	45.	2.	59.	632.	41.					
5138.	50.	0.	38.	581.	59.					
5139.	55.	0.	8.	504.	57.					
5140.	60.	0.	4.	507.	33.					
5141.	65.	0.	2.	532.	28.					
5142.	70.	0.	0.	682.	12.					
5143.	72.	0.	0.	404.	7.					
5144.	75.	0.	0.	692.	12.					
5145.	80.	0.	0.	1042.	9.					
5146.	85.	0.	0.	438.	3.					
5147.	90.	0.	0.	81.	3.					
5148.	95.	0.	0.	11.	0.					
5149.	100.	0.	0.	3.	0.					
5150.	105.	0.	0.	2.	0.					
5151.	110.	0.	0.	1.	0.					
5152.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
5153.	10.	259.	4.	0.	0.					
5154.	14.	0.	29.	2.	1.					
5155.	20.	0.	104.	91.	3.					
5156.	22.	0.	0.	0.	3.					
5157.	24.	0.	0.	0.	5.					
5158.	26.	0.	0.	0.	2.					
5159.	28.	0.	0.	0.	0.					
5160.	30.	0.	0.	0.	0.					
5161.	32.	0.	0.	0.	0.					
5162.	34.	0.	0.	0.	0.					
5163.	36.	0.	0.	0.	0.					
5164.	38.	0.	0.	0.	0.					
5165.	40.	0.	0.	0.	0.					
5166.	45.	0.	0.	0.	0.					
5167.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
5168.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
5169.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

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5175. DISTRICT: 16.

5176. PRESENT LIMITS

5177.

5178. FLEXIBLE - INTERST - HOTMIX - RURAL - HIGH TRAFFIC

5179.

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5181.

5182. YEAR ROUT MAINT REHAB MILES REHAB PREV MAINT

5183. COST (\$) NPOT POT COST (\$) COST (\$)

5246.	12.	0.	60.	2174.	0.					
5247.	18.	0.	29.	2225.	0.					
5248.	24.	0.	2.	849.	0.					
5249.	30.	0.	0.	806.	0.					
5250.	32.	0.	0.	362.	0.					
5251.	33.	0.	0.	174.	0.					
5252.	34.	0.	0.	137.	0.					
5253.	36.	0.	0.	154.	0.					
5254.	38.	0.	0.	62.	0.					
5255.	40.	0.	0.	21.	0.					
5256.	42.	0.	0.	7.	0.					
5257.	44.	0.	0.	2.	0.					
5258.	46.	0.	0.	1.	0.					
5259.	50.	0.	0.	1.	0.					
5260.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
5261.	10.	90.	2.	0.	0.					
5262.	14.	167.	14.	2.	0.					
5263.	20.	188.	72.	26.	0.					
5264.	22.	31.	12.	27.	0.					
5265.	24.	20.	14.	59.	1.					
5266.	26.	26.	10.	110.	1.					
5267.	28.	14.	7.	193.	1.					
5268.	30.	9.	3.	277.	0.					
5269.	32.	5.	10.	271.	4.					
5270.	34.	2.	4.	268.	3.					
5271.	36.	1.	6.	257.	1.					
5272.	38.	1.	6.	176.	0.					
5273.	40.	0.	3.	139.	5.					
5274.	45.	0.	15.	206.	6.					
5275.	50.	0.	4.	192.	6.					
5276.	55.	0.	1.	189.	4.					
5277.	60.	0.	0.	202.	5.					
5278.	65.	0.	0.	287.	3.					
5279.	70.	0.	0.	359.	6.					
5280.	72.	0.	0.	150.	0.					
5281.	75.	0.	0.	256.	3.					
5282.	80.	0.	0.	399.	1.					
5283.	85.	0.	0.	149.	0.					
5284.	90.	0.	0.	48.	0.					
5285.	95.	0.	0.	9.	0.					
5286.	100.	0.	0.	3.	0.					
5287.	105.	0.	0.	0.	0.					
5288.	110.	0.	0.	1.	0.					
5289.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
5290.	10.	79.	2.	0.	0.					
5291.	14.	0.	14.	2.	0.					
5292.	20.	0.	34.	26.	0.					
5293.	22.	0.	0.	0.	0.					
5294.	24.	0.	0.	0.	1.					
5295.	26.	0.	0.	0.	1.					
5296.	28.	0.	0.	0.	0.					
5297.	30.	0.	0.	0.	0.					
5298.	32.	0.	0.	0.	0.					
5299.	34.	0.	0.	0.	0.					
5300.	36.	0.	0.	0.	0.					
5301.	38.	0.	0.	0.	0.					
5302.	40.	0.	0.	0.	0.					
5303.	45.	0.	0.	0.	0.					
5304.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
5305.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
5306.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

5368.										
5369.	SINGLE	16.	16.	16.	16.					
5370.	AXLES			11	0	3.00	0.00	0.00	0.00	0.00
5371.		3.	6.	16.	39.	30.				
5372.		7.	625.	262.	2015.	479.				
5373.		8.	197.	46.	957.	116.				
5374.		12.	535.	103.	2190.	535.				
5375.		16.	284.	115.	2132.	282.				
5376.		18.	86.	51.	1672.	76.				
5377.		19.	25.	13.	546.	20.				
5378.		20.	18.	11.	291.	26.				
5379.		22.	14.	12.	125.	20.				
5380.		24.	9.	4.	13.	5.				
5381.	TANDEM	26.	3.	2.	4.	2.				
5382.	AXLES			15	0	6.00	0.00	0.00	0.00	0.00
5383.		6.	0.	258.	3382.	0.				
5384.		12.	1.	167.	5272.	0.				
5385.		18.	0.	159.	5150.	0.				
5386.		24.	0.	28.	1814.	0.				
5387.		30.	0.	1.	1531.	0.				
5388.		32.	0.	0.	875.	0.				
5389.		33.	0.	0.	483.	0.				
5390.		34.	0.	0.	373.	0.				
5391.		36.	0.	0.	486.	0.				
5392.		38.	0.	0.	217.	0.				
5393.		40.	0.	0.	53.	0.				
5394.		42.	0.	0.	14.	0.				
5395.		44.	0.	0.	4.	0.				
5396.		46.	0.	0.	1.	0.				
5397.	GVW	50.	0.	0.	3.	0.				
5398.				28	0	10.00	0.00	0.00	0.00	0.00
5399.		10.	299.	4.	0.	0.				
5400.		14.	547.	29.	2.	1.				
5401.		20.	590.	188.	91.	3.				
5402.		22.	145.	48.	64.	3.				
5403.		24.	57.	37.	108.	5.				
5404.		26.	71.	29.	293.	2.				
5405.		28.	53.	16.	554.	9.				
5406.		30.	20.	18.	658.	13.				
5407.		32.	12.	27.	583.	22.				
5408.		34.	6.	20.	476.	28.				
5409.		36.	2.	28.	362.	25.				
5410.		38.	3.	38.	280.	15.				
5411.		40.	1.	31.	289.	8.				
5412.		45.	2.	59.	632.	41.				
5413.		50.	0.	38.	581.	59.				
5414.		55.	0.	8.	504.	57.				
5415.		60.	0.	4.	507.	33.				
5416.		65.	0.	2.	532.	28.				
5417.		70.	0.	0.	682.	12.				
5418.		72.	0.	0.	404.	7.				
5419.		75.	0.	0.	692.	12.				
5420.		80.	0.	0.	1042.	9.				
5421.		85.	0.	0.	438.	3.				
5422.		90.	0.	0.	81.	3.				
5423.		95.	0.	0.	11.	0.				
5424.		100.	0.	0.	3.	0.				
5425.		105.	0.	0.	2.	0.				
5426.	EMPTY	110.	0.	0.	1.	0.				
5427.				14	0	10.00	0.00	0.00	0.00	0.00
5428.		10.	259.	4.	0.	0.				
5429.		11.	0.	29.	2.	1.				

5551.	60.	0.	4.	507.	33.					
5552.	65.	0.	2.	532.	28.					
5553.	70.	0.	0.	682.	12.					
5554.	72.	0.	0.	404.	7.					
5555.	75.	0.	0.	692.	12.					
5556.	80.	0.	0.	1042.	9.					
5557.	85.	0.	0.	438.	3.					
5558.	90.	0.	0.	81.	3.					
5559.	95.	0.	0.	11.	0.					
5560.	100.	0.	0.	3.	0.					
5561.	105.	0.	0.	2.	0.					
5562.	110.	0.	0.	1.	0.					
5563.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
5564.	10.	259.	4.	0.	0.					
5565.	14.	0.	29.	2.	1.					
5566.	20.	0.	104.	91.	3.					
5567.	22.	0.	0.	0.	3.					
5568.	24.	0.	0.	0.	5.					
5569.	26.	0.	0.	0.	2.					
5570.	28.	0.	0.	0.	0.					
5571.	30.	0.	0.	0.	0.					
5572.	32.	0.	0.	0.	0.					
5573.	34.	0.	0.	0.	0.					
5574.	36.	0.	0.	0.	0.					
5575.	38.	0.	0.	0.	0.					
5576.	40.	0.	0.	0.	0.					
5577.	45.	0.	0.	0.	0.					
5578.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
5579.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
5580.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

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DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
5596.	1	115765.00	1.43	3.10	243047.00	528.00
5597.	2	127965.00	1.54	3.10	277143.00	575.00
5598.	3	142647.00	1.59	3.10	313233.00	627.00
5599.	4	160490.00	1.64	3.10	353414.00	683.00
5600.	5	181257.00	1.68	3.10	398434.00	745.00
5601.	6	203335.00	1.71	3.10	448988.00	812.00
5602.	7	225207.00	1.75	3.10	505809.00	885.00
5603.	8	246883.00	1.79	3.10	569715.00	964.00
5604.	9	269478.00	1.82	3.10	641604.00	1051.00
5605.	10	294469.00	1.85	3.10	722494.00	1146.00
5606.	11	323277.00	1.89	0.00	241220.00	1249.00
5607.	12	356810.00	1.82	0.00	260840.00	1361.00
5608.	13	395334.00	1.80	0.00	287812.00	1484.00
5609.	14	438873.00	1.78	0.00	319120.00	1617.00
5610.	15	487545.00	1.76	0.00	354782.00	1763.00
611	..	5416...00	1.75	0.00	39...00	1800

5612.	17	601379.00	1.75	0.00	440663.00	2095.00	
5613.	18	667096.00	1.74	0.00	491938.00	2283.00	
5614.							
5615.							
5616.	TOTAL		31.08	31.00			
5617.	PRESENT COSTS	5779417.00			7265393.00	21790.00	
5618.	TOTAL LANE MILES		62.08				
5619.							
5620.							
5621.							
5622.							
5623.	FLEXIBLE	0 0	12.00	0.00	0.00	3.00	3.00
5624.	FLEXIBLE - FM - HOTMIX - URBAN - LOW TRAFFIC						
5625.	16 2 1 2 1	6 1.00 6.00	1 4 10 10 1083.00				
5626.	0.0 0.0 0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
5627.	0.0 0.0 0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
5628.	ACP 2.00 0.000	AGB 8.00 0.000	LTS 6.00 0.000	0.00 0.000	0.00 0.000		
5629.	AGE DISTRIBUTION	30 0	0.00	0.00	0.00	0.00	0.00
5630.	0.0 0.0 0.0 0.0	0.0 0.0	1.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
5631.	0.0 0.0 0.0 0.0	0.0 0.0	1.0 1.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
5632.	TRUCK TYPE	4 0	0.00	0.00	0.00	0.00	0.00
5633.	2D 3A 3-S2 2-S1-2 2-S1 2-S2 3-S1 3-S3						
5634.	3-S1-2 2-S2-2						
5635.	2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0 2010 0 0 1020 0 0						
5636.	4 1 0 0 4 1 0 0						
5637.	0 3.52 0.58 0.04	0.31 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00		
5638.	LOAD LIMITS	0 0	0.00	0.00	0.00	0.00	0.00
5639.	80.00 20.00	34.00 56.00					
5640.	120.00 22.40	36.00 56.00					
5641.	13. 13. 12. 8.						
5642.	16. 16. 16. 16.						
5643.	SINGLE AXLES	11 0	3.00	0.00	0.00	0.00	0.00
5644.	3. 0. 4. 9. 6.						
5645.	7. 169. 91. 847. 56.						
5646.	8. 59. 16. 513. 15.						
5647.	12. 177. 30. 976. 52.						
5648.	16. 89. 29. 984. 43.						
5649.	18. 21. 7. 603. 19.						
5650.	19. 15. 1. 216. 4.						
5651.	20. 10. 2. 109. 1.						
5652.	22. 6. 2. 72. 4.						
5653.	24. 5. 2. 15. 0.						
5654.	26. 3. 0. 2. 0.						
5655.	TANDEM AXLES	15 0	6.00	0.00	0.00	0.00	0.00
5656.	6. 0. 91. 1484. 0.						
5657.	12. 0. 60. 2174. 0.						
5658.	18. 0. 29. 2225. 0.						
5659.	24. 0. 2. 849. 0.						
5660.	30. 0. 0. 806. 0.						
5661.	32. 0. 0. 362. 0.						
5662.	33. 0. 0. 174. 0.						
5663.	34. 0. 0. 137. 0.						
5664.	36. 0. 0. 154. 0.						
5665.	38. 0. 0. 62. 0.						
5666.	40. 0. 0. 21. 0.						
5667.	42. 0. 0. 7. 0.						
5668.	44. 0. 0. 2. 0.						
5669.	46. 0. 0. 1. 0.						
5670.	50. 0. 0. 1. 0.						
5671.	GVW	28 0	10.00	0.00	0.00	0.00	0.00

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5673.	14.	167.	14.	2.	0					
5674.	20.	188.	72.	26.	0.					
5675.	22.	31.	12.	27.	0.					
5676.	24.	20.	14.	59.	1.					
5677.	26.	26.	10.	110.	1.					
5678.	28.	14.	7.	193.	1.					
5679.	30.	9.	3.	277.	0.					
5680.	32.	5.	10.	271.	4.					
5681.	34.	2.	4.	268.	3.					
5682.	36.	1.	6.	257.	1.					
5683.	38.	1.	6.	176.	0.					
5684.	40.	0.	3.	139.	5.					
5685.	45.	0.	15.	206.	6.					
5686.	50.	0.	4.	192.	6.					
5687.	55.	0.	1.	189.	4.					
5688.	60.	0.	0.	202.	5.					
5689.	65.	0.	0.	287.	3.					
5690.	70.	0.	0.	359.	6.					
5691.	72.	0.	0.	150.	0.					
5692.	75.	0.	0.	256.	3.					
5693.	80.	0.	0.	399.	1.					
5694.	85.	0.	0.	149.	0.					
5695.	90.	0.	0.	48.	0.					
5696.	95.	0.	0.	9.	0.					
5697.	100.	0.	0.	3.	0.					
5698.	105.	0.	0.	0.	0.					
5699.	110.	0.	0.	1.	0.					
5700.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
5701.	10.	79.	2.	0.	0.					
5702.	14.	0.	14.	2.	0.					
5703.	20.	0.	34.	26.	0.					
5704.	22.	0.	0.	0.	0.					
5705.	24.	0.	0.	0.	1.					
5706.	26.	0.	0.	0.	1.					
5707.	28.	0.	0.	0.	0.					
5708.	30.	0.	0.	0.	0.					
5709.	32.	0.	0.	0.	0.					
5710.	34.	0.	0.	0.	0.					
5711.	36.	0.	0.	0.	0.					
5712.	38.	0.	0.	0.	0.					
5713.	40.	0.	0.	0.	0.					
5714.	45.	0.	0.	0.	0.					
5715.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
5716.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
5717.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - URBAN - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)
732	2108.00	0.02	0.00	633.00	313.00

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5917	SINGLE AXLES		11	0	3.00	0.00	0.00	0.00	0.00
5918		3.	6.	16.	39.				
5919		7.	625.	262.	2015.				
5920		8.	197.	46.	957.				
5921		12.	535.	103.	2190.				
5922		16.	284.	115.	2132.				
5923		18.	86.	51.	1672.				
5924		19.	25.	13.	546.				
5925		20.	18.	11.	291.				
5926		22.	14.	12.	125.				
5927		24.	9.	4.	13.				
5928		26.	3.	2.	4.				
5929	TANDEM AXLES			15	0	6.00	0.00	0.00	0.00
5930		6.	0.	258.	3382.				
5931		12.	1.	167.	5272.				
5932		18.	0.	159.	5150.				
5933		24.	0.	28.	1814.				
5934		30.	0.	1.	1531.				
5935		32.	0.	0.	875.				
5936		33.	0.	0.	483.				
5937		34.	0.	0.	373.				
5938		36.	0.	0.	486.				
5939		38.	0.	0.	217.				
5940		40.	0.	0.	53.				
5941		42.	0.	0.	14.				
5942		44.	0.	0.	4.				
5943		46.	0.	0.	1.				
5944		50.	0.	0.	3.				
5945	GVW			28	0	10.00	0.00	0.00	0.00
5946		10.	299.	4.	0.				
5947		14.	547.	29.	2.				
5948		20.	590.	188.	91.				
5949		22.	145.	48.	64.				
5950		24.	57.	37.	108.				
5951		26.	71.	29.	293.				
5952		28.	53.	16.	554.				
5953		30.	20.	18.	658.				
5954		32.	12.	27.	583.				
5955		34.	6.	20.	476.				
5956		36.	2.	28.	362.				
5957		38.	3.	38.	280.				
5958		40.	1.	31.	289.				
5959		45.	2.	59.	632.				
5960		50.	0.	38.	581.				
5961		55.	0.	8.	504.				
5962		60.	0.	4.	507.				
5963		65.	0.	2.	532.				
5964		70.	0.	0.	682.				
5965		72.	0.	0.	404.				
5966		75.	0.	0.	692.				
5967		80.	0.	0.	1042.				
5968		85.	0.	0.	438.				
5969		90.	0.	0.	81.				
5970		95.	0.	0.	11.				
5971		100.	0.	0.	3.				
5972		105.	0.	0.	2.				
5973		110.	0.	0.	1.				
5974	EMPTY			14	0	10.00	0.00	0.00	0.00
5975		10.	259.	4.	0.				
5976		14.	0.	29.	2.				
5977		20.	0.	104.	91.				

5978.	22.	0.	0.	0.	3.															
5979.	24.	0.	0.	0.	5.															
5980.	26.	0.	0.	0.	2.															
5981.	28.	0.	0.	0.	0.															
5982.	30.	0.	0.	0.	0.															
5983.	32.	0.	0.	0.	0.															
5984.	34.	0.	0.	0.	0.															
5985.	36.	0.	0.	0.	0.															
5986.	38.	0.	0.	0.	0.															
5987.	40.	0.	0.	0.	0.															
5988.	45.	0.	0.	0.	0.															
5989.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00											
5990.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00											
5991.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00											

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DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	2285541.00	0.00	148.30	8815212.00	24.00
2	2508791.00	0.01	148.30	9873040.00	27.00
3	2755051.00	0.01	148.30	11057808.00	29.00
4	3025524.00	0.01	148.30	12384749.00	32.00
5	3320343.00	0.01	148.30	13870932.00	35.00
6	3639370.00	0.01	148.30	15535448.00	38.00
7	3986012.00	0.01	148.30	17399712.00	41.00
8	4370718.00	0.01	148.30	19487696.00	45.00
9	4813818.00	0.01	148.30	21826240.00	49.00
10	5348268.00	0.01	148.30	24445408.00	53.00
11	6013356.00	0.01	0.00	929.00	58.00
12	6835288.00	0.01	0.00	1072.00	63.00
13	7819320.00	0.01	0.00	1264.00	69.00
14	8962924.00	0.01	0.00	1469.00	75.00
15	10267567.00	0.01	0.00	1690.00	82.00
16	11740058.00	0.01	0.00	1959.00	89.00
17	13388294.00	0.01	0.00	2268.00	97.00
18	15214040.00	0.01	0.00	2595.00	106.00
TOTAL PRESENT COSTS	116294144.00	0.12	1483.00	154709408.00	1012.00
TOTAL LANE MILES			1483.12		

FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00													
FLEXIBLE - FM - OVRLAY - RURAL - HIGH TRAFFIC	16	2	3	1	2	6	1.00	6.00	1	4	10	10	971.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6036.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6037.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6038.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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6039.	ACP	3.00	0.000	ATB	4.00	0.000	AGB	12.00	0.000	LTS	0.00	0.000						
6040.	AGE DISTRIBUTION				30	0		0.00		0.00		0.00		0.00				
6041.		0.0	0.0		0.0	0.0		0.0	3.0	6.0		0.0	6.0	1.0		0.0	5.0	0.0
6042.		5.0	12.0		12.0	24.0		18.0	12.0	9.0		10.0	8.0	8.0		16.0	20.0	17.0
6043.	TRUCK TYPE				4	0		0.00		0.00		0.00		0.00		0.00		
6044.	2D	3A			3-S2			2-S1-2		2-S1		2-S2		3-S1		3-S3		
6045.		3-S1-2			2-S2-2													
6046.		2 0 0 0			1 1 0 0			1 2 0 0		5 0 0 0		3 0 0 0		2 1 0 0		2010 0 0		1020 0 0
6047.		4 1 0 0			4 1 0 0													
6048.		0	3.94		0.71	0.23		1.83	0.00	0.00		0.00	0.00	0.00		0.00		
6049.	LOAD LIMITS					0		0		0.00		0.00		0.00		0.00		
6050.		80.00			20.00			34.00		56.00								
6051.		120.00			22.40			36.00		56.00								
6052.		13.			13.			12.		8.								
6053.		16.			16.			16.										
6054.	SINGLE AXLES					11		0		3.00		0.00		0.00		0.00		0.00
6055.		3.			6.			16.		39.		30.						
6056.		7.			625.			262.		2015.		479.						
6057.		8.			197.			46.		957.		116.						
6058.		12.			535.			103.		2190.		535.						
6059.		16.			284.			115.		2132.		282.						
6060.		18.			86.			51.		1672.		76.						
6061.		19.			25.			13.		546.		20.						
6062.		20.			18.			11.		291.		26.						
6063.		22.			14.			12.		125.		20.						
6064.		24.			9.			4.		13.		5.						
6065.		26.			3.			2.		4.		2.						
6066.	TANDEM AXLES					15		0		6.00		0.00		0.00		0.00		0.00
6067.		6.			0.			258.		3382.		0.						
6068.		12.			1.			167.		5272.		0.						
6069.		18.			0.			159.		5150.		0.						
6070.		24.			0.			28.		1814.		0.						
6071.		30.			0.			1.		1531.		0.						
6072.		32.			0.			0.		875.		0.						
6073.		33.			0.			0.		483.		0.						
6074.		34.			0.			0.		373.		0.						
6075.		36.			0.			0.		486.		0.						
6076.		38.			0.			0.		217.		0.						
6077.		40.			0.			0.		53.		0.						
6078.		42.			0.			0.		14.		0.						
6079.		44.			0.			0.		4.		0.						
6080.		46.			0.			0.		1.		0.						
6081.		50.			0.			0.		3.		0.						
6082.	GVW					28		0		10.00		0.00		0.00		0.00		0.00
6083.		10.			299.			4.		0.		0.						
6084.		14.			547.			29.		2.		1.						
6085.		20.			590.			188.		91.		3.						
6086.		22.			145.			48.		64.		3.						
6087.		24.			57.			37.		108.		5.						
6088.		26.			71.			29.		293.		2.						
6089.		28.			53.			16.		554.		9.						
6090.		30.			20.			18.		658.		13.						
6091.		32.			12.			27.		583.		22.						
6092.		34.			6.			20.		476.		28.						
6093.		36.			2.			28.		362.		25.						
6094.		38.			3.			38.		280.		15.						
6095.		40.			1.			31.		289.		8.						
6096.		45.			2.			59.		632.		41.						
6097.		50.			0.			38.		581.		59.						
6098.		55.			0.			8.		71.		73.						
6099.		60.			0.			4.		507.		33.						

6100.	65.	0.	2.	532.	28.					
6101.	70.	0.	0.	682.	12.					
6102.	72.	0.	0.	404.	7.					
6103.	75.	0.	0.	692.	12.					
6104.	80.	0.	0.	1042.	9.					
6105.	85.	0.	0.	438.	3.					
6106.	90.	0.	0.	81.	3.					
6107.	95.	0.	0.	11.	0.					
6108.	100.	0.	0.	3.	0.					
6109.	105.	0.	0.	2.	0.					
6110.	110.	0.	0.	1.	0.					
6111.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
6112.	10.	259.	4.	0.	0.					
6113.	14.	0.	29.	2.	1.					
6114.	20.	0.	104.	91.	3.					
6115.	22.	0.	0.	0.	3.					
6116.	24.	0.	0.	0.	5.					
6117.	26.	0.	0.	0.	2.					
6118.	28.	0.	0.	0.	0.					
6119.	30.	0.	0.	0.	0.					
6120.	32.	0.	0.	0.	0.					
6121.	34.	0.	0.	0.	0.					
6122.	36.	0.	0.	0.	0.					
6123.	38.	0.	0.	0.	0.					
6124.	40.	0.	0.	0.	0.					
6125.	45.	0.	0.	0.	0.					
6126.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
6127.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
6128.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - FM - OVERLAY - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
6141.						
6142.						
6143.						
6144.	1	402328.00	0.03	26.10	1552562.00	137.00
6145.	2	441430.00	0.03	26.10	1738919.00	149.00
6146.	3	484539.00	0.03	26.10	1947646.00	162.00
6147.	4	531864.00	0.03	26.10	2181432.00	177.00
6148.	5	583437.00	0.03	26.10	2443285.00	193.00
6149.	6	639265.00	0.03	26.10	2736574.00	210.00
6150.	7	699975.00	0.04	26.10	3065073.00	229.00
6151.	8	767407.00	0.04	26.10	3433015.00	250.00
6152.	9	845123.00	0.04	26.10	3845131.00	272.00
6153.	10	938914.00	0.04	26.10	4306729.00	297.00
6154.	11	1055685.00	0.04	0.00	5378.00	323.00
6155.	12	1200044.00	0.04	0.00	6267.00	352.00
6156.	13	1372910.00	0.05	0.00	7292.00	384.00
6157.	14	1573832.00	0.05	0.00	8471.00	419.00
6158.	15	1803060.00	0.05	0.00	9815.00	456.00
6159.	16	2061785.00	0.05	0.00	11356.00	497.00
6160.	17	2351395.00	0.05	0.00	13121.00	542.00

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6222.	20.	188.	72.	26.	0.					
6223.	22.	31.	12.	27.	0.					
6224.	24.	20.	14.	59.	1.					
6225.	26.	26.	10.	110.	1.					
6226.	28.	14.	7.	193.	1.					
6227.	30.	9.	3.	277.	0.					
6228.	32.	5.	10.	271.	4.					
6229.	34.	2.	4.	268.	3.					
6230.	36.	1.	6.	257.	1.					
6231.	38.	1.	6.	176.	0.					
6232.	40.	0.	3.	139.	5.					
6233.	45.	0.	15.	206.	6.					
6234.	50.	0.	4.	192.	6.					
6235.	55.	0.	1.	189.	4.					
6236.	60.	0.	0.	202.	5.					
6237.	65.	0.	0.	287.	3.					
6238.	70.	0.	0.	359.	6.					
6239.	72.	0.	0.	150.	0.					
6240.	75.	0.	0.	256.	3.					
6241.	80.	0.	0.	399.	1.					
6242.	85.	0.	0.	149.	0.					
6243.	90.	0.	0.	48.	0.					
6244.	95.	0.	0.	9.	0.					
6245.	100.	0.	0.	3.	0.					
6246.	105.	0.	0.	0.	0.					
6247.	110.	0.	0.	1.	0.					
6248.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
6249.	10.	79.	2.	0.	0.					
6250.	14.	0.	14.	2.	0.					
6251.	20.	0.	34.	26.	0.					
6252.	22.	0.	0.	0.	0.					
6253.	24.	0.	0.	0.	1.					
6254.	26.	0.	0.	0.	1.					
6255.	28.	0.	0.	0.	0.					
6256.	30.	0.	0.	0.	0.					
6257.	32.	0.	0.	0.	0.					
6258.	34.	0.	0.	0.	0.					
6259.	36.	0.	0.	0.	0.					
6260.	38.	0.	0.	0.	0.					
6261.	40.	0.	0.	0.	0.					
6262.	45.	0.	0.	0.	0.					
6263.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
6264.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
6265.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - URBAN - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	31281.00	0.00	2.10	124842.00	104.00
2	34100.00	0.00	2.10	139824.00	113.00

6283.	3	37173.00	0.00	2.10	156604.00	124.00
6284.	4	40525.00	0.00	2.10	175397.00	135.00
6285.	5	44189.00	0.00	2.10	196446.00	147.00
6286.	6	48210.00	0.00	2.10	220020.00	160.00
6287.	7	52661.00	0.00	2.10	246424.00	175.00
6288.	8	57680.00	0.00	2.10	275997.00	190.00
6289.	9	63531.00	0.00	2.10	309119.00	207.00
6290.	10	70660.00	0.00	2.10	346215.00	226.00
6291.	11	79610.00	0.00	0.00	80.00	246.00
6292.	12	90745.00	0.00	0.00	93.00	269.00
6293.	13	104133.00	0.00	0.00	108.00	293.00
6294.	14	119732.00	0.00	0.00	125.00	319.00
6295.	15	137558.00	0.00	0.00	145.00	348.00
6296.	16	157703.00	0.00	0.00	168.00	379.00
6297.	17	180273.00	0.00	0.00	193.00	413.00
6298.	18	205287.00	0.00	0.00	224.00	450.00

6300.						
6301.	TOTAL		0.01	21.00		
6302.	PRESENT COSTS	1555051.00			2192024.00	4298.00
6303.	TOTAL LANE MILES		21.01			

6304.	-----															
6305.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00								
6306.	FLEXIBLE - FM - OVRLAY - URBAN - HIGH TRAFFIC															
6307.	16	2	3	2	2	6	1.00	6.00	1	4	10	10	2391.00			
6308.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6309.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
6310.	ACP	3.00	0.000	ATB	4.00	0.000	AGB	10.00	0.000	LTS	6.00	0.000				
6311.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6312.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6313.	0.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	14.0	
6314.	TRUCK TYPE	4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6315.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3								
6316.	3-S1-2	2-S2-2														
6317.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0								
6318.	4 1 0 0	4 1 0 0														
6319.	0	3	52	0.58	0.04	0.31	0.00	0.00	0.00	0.00	0.00	0.00				
6320.	LOAD LIMITS	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6321.	80.00	20.00	34.00	56.00												
6322.	120.00	22.40	36.00	56.00												
6323.	13.	13.	12.	8.												
6324.	16.	16.	16.	16.												
6325.	SINGLE AXLES	11	0	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6326.	3.	0.	4.	9.	6.											
6327.	7.	169.	91.	847.	56.											
6328.	8.	59.	16.	513.	15.											
6329.	12.	177.	30.	976.	52.											
6330.	16.	89.	29.	984.	43.											
6331.	18.	21.	7.	603.	19.											
6332.	19.	15.	1.	216.	4.											
6333.	20.	10.	2.	109.	1.											
6334.	22.	6.	2.	72.	4.											
6335.	24.	5.	2.	15.	0.											
6336.	26.	3.	0.	2.	0.											
6337.	TANDEM AXLES	15	0	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6338.	6.	0.	91.	1484.	0.											
6339.	12.	0.	60.	2174.	0.											
6340.	18	0	99	2225.	0.											

6344.	24.	0.	2.	849.	0.					
6345.	30.	0.	0.	806.	0.					
6346.	32.	0.	0.	362.	0.					
6347.	33.	0.	0.	174.	0.					
6348.	34.	0.	0.	137.	0.					
6349.	36.	0.	0.	154.	0.					
6350.	38.	0.	0.	62.	0.					
6351.	40.	0.	0.	21.	0.					
6352.	42.	0.	0.	7.	0.					
6353.	44.	0.	0.	2.	0.					
6354.	46.	0.	0.	1.	0.					
6355.	50.	0.	0.	1.	0.					
6356.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	
6357.	10.	90.	2.	0.	0.					
6358.	14.	167.	14.	2.	0.					
6359.	20.	188.	72.	26.	0.					
6360.	22.	31.	12.	27.	0.					
6361.	24.	20.	14.	59.	1.					
6362.	26.	26.	10.	110.	1.					
6363.	28.	14.	7.	193.	1.					
6364.	30.	9.	3.	277.	0.					
6365.	32.	5.	10.	271.	4.					
6366.	34.	2.	4.	268.	3.					
6367.	36.	1.	6.	257.	1.					
6368.	38.	1.	6.	176.	0.					
6369.	40.	0.	3.	139.	5.					
6370.	45.	0.	15.	206.	6.					
6371.	50.	0.	4.	192.	6.					
6372.	55.	0.	1.	189.	4.					
6373.	60.	0.	0.	202.	5.					
6374.	65.	0.	0.	287.	3.					
6375.	70.	0.	0.	359.	6.					
6376.	72.	0.	0.	150.	0.					
6377.	75.	0.	0.	256.	3.					
6378.	80.	0.	0.	399.	1.					
6379.	85.	0.	0.	149.	0.					
6380.	90.	0.	0.	48.	0.					
6381.	95.	0.	0.	9.	0.					
6382.	100.	0.	0.	3.	0.					
6383.	105.	0.	0.	0.	0.					
6384.	110.	0.	0.	1.	0.					
6385.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	
6386.	10.	79.	2.	0.	0.					
6387.	14.	0.	14.	2.	0.					
6388.	20.	0.	34.	26.	0.					
6389.	22.	0.	0.	0.	0.					
6390.	24.	0.	0.	0.	1.					
6391.	26.	0.	0.	0.	1.					
6392.	28.	0.	0.	0.	0.					
6393.	30.	0.	0.	0.	0.					
6394.	32.	0.	0.	0.	0.					
6395.	34.	0.	0.	0.	0.					
6396.	36.	0.	0.	0.	0.					
6397.	38.	0.	0.	0.	0.					
6398.	40.	0.	0.	0.	0.					
6399.	45.	0.	0.	0.	0.					
6400.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
6401.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
6402.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	
6403.	-----									
6404.										

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DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	29192.00	0.00	1.90	113103.00	336.00
2	31818.00	0.00	1.90	126682.00	367.00
3	34680.00	0.00	1.90	141892.00	400.00
4	37802.00	0.00	1.90	158928.00	435.00
5	41214.00	0.00	1.90	178011.00	475.00
6	44956.00	0.00	1.90	199385.00	517.00
7	49096.00	0.01	1.90	223326.00	564.00
8	53759.00	0.01	1.90	250143.00	615.00
9	59186.00	0.01	1.90	280182.00	670.00
10	65781.00	0.01	1.90	313828.00	730.00
11	74038.00	0.01	0.00	755.00	796.00
12	84286.00	0.01	0.00	879.00	868.00
13	96588.00	0.01	0.00	1022.00	946.00
14	110908.00	0.01	0.00	1186.00	1031.00
15	127262.00	0.01	0.00	1374.00	1124.00
16	145732.00	0.01	0.00	1589.00	1225.00
17	166417.00	0.01	0.00	1835.00	1335.00
18	189337.00	0.01	0.00	2115.00	1455.00
TOTAL PRESENT COSTS	1442052.00	0.10	19.00	1996235.00	13889.00
TOTAL LANE MILES			19.10		

FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00											
FLEXIBLE - US/STAT - HOTMIX - RURAL - LOW TRAFFIC																		
16 3 1 1 1 6 1.00 6.00 1 4 10 10 626.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0 0.0 0.0 0.0 0.0																		
ACP 2.00 0.000 AGB 8.00 0.000 LTS 0.00 0.000 0.00 0.000																		
AGE DISTRIBUTION 30 0 0.00 0.00 0.00 10.0 25.0 18.0 34.0 9.0 8.0 36.0 16.0 20.0 6.0																		
11.0 17.0 13.0 16.0 26.0 12.0 45.0 21.0 21.0 10.0 13.0 15.0 10.0 9.0 13.0																		
TRUCK TYPE 4 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																		
2D 3A 3-S2 2-S1-2 2-S1 2-S2 3-S1 3-S3																		
3-S1-2 2-S2-2																		
2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0 2010 0 0 1020 0 0																		
4 1 0 0 4 1 0 0																		
0 3.38 0.98 0.17 0.65 0.00 0.00 0.00 0.00 0.00 0.00 0.00																		
LOAD LIMITS 0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																		
80.00 20.00 34.00 56.00																		
120.00 22.40 36.00 56.00																		
13. 13. 12. 8.																		
16. 16. 16. 16.																		
3.00 0.00 0.00 0.00																		

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6466.	3.	6.	16.	39.	30.					
6467.	7.	625.	262.	2015.	479.					
6468.	8.	197.	46.	957.	116.					
6469.	12.	535.	103.	2190.	535.					
6470.	16.	284.	115.	2132.	282.					
6471.	18.	86.	51.	1672.	76.					
6472.	19.	25.	13.	546.	20.					
6473.	20.	18.	11.	291.	26.					
6474.	22.	14.	12.	125.	20.					
6475.	24.	9.	4.	13.	5.					
6476.	26.	3.	2.	4.	2.					
6477.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00
6478.	6.	0.	258.	3382.	0.					
6479.	12.	1.	167.	5272.	0.					
6480.	18.	0.	159.	5150.	0.					
6481.	24.	0.	28.	1814.	0.					
6482.	30.	0.	1.	1531.	0.					
6483.	32.	0.	0.	875.	0.					
6484.	33.	0.	0.	483.	0.					
6485.	34.	0.	0.	373.	0.					
6486.	36.	0.	0.	486.	0.					
6487.	38.	0.	0.	217.	0.					
6488.	40.	0.	0.	53.	0.					
6489.	42.	0.	0.	14.	0.					
6490.	44.	0.	0.	4.	0.					
6491.	46.	0.	0.	1.	0.					
6492.	50.	0.	0.	3.	0.					
6493.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
6494.	10.	299.	4.	0.	0.					
6495.	14.	547.	29.	2.	1.					
6496.	20.	590.	188.	91.	3.					
6497.	22.	145.	48.	64.	3.					
6498.	24.	57.	37.	108.	5.					
6499.	26.	71.	29.	293.	2.					
6500.	28.	53.	16.	554.	9.					
6501.	30.	20.	18.	658.	13.					
6502.	32.	12.	27.	583.	22.					
6503.	34.	6.	20.	476.	28.					
6504.	36.	2.	28.	362.	25.					
6505.	38.	3.	38.	280.	15.					
6506.	40.	1.	31.	289.	8.					
6507.	45.	2.	59.	632.	41.					
6508.	50.	0.	38.	581.	59.					
6509.	55.	0.	8.	504.	57.					
6510.	60.	0.	4.	507.	33.					
6511.	65.	0.	2.	532.	28.					
6512.	70.	0.	0.	682.	12.					
6513.	72.	0.	0.	404.	7.					
6514.	75.	0.	0.	692.	12.					
6515.	80.	0.	0.	1042.	9.					
6516.	85.	0.	0.	438.	3.					
6517.	90.	0.	0.	81.	3.					
6518.	95.	0.	0.	11.	0.					
6519.	100.	0.	0.	3.	0.					
6520.	105.	0.	0.	2.	0.					
6521.	110.	0.	0.	1.	0.					
6522.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
6523.	10.	259.	4.	0.	0.					
6524.	14.	0.	29.	2.	1.					
6525.	20.	0.	104.	91.	3.					
6526.	22.	0.	0.	0.	3.					

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6527.	24.	0.	0.	0.	5.				
6528.	26.	0.	0.	0.	2.				
6529.	28.	0.	0.	0.	0.				
6530.	30.	0.	0.	0.	0.				
6531.	32.	0.	0.	0.	0.				
6532.	34.	0.	0.	0.	0.				
6533.	36.	0.	0.	0.	0.				
6534.	38.	0.	0.	0.	0.				
6535.	40.	0.	0.	0.	0.				
6536.	45.	0.	0.	0.	0.				
6537.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
6538.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
6539.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - US/STAT - HOTMIX - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
6551.						
6552.						
6553.						
6554.						
6555.	1	298901.00	1.48	7.00	477160.00	182.00
6556.	2	342455.00	1.55	7.00	537322.00	198.00
6557.	3	391204.00	1.58	7.00	603282.00	216.00
6558.	4	443799.00	1.60	7.00	676998.00	236.00
6559.	5	498203.00	1.62	7.00	759565.00	257.00
6560.	6	552936.00	1.64	7.00	852114.00	280.00
6561.	7	608150.00	1.66	7.00	955890.00	305.00
6562.	8	665452.00	1.68	7.00	1072276.00	333.00
6563.	9	727066.00	1.69	7.00	1202818.00	363.00
6564.	10	795472.00	1.71	7.00	1349245.00	395.00
6565.	11	873121.00	1.73	0.00	221215.00	431.00
6566.	12	961699.00	1.67	0.00	239190.00	470.00
6567.	13	1061875.00	1.64	0.00	263309.00	512.00
6568.	14	1173952.00	1.62	0.00	291089.00	558.00
6569.	15	1298428.00	1.60	0.00	322561.00	608.00
6570.	16	1436075.00	1.59	0.00	358013.00	663.00
6571.	17	1587779.00	1.58	0.00	397838.00	723.00
6572.	18	1754264.00	1.57	0.00	442514.00	788.00

6573.						
6574.						
6575.	TOTAL PRESENT COSTS	15470831.00	29.21	70.00	11022399.00	7518.00
6576.	TOTAL LANE MILES		99.21			

6581.																
6582.	FLEXIBLE		0	0	12.00	0.00	0.00	3.00	3.00							
6583.	FLEXIBLE - US/STAT - HOTMIX - RURAL - HIGH TRAFFIC															
6584.	16	3	1	1	2	6	1.00	6.00	1	4	10	10	2086.00			
6585.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6586.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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6588.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
6589.		0.0	0.0	0.0	0.0	0.0	34.0	85.0	62.0	116.0	30.0	26.0	126.0	55.0	69.0	20.0
6590.		39.0	59.0	45.0	55.0	90.0	41.0	154.0	72.0	74.0	35.0	44.0	52.0	35.0	30.0	46.0
6591.	TRUCK TYPE			4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6592.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3								
6593.	3-S1-2	2-S2-2														
6594.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010	0 0	1020	0 0						
6595.	4 1 0 0	4 1 0 0														
6596.	0	3.38	0.98	0.17	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6597.	LOAD LIMITS			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6598.	80.00	20.00	34.00	56.00												
6599.	120.00	22.40	36.00	56.00												
6600.	13.	13.	12.	8.												
6601.	16.	16.	16.	16.												
6602.	SINGLE AXLES		11	0	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6603.	3.	6.	16.	39.	30.											
6604.	7.	625.	262.	2015.	479.											
6605.	8.	197.	46.	957.	116.											
6606.	12.	535.	103.	2190.	535.											
6607.	16.	284.	115.	2132.	282.											
6608.	18.	86.	51.	1672.	76.											
6609.	19.	25.	13.	546.	20.											
6610.	20.	18.	11.	291.	26.											
6611.	22.	14.	12.	125.	20.											
6612.	24.	9.	4.	13.	5.											
6613.	26.	3.	2.	4.	2.											
6614.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6615.	6.	0.	258.	3382.	0.											
6616.	12.	1.	167.	5272.	0.											
6617.	18.	0.	159.	5150.	0.											
6618.	24.	0.	28.	1814.	0.											
6619.	30.	0.	1.	1531.	0.											
6620.	32.	0.	0.	875.	0.											
6621.	33.	0.	0.	483.	0.											
6622.	34.	0.	0.	373.	0.											
6623.	36.	0.	0.	486.	0.											
6624.	38.	0.	0.	217.	0.											
6625.	40.	0.	0.	53.	0.											
6626.	42.	0.	0.	14.	0.											
6627.	44.	0.	0.	4.	0.											
6628.	46.	0.	0.	1.	0.											
6629.	50.	0.	0.	3.	0.											
6630.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6631.	10.	299.	4.	0	0											
6632.	14.	547.	29.	2.	1.											
6633.	20.	590.	188.	91.	3.											
6634.	22.	145.	48.	64.	3.											
6635.	24.	57.	37.	108.	5.											
6636.	26.	71.	29.	293.	2.											
6637.	28.	53.	16.	554.	9.											
6638.	30.	20.	18.	658.	13.											
6639.	32.	12.	27.	583.	22.											
6640.	34.	6.	20.	476.	28.											
6641.	36.	2.	28.	362.	25.											
6642.	38.	3.	38.	280.	15.											
6643.	40.	1.	31.	289.	8.											
6644.	45.	2.	59.	632.	41.											
6645.	50.	0.	38.	581.	59.											
6646.	55.	0.	8.	504.	57.											
6647.	60.	0.	4.	507.	33.											
6648.	65.	0.	2.	532.	28.											

6649.	70.	0.	0.	682.	12.					
6650.	72.	0.	0.	404.	7.					
6651.	75.	0.	0.	692.	12.					
6652.	80.	0.	0.	1042.	9.					
6653.	85.	0.	0.	438.	3.					
6654.	90.	0.	0.	81.	3.					
6655.	95.	0.	0.	11.	0.					
6656.	100.	0.	0.	3.	0.					
6657.	105.	0.	0.	2.	0.					
6658.	110.	0.	0.	1.	0.					
6659.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
6660.	10.	259.	4.	0.	0.					
6661.	14.	0.	29.	2.	1.					
6662.	20.	0.	104.	91.	3.					
6663.	22.	0.	0.	0.	3.					
6664.	24.	0.	0.	0.	5.					
6665.	26.	0.	0.	0.	2.					
6666.	28.	0.	0.	0.	0.					
6667.	30.	0.	0.	0.	0.					
6668.	32.	0.	0.	0.	0.					
6669.	34.	0.	0.	0.	0.					
6670.	36.	0.	0.	0.	0.					
6671.	38.	0.	0.	0.	0.					
6672.	40.	0.	0.	0.	0.					
6673.	45.	0.	0.	0.	0.					
6674.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
6675.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
6676.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

6677.
6678.
6679.
6680.
6681.

DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - US/STAT - HOTMIX - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
6688.						
6689.						
6690.						
6691.						
6692.	1	1026687.00	12.00	24.20	1932041.00	607.00
6693.	2	1170365.00	12.64	24.20	2193384.00	661.00
6694.	3	1330267.00	12.94	24.20	2472310.00	721.00
6695.	4	1501690.00	13.18	24.20	2783035.00	786.00
6696.	5	1677719.00	13.40	24.20	3131011.00	856.00
6697.	6	1853477.00	13.60	24.20	3521435.00	933.00
6698.	7	2029630.00	13.80	24.20	3959861.00	1017.00
6699.	8	2211746.00	13.99	24.20	4452410.00	1109.00
6700.	9	2407593.00	14.18	24.20	5005909.00	1209.00
6701.	10	2626103.00	14.37	24.20	5628004.00	1318.00
6702.	11	2876216.00	14.55	0.00	1859665.00	1436.00
6703.	12	3163904.00	14.12	0.00	2020910.00	1565.00
6704.	13	3491109.00	13.93	0.00	2232974.00	1706.00
6705.	14	3858312.00	13.80	0.00	2477220.00	1860.00
6706.	15	4266724.00	13.70	0.00	2754318.00	2027.00
6707.	16	4718655.00	13.62	0.00	3067087.00	2210.00
6708.	17	5216870.00	13.56	0.00	3419228.00	2409.00
6709.	18	5763682.00	13.51	0.00	3815217.00	2625.00

6710.																			
6711.																			
6712.	TOTAL					244.89	242.00												
6713.	PRESENT COSTS																		
6714.	TOTAL LANE MILES	51190688.00				486.89					56725920.00						25055.00		
6715.																			
6716.																			
6717.																			
6718.																			
6719.	FLEXIBLE		0	0	12.00		0.00		0.00		3.00		3.00						
6720.	FLEXIBLE - US/STAT - HOTMIX - URBAN - LOW TRAFFIC																		
6721.	16 3 1 2 1 6 1.00 6.00 1 4 10 10 1814.00																		
6722.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0																		
6723.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0																		
6724.	ACP 2.00 0.000 AGB 8.00 0.000 LTS 6.00 0.000 0.00 0.000																		
6725.	AGE DISTRIBUTION 30 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																		
6726.	0.0 0.0 0.0 0.0 0.0 0.0 3.0 6.0 5.0 9.0 2.0 2.0 9.0 4.0 5.0 1.0																		
6727.	3.0 4.0 3.0 4.0 7.0 3.0 12.0 5.0 6.0 3.0 3.0 4.0 3.0 2.0 3.0																		
6728.	TRUCK TYPE 4 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																		
6729.	2D 3A 3-S2 2-S1-2 2-S1 2-S2 3-S1 3-S3																		
6730.	3-S1-2 2-S2-2																		
6731.	2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0 2010 0 0 1020 0 0																		
6732.	4 1 0 0 4 1 0 0																		
6733.	0 3.52 0.58 0.04 0.31 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																		
6734.	LOAD LIMITS 0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																		
6735.	80.00 20.00 34.00 56.00																		
6736.	120.00 22.40 36.00 56.00																		
6737.	13. 13. 12. 8.																		
6738.	16. 16. 16. 16.																		
6739.	SINGLE AXLES 11 0 3.00 0.00 0.00 0.00 0.00 0.00																		
6740.	3. 0. 4. 9. 6.																		
6741.	7. 169. 91. 847. 56.																		
6742.	8. 59. 16. 513. 15.																		
6743.	12. 177. 30. 976. 52.																		
6744.	16. 89. 29. 984. 43.																		
6745.	18. 21. 7. 603. 19.																		
6746.	19. 15. 1. 216. 4.																		
6747.	20. 10. 2. 109. 1.																		
6748.	22. 6. 2. 72. 4.																		
6749.	24. 5. 2. 15. 0.																		
6750.	26 3. 0. 2. 0.																		
6751.	TANDEM AXLES 15 0 6.00 0.00 0.00 0.00 0.00 0.00																		
6752.	6 0. 91. 1484. 0.																		
6753.	12 0. 60. 2174. 0.																		
6754.	18 0. 29. 2225. 0.																		
6755.	24 0. 2. 849. 0.																		
6756.	30 0. 0. 806. 0.																		
6757.	32 0. 0. 362. 0.																		
6758.	33 0. 0. 174. 0.																		
6759.	34 0. 0. 137. 0.																		
6760.	36 0. 0. 154. 0.																		
6761.	38 0. 0. 62. 0.																		
6762.	40 0. 0. 21. 0.																		
6763.	42 0. 0. 7. 0.																		
6764.	44 0. 0. 2. 0.																		
6765.	46 0. 0. 1. 0.																		
6766.	50 0. 0. 1. 0.																		
6767.	GVW 28 0 10.00 0.00 0.00 0.00 0.00 0.00																		
6768.	10. 90. 2. 0. 0.																		
6769.	14. 167. 14. 2. 0.																		
6770.	20 188 72. 26. 0.																		

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6771.	22.	31.	12.	27.	0.					
6772.	24.	20.	14.	59.	1.					
6773.	26.	26.	10.	110.	1.					
6774.	28.	14.	7.	193.	1.					
6775.	30.	9.	3.	277.	0.					
6776.	32.	5.	10.	271.	4.					
6777.	34.	2.	4.	268.	3.					
6778.	36.	1.	6.	257.	1.					
6779.	38.	1.	6.	176.	0.					
6780.	40.	0.	3.	139.	5.					
6781.	45.	0.	15.	206.	6.					
6782.	50.	0.	4.	192.	6.					
6783.	55.	0.	1.	189.	4.					
6784.	60.	0.	0.	202.	5.					
6785.	65.	0.	0.	287.	3.					
6786.	70.	0.	0.	359.	6.					
6787.	72.	0.	0.	150.	0.					
6788.	75.	0.	0.	256.	3.					
6789.	80.	0.	0.	399.	1.					
6790.	85.	0.	0.	149.	0.					
6791.	90.	0.	0.	48.	0.					
6792.	95.	0.	0.	9.	0.					
6793.	100.	0.	0.	3.	0.					
6794.	105.	0.	0.	0.	0.					
6795.	110.	0.	0.	1.	0.					
6796.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
6797.	10.	79.	2.	0.	0.					
6798.	14.	0.	14.	2.	0.					
6799.	20.	0.	34.	26.	0.					
6800.	22.	0.	0.	0.	0.					
6801.	24.	0.	0.	0.	1.					
6802.	26.	0.	0.	0.	1.					
6803.	28.	0.	0.	0.	0.					
6804.	30.	0.	0.	0.	0.					
6805.	32.	0.	0.	0.	0.					
6806.	34.	0.	0.	0.	0.					
6807.	36.	0.	0.	0.	0.					
6808.	38.	0.	0.	0.	0.					
6809.	40.	0.	0.	0.	0.					
6810.	45.	0.	0.	0.	0.					
6811.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
6812.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
6813.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

6814.
6815.
6816.
6817.
6818.
6819. DISTRICT: 16.
6820. PRESENT LIMITS

6821. FLEXIBLE - US/STAT - HOTMIX - URBAN - LOW TRAFFIC
6822.
6823.
6824.

6825.	YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
6826.	1	75843.00	0.77	1.80	138850.00	528.00
6827.	2	86625.00	0.81	1.80	157326.00	575.00
6828.	3	98000.00	0.83	1.80	170000.00	0.00

6893.	30.	0.	0.	806.	0.					
6894.	32.	0.	0.	362.	0.					
6895.	33.	0.	0.	174.	0.					
6896.	34.	0.	0.	137.	0.					
6897.	36.	0.	0.	154.	0.					
6898.	38.	0.	0.	62.	0.					
6899.	40.	0.	0.	21.	0.					
6900.	42.	0.	0.	7.	0.					
6901.	44.	0.	0.	2.	0.					
6902.	46.	0.	0.	1.	0.					
6903.	50.	0.	0.	1.	0.					
6904.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
6905.	10.	90.	2.	0.	0.					
6906.	14.	167.	14.	2.	0.					
6907.	20.	188.	72.	26.	0.					
6908.	22.	31.	12.	27.	0.					
6909.	24.	20.	14.	59.	1.					
6910.	26.	26.	10.	110.	1.					
6911.	28.	14.	7.	193.	1.					
6912.	30.	9.	3.	277.	0.					
6913.	32.	5.	10.	271.	4.					
6914.	34.	2.	4.	268.	3.					
6915.	36.	1.	6.	257.	1.					
6916.	38.	1.	6.	176.	0.					
6917.	40.	0.	3.	139.	5.					
6918.	45.	0.	15.	206.	6.					
6919.	50.	0.	4.	192.	6.					
6920.	55.	0.	1.	189.	4.					
6921.	60.	0.	0.	202.	5.					
6922.	65.	0.	0.	287.	3.					
6923.	70.	0.	0.	359.	6.					
6924.	72.	0.	0.	150.	0.					
6925.	75.	0.	0.	256.	3.					
6926.	80.	0.	0.	399.	1.					
6927.	85.	0.	0.	149.	0.					
6928.	90.	0.	0.	48.	0.					
6929.	95.	0.	0.	9.	0.					
6930.	100.	0.	0.	3.	0.					
6931.	105.	0.	0.	0.	0.					
6932.	110.	0.	0.	1.	0.					
6933.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
6934.	10.	79.	2.	0.	0.					
6935.	14.	0.	14.	2.	0.					
6936.	20.	0.	34.	26.	0.					
6937.	22.	0.	0.	0.	0.					
6938.	24.	0.	0.	0.	1.					
6939.	26.	0.	0.	0.	1.					
6940.	28.	0.	0.	0.	0.					
6941.	30.	0.	0.	0.	0.					
6942.	32.	0.	0.	0.	0.					
6943.	34.	0.	0.	0.	0.					
6944.	36.	0.	0.	0.	0.					
6945.	38.	0.	0.	0.	0.					
6946.	40.	0.	0.	0.	0.					
6947.	45.	0.	0.	0.	0.					
6948.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
6949.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
6950.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

111-0

7015.	7.	625.	262.	2015.	479.					
7016.	8.	197.	46.	957.	116.					
7017.	12.	535.	103.	2190.	535.					
7018.	16.	284.	115.	2132.	282.					
7019.	18.	86.	51.	1672.	76.					
7020.	19.	25.	13.	546.	20.					
7021.	20.	18.	11.	291.	26.					
7022.	22.	14.	12.	125.	20.					
7023.	24.	9.	4.	13.	5.					
7024.	26.	3.	2.	4.	2.					
7025.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00
7026.	6.	0.	258.	3382.	0.					
7027.	12.	1.	167.	5272.	0.					
7028.	18.	0.	159.	5150.	0.					
7029.	24.	0.	28.	1814.	0.					
7030.	30.	0.	1.	1531.	0.					
7031.	32.	0.	0.	875.	0.					
7032.	33.	0.	0.	483.	0.					
7033.	34.	0.	0.	373.	0.					
7034.	36.	0.	0.	486.	0.					
7035.	38.	0.	0.	217.	0.					
7036.	40.	0.	0.	53.	0.					
7037.	42.	0.	0.	14.	0.					
7038.	44.	0.	0.	4.	0.					
7039.	46.	0.	0.	1.	0.					
7040.	50.	0.	0.	3.	0.					
7041.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
7042.	10.	299.	4.	0.	0.					
7043.	14.	547.	29.	2.	1.					
7044.	20.	590.	188.	91.	3.					
7045.	22.	145.	48.	64.	3.					
7046.	24.	57.	37.	108.	5.					
7047.	26.	71.	29.	293.	2.					
7048.	28.	53.	16.	554.	9.					
7049.	30.	20.	18.	658.	13.					
7050.	32.	12.	27.	583.	22.					
7051.	34.	6.	20.	476.	28.					
7052.	36.	2.	28.	362.	25.					
7053.	38.	3.	38.	280.	15.					
7054.	40.	1.	31.	289.	8.					
7055.	45.	2.	59.	632.	41.					
7056.	50.	0.	38.	581.	59.					
7057.	55.	0.	8.	504.	57.					
7058.	60.	0.	4.	507.	33.					
7059.	65.	0.	2.	532.	28.					
7060.	70.	0.	0.	682.	12.					
7061.	72.	0.	0.	404.	7.					
7062.	75.	0.	0.	692.	12.					
7063.	80.	0.	0.	1042.	9.					
7064.	85.	0.	0.	438.	3.					
7065.	90.	0.	0.	81.	3.					
7066.	95.	0.	0.	11.	0.					
7067.	100.	0.	0.	3.	0.					
7068.	105.	0.	0.	2.	0.					
7069.	110.	0.	0.	1.	0.					
7070.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
7071.	10.	259.	4.	0.	0.					
7072.	14.	0.	29.	2.	1.					
7073.	20.	0.	104.	91.	3.					
7074.	22.	0.	0.	0.	0.					
7075.	0.	0.	0.	0.	0.					

7076.	26.	0.	0.	0.	2.				
7077.	28.	0.	0.	0.	0.				
7078.	30.	0.	0.	0.	0.				
7079.	32.	0.	0.	0.	0.				
7080.	34.	0.	0.	0.	0.				
7081.	36.	0.	0.	0.	0.				
7082.	38.	0.	0.	0.	0.				
7083.	40.	0.	0.	0.	0.				
7084.	45.	0.	0.	0.	0.				
7085.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
7086.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
7087.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - US/STAT - OVRLAY - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
7100.						
7101.						
7102.						
7103.	1	150044.00	0.00	11.10	659830.00	61.00
7104.	2	167569.00	0.00	11.10	739011.00	67.00
7105.	3	186523.00	0.00	11.10	827694.00	73.00
7106.	4	206459.00	0.00	11.10	927019.00	80.00
7107.	5	227162.00	0.00	11.10	1038265.00	87.00
7108.	6	248939.00	0.00	11.10	1162859.00	95.00
7109.	7	272410.00	0.00	11.10	1302406.00	103.00
7110.	8	298426.00	0.00	11.10	1458700.00	112.00
7111.	9	328299.00	0.00	11.10	1633749.00	122.00
7112.	10	364078.00	0.00	11.10	1829805.00	133.00
7113.	11	408205.00	0.00	0.00	195.00	145.00
7114.	12	462317.00	0.00	0.00	228.00	159.00
7115.	13	526759.00	0.00	0.00	265.00	173.00
7116.	14	601399.00	0.00	0.00	309.00	188.00
7117.	15	686357.00	0.00	0.00	360.00	205.00
7118.	16	782083.00	0.00	0.00	416.00	224.00
7119.	17	889100.00	0.00	0.00	481.00	244.00
7120.	18	1007555.00	0.00	0.00	555.00	266.00
7121.						
7122.						
7123.	TOTAL		0.03	111.00		
7124.	PRESENT COSTS	7813684.00			11582147.00	2537.00
7125.	TOTAL LANE MILES		111.03			

7130.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00							
7131.	FLEXIBLE - US/STAT - OVRLAY - RURAL - HIGH TRAFFIC														
7132.	16 3 3 1 2	6	1.00	6.00	1	4	10	10	1687.00						
7133.	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7134.	0.0 0.0 0.0 0.0	0.0	0.0	0.0											
7135.	ACP 3.00 0.000 ATB	4.00	0.000	AGB 12.00	0.000	LTS 0.00	0.000								
7136.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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7198.	72.	0.	0.	404.	7.					
7199.	75.	0.	0.	692.	12.					
7200.	80.	0.	0.	1042.	9.					
7201.	85.	0.	0.	438.	3.					
7202.	90.	0.	0.	81.	3.					
7203.	95.	0.	0.	11.	0.					
7204.	100.	0.	0.	3.	0.					
7205.	105.	0.	0.	2.	0.					
7206.	110.	0.	0.	1.	0.					
7207.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
7208.	10.	259.	4.	0.	0.					
7209.	14.	0.	29.	2.	1.					
7210.	20.	0.	104.	91.	3.					
7211.	22.	0.	0.	0.	3.					
7212.	24.	0.	0.	0.	5.					
7213.	26.	0.	0.	0.	2.					
7214.	28.	0.	0.	0.	0.					
7215.	30.	0.	0.	0.	0.					
7216.	32.	0.	0.	0.	0.					
7217.	34.	0.	0.	0.	0.					
7218.	36.	0.	0.	0.	0.					
7219.	38.	0.	0.	0.	0.					
7220.	40.	0.	0.	0.	0.					
7221.	45.	0.	0.	0.	0.					
7222.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
7223.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
7224.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 16.
PRESENT LIMITS

FLEXIBLE - US/STAT - OVRLAY - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
7237.						
7238.						
7239.						
7240.	1	4178.00	0.00	0.30	17848.00	237.00
7241.	2	4633.00	0.00	0.30	19991.00	259.00
7242.	3	5091.00	0.00	0.30	22391.00	282.00
7243.	4	5570.00	0.00	0.30	25078.00	307.00
7244.	5	6083.00	0.00	0.30	28089.00	335.00
7245.	6	6639.00	0.00	0.30	31461.00	365.00
7246.	7	7251.00	0.00	0.30	35238.00	398.00
7247.	8	7937.00	0.00	0.30	39469.00	434.00
7248.	9	8729.00	0.00	0.30	44207.00	473.00
7249.	10	9681.00	0.00	0.30	49515.00	515.00
7250.	11	10858.00	0.00	0.00	76.00	562.00
7251.	12	12304.00	0.00	0.00	89.00	612.00
7252.	13	14028.00	0.00	0.00	104.00	667.00
7253.	14	16026.00	0.00	0.00	121.00	727.00
7254.	15	18301.00	0.00	0.00	140.00	793.00
7255.	16	20865.00	0.00	0.00	162.00	864.00
7256.	17	23732.00	0.00	0.00	187.00	942.00
7257.	18	26905.00	0.00	0.00	216.00	1027.00
7258.						

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7320.	24.	20.	14.	59.	1.					
7321.	26.	26.	10.	110.	1.					
7322.	28.	14.	7.	193.	1.					
7323.	30.	9.	3.	277.	0.					
7324.	32.	5.	10.	271.	4.					
7325.	34.	2.	4.	268.	3.					
7326.	36.	1.	6.	257.	1.					
7327.	38.	1.	6.	176.	0.					
7328.	40.	0.	3.	139.	5.					
7329.	45.	0.	15.	206.	6.					
7330.	50.	0.	4.	192.	6.					
7331.	55.	0.	1.	189.	4.					
7332.	60.	0.	0.	202.	5.					
7333.	65.	0.	0.	287.	3.					
7334.	70.	0.	0.	359.	6.					
7335.	72.	0.	0.	150.	0.					
7336.	75.	0.	0.	256.	3.					
7337.	80.	0.	0.	399.	1.					
7338.	85.	0.	0.	149.	0.					
7339.	90.	0.	0.	48.	0.					
7340.	95.	0.	0.	9.	0.					
7341.	100.	0.	0.	3.	0.					
7342.	105.	0.	0.	0.	0.					
7343.	110.	0.	0.	1.	0.					
7344.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
7345.	10.	79.	2.	0.	0.					
7346.	14.	0.	14.	2.	0.					
7347.	20.	0.	34.	26.	0.					
7348.	22.	0.	0.	0.	0.					
7349.	24.	0.	0.	0.	1.					
7350.	26.	0.	0.	0.	1.					
7351.	28.	0.	0.	0.	0.					
7352.	30.	0.	0.	0.	0.					
7353.	32.	0.	0.	0.	0.					
7354.	34.	0.	0.	0.	0.					
7355.	36.	0.	0.	0.	0.					
7356.	38.	0.	0.	0.	0.					
7357.	40.	0.	0.	0.	0.					
7358.	45.	0.	0.	0.	0.					
7359.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
7360.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
7361.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 16.
 PRESENT LIMITS
 FLEXIBLE - US/STAT - OVRLAY - URBAN - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
7373.					
7374.					
7375.					
7376.					
7377.	1	9604.00	0.00	41676.00	309.00
7378.	2	10741.00	0.00	46680.00	337.00
7379.	3	11957.00	0.00	52286.00	367.00
7380.	4	13217.00	0.00	58564.00	400.00

7564.	8.	197.	46.	957.	116.					
7565.	12.	535.	103.	2190.	535.					
7566.	16.	284.	115.	2132.	282.					
7567.	18.	86.	51.	1672.	76.					
7568.	19.	25.	13.	546.	20.					
7569.	20.	18.	11.	291.	26.					
7570.	22.	14.	12.	125.	20.					
7571.	24.	9.	4.	13.	5.					
7572.	26.	3.	2.	4.	2.					
7573.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00
7574.	6.	0.	258.	3382.	0.					
7575.	12.	1.	167.	5272.	0.					
7576.	18.	0.	159.	5150.	0.					
7577.	24.	0.	28.	1814.	0.					
7578.	30.	0.	1.	1531.	0.					
7579.	32.	0.	0.	875.	0.					
7580.	33.	0.	0.	483.	0.					
7581.	34.	0.	0.	373.	0.					
7582.	36.	0.	0.	486.	0.					
7583.	38.	0.	0.	217.	0.					
7584.	40.	0.	0.	53.	0.					
7585.	42.	0.	0.	14.	0.					
7586.	44.	0.	0.	4.	0.					
7587.	46.	0.	0.	1.	0.					
7588.	50.	0.	0.	3.	0.					
7589.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
7590.	10.	299.	4.	0.	0.					
7591.	14.	547.	29.	2.	1.					
7592.	20.	590.	188.	91.	3.					
7593.	22.	145.	48.	64.	3.					
7594.	24.	57.	37.	108.	5.					
7595.	26.	71.	29.	293.	2.					
7596.	28.	53.	16.	554.	9.					
7597.	30.	20.	18.	658.	13.					
7598.	32.	12.	27.	583.	22.					
7599.	34.	6.	20.	476.	28.					
7600.	36.	2.	28.	362.	25.					
7601.	38.	3.	38.	280.	15.					
7602.	40.	1.	31.	289.	8.					
7603.	45.	2.	59.	632.	41.					
7604.	50.	0.	38.	581.	59.					
7605.	55.	0.	8.	504.	57.					
7606.	60.	0.	4.	507.	33.					
7607.	65.	0.	2.	532.	28.					
7608.	70.	0.	0.	682.	12.					
7609.	72.	0.	0.	404.	7.					
7610.	75.	0.	0.	692.	12.					
7611.	80.	0.	0.	1042.	9.					
7612.	85.	0.	0.	438.	3.					
7613.	90.	0.	0.	81.	3.					
7614.	95.	0.	0.	11.	0.					
7615.	100.	0.	0.	3.	0.					
7616.	105.	0.	0.	2.	0.					
7617.	110.	0.	0.	1.	0.					
7618.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
7619.	10.	259.	4.	0.	0.					
7620.	14.	0.	29.	2.	1.					
7621.	20.	0.	104.	91.	3.					
7622.	22.	0.	0.	0.	3.					
7623.	24.	0.	0.	0.	5.					
7624.	26.	0.	0.	0.	2.					

7625.	28.	0.	0.	0.	0.														
7626.	30.	0.	0.	0.	0.														
7627.	32.	0.	0.	0.	0.														
7628.	34.	0.	0.	0.	0.														
7629.	36.	0.	0.	0.	0.														
7630.	38.	0.	0.	0.	0.														
7631.	40.	0.	0.	0.	0.														
7632.	45.	0.	0.	0.	0.														
7633.	PERFORMANCE		0	0	0.00		3.05		4.70		0.00		0.00						
7634.	OVERLAY		0	0	95.00		4.75		0.25		0.00		0.00						
7635.	EXECUTE		0	0	0.00		0.00		0.00		0.00		0.00						

7636.
7637.
7638.
7639.
7640.

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - INTERST - HOTMIX - RURAL - HIGH TRAFFIC

7645.
7646.
7647.

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
7650.						
7651.	1	28864.00	0.13	0.00	5221.00	676.00
7652.	2	31577.00	0.13	0.00	5952.00	737.00
7653.	3	34275.00	0.13	0.00	6695.00	803.00
7654.	4	37058.00	0.13	0.00	7514.00	876.00
7655.	5	39997.00	0.13	0.00	8426.00	954.00
7656.	6	43140.00	0.13	0.00	9444.00	1040.00
7657.	7	46526.00	0.13	0.00	10585.00	1134.00
7658.	8	50193.00	0.13	0.00	11865.00	1236.00
7659.	9	54195.00	0.13	0.00	13302.00	1347.00
7660.	10	58610.00	0.13	0.00	14915.00	1469.00
7661.	11	63526.00	0.13	0.00	16727.00	1601.00
7662.	12	69008.00	0.13	0.00	18763.00	1745.00
7663.	13	75082.00	0.13	0.00	21051.00	1902.00
7664.	14	81764.00	0.13	0.00	23624.00	2073.00
7665.	15	89077.00	0.13	0.00	26517.00	2260.00
7666.	16	97062.00	0.13	0.00	29769.00	2463.00
7667.	17	105768.00	0.13	0.00	33427.00	2685.00
7668.	18	115258.00	0.13	0.00	37542.00	2926.00
7669.						
7670.						
7671.	TOTAL		2.35	0.00		
7672.	PRESENT COSTS	1120980.00			301339.00	27927.00
7673.	TOTAL LANE MILES		2.35			

7674.
7675.
7676.
7677.

7678.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00												
7679.	FLEXIBLE - INTERST - HOTMIX - URBAN - LOW TRAFFIC																			
7680.	21	1	1	2	1	6	1.00	6.00	1	4	10	10	2325.00							
7681.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7682.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7683.	ACP	2.00	0.000	AGB	8.00	0.000	LTS	6.00	0.000		0.00	0.000								
7684.	AC	STR	ION		30	0	5.00				0.00	0.000								

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7686.	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7687.	TRUCK TYPE																
7688.	2D	3A	3-S2	4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7689.	3-S1-2	2-S2-2															
7690.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0									
7691.	4 1 0 0	4 1 0 0															
7692.	0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00	0.00						
7693.	LOAD LIMITS																
7694.	80.00	20.00	34.00	56.00													
7695.	120.00	22.40	36.00	56.00													
7696.	13.	13.	12.	8.													
7697.	16.	16.	16.	16.													
7698.	SINGLE AXLES																
7699.	3.	0.	4.	9.	6.												
7700.	7.	169.	91.	847.	56.												
7701.	8.	59.	16.	513.	15.												
7702.	12.	177.	30.	976.	52.												
7703.	16.	89.	29.	984.	43.												
7704.	18.	21.	7.	603.	19.												
7705.	19.	15.	1.	216.	4.												
7706.	20.	10.	2.	109.	1.												
7707.	22.	6.	2.	72.	4.												
7708.	24.	5.	2.	15.	0.												
7709.	26.	3.	0.	2.	0.												
7710.	TANDEM AXLES																
7711.	6.	0.	91.	1484.	0.												
7712.	12.	0.	60.	2174.	0.												
7713.	18.	0.	29.	2225.	0.												
7714.	24.	0.	2.	849.	0.												
7715.	30.	0.	0.	806.	0.												
7716.	32.	0.	0.	362.	0.												
7717.	33.	0.	0.	174.	0.												
7718.	34.	0.	0.	137.	0.												
7719.	36.	0.	0.	154.	0.												
7720.	38.	0.	0.	62.	0.												
7721.	40.	0.	0.	21.	0.												
7722.	42.	0.	0.	7.	0.												
7723.	44.	0.	0.	2.	0.												
7724.	46.	0.	0.	1.	0.												
7725.	50.	0.	0.	1.	0.												
7726.	GVW																
7727.	10.	90.	2.	0.	0.												
7728.	14.	167.	14.	2.	0.												
7729.	20.	188.	72.	26.	0.												
7730.	22.	31.	12.	27.	0.												
7731.	24.	20.	14.	59.	1.												
7732.	26.	26.	10.	110.	1.												
7733.	28.	14.	7.	193.	1.												
7734.	30.	9.	3.	277.	0.												
7735.	32.	5.	10.	271.	4.												
7736.	34.	2.	4.	268.	3.												
7737.	36.	1.	6.	257.	1.												
7738.	38.	1.	6.	176.	0.												
7739.	40.	0.	3.	139.	5.												
7740.	45.	0.	15.	206.	6.												
7741.	50.	0.	4.	192.	6.												
7742.	55.	0.	1.	189.	4.												
7743.	60.	0.	0.	202.	5.												
7744.	65.	0.	0.	287.	3.												
7745.	70.	0.	0.	359.	6.												
7746.	72.	0.	0.	150.	0.												

7747.	75.	0.	0.	256.	3.				
7748.	80.	0.	0.	399.	1.				
7749.	85.	0.	0.	149.	0.				
7750.	90.	0.	0.	48.	0.				
7751.	95.	0.	0.	9.	0.				
7752.	100.	0.	0.	3.	0.				
7753.	105.	0.	0.	0.	0.				
7754.	110.	0.	0.	1.	0.				
7755.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
7756.	10.	79.	2.	0.	0.				
7757.	14.	0.	14.	2.	0.				
7758.	20.	0.	34.	26.	0.				
7759.	22.	0.	0.	0.	0.				
7760.	24.	0.	0.	0.	1.				
7761.	26.	0.	0.	0.	1.				
7762.	28.	0.	0.	0.	0.				
7763.	30.	0.	0.	0.	0.				
7764.	32.	0.	0.	0.	0.				
7765.	34.	0.	0.	0.	0.				
7766.	36.	0.	0.	0.	0.				
7767.	38.	0.	0.	0.	0.				
7768.	40.	0.	0.	0.	0.				
7769.	45.	0.	0.	0.	0.				
7770.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
7771.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
7772.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

7773.
7774.
7775.
7776.
7777.

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - INTERST - HOTMIX - URBAN - LOW TRAFFIC

7781.
7782.
7783.
7784.

7785.	YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
7788.	1	5390.00	0.03	0.00	1049.00	676.00
7789.	2	5801.00	0.03	0.00	1203.00	737.00
7790.	3	6243.00	0.03	0.00	1359.00	803.00
7791.	4	6720.00	0.03	0.00	1530.00	876.00
7792.	5	7233.00	0.03	0.00	1721.00	954.00
7793.	6	7786.00	0.03	0.00	1935.00	1040.00
7794.	7	8384.00	0.03	0.00	2174.00	1134.00
7795.	8	9032.00	0.03	0.00	2442.00	1236.00
7796.	9	9739.00	0.03	0.00	2744.00	1347.00
7797.	10	10521.00	0.03	0.00	3082.00	1469.00
7798.	11	11393.00	0.03	0.00	3463.00	1601.00
7799.	12	12367.00	0.03	0.00	3892.00	1745.00
7800.	13	13449.00	0.03	0.00	4374.00	1902.00
7801.	14	14640.00	0.03	0.00	4916.00	2073.00
7802.	15	15943.00	0.03	0.00	5526.00	2260.00
7803.	16	17367.00	0.03	0.00	6213.00	2463.00
7804.	17	18919.00	0.03	0.00	6986.00	2685.00
7805.	18	20611.00	0.03	0.00	7856.00	2926.00

7806.
7807.

7808.	TOTAL						0.48	0.00								
7809.	PRESENT COSTS					201538.00						62465.00				27927.00
7810.	TOTAL LANE MILES								0.48							
7811.																
7812.																
7813.																
7814.																
7815.	FLEXIBLE			0	0	12.00		0.00		0.00		3.00		3.00		
7816.	FLEXIBLE - INTERST - HOTMIX - URBAN - HIGH TRAFFIC															
7817.	21 1 1 2 2 6 1.00 6.00 1 4 10 10 8895.00															
7818.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
7819.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
7820.	ACP 4.00 0.000 AGB 10.00 0.000 LTS 6.00 0.000 0.00 0.000															
7821.	AGE DISTRIBUTION 30 0 0.00 0.00 0.00 0.00															
7822.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
7823.	0.0 0.0 0.0 0.0 0.0 25.0 0.0 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
7824.	TRUCK TYPE 4 0 0.00 0.00 0.00 0.00															
7825.	2D 3A 3-S2 2-S1-2 2-S1 2-S2 3-S1 3-S3															
7826.	3-S1-2 2-S2-2															
7827.	2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0 2010 0 0 1020 0 0															
7828.	4 1 0 0 4 1 0 0															
7829.	0 3.94 0.71 0.23 1.83 0.00 0.00 0.00 0.00 0.00 0.00 0.00															
7830.	LOAD LIMITS 0 0 0.00 0.00 0.00 0.00 0.00 0.00															
7831.	80.00 20.00 34.00 56.00															
7832.	120.00 22.40 36.00 56.00															
7833.	13. 13. 12. 8.															
7834.	16. 16. 16. 16.															
7835.	SINGLE AXLES 11 0 3.00 0.00 0.00 0.00 0.00															
7836.	3. 0. 4. 9. 6.															
7837.	7. 169. 91. 847. 56.															
7838.	8. 59. 16. 513. 15.															
7839.	12. 177. 30. 976. 52.															
7840.	16. 89. 29. 984. 43.															
7841.	18. 21. 7. 603. 19.															
7842.	19. 15. 1. 216. 4.															
7843.	20. 10. 2. 109. 1.															
7844.	22. 6. 2. 72. 4.															
7845.	24. 5. 2. 15. 0.															
7846.	26. 3. 0. 2. 0.															
7847.	TANDEM AXLES 15 0 6.00 0.00 0.00 0.00 0.00															
7848.	6. 0. 91. 1484. 0.															
7849.	12. 0. 60. 2174. 0.															
7850.	18. 0. 29. 2225. 0.															
7851.	24. 0. 2. 849. 0.															
7852.	30. 0. 0. 806. 0.															
7853.	32. 0. 0. 362. 0.															
7854.	33. 0. 0. 174. 0.															
7855.	34. 0. 0. 137. 0.															
7856.	36. 0. 0. 154. 0.															
7857.	38. 0. 0. 62. 0.															
7858.	40. 0. 0. 21. 0.															
7859.	42. 0. 0. 7. 0.															
7860.	44. 0. 0. 2. 0.															
7861.	46. 0. 0. 1. 0.															
7862.	50. 0. 0. 1. 0.															
7863.	GVW 28 0 10.00 0.00 0.00 0.00 0.00															
7864.	10. 90. 2. 0. 0.															
7865.	14. 167. 14. 2. 0.															
7866.	20. 188. 72. 26. 0.															
7867.	22. 31. 12. 27. 0.															
7868.	24. 20. 14. 59. 1.															

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7869.	26.	26.	10.	110.	1.					
7870.	28.	14.	7.	193.	1.					
7871.	30.	9.	3.	277.	0.					
7872.	32.	5.	10.	271.	4.					
7873.	34.	2.	4.	268.	3.					
7874.	36.	1.	6.	257.	1.					
7875.	38.	1.	6.	176.	0.					
7876.	40.	0.	3.	139.	5.					
7877.	45.	0.	15.	206.	6.					
7878.	50.	0.	4.	192.	6.					
7879.	55.	0.	1.	189.	4.					
7880.	60.	0.	0.	202.	5.					
7881.	65.	0.	0.	287.	3.					
7882.	70.	0.	0.	359.	6.					
7883.	72.	0.	0.	150.	0.					
7884.	75.	0.	0.	256.	3.					
7885.	80.	0.	0.	399.	1.					
7886.	85.	0.	0.	149.	0.					
7887.	90.	0.	0.	48.	0.					
7888.	95.	0.	0.	9.	0.					
7889.	100.	0.	0.	3.	0.					
7890.	105.	0.	0.	0.	0.					
7891.	110.	0.	0.	1.	0.					
7892.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
7893.	10.	79.	2.	0.	0.					
7894.	14.	0.	14.	2.	0.					
7895.	20.	0.	34.	26.	0.					
7896.	22.	0.	0.	0.	0.					
7897.	24.	0.	0.	0.	1.					
7898.	26.	0.	0.	0.	1.					
7899.	28.	0.	0.	0.	0.					
7900.	30.	0.	0.	0.	0.					
7901.	32.	0.	0.	0.	0.					
7902.	34.	0.	0.	0.	0.					
7903.	36.	0.	0.	0.	0.					
7904.	38.	0.	0.	0.	0.					
7905.	40.	0.	0.	0.	0.					
7906.	45.	0.	0.	0.	0.					
7907.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
7908.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
7909.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - INTERST - HOTMIX - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
7921.						
7922.						
7923.						
7924.						
7925.	1	84655.00	1.11	0.10	51600.00	2587.00
7926.	2	90518.00	1.19	0.10	61603.00	2820.00
7927.	3	95998.00	1.23	0.10	71162.00	3074.00
7928.	4	101375.00	1.27	0.10	81575.00	3177.00
7929.	5	106833.00	1.29	0.10	95100.00	3652.00

7930.	6	112467.00	1.32	0.10	106181.00	3980.00
7931.	7	118373.00	1.34	0.10	120847.00	4339.00
7932.	8	124672.00	1.37	0.10	137414.00	4729.00
7933.	9	131595.00	1.39	0.10	156154.00	5155.00
7934.	10	139528.00	1.41	0.10	177369.00	5618.00
7935.	11	148923.00	1.43	0.00	182941.00	6124.00
7936.	12	160041.00	1.44	0.00	206612.00	6675.00
7937.	13	172859.00	1.46	0.00	233872.00	7276.00
7938.	14	187250.00	1.48	0.00	264868.00	7931.00
7939.	15	203137.00	1.49	0.00	300056.00	8645.00
7940.	16	220522.00	1.51	0.00	339985.00	9423.00
7941.	17	239454.00	1.53	0.00	385285.00	10271.00
7942.	18	260012.00	1.55	0.00	436675.00	11195.00

7943.						
7944.						
7945.	TOTAL		24.81	1.00		
7946.	PRESENT COSTS	2698210.00			3407367.00	106844.00
7947.	TOTAL LANE MILES		25.81			
7948.						
7949.						
7950.						

7951.	-----															
7952.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00								
7953.	FLEXIBLE - FM - HOTMIX - RURAL - LOW TRAFFIC															
7954.	21 2 1 1 6 1.00 6.00 1 4 10 10 310.00															
7955.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
7956.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
7957.	ACP 2.00 0.000 AGB 8.00 0.000 LTS 0.00 0.000 0.00 0.000															
7958.	AGE DISTRIBUTION 30 0 0.00 0.00 0.00 0.00 0.00 0.00															
7959.	0.0 0.0 0.0 0.0 0.0 8.0 12.0 22.0 26.0 20.0 7.0 1.0 7.0 4.0 4.0															
7960.	10.0 4.0 9.0 1.0 7.0 1.0 4.0 12.0 2.0 2.0 5.0 3.0 1.0 3.0 9.0															
7961.	TRUCK TYPE 4 0 0.00 0.00 0.00 0.00 0.00															
7962.	2D 3A 3-S2 2-S1-2 2-S1 2-S2 3-S1 3-S3															
7963.	3-S1-2 2-S2-2															
7964.	2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0 2010 0 0 1020 0 0															
7965.	4 1 0 0 4 1 0 0															
7966.	0 3.94 0.71 0.23 1.83 0.00 0.00 0.00 0.00 0.00 0.00															
7967.	LOAD LIMITS 0 0 0.00 0.00 0.00 0.00 0.00															
7968.	80.00 20.00 34.00 56.00															
7969.	120.00 22.40 36.00 56.00															
7970.	13. 13. 12. 8															
7971.	16. 16. 16. 16															
7972.	SINGLE AXLES 11 0 3.00 0.00 0.00 0.00 0.00															
7973.	3. 6. 16. 39 30.															
7974.	7. 625. 262 2015 479.															
7975.	8. 197. 46. 957. 116.															
7976.	12. 535. 103 2190 535.															
7977.	16. 284. 115. 2132 282.															
7978.	18. 86. 51. 1672 76.															
7979.	19. 25. 13. 546. 20.															
7980.	20. 18. 11. 291 26.															
7981.	22. 14. 12. 125 20.															
7982.	24. 9. 4. 13 5.															
7983.	26. 3. 2. 4 2.															
7984.	TANDEM AXLES 15 0 6.00 0.00 0.00 0.00 0.00															
7985.	6. 0. 258. 3382. 0.															
7986.	12. 1. 167. 5272. 0.															
7987.	18. 0. 159. 5150. 0.															
7988.	24. 0. 28 1814. 0.															
7989.	30. 0. 1. 1531. 0.															
7990.	32. 0. 0. 875. 0.															

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DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	119757.00	0.57	2.30	160014.00	90.00
2	147508.00	0.58	2.30	179779.00	98.00
3	179780.00	0.58	2.30	201518.00	107.00
4	213882.00	0.58	2.30	225830.00	117.00
5	247457.00	0.59	2.30	253066.00	127.00
6	279426.00	0.59	2.30	283595.00	139.00
7	310113.00	0.59	2.30	317823.00	151.00
8	340786.00	0.59	2.30	356202.00	165.00
9	372961.00	0.60	2.30	399238.00	180.00
10	408073.00	0.60	2.30	447497.00	196.00
11	447384.00	0.60	0.00	77008.00	213.00
12	491738.00	0.58	0.00	83596.00	233.00
13	541512.00	0.57	0.00	92092.00	254.00
14	596912.00	0.57	0.00	101814.00	276.00
15	658217.00	0.56	0.00	112796.00	301.00
16	725825.00	0.56	0.00	125144.00	328.00
17	800181.00	0.55	0.00	138997.00	358.00
18	881679.00	0.55	0.00	154520.00	390.00
TOTAL PRESENT COSTS	7763191.00	10.41	23.00	3710529.00	3723.00
TOTAL LANE MILES		33.41			

FLEXIBLE		0	0	12.00	0.00	0.00	3.00	3.00									
FLEXIBLE - FM - HOTMIX - RURAL - HIGH TRAFFIC																	
21	2	1	1	2	6	1.00	6.00	1	4	10	10	1454.00					
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
ACP	4.00	0.000	AGB	12.00	0.000	LTS	0.00	0.000	0.00	0.000	0.00	0.000					
AGE DISTRIBUTION	30	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.0	0.0	0.0	0.0	0.0	0.0	16.0	24.0	44.0	51.0	40.0	13.0	2.0	13.0	8.0	9.0		
19.0	8.0	17.0	2.0	14.0	2.0	8.0	24.0	3.0	3.0	9.0	6.0	2.0	6.0	18.0			
TRUCK TYPE	4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3										
3-S1-2	2-S2-2																
2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0										
4 1 0 0	4 1 0 0																
0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
LOAD LIMITS	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
80.00	20.00	34.00	56.00														
120.00	22.40	36.00	56.00														
13.	13.	12.	8.														
16.	16.	16.	16.														
SINGLE AXLES	11	0	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3.	6.	16.	39.	30.													
7.	625.	262.	2015.	479.													
8.	197.	46.	957.	116.													

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8113.	12.	535.	103.	2190.	535.					
8114.	16.	284.	115.	2132.	282.					
8115.	18.	86.	51.	1672.	76.					
8116.	19.	25.	13.	546.	20.					
8117.	20.	18.	11.	291.	26.					
8118.	22.	14.	12.	125.	20.					
8119.	24.	9.	4.	13.	5.					
8120.	26.	3.	2.	4.	2.					
8121.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00
8122.	6.	0.	258.	3382.	0.					
8123.	12.	1.	167.	5272.	0.					
8124.	18.	0.	159.	5150.	0.					
8125.	24.	0.	28.	1814.	0.					
8126.	30.	0.	1.	1531.	0.					
8127.	32.	0.	0.	875.	0.					
8128.	33.	0.	0.	483.	0.					
8129.	34.	0.	0.	373.	0.					
8130.	36.	0.	0.	486.	0.					
8131.	38.	0.	0.	217.	0.					
8132.	40.	0.	0.	53.	0.					
8133.	42.	0.	0.	14.	0.					
8134.	44.	0.	0.	4.	0.					
8135.	46.	0.	0.	1.	0.					
8136.	50.	0.	0.	3.	0.					
8137.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
8138.	10.	299.	4.	0.	0.					
8139.	14.	547.	29.	2.	1.					
8140.	20.	590.	188.	91.	3.					
8141.	22.	145.	48.	64.	3.					
8142.	24.	57.	37.	108.	5.					
8143.	26.	71.	29.	293.	2.					
8144.	28.	53.	16.	554.	9.					
8145.	30.	20.	18.	658.	13.					
8146.	32.	12.	27.	583.	22.					
8147.	34.	6.	20.	476.	28.					
8148.	36.	2.	28.	362.	25.					
8149.	38.	3.	38.	280.	15.					
8150.	40.	1.	31.	289.	8.					
8151.	45.	2.	59.	632.	41.					
8152.	50.	0.	38.	581.	59.					
8153.	55.	0.	8.	504.	57.					
8154.	60.	0.	4.	507.	33.					
8155.	65.	0.	2.	532.	28.					
8156.	70.	0.	0.	682.	12.					
8157.	72.	0.	0.	404.	7.					
8158.	75.	0.	0.	692.	12.					
8159.	80.	0.	0.	1042.	9.					
8160.	85.	0.	0.	438.	3.					
8161.	90.	0.	0.	81.	3.					
8162.	95.	0.	0.	11.	0.					
8163.	100.	0.	0.	3.	0.					
8164.	105.	0.	0.	2.	0.					
8165.	110.	0.	0.	1.	0.					
8166.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
8167.	10.	259.	4.	0.	0.					
8168.	14.	0.	29.	2.	1.					
8169.	20.	0.	104.	91.	3.					
8170.	22.	0.	0.	0.	3.					
8171.	24.	0.	0.	0.	5.					
8172.	26.	0.	0.	0.	0.					
8173.	28.	0.	0.	0.	0.					

8174.	30.	0.	0.	0.	0.				
8175.	32.	0.	0.	0.	0.				
8176.	34.	0.	0.	0.	0.				
8177.	36.	0.	0.	0.	0.				
8178.	38.	0.	0.	0.	0.				
8179.	40.	0.	0.	0.	0.				
8180.	45.	0.	0.	0.	0.				
8181.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
8182.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
8183.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES PDT	REHAB COST (\$)	PREV MAINT COST (\$)	
8196.	1	232013.00	3.29	4.40	396745.00	423.00
8197.	2	284578.00	3.40	4.40	449480.00	461.00
8198.	3	345381.00	3.44	4.40	505453.00	502.00
8199.	4	409071.00	3.47	4.40	567794.00	548.00
8200.	5	471043.00	3.49	4.40	637628.00	597.00
8201.	6	529242.00	3.52	4.40	715998.00	651.00
8202.	7	584369.00	3.54	4.40	804022.00	709.00
8203.	8	638963.00	3.57	4.40	902928.00	773.00
8204.	9	696074.00	3.60	4.40	1014086.00	843.00
8205.	10	758685.00	3.63	4.40	1139033.00	918.00
8206.	11	829467.00	3.66	0.00	467194.00	1001.00
8207.	12	910139.00	3.57	0.00	510273.00	1091.00
8208.	13	1001295.00	3.52	0.00	564676.00	1189.00
8209.	14	1103122.00	3.49	0.00	626951.00	1296.00
8210.	15	1215979.00	3.47	0.00	697426.00	1413.00
8211.	16	1340500.00	3.45	0.00	776859.00	1540.00
8212.	17	1477462.00	3.43	0.00	866230.00	1679.00
8213.	18	1627568.00	3.42	0.00	966681.00	1830.00
8214.						
8215.						
8216.						
8217.						
8218.						
8219.	TOTAL PRESENT COSTS	14454951.00	62.95	44.00	12609457.00	17464.00
8220.	TOTAL LANE MILES		106.95			

8226.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00									
8227.	FLEXIBLE - FM - HOTMIX - URBAN - LOW TRAFFIC																
8228.	21	2	1	2	1	6	1.00	6.00	1	4	10	10	953.00				
8229.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8231.	ACP	2.00	0.000	AGB	8.00	0.000	LTS	6.00	0.000		0.00	0.000					
8232.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8233.	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	4.0	3.0	1.0	0.0	1.0	1.0	1.0	1.0
8234.	1.0	1.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0

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8235.	TRUCK TYPE		4	0	0.00	0.00	0.00	0.00	0.00	0.00
8236.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3		
8237.		3-S1-2	2-S2-2							
8238.		2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0	
8239.		4 1 0 0	4 1 0 0							
8240.		0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00
8241.	LOAD LIMITS			0	0	0.00	0.00	0.00	0.00	0.00
8242.		80.00	20.00	34.00	56.00					
8243.		120.00	22.40	36.00	56.00					
8244.		13.	13.	12.	8.					
8245.		16.	16.	16.	16.					
8246.	SINGLE AXLES			11	0	3.00	0.00	0.00	0.00	0.00
8247.		3.	0.	4.	9.	6.				
8248.		7.	169.	91.	847.	56.				
8249.		8.	59.	16.	513.	15.				
8250.		12.	177.	30.	976.	52.				
8251.		16.	89.	29.	984.	43.				
8252.		18.	21.	7.	603.	19.				
8253.		19.	15.	1.	216.	4.				
8254.		20.	10.	2.	109.	1.				
8255.		22.	6.	2.	72.	4.				
8256.		24.	5.	2.	15.	0.				
8257.		26.	3.	0.	2.	0.				
8258.	TANDEM AXLES			15	0	6.00	0.00	0.00	0.00	0.00
8259.		6.	0.	91.	1484.	0.				
8260.		12.	0.	60.	2174.	0.				
8261.		18.	0.	29.	2225.	0.				
8262.		24.	0.	2.	849.	0.				
8263.		30.	0.	0.	806.	0.				
8264.		32.	0.	0.	362.	0.				
8265.		33.	0.	0.	174.	0.				
8266.		34.	0.	0.	137.	0.				
8267.		36.	0.	0.	154.	0.				
8268.		38.	0.	0.	62.	0.				
8269.		40.	0.	0.	21.	0.				
8270.		42.	0.	0.	7.	0.				
8271.		44.	0.	0.	2.	0.				
8272.		46.	0.	0.	1.	0.				
8273.		50.	0.	0.	1.	0.				
8274.	GVW			28	0	10.00	0.00	0.00	0.00	0.00
8275.		10.	90.	2.	0.	0.				
8276.		14.	167.	14.	2.	0.				
8277.		20.	188.	72.	26.	0.				
8278.		22.	31.	12.	27.	0.				
8279.		24.	20.	14.	59.	1.				
8280.		26.	26.	10.	110.	1.				
8281.		28.	14.	7.	193.	1.				
8282.		30.	9.	3.	277.	0.				
8283.		32.	5.	10.	271.	4.				
8284.		34.	2.	4.	268.	3.				
8285.		36.	1.	6.	257.	1.				
8286.		38.	1.	6.	176.	0.				
8287.		40.	0.	3.	139.	5.				
8288.		45.	0.	15.	206.	6.				
8289.		50.	0.	4.	192.	6.				
8290.		55.	0.	1.	189.	4.				
8291.		60.	0.	0.	202.	5.				
8292.		65.	0.	0.	287.	3.				
8293.		70.	0.	0.	359.	6.				
8294.		72.	0.	0.	150.	0.				
8295.		75.	0.	0.	56.	3.				

8296.	80.	0.	0.	399.	1.					
8297.	85.	0.	0.	149.	0.					
8298.	90.	0.	0.	48.	0.					
8299.	95.	0.	0.	9.	0.					
8300.	100.	0.	0.	3.	0.					
8301.	105.	0.	0.	0.	0.					
8302.	110.	0.	0.	1.	0.					
8303.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
8304.	10.	79.	2.	0.	0.					
8305.	14.	0.	14.	2.	0.					
8306.	20.	0.	34.	26.	0.					
8307.	22.	0.	0.	0.	0.					
8308.	24.	0.	0.	0.	1.					
8309.	26.	0.	0.	0.	1.					
8310.	28.	0.	0.	0.	0.					
8311.	30.	0.	0.	0.	0.					
8312.	32.	0.	0.	0.	0.					
8313.	34.	0.	0.	0.	0.					
8314.	36.	0.	0.	0.	0.					
8315.	38.	0.	0.	0.	0.					
8316.	40.	0.	0.	0.	0.					
8317.	45.	0.	0.	0.	0.					
8318.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
8319.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
8320.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

8321.
8322.
8323.
8324.
8325.

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - URBAN - LOW TRAFFIC

8326.
8327.
8328.
8329.

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
8330.					
8331.					
8332.					
8333.					
8334.					
8335.					
8336.	1	16455.00	0.20	20081.00	277.00
8337.	2	20354.00	0.20	22641.00	302.00
8338.	3	24863.00	0.20	25372.00	329.00
8339.	4	29577.00	0.20	28417.00	359.00
8340.	5	34154.00	0.20	31827.00	391.00
8341.	6	38440.00	0.20	35653.00	426.00
8342.	7	42496.00	0.20	39947.00	465.00
8343.	8	46508.00	0.20	44768.00	507.00
8344.	9	50687.00	0.20	50181.00	552.00
8345.	10	55226.00	0.20	56261.00	602.00
8346.	11	60289.00	0.20	62166.00	656.00
8347.	12	65981.00	0.20	68740.00	715.00
8348.	13	72347.00	0.20	75189.00	780.00
8349.	14	79408.00	0.20	82402.00	850.00
8350.	15	87194.00	0.20	89397.00	926.00
8351.	16	95753.00	0.19	96890.00	1010.00
8352.	17	105140.00	0.19	104836.00	1100.00
8353.	18	115410.00	0.19	114601.00	1199.00
8354.					
8355.					
8356.	TOTAL		3.61	2.00	

8357.	PRESENT COSTS										1040282.00	-----		664139.00	11446.00																
8358.	TOTAL LANE MILES										5.61																				
8359.																															
8360.																															
8361.																															
8362.																															
8363.	FLEXIBLE	0		0	12.00	0.00		0.00	3.00		3.00																				
8364.	FLEXIBLE - FM - HOTMIX - URBAN - HIGH TRAFFIC																														
8365.	21	2	1	2	2	6	1.00	6.00	1	4	10	10	3298.00																		
8366.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
8367.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
8368.	ACP	4.00	0.000	AGB	10.00	0.000	LTS	6.00	0.000	0.00	0.000																				
8369.	AGE DISTRIBUTION																														
8370.	0.0	0.0	0.0	0.0	0.0	0.0	7.0	10.0	18.0	22.0	17.0	6.0	1.0	6.0	3.0	4.0	4.0														
8371.	8.0	3.0	7.0	1.0	6.0	1.0	4.0	10.0	1.0	1.0	4.0	2.0	1.0	2.0	8.0	8.0	8.0														
8372.	TRUCK TYPE																														
8373.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3																							
8374.	3-S1-2	2-S2-2																													
8375.	2	0	0	1	1	0	0	1	2	0	0	5	0	0	0	3	0	0	0	2	1	0	0	20	10	0	0	10	20	0	0
8376.	4	1	0	0	4	1	0	0																							
8377.	0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00	0.00																				
8378.	LOAD LIMITS																														
8379.	80	00	20	00	34	00	56	00																							
8380.	120	00	22	40	36	00	56	00																							
8381.	13.	13.	12.	8.																											
8382.	16.	16.	16.	16.																											
8383.	SINGLE AXLES																														
8384.	3.	0.	4.	9.	6.	3.00	0.00	0.00	0.00	0.00	0.00																				
8385.	7.	169.	91.	847.	56.																										
8386.	8.	59.	16.	513.	15.																										
8387.	12.	177.	30.	976.	52.																										
8388.	16.	89.	29.	984.	43.																										
8389.	18.	21.	7.	603.	19.																										
8390.	19.	15.	1.	216.	4.																										
8391.	20.	10.	2.	109.	1.																										
8392.	22.	6.	2.	72.	4.																										
8393.	24.	5.	2.	15.	0.																										
8394.	26.	3.	0.	2.	0.																										
8395.	TANDEM AXLES																														
8396.	6.	0.	91.	1484.	0.	6.00	0.00	0.00	0.00	0.00	0.00																				
8397.	12.	0.	60.	2174.	0.																										
8398.	18.	0.	29.	2225.	0.																										
8399.	24.	0.	2.	849.	0.																										
8400.	30.	0.	0.	806.	0.																										
8401.	32.	0.	0.	362.	0.																										
8402.	33.	0.	0.	174.	0.																										
8403.	34.	0.	0.	137.	0.																										
8404.	36.	0.	0.	154.	0.																										
8405.	38.	0.	0.	62.	0.																										
8406.	40.	0.	0.	21.	0.																										
8407.	42.	0.	0.	7.	0.																										
8408.	44.	0.	0.	2.	0.																										
8409.	46.	0.	0.	1.	0.																										
8410.	50.	0.	0.	1.	0.																										
8411.	GVW																														
8412.	10.	90.	2.	0.	0.	10.00	0.00	0.00	0.00	0.00	0.00																				
8413.	14.	167.	14.	2.	0.																										
8414.	20.	188.	72.	26.	0.																										
8415.	22.	31.	12.	27.	0.																										
8416.	24.	20.	14.	59.	1.																										
8417.	26.	26.	10.	110.	1.																										

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8418.	28.	14.	7.	193.	1.					
8419.	30.	9.	3.	277.	0.					
8420.	32.	5.	10.	271.	4.					
8421.	34.	2.	4.	268.	3.					
8422.	36.	1.	6.	257.	1.					
8423.	38.	1.	6.	176.	0.					
8424.	40.	0.	3.	139.	5.					
8425.	45.	0.	15.	206.	6.					
8426.	50.	0.	4.	192.	6.					
8427.	55.	0.	1.	189.	4.					
8428.	60.	0.	0.	202.	5.					
8429.	65.	0.	0.	287.	3.					
8430.	70.	0.	0.	359.	6.					
8431.	72.	0.	0.	150.	0.					
8432.	75.	0.	0.	256.	3.					
8433.	80.	0.	0.	399.	1.					
8434.	85.	0.	0.	149.	0.					
8435.	90.	0.	0.	48.	0.					
8436.	95.	0.	0.	9.	0.					
8437.	100.	0.	0.	3.	0.					
8438.	105.	0.	0.	0.	0.					
8439.	110.	0.	0.	1.	0.					
8440.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
8441.	10.	79.	2.	0.	0.					
8442.	14.	0.	14.	2.	0.					
8443.	20.	0.	34.	26.	0.					
8444.	22.	0.	0.	0.	0.					
8445.	24.	0.	0.	0.	1.					
8446.	26.	0.	0.	0.	1.					
8447.	28.	0.	0.	0.	0.					
8448.	30.	0.	0.	0.	0.					
8449.	32.	0.	0.	0.	0.					
8450.	34.	0.	0.	0.	0.					
8451.	36.	0.	0.	0.	0.					
8452.	38.	0.	0.	0.	0.					
8453.	40.	0.	0.	0.	0.					
8454.	45.	0.	0.	0.	0.					
8455.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
8456.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
8457.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - FM - HOTMIX - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
8470.						
8471.						
8472.						
8473.	1	97590.00	2.60	1.80	213991.00	959.00
8474.	2	118865.00	2.73	1.80	245547.00	1045.00
8475.	3	143123.00	2.78	1.80	277716.00	1140.00
8476.	4	168125.00	2.82	1.80	313330.00	1242.00
8477.	5	192043.00	2.86	1.80	353194.00	1354.00
8478.	6	214111.00	2.89	1.80	397982.00	1476.00

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8540.	34.	0.	0.	373.	0.					
8541.	36.	0.	0.	486.	0.					
8542.	38.	0.	0.	217.	0.					
8543.	40.	0.	0.	53.	0.					
8544.	42.	0.	0.	14.	0.					
8545.	44.	0.	0.	4.	0.					
8546.	46.	0.	0.	1.	0.					
8547.	50.	0.	0.	3.	0.					
8548.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
8549.	10.	299.	4.	0.	0.					
8550.	14.	547.	29.	2.	1.					
8551.	20.	590.	188.	91.	3.					
8552.	22.	145.	48.	64.	3.					
8553.	24.	57.	37.	108.	5.					
8554.	26.	71.	29.	293.	2.					
8555.	28.	53.	16.	554.	9.					
8556.	30.	20.	18.	658.	13.					
8557.	32.	12.	27.	583.	22.					
8558.	34.	6.	20.	476.	28.					
8559.	36.	2.	28.	362.	25.					
8560.	38.	3.	38.	280.	15.					
8561.	40.	1.	31.	289.	8.					
8562.	45.	2.	59.	632.	41.					
8563.	50.	0.	38.	581.	59.					
8564.	55.	0.	8.	504.	57.					
8565.	60.	0.	4.	507.	33.					
8566.	65.	0.	2.	532.	28.					
8567.	70.	0.	0.	682.	12.					
8568.	72.	0.	0.	404.	7.					
8569.	75.	0.	0.	692.	12.					
8570.	80.	0.	0.	1042.	9.					
8571.	85.	0.	0.	438.	3.					
8572.	90.	0.	0.	81.	3.					
8573.	95.	0.	0.	11.	0.					
8574.	100.	0.	0.	3.	0.					
8575.	105.	0.	0.	2.	0.					
8576.	110.	0.	0.	1.	0.					
8577.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
8578.	10.	259.	4.	0.	0.					
8579.	14.	0.	29.	2.	1.					
8580.	20.	0.	104.	91.	3.					
8581.	22.	0.	0.	0.	3.					
8582.	24.	0.	0.	0.	5.					
8583.	26.	0.	0.	0.	2.					
8584.	28.	0.	0.	0.	0.					
8585.	30.	0.	0.	0.	0.					
8586.	32.	0.	0.	0.	0.					
8587.	34.	0.	0.	0.	0.					
8588.	36.	0.	0.	0.	0.					
8589.	38.	0.	0.	0.	0.					
8590.	40.	0.	0.	0.	0.					
8591.	45.	0.	0.	0.	0.					
8592.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
8593.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
8594.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

8662.	16.	284.	115.	2132.	282.					
8663.	18.	86.	51.	1672.	76.					
8664.	19.	25.	13.	546.	20.					
8665.	20.	18.	11.	291.	26.					
8666.	22.	14.	12.	125.	20.					
8667.	24.	9.	4.	13.	5.					
8668.	26.	3.	2.	4.	2.					
8669.	TANDEM AXLES		15	0	6.00	0.00	0.00	0.00	0.00	0.00
8670.	6.	0.	258.	3382.	0.					
8671.	12.	1.	167.	5272.	0.					
8672.	18.	0.	159.	5150.	0.					
8673.	24.	0.	28.	1814.	0.					
8674.	30.	0.	1.	1531.	0.					
8675.	32.	0.	0.	875.	0.					
8676.	33.	0.	0.	483.	0.					
8677.	34.	0.	0.	373.	0.					
8678.	36.	0.	0.	486.	0.					
8679.	38.	0.	0.	217.	0.					
8680.	40.	0.	0.	53.	0.					
8681.	42.	0.	0.	14.	0.					
8682.	44.	0.	0.	4.	0.					
8683.	46.	0.	0.	1.	0.					
8684.	50.	0.	0.	3.	0.					
8685.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
8686.	10.	299.	4.	0.	0.					
8687.	14.	547.	29.	2.	1.					
8688.	20.	590.	188.	91.	3.					
8689.	22.	145.	48.	64.	3.					
8690.	24.	57.	37.	108.	5.					
8691.	26.	71.	29.	293.	2.					
8692.	28.	53.	16.	554.	9.					
8693.	30.	20.	18.	658.	13.					
8694.	32.	12.	27.	583.	22.					
8695.	34.	6.	20.	476.	28.					
8696.	36.	2.	28.	362.	25.					
8697.	38.	3.	38.	280.	15.					
8698.	40.	1.	31.	289.	8.					
8699.	45.	2.	59.	632.	41.					
8700.	50.	0.	38.	581.	59.					
8701.	55.	0.	8.	504.	57.					
8702.	60.	0.	4.	507.	33.					
8703.	65.	0.	2.	532.	28.					
8704.	70.	0.	0.	682.	12.					
8705.	72.	0.	0.	404.	7.					
8706.	75.	0.	0.	692.	12.					
8707.	80.	0.	0.	1042.	9.					
8708.	85.	0.	0.	438.	3.					
8709.	90.	0.	0.	81.	3.					
8710.	95.	0.	0.	11.	0.					
8711.	100.	0.	0.	3.	0.					
8712.	105.	0.	0.	2.	0.					
8713.	110.	0.	0.	1.	0.					
8714.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
8715.	10.	259.	4.	0.	0.					
8716.	14.	0.	29.	2.	1.					
8717.	20.	0.	104.	91.	3.					
8718.	22.	0.	0.	0.	3.					
8719.	24.	0.	0.	0.	5.					
8720.	26.	0.	0.	0.	2.					
8721.	28.	0.	0.	0.	0.					
8722.	30.	0.	0.	0.	0.					

8723.	32.	0.	0.	0.	0.				
8724.	34.	0.	0.	0.	0.				
8725.	36.	0.	0.	0.	0.				
8726.	38.	0.	0.	0.	0.				
8727.	40.	0.	0.	0.	0.				
8728.	45.	0.	0.	0.	0.				
8729.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
8730.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
8731.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

8733.
8734.
8735.
8736.

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
8746.	1	367106.00	0.02	23.40	1391823.00	128.00
8748.	2	406042.00	0.02	23.40	1558883.00	140.00
8749.	3	448867.00	0.02	23.40	1745997.00	152.00
8750.	4	495364.00	0.03	23.40	1955573.00	166.00
8751.	5	544991.00	0.03	23.40	2190308.00	181.00
8752.	6	597720.00	0.03	23.40	2453220.00	197.00
8753.	7	654534.00	0.03	23.40	2747700.00	215.00
8754.	8	717429.00	0.03	23.40	3077530.00	234.00
8755.	9	789742.00	0.03	23.40	3446960.00	256.00
8756.	10	876707.00	0.03	23.40	3860743.00	279.00
8757.	11	984541.00	0.03	0.00	4285.00	304.00
8758.	12	1117394.00	0.03	0.00	4997.00	331.00
8759.	13	1276114.00	0.04	0.00	5816.00	361.00
8760.	14	1460324.00	0.04	0.00	6753.00	393.00
8761.	15	1670282.00	0.04	0.00	7832.00	429.00
8762.	16	1907085.00	0.04	0.00	9066.00	467.00
8763.	17	2172017.00	0.04	0.00	10476.00	509.00
8764.	18	2465386.00	0.04	0.00	12084.00	555.00
8766.						
8767.	TOTAL		0.58	234.00		
8768.	PRESENT COSTS	18951632.00			24489968.00	5297.00
8769.	TOTAL LANE MILES			234.58		

8770.
8771.
8772.

8774.	FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00									
8775.	FLEXIBLE - FM - OVRLAY - URBAN - LOW TRAFFIC																
8776.	21	2	3	2	1	6	1.00	6.00	1	4	10	791.00					
8777.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8778.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8779.	ACP	2.00	0.000	ATB	2.00	0.000	AGB	8.00	0.000	LTS	6.00	0.000					
8780.	AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8781.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8782.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
8783.	TRUCK TYPE	4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3		
8784.										
8785.	3-S1-2	2-S2-2								
8786.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0		
8787.	4 1 0 0	4 1 0 0								
8788.	0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00
8789.	LOAD LIMITS			0	0	0.00	0.00	0.00	0.00	0.00
8790.	80.00	20.00		34.00	56.00					
8791.	120.00	22.40		36.00	56.00					
8792.	13.	13.		12.	8.					
8793.	16.	16.		16.	16.					
8794.	SINGLE AXLES			11	0	3.00	0.00	0.00	0.00	0.00
8795.	3.	0.		4.	9.					
8796.	7.	169.		91.	847.					
8797.	8.	59.		16.	513.					
8798.	12.	177.		30.	976.					
8799.	16.	89.		29.	984.					
8800.	18.	21.		7.	603.					
8801.	19.	15.		1.	216.					
8802.	20.	10.		2.	109.					
8803.	22.	6.		2.	72.					
8804.	24.	5.		2.	15.					
8805.	26.	3.		0.	2.					
8806.	TANDEM AXLES			15	0	6.00	0.00	0.00	0.00	0.00
8807.	6.	0.		91.	1484.					
8808.	12.	0.		60.	2174.					
8809.	18.	0.		29.	2225.					
8810.	24.	0.		2.	849.					
8811.	30.	0.		0.	806.					
8812.	32.	0.		0.	362.					
8813.	33.	0.		0.	174.					
8814.	34.	0.		0.	137.					
8815.	36.	0.		0.	154.					
8816.	38.	0.		0.	62.					
8817.	40.	0.		0.	21.					
8818.	42.	0.		0.	7.					
8819.	44.	0.		0.	2.					
8820.	46.	0.		0.	1.					
8821.	50.	0.		0.	1.					
8822.	GVW			28	0	10.00	0.00	0.00	0.00	0.00
8823.	10.	90.		2.	0					
8824.	14.	167.		14.	2					
8825.	20.	188.		72.	26					
8826.	22.	31.		12.	27					
8827.	24.	20.		14.	59					
8828.	26.	26.		10.	110.					
8829.	28.	14.		7.	193.					
8830.	30.	9.		3.	277.					
8831.	32.	5.		10.	271.					
8832.	34.	2.		4.	268.					
8833.	36.	1.		6.	257.					
8834.	38.	1.		6.	176.					
8835.	40.	0.		3.	139.					
8836.	45.	0.		15.	206.					
8837.	50.	0.		4.	192.					
8838.	55.	0.		1.	189.					
8839.	60.	0.		0.	202.					
8840.	65.	0.		0.	287.					
8841.	70.	0.		0.	359.					
8842.	72.	0.		0.	150.					
8843.	75.	0.		0.	256.					
8844.	80.	0.		0.	399.					

8845.	85.	0.	0.	149.	0.				
8846.	90.	0.	0.	48.	0.				
8847.	95.	0.	0.	9.	0.				
8848.	100.	0.	0.	3.	0.				
8849.	105.	0.	0.	0.	0.				
8850.	110.	0.	0.	1.	0.				
8851.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
8852.	10.	79.	2.	0.	0.				
8853.	14.	0.	14.	2.	0.				
8854.	20.	0.	34.	26.	0.				
8855.	22.	0.	0.	0.	0.				
8856.	24.	0.	0.	0.	1.				
8857.	26.	0.	0.	0.	1.				
8858.	28.	0.	0.	0.	0.				
8859.	30.	0.	0.	0.	0.				
8860.	32.	0.	0.	0.	0.				
8861.	34.	0.	0.	0.	0.				
8862.	36.	0.	0.	0.	0.				
8863.	38.	0.	0.	0.	0.				
8864.	40.	0.	0.	0.	0.				
8865.	45.	0.	0.	0.	0.				
8866.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
8867.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
8868.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - URBAN - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
8884.	1	6257.00	0.00	0.60	35685.00	111.00
8885.	2	6820.00	0.00	0.60	39967.00	121.00
8886.	3	7433.00	0.00	0.60	44764.00	132.00
8887.	4	8104.00	0.00	0.60	50137.00	144.00
8888.	5	8837.00	0.00	0.60	56155.00	157.00
8889.	6	9644.00	0.00	0.60	62895.00	171.00
8890.	7	10544.00	0.00	0.60	70445.00	187.00
8891.	8	11572.00	0.00	0.60	78900.00	203.00
8892.	9	12801.00	0.00	0.60	88371.00	222.00
8893.	10	14355.00	0.00	0.60	98979.00	242.00
8894.	11	16387.00	0.00	0.00	94.00	263.00
8895.	12	18995.00	0.00	0.00	110.00	287.00
8896.	13	22195.00	0.00	0.00	129.00	313.00
8897.	14	25971.00	0.00	0.00	150.00	341.00
8898.	15	30322.00	0.00	0.00	175.00	372.00
8899.	16	35269.00	0.00	0.00	203.00	405.00
8900.	17	40835.00	0.00	0.00	235.00	442.00
8901.	18	47020.00	0.00	0.00	272.00	481.00
8902.						
8903.						
8904.	TOTAL		0.01	6.00		
8905.	PRESENT COSTS	333361.00	-----		627666.00	4594.00

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8906.	TOTAL LANE MILES										6.01								
8907.																			
8908.																			
8909.																			
8910.																			
8911.	FLEXIBLE										0	0	12.00	0.00	0.00	3.00	3.00		
8912.	FLEXIBLE - FM - OVRLAY - URBAN - HIGH TRAFFIC																		
8913.	21	2	3	2	2	6	1.00	6.00	1	4	10	10	2483.00						
8914.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8915.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8916.	ACP	3.00	0.000	ATB	4.00	0.000	AGB	10.00	0.000	LTS	6.00	0.000							
8917.	AGE DISTRIBUTION										30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8918.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8919.	1.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0	1.0	0.0	8.0	
8920.	TRUCK TYPE										4	0	0.00	0.00	0.00	0.00	0.00		
8921.	2D	3A	3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3											
8922.	3-S1-2	2-S2-2																	
8923.	2	0	0	1	1	0	0	1	2	0	0	5	0	0	0	3	0	0	0
8924.	4	1	0	0	4	1	0	0											
8925.	0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00	0.00								
8926.	LOAD LIMITS										0	0	0.00	0.00	0.00	0.00			
8927.	80.00	20.00	34.00	56.00															
8928.	120.00	22.40	36.00	56.00															
8929.	13.	13.	12.	8.															
8930.	16.	16.	16.	16.															
8931.	SINGLE AXLES										11	0	3.00	0.00	0.00	0.00	0.00		
8932.	3.	0.	4.	9.	6.														
8933.	7.	169.	91.	847.	56.														
8934.	8.	59.	16.	513.	15.														
8935.	12.	177.	30.	976.	52.														
8936.	16.	89.	29.	984.	43.														
8937.	18.	21.	7.	603.	19.														
8938.	19.	15.	1.	216.	4.														
8939.	20.	10.	2.	109.	1.														
8940.	22.	6.	2.	72.	4.														
8941.	24.	5.	2.	15.	0.														
8942.	26.	3.	0.	2.	0.														
8943.	TANDEM AXLES										15	0	6.00	0.00	0.00	0.00	0.00		
8944.	6.	0.	91.	1484.	0.														
8945.	12	0.	60.	2174.	0.														
8946.	18	0	29	2225	0.														
8947.	24	0	2	849	0.														
8948.	30	0	0	806	0.														
8949.	32	0	0	362	0.														
8950.	33	0	0	174	0.														
8951.	34	0	0	137	0.														
8952.	36	0	0	154	0.														
8953.	38	0	0	62	0.														
8954.	40	0	0	21	0.														
8955.	42	0	0	7	0.														
8956.	44	0	0	2	0.														
8957.	46	0	0	1	0.														
8958.	50	0	0	1	0.														
8959.	GVW										28	0	10.00	0.00	0.00	0.00	0.00		
8960.	10.	90.	2.	0.	0.														
8961.	14.	167.	14.	2.	0.														
8962.	20.	188.	72.	26.	0.														
8963.	22.	31.	12.	27.	0.														
8964.	24.	20.	14.	59.	1.														
8965.	26.	26.	10.	110.	1.														
8966.	28.	14.	7.	193.	1.														

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8967.	30.	9.	3.	277.	0.					
8968.	32.	5.	10.	271.	4.					
8969.	34.	2.	4.	268.	3.					
8970.	36.	1.	6.	257.	1.					
8971.	38.	1.	6.	176.	0.					
8972.	40.	0.	3.	139.	5.					
8973.	45.	0.	15.	206.	6.					
8974.	50.	0.	4.	192.	6.					
8975.	55.	0.	1.	189.	4.					
8976.	60.	0.	0.	202.	5.					
8977.	65.	0.	0.	287.	3.					
8978.	70.	0.	0.	359.	6.					
8979.	72.	0.	0.	150.	0.					
8980.	75.	0.	0.	256.	3.					
8981.	80.	0.	0.	399.	1.					
8982.	85.	0.	0.	149.	0.					
8983.	90.	0.	0.	48.	0.					
8984.	95.	0.	0.	9.	0.					
8985.	100.	0.	0.	3.	0.					
8986.	105.	0.	0.	0.	0.					
8987.	110.	0.	0.	1.	0.					
8988.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
8989.	10.	79.	2.	0.	0.					
8990.	14.	0.	14.	2.	0.					
8991.	20.	0.	34.	26.	0.					
8992.	22.	0.	0.	0.	0.					
8993.	24.	0.	0.	0.	1.					
8994.	26.	0.	0.	0.	1.					
8995.	28.	0.	0.	0.	0.					
8996.	30.	0.	0.	0.	0.					
8997.	32.	0.	0.	0.	0.					
8998.	34.	0.	0.	0.	0.					
8999.	36.	0.	0.	0.	0.					
9000.	38.	0.	0.	0.	0.					
9001.	40.	0.	0.	0.	0.					
9002.	45.	0.	0.	0.	0.					
9003.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
9004.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
9005.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

9006.
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DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - FM - OVRLAY - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
9017.						
9018.						
9019.						
9020.						
9021.	1	14582.00	0.01	1.00	59869.00	349.00
9022.	2	15888.00	0.01	1.00	67070.00	381.00
9023.	3	17307.00	0.01	1.00	75139.00	415.00
9024.	4	18853.00	0.01	1.00	84180.00	452.00
9025.	5	20541.00	0.01	1.00	94310.00	493.00
9026.		22350.00	0.01	1.00	105000.00	527.00
9027.		24441.00	0.01	1.00	118500.00	560.00

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9089.	36.	0.	0.	486.	0.					
9090.	38.	0.	0.	217.	0.					
9091.	40.	0.	0.	53.	0.					
9092.	42.	0.	0.	14.	0.					
9093.	44.	0.	0.	4.	0.					
9094.	46.	0.	0.	1.	0.					
9095.	50.	0.	0.	3.	0.					
9096.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
9097.	10.	299.	4.	0.	0.					
9098.	14.	547.	29.	2.	1.					
9099.	20.	590.	188.	91.	3.					
9100.	22.	145.	48.	64.	3.					
9101.	24.	57.	37.	108.	5.					
9102.	26.	71.	29.	293.	2.					
9103.	28.	53.	16.	554.	9.					
9104.	30.	20.	18.	658.	13.					
9105.	32.	12.	27.	583.	22.					
9106.	34.	6.	20.	476.	28.					
9107.	36.	2.	28.	362.	25.					
9108.	38.	3.	38.	280.	15.					
9109.	40.	1.	31.	289.	8.					
9110.	45.	2.	59.	632.	41.					
9111.	50.	0.	38.	581.	59.					
9112.	55.	0.	8.	504.	57.					
9113.	60.	0.	4.	507.	33.					
9114.	65.	0.	2.	532.	28.					
9115.	70.	0.	0.	682.	12.					
9116.	72.	0.	0.	404.	7.					
9117.	75.	0.	0.	692.	12.					
9118.	80.	0.	0.	1042.	9.					
9119.	85.	0.	0.	438.	3.					
9120.	90.	0.	0.	81.	3.					
9121.	95.	0.	0.	11.	0.					
9122.	100.	0.	0.	3.	0.					
9123.	105.	0.	0.	2.	0.					
9124.	110.	0.	0.	1.	0.					
9125.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
9126.	10.	259.	4.	0.	0.					
9127.	14.	0.	29.	2.	1.					
9128.	20.	0.	104.	91.	3.					
9129.	22.	0.	0.	0.	3.					
9130.	24.	0.	0.	0.	5.					
9131.	26.	0.	0.	0.	2.					
9132.	28.	0.	0.	0.	0.					
9133.	30.	0.	0.	0.	0.					
9134.	32.	0.	0.	0.	0.					
9135.	34.	0.	0.	0.	0.					
9136.	36.	0.	0.	0.	0.					
9137.	38.	0.	0.	0.	0.					
9138.	40.	0.	0.	0.	0.					
9139.	45.	0.	0.	0.	0.					
9140.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	0.00
9141.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	0.00
9142.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	0.00

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FLEXIBLE - US/STAT - HOTMIX - RURAL - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	301594.00	2.83	4.80	401547.00	248.00
2	348271.00	2.89	4.80	452937.00	271.00
3	401602.00	2.92	4.80	508390.00	295.00
4	460501.00	2.93	4.80	570264.00	322.00
5	522637.00	2.94	4.80	639566.00	351.00
6	585184.00	2.96	4.80	717279.00	382.00
7	646798.00	2.97	4.80	804477.00	417.00
8	708733.00	2.99	4.80	902342.00	454.00
9	773626.00	3.00	4.80	1012195.00	495.00
10	844330.00	3.02	4.80	1135513.00	539.00
11	923416.00	3.04	0.00	387823.00	588.00
12	1012597.00	2.96	0.00	424032.00	641.00
13	1112589.00	2.93	0.00	469158.00	699.00
14	1223752.00	2.90	0.00	520633.00	761.00
15	1346590.00	2.88	0.00	578743.00	830.00
16	1481863.00	2.86	0.00	644123.00	905.00
17	1630453.00	2.85	0.00	717555.00	986.00
18	1793182.00	2.83	0.00	799959.00	1075.00
TOTAL		52.69	48.00		
PRESENT COSTS	16117718.00			11686536.00	10259.00
TOTAL LANE MILES		100.69			

FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00									
FLEXIBLE - US/STAT - HOTMIX - RURAL - HIGH TRAFFIC	21	3	1	1	2	6	1.00	6.00	1	4	10	10	2381.00			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACP	4.00	0.000	AGB	12.00	0.000	LTS	0.00	0.000		0.00	0.000					
AGE DISTRIBUTION				30	0		0.00		0.00		0.00		0.00			
	0.0	0.0	0.0	0.0	0.0	86.0	75.0	65.0	105.0	35.0	11.0	109.0	87.0	20.0	28.0	
	49.0	58.0	101.0	142.0	57.0	49.0	13.0	53.0	4.0	16.0	18.0	18.0	14.0	0.0	62.0	
TRUCK TYPE			4	0	0.00		0.00		0.00		0.00		0.00			
2D	3A		3-S2		2-S1-2		2-S1		2-S2		3-S1		3-S3			
	3 S1-2		2 S2-2													
	2 0 0 0		1 1 0 0		1 2 0 0		5 0 0 0		3 0 0 0		2 1 0 0		2010 0 0		1020 0 0	
	4 1 0 0		4 1 0 0													
	0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00	0.00					
LOAD LIMITS				0	0		0.00		0.00		0.00		0.00		0.00	
	80.00		20.00		34.00		56.00									
	120.00		22.40		36.00		56.00									
	13.		13.		12.		8.									
	16.		16.		16.		16.									
SINGLE AXLES				11	0		3.00		0.00		0.00		0.00		0.00	
	3.		6.		16.		39.		30.							
	7.		625.		262.		2015.		479.							
	8.		197.		46.		957.		116.							
	12.		535.		103.		2190.		535.							
	16.		284.		115.		2132.		282.							

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9211.	18.	86.	51.	1672.	76.					
9212.	19.	25.	13.	546.	20.					
9213.	20.	18.	11.	291.	26.					
9214.	22.	14.	12.	125.	20.					
9215.	24.	9.	4.	13.	5.					
9216.	26.	3.	2.	4.	2.					
9217.	TANDEM	AXLES	15	0	6.00	0.00	0.00	0.00	0.00	0.00
9218.	6.	0.	258.	3382.	0.					
9219.	12.	1.	167.	5272.	0.					
9220.	18.	0.	159.	5150.	0.					
9221.	24.	0.	28.	1814.	0.					
9222.	30.	0.	1.	1531.	0.					
9223.	32.	0.	0.	875.	0.					
9224.	33.	0.	0.	483.	0.					
9225.	34.	0.	0.	373.	0.					
9226.	36.	0.	0.	486.	0.					
9227.	38.	0.	0.	217.	0.					
9228.	40.	0.	0.	53.	0.					
9229.	42.	0.	0.	14.	0.					
9230.	44.	0.	0.	4.	0.					
9231.	46.	0.	0.	1.	0.					
9232.	50.	0.	0.	3.	0.					
9233.	GVW		28	0	10.00	0.00	0.00	0.00	0.00	0.00
9234.	10.	299.	4.	0.	0.					
9235.	14.	547.	29.	2.	1.					
9236.	20.	590.	188.	91.	3.					
9237.	22.	145.	48.	64.	3.					
9238.	24.	57.	37.	108.	5.					
9239.	26.	71.	29.	293.	2.					
9240.	28.	53.	16.	554.	9.					
9241.	30.	20.	18.	658.	13.					
9242.	32.	12.	27.	583.	22.					
9243.	34.	6.	20.	476.	28.					
9244.	36.	2.	28.	362.	25.					
9245.	38.	3.	38.	280.	15.					
9246.	40.	1.	31.	289.	8.					
9247.	45.	2.	59.	632.	41.					
9248.	50.	0.	38.	581.	59.					
9249.	55.	0.	8.	504.	57.					
9250.	60.	0.	4.	507.	33.					
9251.	65.	0.	2.	532.	28.					
9252.	70.	0.	0.	682.	12.					
9253.	72.	0.	0.	404.	7.					
9254.	75.	0.	0.	692.	12.					
9255.	80.	0.	0.	1042.	9.					
9256.	85.	0.	0.	438.	3.					
9257.	90.	0.	0.	81.	3.					
9258.	95.	0.	0.	11.	0.					
9259.	100.	0.	0.	3.	0.					
9260.	105.	0.	0.	2.	0.					
9261.	110.	0.	0.	1.	0.					
9262.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
9263.	10.	259.	4.	0.	0.					
9264.	14.	0.	29.	2.	1.					
9265.	20.	0.	104.	91.	3.					
9266.	22.	0.	0.	0.	3.					
9267.	24.	0.	0.	0.	5.					
9268.	26.	0.	0.	0.	2.					
9269.	28.	0.	0.	0.	0.					
9270.	30.	0.	0.	0.	0.					
9271.	32.	0.	0.	0.	0.					
9272.	34.	0.	0.	0.	0.					
9273.	36.	0.	0.	0.	0.					
9274.	38.	0.	0.	0.	0.					
9275.	40.	0.	0.	0.	0.					
9276.	42.	0.	0.	0.	0.					
9277.	44.	0.	0.	0.	0.					
9278.	46.	0.	0.	0.	0.					
9279.	48.	0.	0.	0.	0.					
9280.	50.	0.	0.	0.	0.					

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9272.	34.	0.	0.	0.	0.					
9273.	36.	0.	0.	0.	0.					
9274.	38.	0.	0.	0.	0.					
9275.	40.	0.	0.	0.	0.					
9276.	45.	0.	0.	0.	0.					
9277.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
9278.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
9279.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - US/STAT - HOTMIX - RURAL - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
9295.	1	808064.00	15.96	12.80	1417457.00	692.00
9296.	2	927285.00	16.58	12.80	1616239.00	755.00
9297.	3	1062445.00	16.83	12.80	1822775.00	823.00
9298.	4	1210383.00	17.01	12.80	2052021.00	897.00
9299.	5	1364820.00	17.17	12.80	2308626.00	977.00
9300.	6	1518428.00	17.32	12.80	2596669.00	1065.00
9301.	7	1667946.00	17.47	12.80	2920420.00	1161.00
9302.	8	1816955.00	17.62	12.80	3284542.00	1266.00
9303.	9	1972749.00	17.77	12.80	3694234.00	1380.00
9304.	10	2143474.00	17.93	12.80	4155300.00	1504.00
9305.	11	2336643.00	18.09	0.00	2311240.00	1639.00
9306.	12	2557040.00	17.76	0.00	2542050.00	1787.00
9307.	13	2806158.00	17.63	0.00	2825613.00	1948.00
9308.	14	3084273.00	17.54	0.00	3149325.00	2123.00
9309.	15	3392166.00	17.49	0.00	3515656.00	2314.00
9310.	16	3731427.00	17.45	0.00	3928924.00	2522.00
9311.	17	4104110.00	17.42	0.00	4394475.00	2749.00
9312.	18	4512177.00	17.41	0.00	4918607.00	2997.00
9315.	TOTAL		312.45	128.00		
9316.	PRESENT COSTS	41016496.00			53454064.00	28599.00
9317.	TOTAL LANE MILES		440.45			

9322.	FLEXIBLE		0	0	12.00	0.00	0.00	0.00	3.00	3.00							
9323.	FLEXIBLE - US/STAT - HOTMIX - URBAN - LOW TRAFFIC																
9324.	21	3	1	2	1	6	1.00	6.00	1	4	10	1941.00					
9325.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9326.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0									
9327.	ACP	2.00	0.000	AGB	8.00	0.000	LTS	6.00	0.000	0.00	0.000						
9328.	AGE DISTRIBUTION				30	0	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
9329.	0	0	0	0	0	0	0	7	0	6	0	5	8	3	1	8	7
9330.	4	0	4	0	8	11	0	4	4	1	4	0	1	1	1	1	0
9331.	TRUCK TYPE				4	0	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
9332.	20	3A		3-S2		2-S1-2		2-S1		2-S2		3-S1		3-S3			

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9333.	3-S1-2	2-S2-2										
9334.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0				
9335.	4 1 0 0	4 1 0 0										
9336.	0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9337.	LOAD LIMITS			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9338.	80.00	20.00		34.00	56.00							
9339.	120.00	22.40		36.00	56.00							
9340.	13.	13.	12.	8.								
9341.	16.	16.	16.	16.								
9342.	SINGLE AXLES		11	0	3.00		0.00	0.00	0.00	0.00	0.00	0.00
9343.	3.	0.	4.	9.	6.							
9344.	7.	169.	91.	847.	56.							
9345.	8.	59.	16.	513.	15.							
9346.	12.	177.	30.	976.	52.							
9347.	16.	89.	29.	984.	43.							
9348.	18.	21.	7.	603.	19.							
9349.	19.	15.	1.	216.	4.							
9350.	20.	10.	2.	109.	1.							
9351.	22.	6.	2.	72.	4.							
9352.	24.	5.	2.	15.	0.							
9353.	26.	3.	0.	2.	0.							
9354.	TANDEM AXLES		15	0	6.00		0.00	0.00	0.00	0.00	0.00	0.00
9355.	6.	0.	91.	1484.	0.							
9356.	12.	0.	60.	2174.	0.							
9357.	18.	0.	29.	2225.	0.							
9358.	24.	0.	2.	849.	0.							
9359.	30.	0.	0.	806.	0.							
9360.	32.	0.	0.	362.	0.							
9361.	33.	0.	0.	174.	0.							
9362.	34.	0.	0.	137.	0.							
9363.	36.	0.	0.	154.	0.							
9364.	38.	0.	0.	62.	0.							
9365.	40.	0.	0.	21.	0.							
9366.	42.	0.	0.	7.	0.							
9367.	44.	0.	0.	2.	0.							
9368.	46.	0.	0.	1.	0.							
9369.	50.	0.	0.	1.	0.							
9370.	GVW		28	0	10.00		0.00	0.00	0.00	0.00	0.00	0.00
9371.	10.	90.	2.	0.	0.							
9372.	14.	167.	14.	2.	0.							
9373.	20.	188.	72.	26.	0.							
9374.	22.	31.	12.	27.	0.							
9375.	24.	20.	14.	59.	1.							
9376.	26.	26.	10.	110.	1.							
9377.	28.	14.	7.	193.	1.							
9378.	30.	9.	3.	277.	0.							
9379.	32.	5.	10.	271.	4.							
9380.	34.	2.	4.	268.	3.							
9381.	36.	1.	6.	257.	1.							
9382.	38.	1.	6.	176.	0.							
9383.	40.	0.	3.	139.	5.							
9384.	45.	0.	15.	206.	6.							
9385.	50.	0.	4.	192.	6.							
9386.	55.	0.	1.	189.	4.							
9387.	60.	0.	0.	202.	5.							
9388.	65.	0.	0.	287.	3.							
9389.	70.	0.	0.	359.	6.							
9390.	72.	0.	0.	150.	0.							
9391.	75.	0.	0.	256.	3.							
9392.	80.	0.	0.	399.	1.							
9393.	85.	0.	0.	149.	0.							

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9394.	90.	0.	0.	48.	0.					
9395.	95.	0.	0.	9.	0.					
9396.	100.	0.	0.	3.	0.					
9397.	105.	0.	0.	0.	0.					
9398.	110.	0.	0.	1.	0.					
9399.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
9400.	10.	79.	2.	0.	0.					
9401.	14.	0.	14.	2.	0.					
9402.	20.	0.	34.	26.	0.					
9403.	22.	0.	0.	0.	0.					
9404.	24.	0.	0.	0.	1.					
9405.	26.	0.	0.	0.	1.					
9406.	28.	0.	0.	0.	0.					
9407.	30.	0.	0.	0.	0.					
9408.	32.	0.	0.	0.	0.					
9409.	34.	0.	0.	0.	0.					
9410.	36.	0.	0.	0.	0.					
9411.	38.	0.	0.	0.	0.					
9412.	40.	0.	0.	0.	0.					
9413.	45.	0.	0.	0.	0.					
9414.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
9415.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
9416.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 21.
 PRESENT LIMITS
 FLEXIBLE - US/STAT - HOTMIX - URBAN - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
9429.						
9430.						
9431.						
9432.	1	61509.00	1.20	0.90	102661.00	564.00
9433.	2	70739.00	1.24	0.90	116916.00	615.00
9434.	3	81219.00	1.25	0.90	131739.00	671.00
9435.	4	92723.00	1.26	0.90	148196.00	731.00
9436.	5	104766.00	1.27	0.90	166616.00	797.00
9437.	6	116749.00	1.28	0.90	187290.00	869.00
9438.	7	128391.00	1.29	0.90	210524.00	947.00
9439.	8	139958.00	1.30	0.90	236650.00	1032.00
9440.	9	152015.00	1.31	0.90	266040.00	1125.00
9441.	10	165187.00	1.32	0.90	299109.00	1226.00
9442.	11	180042.00	1.33	0.00	170172.00	1336.00
9443.	12	196942.00	1.31	0.00	187337.00	1457.00
9444.	13	216004.00	1.30	0.00	208281.00	1588.00
9445.	14	237256.00	1.29	0.00	232159.00	1731.00
9446.	15	260760.00	1.29	0.00	259161.00	1886.00
9447.	16	286639.00	1.29	0.00	289610.00	2056.00
9448.	17	315052.00	1.28	0.00	323900.00	2241.00
9449.	18	346152.00	1.28	0.00	362492.00	2443.00
9450.						
9451.						
9452.	TOTAL		23.11	9.00		
9453.	PRESENT COSTS	3152103.00			3898853.00	23315.00
9454.	TOTAL LANE MILES		32.11			

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FLEXIBLE			0	0	12.00		0.00		0.00	3.00	3.00						
FLEXIBLE - US/STAT - HOTMIX - URBAN - HIGH TRAFFIC																	
21	3	1	2	2	6	1.00	6.00	1	4	10	10	4705.00					
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACP	4.00	0.000	AGB	10.00	0.000	LTS	6.00	0.000		0.00	0.000						
AGE DISTRIBUTION			30	0	0.00		0.00			0.00		0.00					
0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	47.0	40.0	65.0	22.0	7.0	68.0	54.0	13.0	17.0	
30.0	36.0	63.0	88.0	35.0	30.0	8.0	33.0	3.0	10.0	11.0	11.0	8.0	0.0	38.0			
TRUCK TYPE			4	0	0.00		0.00		0.00	0.00	0.00						
2D	3A		3-S2	2-S1-2	2-S1	2-S2	3-S1	3-S3									
3-S1-2	2-S2-2																
2 0 0 0	1 1 0 0		1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0									
4 1 0 0	4 1 0 0																
0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
LOAD LIMITS			0	0	0.00		0.00		0.00	0.00	0.00						
80.00	20.00	34.00	56.00														
120.00	22.40	36.00	56.00														
13.	13.	12.	8.														
16.	16.	16.	16.														
SINGLE AXLES			11	0	3.00		0.00		0.00	0.00	0.00						
3.	0.	4.	9.	6.													
7.	169.	91.	847.	56.													
8.	59.	16.	513.	15.													
12.	177.	30.	976.	52.													
16.	89.	29.	984.	43.													
18.	21.	7.	603.	19.													
19.	15.	1.	216.	4.													
20.	10.	2.	109.	1.													
22.	6.	2.	72.	4.													
24.	5.	2.	15.	0.													
26.	3.	0.	2.	0.													
TANDEM AXLES			15	0	6.00		0.00		0.00	0.00	0.00						
6.	0.	91.	1484.	0													
12.	0.	60.	2174.	0													
18.	0.	29.	2225.	0													
24.	0.	2.	849.	0													
30.	0.	0.	806.	0.													
32.	0.	0.	362.	0.													
33.	0.	0.	174.	0.													
34.	0.	0.	137.	0.													
36.	0.	0.	154.	0.													
38.	0.	0.	62.	0.													
40.	0.	0.	21.	0.													
42.	0.	0.	7.	0.													
44.	0.	0.	2.	0.													
46.	0.	0.	1.	0.													
50.	0.	0.	1.	0.													
GVW			28	0	10.00		0.00		0.00	0.00	0.00						
10.	90.	2.	0.	0.													
14.	167.	14.	2.	0.													
20.	188.	72.	26.	0.													
22.	31.	12.	27.	0.													
24.	20.	14.	59.	1.													
26.	26.	10.	110.	1.													
28.	14.	7.	193.	1.													
30.	9.	3.	7.	0.													

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9516.	32.	5.	10.	271.	4.					
9517.	34.	2.	4.	268.	3.					
9518.	36.	1.	6.	257.	1.					
9519.	38.	1.	6.	176.	0.					
9520.	40.	0.	3.	139.	5.					
9521.	45.	0.	15.	206.	6.					
9522.	50.	0.	4.	192.	6.					
9523.	55.	0.	1.	189.	4.					
9524.	60.	0.	0.	202.	5.					
9525.	65.	0.	0.	287.	3.					
9526.	70.	0.	0.	359.	6.					
9527.	72.	0.	0.	150.	0.					
9528.	75.	0.	0.	256.	3.					
9529.	80.	0.	0.	399.	1.					
9530.	85.	0.	0.	149.	0.					
9531.	90.	0.	0.	48.	0.					
9532.	95.	0.	0.	9.	0.					
9533.	100.	0.	0.	3.	0.					
9534.	105.	0.	0.	0.	0.					
9535.	110.	0.	0.	1.	0.					
9536.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00	0.00
9537.	10.	79.	2.	0.	0.					
9538.	14.	0.	14.	2.	0.					
9539.	20.	0.	34.	26.	0.					
9540.	22.	0.	0.	0.	0.					
9541.	24.	0.	0.	0.	1.					
9542.	26.	0.	0.	0.	1.					
9543.	28.	0.	0.	0.	0.					
9544.	30.	0.	0.	0.	0.					
9545.	32.	0.	0.	0.	0.					
9546.	34.	0.	0.	0.	0.					
9547.	36.	0.	0.	0.	0.					
9548.	38.	0.	0.	0.	0.					
9549.	40.	0.	0.	0.	0.					
9550.	45.	0.	0.	0.	0.					
9551.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00	
9552.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00	
9553.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00	

DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - US/STAT - HOTMIX - URBAN - HIGH TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)	
9566.						
9567.						
9568.						
9569.	1	496036.00	16.98	7.80	1162241.00	1368.00
9570.	2	564262.00	17.95	7.80	1346389.00	1492.00
9571.	3	640780.00	18.38	7.80	1530164.00	1626.00
9572.	4	723470.00	18.71	7.80	1732758.00	1772.00
9573.	5	808448.00	19.00	7.80	1959290.00	1932.00
9574.	6	891365.00	19.26	7.80	2213838.00	2105.00
9575.	7	970465.00	19.52	7.80	2500511.00	2295.00
9576.	8	1048100.00	19.78	7.80	2823764.00	2501.00

9638.		38.	0.	0.	217.	0.				
9639.		40.	0.	0.	53.	0.				
9640.		42.	0.	0.	14.	0.				
9641.		44.	0.	0.	4.	0.				
9642.		46.	0.	0.	1.	0.				
9643.		50.	0.	0.	3.	0.				
9644.	GVW			28	0	10.00	0.00	0.00	0.00	0.00
9645.		10.	299.	4.	0.	0.				
9646.		14.	547.	29.	2.	1.				
9647.		20.	590.	188.	91.	3.				
9648.		22.	145.	48.	64.	3.				
9649.		24.	57.	37.	108.	5.				
9650.		26.	71.	29.	293.	2.				
9651.		28.	53.	16.	554.	9.				
9652.		30.	20.	18.	658.	13.				
9653.		32.	12.	27.	583.	22.				
9654.		34.	6.	20.	476.	28.				
9655.		36.	2.	28.	362.	25.				
9656.		38.	3.	38.	280.	15.				
9657.		40.	1.	31.	289.	8.				
9658.		45.	2.	59.	632.	41.				
9659.		50.	0.	38.	581.	59.				
9660.		55.	0.	8.	504.	57.				
9661.		60.	0.	4.	507.	33.				
9662.		65.	0.	2.	532.	28.				
9663.		70.	0.	0.	682.	12.				
9664.		72.	0.	0.	404.	7.				
9665.		75.	0.	0.	692.	12.				
9666.		80.	0.	0.	1042.	9.				
9667.		85.	0.	0.	438.	3.				
9668.		90.	0.	0.	81.	3.				
9669.		95.	0.	0.	11.	0.				
9670.		100.	0.	0.	3.	0.				
9671.		105.	0.	0.	2.	0.				
9672.		110.	0.	0.	1.	0.				
9673.	EMPTY			14	0	10.00	0.00	0.00	0.00	0.00
9674.		10.	259.	4.	0.	0.				
9675.		14.	0.	29.	2.	1.				
9676.		20.	0.	104.	91.	3.				
9677.		22.	0.	0.	0.	3.				
9678.		24.	0.	0.	0.	5.				
9679.		26.	0.	0.	0.	2.				
9680.		28.	0.	0.	0.	0.				
9681.		30.	0.	0.	0.	0.				
9682.		32.	0.	0.	0.	0.				
9683.		34.	0.	0.	0.	0.				
9684.		36.	0.	0.	0.	0.				
9685.		38.	0.	0.	0.	0.				
9686.		40.	0.	0.	0.	0.				
9687.		45.	0.	0.	0.	0.				
9688.	PERFORMANCE			0	0	0.00	3.05	4.70	0.00	0.00
9689.	OVERLAY			0	0	95.00	4.75	0.25	0.00	0.00
9690.	EXECUTE			0	0	0.00	0.00	0.00	0.00	0.00

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DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - US/STAT - OVRLAY - RURAL - LOW TRAFFIC

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YEAR	ROUT MAINT COST (\$)	REHAB NPOT	REHAB POT MILES	REHAB COST (\$)	PREV MAINT COST (\$)
1	359220.00	0.01	24.10	1432972.00	76.00
2	394452.00	0.01	24.10	1604947.00	83.00
3	432761.00	0.01	24.10	1797563.00	90.00
4	473852.00	0.01	24.10	2013295.00	99.00
5	517902.00	0.01	24.10	2254921.00	107.00
6	565574.00	0.01	24.10	2525547.00	117.00
7	617849.00	0.01	24.10	2828652.00	128.00
8	676247.00	0.01	24.10	3168140.00	139.00
9	743426.00	0.02	24.10	3548373.00	152.00
10	823752.00	0.02	24.10	3974243.00	165.00
11	922493.00	0.02	0.00	2083.00	180.00
12	1043202.00	0.02	0.00	2424.00	196.00
13	1186643.00	0.02	0.00	2813.00	214.00
14	1352549.00	0.02	0.00	3258.00	233.00
15	1541201.00	0.02	0.00	3771.00	254.00
16	1753612.00	0.02	0.00	4354.00	277.00
17	1990948.00	0.02	0.00	5022.00	302.00
18	2253564.00	0.02	0.00	5781.00	329.00

TOTAL PRESENT COSTS	17649232.00	0.28	241.00	25178080.00	3141.00
TOTAL LANE MILES		241.28			

FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00										
FLEXIBLE - US/STAT - OVRLAY - RURAL - HIGH TRAFFIC	21	3	3	1	2	6	1.00	6.00	1	4	10	10	1641.00				
ACP	3.00	0.000	ATB	4.00	0.000	AGB	12.00	0.000	LTS	0.00	0.000						
AGE DISTRIBUTION	30	0	0.00		0.00			0.00		0.00		0.00		0.00		0.00	
TRUCK TYPE	4	0	0.00		0.00			0.00		0.00		0.00		0.00		0.00	
LOAD LIMITS	0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	
SINGLE AXLES	11	0	3.00		0.00		0.00	0.00		0.00		0.00		0.00		0.00	

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9760.	19.	25.	13.	546.	20.				
9761.	20.	18.	11.	291.	26.				
9762.	22.	14.	12.	125.	20.				
9763.	24.	9.	4.	13.	5.				
9764.	26.	3.	2.	4.	2.				
9765.	TANDEM	AXLES	15	0	6.00	0.00	0.00	0.00	0.00
9766.	6.	0.	258.	3382.	0.				
9767.	12.	1.	167.	5272.	0.				
9768.	18.	0.	159.	5150.	0.				
9769.	24.	0.	28.	1814.	0.				
9770.	30.	0.	1.	1531.	0.				
9771.	32.	0.	0.	875.	0.				
9772.	33.	0.	0.	483.	0.				
9773.	34.	0.	0.	373.	0.				
9774.	36.	0.	0.	486.	0.				
9775.	38.	0.	0.	217.	0.				
9776.	40.	0.	0.	53.	0.				
9777.	42.	0.	0.	14.	0.				
9778.	44.	0.	0.	4.	0.				
9779.	46.	0.	0.	1.	0.				
9780.	50.	0.	0.	3.	0.				
9781.	GVW		28	0	10.00	0.00	0.00	0.00	0.00
9782.	10.	299.	4.	0.	0.				
9783.	14.	547.	29.	2.	1.				
9784.	20.	590.	188.	91.	3.				
9785.	22.	145.	48.	64.	3.				
9786.	24.	57.	37.	108.	5.				
9787.	26.	71.	29.	293.	2.				
9788.	28.	53.	16.	554.	9.				
9789.	30.	20.	18.	658.	13.				
9790.	32.	12.	27.	583.	22.				
9791.	34.	6.	20.	476.	28.				
9792.	36.	2.	28.	362.	25.				
9793.	38.	3.	38.	280.	15.				
9794.	40.	1.	31.	289.	8.				
9795.	45.	2.	59.	632.	41.				
9796.	50.	0.	38.	581.	59.				
9797.	55.	0.	8.	504.	57.				
9798.	60.	0.	4.	507.	33.				
9799.	65.	0.	2.	532.	28.				
9800.	70.	0.	0.	682.	12.				
9801.	72.	0.	0.	404.	7.				
9802.	75.	0.	0.	692.	12.				
9803.	80.	0.	0.	1042.	9.				
9804.	85.	0.	0.	438.	3.				
9805.	90.	0.	0.	81.	3.				
9806.	95.	0.	0.	11.	0.				
9807.	100.	0.	0.	3.	0.				
9808.	105.	0.	0.	2.	0.				
9809.	110.	0.	0.	1.	0.				
9810.	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
9811.	10.	259.	4.	0.	0.				
9812.	14.	0.	29.	2.	1.				
9813.	20.	0.	104.	91.	3.				
9814.	22.	0.	0.	0.	3.				
9815.	24.	0.	0.	0.	5.				
9816.	26.	0.	0.	0.	2.				
9817.	28.	0.	0.	0.	0.				
9818.	30.	0.	0.	0.	0.				
9819.	32.	0.	0.	0.	0.				
9820.	34.	0.	0.	0.	0.				

9821.	36.	0.	0.	0.	0.				
9822.	38.	0.	0.	0.	0.				
9823.	40.	0.	0.	0.	0.				
9824.	45.	0.	0.	0.	0.				
9825.	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
9826.	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
9827.	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

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DISTRICT: 21.
PRESENT LIMITS

FLEXIBLE - US/STAT - OVRLAY - RURAL - HIGH TRAFFIC

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YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	97119.00	0.03	6.60	393387.00	231.00
2	106562.00	0.03	6.60	440638.00	252.00
3	116829.00	0.03	6.60	493566.00	274.00
4	127852.00	0.03	6.60	552855.00	299.00
5	139681.00	0.03	6.60	619269.00	326.00
6	152491.00	0.03	6.60	693665.00	355.00
7	166545.00	0.03	6.60	777003.00	387.00
8	182252.00	0.03	6.60	870359.00	422.00
9	200338.00	0.04	6.60	974935.00	460.00
10	221998.00	0.04	6.60	1092084.00	501.00
11	248674.00	0.04	0.00	4877.00	546.00
12	281338.00	0.04	0.00	5670.00	596.00
13	320194.00	0.04	0.00	6581.00	649.00
14	365163.00	0.04	0.00	7627.00	708.00
15	416318.00	0.04	0.00	8822.00	771.00
16	473928.00	0.05	0.00	10189.00	841.00
17	538309.00	0.05	0.00	11752.00	916.00
18	609553.00	0.05	0.00	13531.00	999.00
TOTAL PRESENT COSTS	4765144.00	0.66	66.00	6976810.00	9533.00
TOTAL LANE MILES		66.66			

9862.
9863.
9864.
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FLEXIBLE	0	0	12.00	0.00	0.00	3.00	3.00		
FLEXIBLE - US/STAT - OVRLAY - URBAN - LOW TRAFFIC									
21 3 3 2 1	6	1.00	6.00	1	4	10	10	1862.00	
0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACP 2.00 0.000 ATB	2.00	0.000	AGB 8.00	0.000	LTS 6.00	0.000			
AGE DISTRIBUTION	30	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0
TRUCK TYPE	4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2D	152	12-S	2	0.52	3-S1	3-00			

9870.
9871.
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9880.

9882.	2 0 0 0	1 1 0 0	1 2 0 0	5 0 0 0	3 0 0 0	2 1 0 0	2010 0 0	1020 0 0		
9883.	4 1 0 0	4 1 0 0								
9884.	0	3.94	0.71	0.23	1.83	0.00	0.00	0.00	0.00	0.00
9885.	LOAD LIMITS			0	0	0.00	0.00	0.00	0.00	0.00
9886.		80.00	20.00		34.00		56.00			
9887.		120.00	22.40		36.00		56.00			
9888.		13.	13.	12.	8.					
9889.		16.	16.	16.	16.					
9890.	SINGLE AXLES			11	0	3.00		0.00	0.00	0.00
9891.		3.	0.	4.	9.	6.				
9892.		7.	169.	91.	847.	56.				
9893.		8.	59.	16.	513.	15.				
9894.		12.	177.	30.	976.	52.				
9895.		16.	89.	29.	984.	43.				
9896.		18.	21.	7.	603.	19.				
9897.		19.	15.	1.	216.	4.				
9898.		20.	10.	2.	109.	1.				
9899.		22.	6.	2.	72.	4.				
9900.		24.	5.	2.	15.	0.				
9901.		26.	3.	0.	2.	0.				
9902.	TANDEM AXLES			15	0	6.00		0.00	0.00	0.00
9903.		6.	0.	91.	1484.	0.				
9904.		12.	0.	60.	2174.	0.				
9905.		18.	0.	29.	2225.	0.				
9906.		24.	0.	2.	849.	0.				
9907.		30.	0.	0.	806.	0.				
9908.		32.	0.	0.	362.	0.				
9909.		33.	0.	0.	174.	0.				
9910.		34.	0.	0.	137.	0.				
9911.		36.	0.	0.	154.	0.				
9912.		38.	0.	0.	62.	0.				
9913.		40.	0.	0.	21.	0.				
9914.		42.	0.	0.	7.	0.				
9915.		44.	0.	0.	2.	0.				
9916.		46.	0.	0.	1.	0.				
9917.		50.	0.	0.	1.	0.				
9918.	GVW			28	0	10.00		0.00	0.00	0.00
9919.		10.	90.	2	0.	0.				
9920.		14.	167.	14.	2.	0.				
9921.		20.	188.	72.	26.	0.				
9922.		22.	31.	12.	27.	0.				
9923.		24.	20.	14.	59.	1.				
9924.		26.	26.	10.	110.	1.				
9925.		28.	14.	7.	193.	1.				
9926.		30.	9.	3.	277.	0.				
9927.		32.	5.	10.	271.	4.				
9928.		34.	2.	4.	268.	3.				
9929.		36.	1.	6.	257.	1.				
9930.		38.	1.	6.	176.	0.				
9931.		40.	0.	3.	139.	5.				
9932.		45.	0.	15.	206.	6.				
9933.		50.	0.	4.	192.	6.				
9934.		55.	0.	1.	189.	4.				
9935.		60.	0.	0.	202.	5.				
9936.		65.	0.	0.	287.	3.				
9937.		70.	0.	0.	359.	6.				
9938.		72.	0.	0.	150.	0.				
9939.		75.	0.	0.	256.	3.				
9940.		80.	0.	0.	399.	1.				
9941.		85.	0.	0.	149.	0.				
9942.		90.	0.	0.	48.	0.				

9943	95	0	0	9	0				
9944	100	0	0	3	0				
9945	105	0	0	0	0				
9946	110	0	0	1	0				
9947	EMPTY		14	0	10.00	0.00	0.00	0.00	0.00
9948	10	79	2	0	0				
9949	14	0	14	2	0				
9950	20	0	34	26	0				
9951	22	0	0	0	0				
9952	24	0	0	0	1				
9953	26	0	0	0	1				
9954	28	0	0	0	0				
9955	30	0	0	0	0				
9956	32	0	0	0	0				
9957	34	0	0	0	0				
9958	36	0	0	0	0				
9959	38	0	0	0	0				
9960	40	0	0	0	0				
9961	45	0	0	0	0				
9962	PERFORMANCE		0	0	0.00	3.05	4.70	0.00	0.00
9963	OVERLAY		0	0	95.00	4.75	0.25	0.00	0.00
9964	EXECUTE		0	0	0.00	0.00	0.00	0.00	0.00

9965
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DISTRICT: 21
PRESENT LIMITS

FLEXIBLE - US/STAT - OVRLAY - URBAN - LOW TRAFFIC

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT	REHAB MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)	
9976						
9977						
9978						
9979						
9980	1	4311.00	0.00	0.40	23885.00	262.00
9981	2	4697.00	0.00	0.40	26756.00	285.00
9982	3	5117.00	0.00	0.40	29971.00	311.00
9983	4	5575.00	0.00	0.40	33574.00	339.00
9984	5	6076.00	0.00	0.40	37610.00	370.00
9985	6	6626.00	0.00	0.40	42132.00	403.00
9986	7	7236.00	0.00	0.40	47197.00	439.00
9987	8	7927.00	0.00	0.40	52873.00	479.00
9988	9	8739.00	0.00	0.40	59232.00	522.00
9989	10	9743.00	0.00	0.40	66357.00	569.00
9990	11	11024.00	0.00	0.00	496.00	620.00
9991	12	12637.00	0.00	0.00	578.00	676.00
9992	13	14593.00	0.00	0.00	674.00	737.00
9993	14	16884.00	0.00	0.00	783.00	803.00
9994	15	19510.00	0.00	0.00	909.00	875.00
9995	16	22484.00	0.00	0.00	1052.00	954.00
9996	17	25822.00	0.00	0.00	1217.00	1040.00
9997	18	29524.00	0.00	0.00	1405.00	1133.00
9998						
9999						
10000	TOTAL		0.07	4.00		
10001	PRESENT COSTS	218525.00			426701.00	10817.00
10002	TOTAL LANE MILES			4.07		

10004.
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 10046.

 STOP 0 0 0.00 0.00 0.00 0.00 0.00

COST SUMMARY
 PRESENT LIMITS
 REGION : 4

YEAR	ROUT MAINT COST (\$)	REHAB MILES NPOT POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	30003920.00	178.25 1108.09	73198800.00	36444.00
2	33938752.00	187.44 1108.09	82406160.00	39730.00
3	38366944.00	191.49 1108.09	92504080.00	43301.00
4	43244656.00	194.62 1108.09	103785552.00	47205.00
5	48446192.00	197.39 1108.09	116418896.00	51448.00
6	53782384.00	199.99 1108.09	130577472.00	56076.00
7	59164720.00	202.51 1108.09	146451520.00	61122.00
8	64723136.00	205.00 1108.09	164252208.00	66627.00
9	70745152.00	207.48 1108.09	184215728.00	72624.00
10	77607232.00	209.98 1108.09	206606624.00	79156.00
11	85698752.00	212.50 0.00	27152848.00	86282.00
12	95271264.00	208.32 0.00	29813376.00	94043.00
13	106388976.00	206.77 0.00	33141792.00	102514.00
14	119047936.00	205.86 0.00	36956272.00	111735.00
15	133277248.00	205.32 0.00	41282624.00	121789.00
16	149153152.00	205.04 0.00	46172304.00	132752.00
17	166766448.00	204.94 0.00	51689232.00	144701.00
18	186170496.00	205.00 0.00	57908720.00	157719.00
TOTAL		3627.88 11080.91		
PRESENT COSTS	1561795840.00	-----	1624532740.00	1505268.00
TOTAL LANE MILES		14708.79		

COST SUMMARY
PRESENT LIMITS
RIGID PAVEMENTS

YEAR	ROUT MAINT COST (\$)	REHAB NPOT	MILES POT	REHAB COST (\$)	PREV MAINT COST (\$)
1	345404416.00	2.20	0.00	57847.00	0.00
2	385952512.00	2.41	0.00	64924.00	0.00
3	429079808.00	2.63	0.00	72624.00	0.00
4	475334912.00	2.86	0.00	80977.00	0.00
5	505124096.00	3.11	0.00	90006.00	0.00
6	559919616.00	3.36	0.00	99775.00	0.00
7	619368448.00	3.63	0.00	110290.00	0.00
8	683818240.00	3.91	0.00	121598.00	0.00
9	753642240.00	4.21	0.00	133759.00	0.00
10	829016064.00	4.51	0.00	146777.00	0.00
11	910759424.00	4.83	0.00	160714.00	0.00
12	999146752.00	5.16	0.00	175605.00	0.00
13	1094659330.00	5.50	0.00	191485.00	0.00
14	1197813500.00	5.85	0.00	208405.00	0.00
15	1309157890.00	6.22	0.00	226403.00	0.00
16	1429281020.00	6.59	0.00	245513.00	0.00
17	1558809600.00	6.98	0.00	265788.00	0.00
18	1698409980.00	7.38	0.00	287279.00	0.00
TOTAL PRESENT COSTS	15784673300.00	81.35	0.00	2739769.00	0.00
TOTAL LANE MILES		81.35			

APPENDIX D:

RENU3 SOURCE PROGRAM LISTING

Subprograms

1. Subroutine INPUT reads all input data, initializes some variables, and provides printouts of data
2. Subroutine INIT initializes certain arrays to zero and calculates structural numbers for flexible sections
3. Subroutine DISTR calculates failure probabilities for flexible and rigid pavements using survival curves
4. Subroutine EALGET calculates EALs at beginning of the analysis period for both present and proposed regulations
5. Subroutine OVCOST obtains cost/lane mile for a given overlay thickness. Costs are input to this subroutine in dollars/cu yd
6. Subroutine ACCTFC determines cumulative traffic by year from base year (18 kip ESAL or 80 KN)
7. Subroutine OVTHKF calculates overlay thickness for flexible pavements
8. Function FWT18L perform AASHTO-rigid prediction of 18 kip EAL to terminal PSI*
9. Function FNAASH modifies the AASHTO-rigid prediction for non-AASHTO conditions*
10. Function GPSIR performs AASHTO-rigid prediction of PSI for a given 18 kip EAL*
11. Subroutine GETD calculates slab thickness D to provide given N-18 between specified initial and terminal PSI values for rigid pavement*
12. Subroutine OVTHKR calculates thickness of AC overlay necessary to bring equivalent slab thickness, D, of combination up to a new design value
13. Subroutine TRAFIC this routine computes the following:
 1. The adjusted average empty weight of vehicles weighed empty
 2. Adjusted gross weight and total payload carried--present and proposed regulations
 3. Distribution of axle weights--present and proposed regs
 4. Axle weight distributions by vehicle classification--proposed regulations.The inputs are:
 1. NAXLES(10,4)--the number of single, tandem, triple and steering axles for each truck type
 2. NTTY--Number of truck types fot be considered (existing)
 3. NATT--Number of added truck types (future design)
 4. NEWTRK--Shifting indicator
0--shifting procedure to be done
1--shifting procedure not to bve done (already done)
 5. SA(30,11)--Number of single axles weighted by interval and truck type

6. TA(30,11)--Number of tandem axles weighted by interval and truck type
 7. TR(50,11)--Number of triple axles weighted by interval and truck type
 8. ST(30,11)--Number of steering axles weighted by interval and truck type
 9. VE(30,11)--Number of vehicles weighted empty by interval and truck type
 10. VG(75,11)--Number of vehicles weighted gross by interval and truck type
 11. NDLI(6)--Number of intervals input for each of the above six arrays, where,
1 = SA, 2 = TA, 3 = TR, 4 = VG, 5 = VE, 6 = ST
 12. EMPTY(10)--Percent increase in average empty weight for each truck type
 13. PGVWL--Present gross vehicle weight limit
 14. PSAL--Present single axle weight limit
 15. PTAL--Present tandem axle weight limit
 16. PTRAL--Present triple axle weight limit
 17. PSTAW(10)--Present steering axle weight limit by truck type
 - 18-22.
FGVWL, FSAL, FTAL, FTRAL, FSTAW(10)--Same as 13 through 17 except that these are values under proposed regulations
 23. SIZE--Standard interval size (2-kips)
 24. AVRG--Average variable (AVRG=100). Gives average values per 100 trucks)
 25. NAPOV--Number of selected cumulative percentages for the distribution of axle weights--proposed regs. section
 26. PAPOV--Percentage increment corresponding to NAPOV above
14. Subroutine EAL18 calculates the equivalent 18-kip axle load applications for each vehicle using information from Subroutine TRAFIC and the following inputs:
 1. STRNUM--Structural number for a flexible pavement
 2. SLBTHK--Slab thickness for a rigid pavement
 3. TPSI--Terminal PSI
 4. IPVT--Pavement type switch
 5. APPT(10,2)--Average payload per vehicle, present + proposed
 6. COFVCT(6)--A vector with zero-one elements that define the present traffic combination being considered
 15. Subroutine RIGEQ calculates equivalency factors for rigid pavements
 16. Subroutine FLESEQ calculates equivalency factors for flexible pavements
 17. Subroutine STEREQ computes steering axle equivalency factors
 18. Subroutine INTVL converts the end-of-interval kip tables to evenly distributed intervals
 19. Subroutine PCTAGE converts a set of numbers to corresponding percentages of their sum
 20. Subroutine COUNT determines which of the "ICA" values in array CA is the last non-zero value

21. Subroutine ACMLTE converts a list of numbers to a cumulative function
22. Subroutine MIDPNT determines the midpoint of each interval between members of a list of numbers
23. Subroutine AVRGE computes the average of the values in array AV over AN
24. Subroutine SUM computes the sum of the values in array S1
25. Subroutine RUSIAN is used to calculate the thickness of the overlay for a flexible pavement
26. Function BESJO evaluates the BESSEL function $J_0(X)$ using polynomial approximation. It is used by Subroutine RUSIAN
27. Subroutine COSCAL calculates rehabilitation and maintenance costs for each period the planning horizon using cost data and probabilities of failure
28. Subroutine RHBLT calculates the cost of rehabilitation per lane mile. It uses subroutines to calculate thickness and Subroutine OVCOST to calculate cost per lane mile
29. Subroutine ACOST calculates the total cost of routine, rehabilitation, and preventive maintenance for the planning horizon
30. Subroutine PCOST calculates the present value of the total cost for each type of maintenance

* NOTE: Used in the calculation of rigid overlay.

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1.
2. *****
3. *
4. *           R E N U 3
5. *
6. *****
7.
8. REAL XLAMB
9. CHARACTER*3 MC
10. COMMON /MECH/XKT, NRU, NIH, ND, NDEL, IACR, NREG, IYR, JYR, CONSTR(20)
11. COMMON /COSTS/ COSM(20,2), COSV(20,2), COSMS(20,2), COSVS(20,2),
12. 1      CSMPW(2), CSVPW(2), CSMUA(2), CSVUA(2), COSC(20,2)
13. COMMON /EALPAY/ EALPT(10,2), APPT(10,2)
14. COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
15. COMMON /FUNDS/ APOF(20,2), RTINT, RTINF
16. COMMON /IO/ LI, LO, LD
17. COMMON /LMP/ XLM(30), YLM(30), POTLM(20,2), OUTP(20,2),
18. 1      TOTALM, PPF, TPF, PFNO, NASL, NSLR, TOVLM(30,2), XLM2(30)
19. COMMON /OUT/ PSIE(30,2), EALREM(30,2), COSTM(20,30,2), CSTOV(30,2)
20. 1      , PSIB(30)
21. COMMON /OVRLAY/XHCID, XHCIM, WLANE, WPSH, WGSB, PPVDSH, NRHC, CAC, CGR
22. 1      , GSCOAT, NPMC, AGF
23. COMMON /PSI/ PF, PICON, PTERM, PIOV, PTOV
24. COMMON /STRCOE/ STRCD(8), CC(4), NC, STRC(5), RFS(4), RFB(4)
25. COMMON /STRMC/ MC(11)
26. COMMON /TEMPC/ CONTP(25), DISTCT
27. COMMON /STRUC/ SN, SS, R, D, AGG, XJ, XK, E
28. COMMON /TIME/ OVLIF, NYAP, NYR, YR(40)
29. COMMON /TITLE/ TITLE(20,3), SECTTL(20)
30. COMMON/HOR/A(10), B(10), C(10), DT(10), DF(10), S(10), T(10), TR(5), PI(5)
31. *, PT(5), AC(5), AA, SCT(5), XMNW18(10), XKTD
32. COMMON /EXTRA/ PTOVK, TPE, PFD, XMNDTK, XMNDTK, NIS
33. COMMON /BURKE/ XLAMB, GAMMA, TFBAP
34. COMMON /COST/ COSTRH(20), COSTRM(20), COSTPM(20), FMILES(20)
35. -, FMILEP(20)
36. COMMON /ACCDST/ ACCRM(20), ACCRH(20), ACCPM(20), ACCFM(20)
37. -, ACCFP(20)
38. DIMENSION TITLES(5)
39. CALL INIT(1)
40. CALL INPRNT
41. DO 50 K=1,20
42.     ACCRM(K)=0.
43.     ACCRH(K)=0.
44.     ACCPM(K)=0.
45. 50 CONTINUE
46. 100 CALL INPUT (IGO, ADT)
47.     GO TO (110, 200, 300, 300), IGO
48. 110 CALL INIT(2)
49.     CALL EALGET
50.     CALL COSCAL (ADT)
51.     CALL ACOST
52.     GO TO 100
53. 200 CONTINUE
54.     GO TO 100
55. 300 CONTINUE
56.     CALL PCOST
57.     STOP
58.     END
59. BLOCK DATA
60. CHARACTER*3 MC

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61. COMMON /TEMP/ CONTP(25),DISTCT
62. COMMON /MECH/XKT,NRU,NLH,ND,NDEL,IACR,NREG,IYR,JYR,CONSTR(20)
63. COMMON/HOR/A(10),B(10),C(10),DT(10),DF(10),S(10),T(10),TR(5),PI(5)
64. *,PT(5),AC(5),AA,SCT(5),XMNW18(10),XKTO
65. COMMON /EXTRA/ PTOVTK,TPE,PF0,XMNOIK,XMOTK,NIS
66. COMMON /CNSTS/ NAPOV,PAPOV,SIZE,AVRG
67. COMMON /EXPVT/ NPT,THICK(4),MTYPE(4),NLAY,IP,IF,IR,IC
68. COMMON /FUNDS/ APOF(20,2),RTINT,RTINF
69. COMMON /IO/ LI,LO,LD
70. COMMON /LMP/ XLM(30),YLM(30),POTLM(20,2),OUTP(20,2),
71. 1 TOTALM,PPF,TPF,PFNO,NASL,NSLR,TOVLM(30,2),XLM2(30)
72. COMMON /OVLAY/XHCIO,XHCIM,WLANE,WPSH,WGSH,PPVDSH,NRHC,CAC,CGR
73. 1 ,CSCOAT,NPMC,AGF
74. COMMON /PSI/ PF,PICON,PTERM,PIOV,PTOV
75. COMMON /STEER/ EQFACT(15,5),PTST(4)
76. COMMON /STRUC/ SN,SS,R,D,AGG,XJ,XK,E
77. COMMON /STRCDE/ STRCD(8),CC(4),NC,STRC(5),RFS(4),RFB(4)
78. COMMON /STRMC/ MC(11)
79. COMMON /TIME/ OVLIF,NYAP,NYR,YR(40)
80. DATA NAPOV,PAPOV,SIZE,AVRG /21,5.0,3.0,100./
81. DATA XHCIO/0.0,XHCIM/0.0/
82. DATA PICON,PTERM,PIOV,PTOV / 4*-1. /
83. DATA IF,IR,IC /1,2,3 /
84. DATA LI,LO,LD /10,6,1/
85. DATA SS,R,AGG,XK,E /3.,1.,195.43,150.,4.0E6/
86. DATA NYAP,OVLIF,NYR / 20,20.,40 /
87. DATA RTINT,RTINF /0.,0. /
88. C TABLE OF STEERING AXLE EQUIVALENCIES BY AXLE LOAD AND TERMINAL PSI
89. DATA XMNW18/10*0.0/
90. DATA SCT/.5,.5,.5,.5,.5/
91. DATA A/13.,13.,10.,8.,10.,10.,10.,10.,0./
92. DATA AC/.5,.5,.5,.5,.5/
93. DATA B/12.,12.,10.,7.,10.,10.,10.,10.,40.,0./
94. DATA C/9.,-30.,125.,20.,16.,55.,0.,0.,0.,0./
95. DATA DT/ 5,0.,0.,0.,0.,0.,0.,0.,0.,0./
96. DATA DF/1.5,1.,2.225,0.,0.,0.,0.,0.,0.,0./
97. DATA T/15.,0.,0.,0.,0.,0.,0.,0.,0.,0./
98. DATA TR/36000.,36000.,36000.,36000.,36000./
99. DATA S/5.,50.,30.,40.,0.,0.,0.,0.,0.,0./
100. DATA PI/4.7,4.73,4.41,4.81,4.6/
101. DATA PT/2.5,2.5,2.5,2.5,2.5/
102. DATA PPF,TPF,PFNO /0.,0.,0. /
103. DATA PTST /1.5,2.0,2.5,3.0/
104. DATA EQFACT /2.,4.,6.,8.,10.,12.,14.,16.,18.,20.,22.,
105. 1 24.,26.,28.,30.,
106. 2 .0005, .008, .04, .13, .28, .52, .92, 1.42, 2.12,
107. 3 2.95, 4.02, 5.29, 6.73, 8.31, 10.19,
108. 4 .0009, .01, .05, .14, .31, .54, .86, 1.31, 1.94,
109. 5 2.52, 3.35, 4.4, 5.49, 6.67, 8.05,
110. 6 .002, .02, .06, .18, .36, .62, .93, 1.33, 1.9, 2.44,
111. 7 3.15, 3.95, 4.82, 5.83, 6.8,
112. 8 .004, .03, .09, .23, .41, .66, .94, 1.28, 1.74,
113. 9 2.16, 2.7, 3.28, 3.89, 4.59, 5.23/
114. DATA STRCD / 44, 34, 23, 14, 30, 18, 11, 14 /
115. DATA RFS / 9, 7, 5, 5/
116. DATA RFB /1.,.9,.7,.5/
117. DATA CC / 1.0, 0.85, 0.75, 0.75 /
118. DATA NC /11/
119. DATA MC /'ACP','ATB','CTB','AGB','SAB','LTB','AGS','LTS',
120. 1 'JCP','CRC','ACD'/
121. DATA CONTP / 21.,22.,22.,9.,16.,23.,26.,26.,28.,24.,28.,33.,33.,

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122.          1          31.,31.,36.,30.,26.,25.,32.,38.,31.,25.,24.,19./
123.          END
124.          *****
125.          *
126.          *      SUBROUTINE INPUT: READS ALL INPUT DATA, INITIALIZES SOME *
127.          *      VARIABLES, AND PROVIDES PRINTOUTS OF DATA *
128.          *
129.          *****
130.          SUBROUTINE INPUT (IGO,ADT)
131.          CHARACTER*3 MC,MCODE(5)
132.          CHARACTER*4 ISTOP, KEY, IACO
133.          CHARACTER*4 KWORD
134.          COMMON /TEMPC/ CONTP(25),DISTCT
135.          COMMON /EXTRA/ PTOVTK,TPE,PFO,XMNOTK,XXOTK,NIS
136.          COMMON /MNTPAR/ S,DISS,DCON,DIN
137.          COMMON /MECH/XKT,NRU,NLH,ND,NDEL,IACR,NREG,IYR,JYR,CONSTR(20)
138.          COMMON /EALPAY/ EALPT(10,2), APPI(10,2)
139.          COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
140.          COMMON /FUNDS/ APOF(20,2), RTINT, RTINF
141.          COMMON /INTVLS/ STARTS(6)
142.          COMMON /IO/ LI, LO, LD
143.          COMMON /LDS/ PGVWL, PSAL, PTAL, PTRAL, FGVWL, FSAL, FTAL, FTRAL,
144.          1          PSTAW(10), FSTAW(10)
145.          COMMON /LMP/ XLM(30),YLM(30),POTLM(20,2),OUTP(20,2),TOTALM, PPF,
146.          1          TPF, PFNO, NASL, NSLR,TOVLM(30,2),XLM2(30)
147.          COMMON /NEWSYS/ NEWSYS
148.          COMMON /NMBR/ SA(30,11), TA(30,11), TR(50,11), VE(30,11),
149.          1          VG(500,11), NLDI(6), EPI(10), ST(30,11)
150.          COMMON /OUTSWH/ IOUT
151.          COMMON /OVLAY/XHCIO,XHCIM,WLANE,WPSH,WGSH,PPVDSH,NRHC,CAC,CGR
152.          1          , CSCOAT,NPMC,AGF
153.          COMMON /PSI/ PF,PICON, PTERM, PIOV, PTOV
154.          COMMON /STRCOE/ STRCD(8),CC(4),NC,STRC(5),RFS(4),RFB(4)
155.          COMMON /STRMC/ MC(11)
156.          COMMON /STRUC/ SN,SS,R,D,AGG,XJ,XK,E
157.          COMMON /TIME/ OVLIF, NYAP, NYR, YR(40)
158.          COMMON /TITLE/ TITLE(20,3), SECTTL(20)
159.          COMMON /TRTYP/ TTYP(2,10), PTYP(10),PERCT(4),
160.          1          NAXLES(10,4),NT(4), NITY, NATT, NTT, NEWTRK
161.          COMMON /SWIHS/ PCTINI, PCTINF, IPEPC, PFNOPC, AGR, SPCJT,
162.          1          XMLI,
163.          2          INIT, IDST, NLD, TFCDNS
164.          COMMON /SHIFT/ ISHIFT
165.          DIMENSION KWORD(5), IVAL(2), VAL(5), KEY(17), STRCIN(5)
166.          DIMENSION UNICST(5)
167.          DATA ISTOP /'STOP'/
168.          DATA KEY /'STOP', 'EXEC', 'FLEX', 'RIGI', 'PERF', 'AGE ', 'OVER',
169.          1          'TRUC', 'SYST', 'RUN ',
170.          2          'LOAD', 'SING', 'TAND', 'TRID', 'GVW ', 'EMPT', 'STEE'/
171.          DATA IACO /'ACO '/
172.          DATA NKEY /17/
173.          IDST = 0
174.          NEWTRK = 0
175.          NEWSYS = 0
176.          C
177.          C      READ AND ECHO PRINT A KEYWORD CARD
178.          C
179.          2 READ (LI,3) KWORD, IVAL, VAL
180.          3 FORMAT(5A4,2I5,5F10.0)
181.          WRITE (LD,4) KWORD, IVAL, VAL
182.          4 FORMAT(1X,5A4,2I5,5(F10.2,2X))

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183. C
184. C TEST FOR NORMAL PROGRAM TERMINATION
185. C
186. C IF (KWORD(1) .EQ. ISTOP) GO TO 9992
187. C
188. C SEARCH THE KEY TABLE FOR THE KEYWORD READ IN
189. C
190. C DO TO I=1,NKEY
191. C IKEY = I
192. C IF (KWORD(1) .EQ. KEY(I)) GO TO 15
193. C 10 CONTINUE
194. C GO TO 9996
195. C 15 GO TO (9998, 9997, 100, 200, 300, 400, 500, 900,
196. C 1 1000, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900)
197. C 2 , IKEY
198. C
199. C *** FLEXIBLE SECTION ***
200. C
201. C 100 IP = IF
202. C WLANE = VAL(1)
203. C PF=VAL(4)
204. C PFO=VAL(5)
205. C
206. C READ A TITLE CARD FOR THIS SECTION
207. C
208. C 101 READ (LI,102) SECTTL
209. C 102 FORMAT (20A4)
210. C WRITE (LO,103) SECTTL
211. C 103 FORMAT (1X,20A4)
212. C IF(IP.EQ.IR) GO TO 105
213. C
214. C READ AND ECHO PRINT THE MATERIALS CARD
215. C READ(LI,19) NDIST,NIS,NPT,NRU,NLH,NDEL, XMNOTK, XMXOTK,
216. C 1 IACR,NREG,IYR,JYR,ADT
217. C DISTCT=FLOAT(NDIST)
218. C IF (ADT.GE.150000.) ADT=150000.
219. C TFCDNS= ADT*365.
220. C 19 FORMAT(6I5,2F5.0,4I5,F10.0)
221. C WRITE(LO,21) NDIST,NIS,NPT,NRU,NLH,NDEL, XMNOTK, XMXOTK,
222. C 1 IACR,NREG,IYR,JYR,ADT
223. C 21 FORMAT(1X,6I5,2F5.2,4I5,F10.2)
224. C READ(LI,20)(CONSTR(I),I=1,20)
225. C 20 FORMAT(15F5.0)
226. C WRITE(LO,22)(CONSTR(I),I=1,20)
227. C 22 FORMAT(1X,15F8.1/1X,5F8.1)
228. C 105 READ (LI,110) (MCODE(I), THICK(I), STRCIN(I), I=1,4)
229. C IF(IP.EQ.IR) GO TO 1010
230. C MCODE(1)=MC(1)
231. C MCODE(2)=MC(4)
232. C MCODE(3)=MC(8)
233. C
234. C
235. C THICK REPRESENTS THE LAYER THICKNESSES OF REPRESENTATIVE
236. C SECTIONS
237. C
238. C
239. C IF(THICK(1).NE.0) GO TO 1010
240. C IF(NPT.NE.2.OR.NRU.NE.1) GO TO 50
241. C THICK(1)=.75
242. C THICK(2)=6.0
243. C GO TO 1010

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244. 50 IF(NPT.NE.2.OR.NRU.NE.2) GO TO 51
245. THICK(1)=0.75
246. THICK(2)=8.0
247. GO TO 1010
248. 51 IF(NPT.NE.1.OR.NRU.NE.1.OR.NLH.NE.1) GO TO 52
249. THICK(1)=2.0
250. THICK(2)=8.0
251. GO TO 1010
252. 52 IF(NPT.NE.1.OR.NRU.NE.1.OR.NLH.NE.2) GO TO 53
253. THICK(1)=4.0
254. THICK(2)=12.0
255. GO TO 1010
256. 53 IF(NPT.NE.1.OR.NRU.NE.2.OR.NLH.NE.1) GO TO 54
257. THICK(1)=2.0
258. THICK(2)=8.
259. THICK(3)=6.0
260. GO TO 1010
261. 54 IF(NPT.NE.1.OR.NRU.NE.2.OR.NLH.NE.2) GO TO 55
262. THICK(1)=4.0
263. THICK(2)=10.0
264. THICK(3)=6.0
265. GO TO 1010
266. 55 MCODE(2)=MC(2)
267. MCODE(3)=MC(4)
268. MCODE(4)=MC(8)
269. IF(NPT.NE.3.OR.NRU.NE.1.OR.NLH.NE.1) GO TO 56
270. THICK(1)=2.0
271. THICK(2)= 2.0
272. THICK(3)=8.0
273. GO TO 1010
274. 56 IF(NPT.NE.3.OR.NRU.NE.1.OR.NLH.NE.2) GO TO 57
275. THICK(1)=3.0
276. THICK(2)= 4.0
277. THICK(3)=12.0
278. GO TO 1010
279. 57 IF(NPT.NE.3.OR.NRU.NE.2.OR.NLH.NE.1) GO TO 58
280. THICK(1)=2.0
281. THICK(2)= 2.0
282. THICK(3)=8.0
283. THICK(4)=6.0
284. 58 IF(NPT.NE.3.OR.NRU.NE.2.OR.NLH.NE.2) GO TO 1010
285. THICK(1)=3.0
286. THICK(2)= 4.0
287. THICK(3)=10.0
288. THICK(4)=6.0
289. 1010 CONTINUE
290. 110 FORMAT(5(A3,2X,2F5.0,1X))
291. WRITE (LO,120) (MCODE(I), THICK(I), STRCIN(I), I=1,4)
292. 120 FORMAT(1X,5(A3,2X,F5.2,1X,F5.3,1X))
293. C
294. C DETERMINE THE NUMBER OF LAYERS IN THE PAVEMENT STRUCTURE
295. C
296. IPFLG = 0
297. DO 140 I=1,4
298. IF (THICK(I) .LE. 0.0) GO TO 160
299. NLAY = I
300. STRC(I) = STRCIN(I)
301. DO 135 J=1,NC
302. IF (MCODE(I) .NE. MC(J)) GO TO 135
303. IF ((IP .EQ. IF) .AND. ((J .EQ. 9) .OR. (J .EQ. 10))) GO TO 9994
304. IF ((IP .EQ. IR) .AND. (J .EQ. 1)) IPFLG = I

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305.      MTYPE(I) = J
306.      GO TO 140
307.      135 CONTINUE
308.      GO TO 9993
309.      140 CONTINUE
310.      160 IF (IPFLG .EQ. 0) GO TO 165
311.      IF (MTYPE(2) .NE. 9 .AND. MTYPE(2) .NE. 10) GO TO 9989
312.      NIS=1
313.      IP = IC
314.      165 STRC(5) = STRC(1)
315.      MCODE(5) = IACO
316.      GO TO 2
317.      C
318.      C      *** RIGID SECTION ***
319.      C
320.      200 IP = IR
321.      NDEL=10
322.      WLANE = VAL(1)
323.      XK=VAL(2)
324.      IF (VAL(3) .NE. 0.0) AGG = VAL(3)
325.      IF (VAL(4) .NE. 0.0) E = VAL(4)
326.      IF (VAL(5) .NE. 0.0) DISTCT = VAL(5)
327.      IF (VAL(4) .NE. 0.0) E = VAL(4)
328.      READ(LI,205) ADT,NPT,NREG,IACR,XMNOTK,XXOTK,PF,PFO,
329.      -          DISS,DCON,DIN
330.      205 FORMAT(F10.0,I5,I5,I5,4(F5.0),2F10.0,F5.0)
331.      WRITE(LO,205) ADT,NPT,NREG,IACR,XMNOTK,XXOTK,PF,PFO
332.      TFCDNS= ADT*365.
333.      GO TO 101
334.      C
335.      C      *** PERFORMANCE SECTION ***
336.      C
337.      300 PTERM = VAL(2)
338.      PIOV = VAL(3)
339.      PTOV = PTERM
340.      OVLIF = NYAP
341.      IF (VAL(4) .GT. 0.) OVLIF = VAL(4)
342.      GO TO 2
343.      C
344.      C      *** AGE DISTRIBUTION SECTION ***
345.      C
346.      400 NASL = IVAL(1)
347.      C
348.      C      READ AND ECHO PRINT THE DISTRIBUTION OF LANE MILES BY AGE
349.      C
350.      READ (LI,410) (YLM(I),I=1,NASL)
351.      410 FORMAT(16F5.0,/,14F5.0)
352.      WRITE (LO,420) (YLM(I),I=1,NASL)
353.      420 FORMAT(1X,15F8.1/1X,15F8.1)
354.      404 IF(NASL.LE.25) GO TO 421
355.      DO 422 I=26,NASL
356.      422 YLM(25)=YLM(25)+YLM(I)
357.      NASL=25
358.      421 CONTINUE
359.      GO TO 2
360.      C
361.      C      *** OVERLAY SECTION ***
362.      C
363.      500 PPVDSH = VAL(1)
364.      WPSH = VAL(2)
365.      WGSB = VAL(3)

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366.      GO TO 2
367.      C
368.      C      *** TRUCK TYPES SECTION ***
369.      C
370.      900  NTTY = IVAL(1)
371.          NATT = IVAL(2)
372.          PERCT(1)=VAL(1)
373.          PERCT(2)=VAL(2)
374.          PERCT(3)=VAL(3)
375.          PERCT(4)=VAL(4)
376.          NEWTRK = NEWTRK + 1
377.          IF ((NTTY+NATT) .GT. 10) GO TO 9995
378.          NTT = NTTY
379.          K = 0
380.          INTT = NTT + NATT
381.      C
382.      C      READ AND ECHO PRINT THE TRUCK LABELS
383.      C
384.          READ (LI,910) ((TTYP(M,J),M=1,2),J=1,10)
385.      910  FORMAT(8(2A4,2X),/,2(2A4,2X))
386.          WRITE (LO,920) ((TTYP(M,J),M=1,2),J=1,10)
387.      920  FORMAT(1X,8(2A4,2X),/,1X,2(2A4,2X))
388.      C
389.      C      READ AND ECHO PRINT THE AXLE CONFIGURATIONS
390.      C
391.          READ (LI,921) ((NAXLES(M,J),J=1,4),M=1,10)
392.      921  FORMAT(8(4I2,2X),/,2(4I2,2X))
393.          WRITE (LO,922) ((NAXLES(M,J),J=1,4),M=1,10)
394.      922  FORMAT(1X,8(4I2,2X),/,1X,2(4I2,2X))
395.          DO 929 J=1,4
396.              NT(J) = 0
397.              DO 928 M=1,NTT
398.                  NT(J) = NT(J) + NAXLES(M,J)
399.      928  CONTINUE
400.      929  CONTINUE
401.      C
402.      C      READ AND ECHO PRINT THE TRUCK PERCENTAGES
403.      C
404.          935  READ (LI,930) I, (PTTYP(J),J=1,10)
405.      930  FORMAT(I3,1X,10F6.0)
406.          WRITE (LO,940) I, (PTTYP(J),J=1,10)
407.      940  FORMAT(1X,I3,1X,10F6.2)
408.          GO TO 2
409.      C
410.      C      *** TITLE CARD SECTION ***
411.      C
412.      C      READ AND ECHO PRINT THE THREE TITLE CARDS
413.      C
414.      1000  DO 1030 J=1,3
415.          READ (LI,102) (TITLE(I,J),I=1,20)
416.          WRITE (LO,103) (TITLE(I,J),I=1,20)
417.      1030  CONTINUE
418.          NEWSYS = 1
419.          GO TO 2
420.      C
421.      C      READ AND ECHO PRINT THE ANNUAL PROJECTED OVERLAY FUNDS FOR PRESEN
422.      C      REGULATIONS
423.      C
424.          READ (LI,1110) (APOF(I,1),I=1,NYAP)
425.      C1110  FORMAT(8F10.0)
426.      C      WRITE (LO,1120) (APOF(I,1),I=1,NYAP)

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427. C1120 FORMAT(1X,8F10.0)
428. C   IF (IFF .EQ. 1) GO TO 1140
429. C   DO 1130 I=1,NYAP
430. C   APOF(I,2) = APOF(I,1)
431. C1130 CONTINUE
432. C   GO TO 2
433. C
434. C   READ AND ECHO PRINT THE ANNUAL PROJECTED OVERLAY FUNDS FOR FUTURE
435. C   REGULATIONS
436. C
437. C1140 READ (LI,1110) (APOF(I,2),I=1,NYAP)
438. C   WRITE (LO,1120) (APOF(I,2),I=1,NYAP)
439. C   GO TO 2
440. C1150 TPFPC = VAL(2)
441. C   PFNOPC = VAL(3)
442. C   GO TO 2
443. C
444. C   *** RUN PARAMETERS ***
445. C
446. C   1200 IF (IVAL(1) .NE. 0) NYAP = MINO(IVAL(1),20)
447. C   ISHIFT=IVAL(2)
448. C   AGR = VAL(1)
449. C   PCTINT = VAL(2)
450. C   IF(VAL(3).NE.O.O)XHCIO=VAL(3)
451. C   IF(VAL(4).NE.O.O)XHCIM=VAL(4)
452. C   GO TO 2
453. C
454. C   *** LOAD LIMITS SECTION ***
455. C
456. C   READ THE PRESENT AND FUTURE LOAD LIMITS
457. C
458. C   1300 IEWS = IVAL(1)
459. C   IDST = 1
460. C   NEWTRK = NEWTRK + 2
461. C   READ (LI,1310) PGVWL, PSAL, PTAL, PTRAL
462. C   1310 FORMAT(4F10.0)
463. C   WRITE (LO,1315) PGVWL, PSAL, PTAL, PTRAL
464. C   1315 FORMAT(1X,4F10.2)
465. C   READ (LI,1310) FGVWL, FSAL, FTAL, FTRAL
466. C   WRITE (LO,1315) FGVWL, FSAL, FTAL, FTRAL
467. C
468. C   READ THE PRESENT AND FUTURE STEERING AXLE WEIGHTS FOR EACH TRUCK
469. C
470. C   NTT = INTT
471. C   READ (LI,1320) (PSTAW(I),I=1,NTT)
472. C   READ (LI,1320) (FSTAW(I),I=1,NTT)
473. C   1320 FORMAT(10F8.0)
474. C   WRITE (LO,1325) (PSTAW(I),I=1,NTT)
475. C   WRITE (LO,1325) (FSTAW(I),I=1,NTT)
476. C   1325 FORMAT(1X,10F8.0)
477. C
478. C   READ THE NEW EMPTY WEIGHT (AS A PERCENTAGE OF THE CURRENT EMPTY W
479. C   FOR EACH TRUCK TYPE
480. C
481. C   IF (IEWS .EQ. 0) GO TO 2
482. C   READ (LI,1320) (EPI(I),I=1,NTT)
483. C   WRITE (LO,1330) (EPI(I),I=1,NTT)
484. C   1330 FORMAT(1X,10F8.2)
485. C   GO TO 2
486. C
487. C   *** SINGLE AXLE SECTION ***

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488. C
489. 1400 NLDI(1) = IVAL(1)
490.     NLD = IVAL(1)
491.     NTT = INTT
492.     STARTS(1) = VAL(1)
493.     NEWTRK = NEWTRK + 2
494. C
495. C   READ THE LOAD INTERVALS AND, FOR EACH TRUCK TYPE, THE NUMBER OF
496. C   SINGLE AXLES FOR EACH INTERVAL
497. C
498.     DO 1420 L=1,NLD
499.     READ (LI,1410) ELDINT, (SA(L,J),J=1,NTT)
500. 1410 FORMAT(F10.0,10F7.0)
501.     WRITE (LO,1415) ELDINT, (SA(L,J),J=1,NTT)
502. 1415 FORMAT(1X,F10.0,10F7.0)
503.     SA(L,11) = ELDINT
504. 1420 CONTINUE
505.     DO 1424 J=1,NTT
506.     INDIC=0
507.     DO 1425 L=1,NLD
508.     IF (SA(L,J).NE.O.) INDIC=1
509. 1425 CONTINUE
510.     IF (INDIC.EQ.O) SA(1,J)=1.
511. 1424 CONTINUE
512.     GO TO 2
513. C
514. C   *** TANDEM AXLE SECTION ***
515. C
516. 1500 NLDI(2) = IVAL(1)
517.     NLD = IVAL(1)
518.     NTT = INTT
519.     STARTS(2) = VAL(1)
520.     NEWTRK = NEWTRK + 2
521. C
522. C   READ THE LOAD INTERVALS AND NUMBER OF DOUBLES PER TRUCK TYPE PER
523. C
524.     DO 1510 L=1,NLD
525.     READ (LI,1410) ELDINT, (TA(L,J),J=1,NTT)
526.     WRITE (LO,1415) ELDINT, (TA(L,J),J=1,NTT)
527.     TA(L,11) = ELDINT
528. 1510 CONTINUE
529.     DO 1426 J=1,NTT
530.     INDIC=0
531.     DO 1427 L=1,NLD
532.     IF (TA(L,J).NE.O.) INDIC=1
533. 1427 CONTINUE
534.     IF (INDIC.EQ.O) TA(1,J)=1.
535. 1426 CONTINUE
536.     GO TO 2
537. C
538. C   *** TRIPLE AXLE SECTION ***
539. C
540. 1600 NLDI(3) = IVAL(1)
541.     NLD = IVAL(1)
542.     NTT = INTT
543.     STARTS(3) = VAL(1)
544.     NEWTRK = NEWTRK + 2
545. C
546. C   READ THE LOAD INTERVALS AND NUMBER OF TRIPLES PER TRUCK TYPE PER
547. C
548.     DO 1610 L=1,NLD

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549.      READ (LI,1410) ELDINT, (TR(L,J),J=1,NTT)
550.      WRITE (LO,1415) ELDINT, (TR(L,J),J=1,NTT)
551.      TR(L,11) = ELDINT
552.      1610 CONTINUE
553.      GO TO 2
554.      C
555.      C   *** GROSS VEHICLE WEIGHT SECTION ***
556.      C
557.      1700 NLDI(4) = IVAL(1)
558.      NLD = IVAL(1)
559.      NTT = INTT
560.      STARTS(4) = VAL(1)
561.      NEWTRK = NEWTRK + 2
562.      C
563.      C   READ THE LOAD INTERVALS AND THE NUMBER OF EACH TRUCK TYPE WHOSE G
564.      C   WITHIN EACH INTERVAL
565.      C
566.      DO 1710 L=1,NLD
567.      READ (LI,1410) ELDINT, (VG(L,J),J=1,NTT)
568.      WRITE (LO,1415) ELDINT, (VG(L,J),J=1,NTT)
569.      VG(L,11) = ELDINT
570.      1710 CONTINUE
571.      GO TO 2
572.      C
573.      C   *** EMPTY VEHICLE WEIGHT SECTION ***
574.      C
575.      1800 NLDI(5) = IVAL(1)
576.      NLD = IVAL(1)
577.      NTT = INTT
578.      STARTS(5) = VAL(1)
579.      NEWTRK = NEWTRK + 2
580.      C
581.      C   READ THE LOAD INTERVALS AND THE NUMBER OF EACH TRUCK TYPE WHOSE E
582.      C   WITHIN EACH INTERVAL
583.      C
584.      DO 1810 L=1,NLD
585.      READ (LI,1410) ELDINT, (VE(L,J),J=1,NTT)
586.      WRITE (LO,1415) ELDINT, (VE(L,J),J=1,NTT)
587.      VE(L,11) = ELDINT
588.      1810 CONTINUE
589.      GO TO 2
590.      C
591.      C   *** STEERING AXLES SECTION ***
592.      C
593.      1900 NLDI(6) = IVAL(1)
594.      NLD = IVAL(1)
595.      NTT = INTT
596.      STARTS(6) = VAL(1)
597.      IDST = 6
598.      NEWTRK = NEWTRK + 2
599.      C
600.      C   READ THE LOAD INTERVALS AND, FOR EACH TRUCK TYPE, THE NUMBER OF
601.      C   STEERING AXLES FOR EACH INTERVAL
602.      C
603.      DO 1910 L=1,NLD
604.      READ (LI,1410) ELDINT, (ST(L,J),J=1,NTT)
605.      WRITE (LO,1415) ELDINT, (ST(L,J),J=1,NTT)
606.      ST(L,11) = ELDINT
607.      1910 CONTINUE
608.      GO TO 2
609.      C

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610. C      *** KEYWORD ERROR PROCESSING SECTION ***
611. C
612. 9989 WRITE (LO,9089) IPFLG
613. 9089 FORMAT(/1X,'*** ERROR IN LAYER ',I1,' ***'/
614. 1      ' ACP NOT PERMITTED FOR RIGID PAVEMENT '/
615. 2      ' UNLESS ABOVE JCP OR CRC LAYER'//
616. 3      ' RUN TERMINATED')
617. GO TO 9999
618. 9992 IGD = 3
619. GO TO 99999
620. 9993 WRITE (LO,9093)
621. 9093 FORMAT(/1X,'*** UNRECOGNIZABLE MATERIALS CODE ***'//
622. 1      ' RUN TERMINATED')
623. GO TO 9999
624. 9994 WRITE (LO,9094)
625. 9094 FORMAT(/1X,'*** ILLEGAL MATERIAL CODE FOR THIS TYPE OF PAVEMENT',
626. 1      ' ***'// ' RUN TERMINATED')
627. GO TO 9999
628. 9995 WRITE (LO,9095)
629. 9095 FORMAT(/1X,'*** TOO MANY TRUCK TYPES ***'//
630. 1      ' RUN TERMINATED')
631. GO TO 9999
632. 9996 WRITE (LO,9096)
633. 9096 FORMAT(/1X,'*** SPECIFIED KEYWORD NOT FOUND IN TABLE ***',
634. 1      '// ' RUN TERMINATED')
635. GO TO 9999
636. 9997 IGD = 1
637. GO TO 99999
638. 9998 WRITE (LO,9098)
639. 9098 FORMAT(/1X,'*** STOP DIRECTIVE FOUND OUT OF SEQUENCE ***',
640. 1      '// ' RUN TERMINATED')
641. 9999 IGD = 4
642. 99999 DO 3500 I=1,30
643. XLM(I) = YLM(I)
644. 3500 CONTINUE
645. S = SPCJT
646. XML = 0.
647. IF (XMLI .NE. 0.) XML = XMLI
648. LP = MINO(4, MAXO(1,INT(7.1 - 2.*PIERM)))
649. RETURN
650. END
651. *****
652. *
653. * SUBROUTINE INPRNT: READS SURVIVAL CURVE PARAMETERS*
654. * AND COST MATRIX *
655. *
656. *****
657. SUBROUTINE INPRNT
658. COMMON /FUNDS/ APOF(20,2), RTINT, RTINF
659. COMMON /OVRLAY/XHC10, XHC1M, WLANE, WPSH, WGSB, PPVDSH, NRHC, CAC, CGR
660. 1      , CSCOAT, NPMC, AGF
661. COMMON /SWTCHS/ PCTINT, PCTINF, TPFPC, PFNOPC, AGR, SPCJT,
662. 1      XMLI,
663. 2      INTI, IDST, NLD, TFCDNS
664. COMMON /CMAT/ UNTCST(5,4), BZ(5,3), BB(5,2), RBZ(2,2)
665. COMMON /SURVP/ FPLAM(3,3,5), FPGAM(3,3,5), FDGAM(3,3,5),
666. -FDLAM(3,3,5), RPLAM(2,3,2), RPGAM(2,3,2), RDLAM(2,3,2), RDGAM(2,3,2)
667. READ(8,10) X
668. 10 FORMAT(1X,F3.0,/)
669. DO 30 I=1,5
670. READ(8,20) (UNTCST(I,J), J=1,3), (BZ(I,K), K=1,4), (BB(I,L), L=1,2)

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671.      20 FORMAT(3X,9F7.0)
672.      30 CONTINUE
673.      READ(8,40) UNTCST(1,4),RBZ(1,1),RBZ(1,2),UNTCST(2,4)
674.      -,RBZ(2,1),RBZ(2,2)
675.      40 FORMAT(///,3X,3F7.0,/,3X,3F7.0)
676.      READ(9,10) X
677.      DO 70 I=1,3
678.      DO 70 J=1,3
679.      READ(9,60) (FPGAM(I,J,K),FPLAM(I,J,K),K=1,5)
680.      60 FORMAT(7X,10F6.0)
681.      70 CONTINUE
682.      READ(9,80) X
683.      80 FORMAT(1X,F3.0,///)
684.      DO 90 I=1,3
685.      DO 90 J=1,3
686.      READ(9,60) (FDGAM(I,J,K),FDLAM(I,J,K),K=1,5)
687.      90 CONTINUE
688.      READ(9,80) X
689.      DO 170 I=1,2
690.      DO 170 J=1,3
691.      READ(9,160) (RPGAM(I,J,K),RPLAM(I,J,K),K=1,2)
692.      160 FORMAT(7X,4F6.0)
693.      170 CONTINUE
694.      READ(9,180) X
695.      180 FORMAT(1X,F3.0,///)
696.      DO 190 I=1,2
697.      DO 190 J=1,3
698.      READ(9,160) (RDGAM(I,J,K),RDLAM(I,J,K),K=1,2)
699.      190 CONTINUE
700.      99999 RETURN
701.      END
702.      *****
703.      *
704.      *      SUBROUTINE INIT:INITIALIZES CERTAIN ARRAYS TO ZERO AND CALC-
705.      *      ULATES STRUCTURAL NUMBERS FOR FLEXIBLE SECTIONS
706.      *
707.      *****
708.
709.      SUBROUTINE INIT (IGO)
710.      COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
711.      COMMON /STRUC/ SN,SS,R,D,AGG,XJ,XK,E
712.      COMMON /STRCOE/ STRCD(8),CC(4),NC,STRC(5),RFS(4),RFB(4)
713.      COMMON /TIME/ OVLIF, NYAP, NYR, YR(40)
714.      DATA ICON, F /2, 1. /
715.      C      ICON IS THE INDEX ON CONDITION FACTOR USED TO RELATE AN OLD PCC
716.      C      PAVEMENT WITH AN AC OVERLAY TO AN EQUIVALENT SLAB THICKNESS.
717.      C      F IS A FACTOR ALSO USED IN THE ABOVE RELATION.
718.      GO TO (100, 200, 300), IGO
719.      C      HERE FOR PROGRAM INITIALIZATION, FIRST EXECUTION.
720.      100 DO 110 J=1,NYR
721.      YR(J) = FLOAT(J)
722.      110 CONTINUE
723.      GO TO 900
724.      C
725.      C      HERE FOR SET UP CHORES AFTER READING INPUT DATA.
726.      200 CONTINUE
727.      C      WE HAVE ALL THE INPUT FOR A REPRESENTATIVE SECTION. DETERMINE -S
728.      C      OR -D- FOR COMPOSITE PAVTS, AS WELL AS SET UP STRUCTURAL COEF.
729.      IF (IP .EQ. IR .OR. IP .EQ. IC) GO TO 230
730.      SN = 0.
731.      DO 215 L=1,NLAY

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732.      M = MTYPE(L)
733.      C   REPLACE VALUE IN DATA STATEMENT WITH VALUE READ IN.
734.      IF (STRC(L) .NE. O.) STRCD(M) = STRC(L)
735.      C   IF NO VALUE READ IN, SET VALUE FROM THE DATA STATEMENT.
736.      IF (STRC(L) .EQ. O.) STRC(L) = STRCD(M)
737.      215 SN = SN + STRC(L)*THICK(L)
738.      C   SET -A- VALUE FOR OVERLAY = -A- FOR AC IF NOT READ IN SEPARATELY.
739.      IF (STRC(5) .EQ. O.) STRC(5) = STRCD(1)
740.      GO TO 250
741.      230 XJ = 3.2
742.      C   CONTINUITY FACTOR FOR PCC PAVEMENTS   3.2 FOR JCP, 2.2 FOR CRC.
743.      C   TEST FOR COMPOSITE PAVEMENT (AC TOP LAYER READ UNDER -RIGID-.)
744.      D = THICK(1)
745.      IF (MTYPE(1) .EQ. 10) XJ = 2.2
746.      GO TO 250
747.      C   EQUIVALENT SLAB THICKNESS FOR INITIALLY COMPOSITE PAVT.
748.      240 D = (THICK(1)/2.5 + CC(ICON)*THICK(2))/F
749.      IP = IC
750.      IF (MTYPE(2) .EQ. 10) XJ = 2.2
751.      250 CONTINUE
752.      GO TO 900
753.      C
754.      300 CONTINUE
755.      C
756.      900 CONTINUE
757.      RETURN
758.      END
759.      *****
760.      *
761.      *   SUBROUTINE DISTR: CALCULATES FAILURE PROBABILITIES FOR FLEX- *
762.      *   IBLE AND RIGID PAVEMENTS USING SURVIVAL CURVES *
763.      *
764.      *****
765.      SUBROUTINE DISTR ( P, NHIST, NSLICE)
766.      COMMON /SWTCHS/ PCTINT, PCTINF, TPFPC, PFNOPC, AGR, SPCJT,
767.      1          XMLI,
768.      2          INTT, IDST, NLD, TFCDNS
769.      COMMON /MECH/XKT,NRU,NLH,ND,NDEL,IACR,NREG,IYR,JYR,CONSTR(20)
770.      COMMON /BURKE/ XLAMB, GAMMA, TFBAP
771.      COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
772.      DIMENSION P(60)
773.      CALL SURVIV
774.      C->GET INITIAL TRAFFIC
775.      AGF=AGR/100.
776.      WO=TFBAP*(1+AGF)**(-NSLICE)
777.      C->GET P(I) FOR I=1 TO NHIST
778.      ACUM=0
779.      ACPLYR=0
780.      DO 10 I=1,NHIST
781.      C----->TRANSFORM YEARS INTO ACCUMULATED LOADS AT AGE I
782.      ACUM=ACUM + WO*(1+AGF)**I
783.      C----->GET CUMMULATIVE FRACTION OF PAVEMENTS THAT FAILED
784.      C   "ACUMIL" STANDS FOR ACCUMULATED EAL IN MILLIONS
785.      ACUMIL = ACUM/1000000
786.      POWER = -(XLAMB*ACUMIL)**GAMMA
787.      IF (POWER .GT. -5.4E-79) POWER = -5.4E-79
788.      ACPNOW=1-EXP(POWER)
789.      C----->GET FRACTION OF PAVEMENTS THAT FAILED DURING YEAR I
790.      P(I)=ACPNOW-ACPLYR
791.      C----->UPDATE POINTER AND DO IT AGAIN
792.      ACPLYR=ACPNOW

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793.      10 CONTINUE
794.      999 RETURN
795.      END
796.      *****
797.      *
798.      *   SUBROUTINE EALGET: CALCULATES EALS AT BEGINNING OF THE ANALY-
799.      *   SIS PERIOD FOR BOTH PRESENT AND PROPOSED REGULATIONS   *
800.      *
801.      *****
802.      SUBROUTINE EALGET
803.      COMMON /EALPAY/ EALPT(10,2), APPT(10,2)
804.      COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
805.      COMMON /PSI/ PF,PICON, PTERM, PIOV, PTOV
806.      COMMON /STRUC/ SN,SS,R,D,AGG,XJ,XK,E
807.      COMMON /TIME/ OVLIF, NYAP, NYR, YR(40)
808.      COMMON /SWTCHS/ PCTINT, PCTINF, TPFPC, PFNOPC, AGR, SPCJT,
809.      1          XMLI,
810.      2          INTT, IDST, NLD, TFCDNS
811.      COMMON /TRTYP/ TTYP(2,10), PTTYP(10),PERCT(4),
812.      1          NAXLES(10,4),NT(4), NTTY, NATT, NTT, NEWTRK
813.      COMMON /BURKE/ XLAMB, GAMMA, TFBAP
814.      COMMON /SHIFT/ ISHIFT
815.      DIMENSION S1(10), S2(10), T1(10), T2(10), TFB(2)
816.      IPVT = IP
817.      IF (IP .EQ. IC) IPVT = IR
818.      C   CALL -TRAFFIC- ONLY IF NEW LIMITS OR WEIGHT DISTRIBUTIONS HAVE BEE
819.      C   READ FOR THIS PROBLEM
820.      IF (NEWTRK .GT. 1) CALL TRAFIC
821.      CALL EAL18 (SN, D, PTERM, IPVT)
822.      C   EAL18 RETURNS 18K EAL PER AVERAGE TRUCK, EALPT, AND PAYLOAD PER
823.      C   AVERAGE TRUCK, APPT, FOR EACH TRUCK TYPE.
824.      C   FOR EACH YEAR OBTAIN THE (NORMALIZED) TOTAL PAYLOAD AND TOTAL 18K
825.      C   EAL
826.      CALL MULT (PTTYP(1), APPT(1,1), NTTY, S1)
827.      CALL MULT (PTTYP(1), EALPT(1,1), NTTY, T1)
828.      CALL MULT (PTTYP(1), EALPT(1,2), NTT, T2)
829.      CALL SUM (T2, NTT, TUM2)
830.      CALL SUM (S1, NTTY, SUM1)
831.      CALL SUM (T1, NTTY, TUM1)
832.      TFB(1)=TUM1*TFCDNS/100.
833.      TFB(2)=TUM2*TFCDNS/100.
834.      TFBAP=TFB(1)
835.      IF (ISHIFT.EQ.1) TFBAP=TFB(2)
836.      RETURN
837.      END
838.      *****
839.      *
840.      *   SUBROUTINE OVCOST: OBTAINS COST/LANE MILE FOR A GIVEN OVER-
841.      *   LAY THICKNESS.UNIT COSTS ARE IN TERMS OF DOLLARS/CU YD   *
842.      *
843.      *****
844.      SUBROUTINE OVCOST (THOV,OVCST)
845.      COMMON /OVRLAY/XHCIO,XHCIM,WLANE,WPSH,WGSH,PPVDSH,NRHC,CAC,CGR
846.      1          , CSCOAT,NPMC,AGF
847.      COMMON /MECH/XKT,NRU,NLH,ND,NDEL,IACR,NREG,IYR,JYR,CONSTR(20)
848.      COMMON /CMAT/ UNTCST(5,4),BZ(5,3),BB(5,2),RBZ(2,2)
849.      COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
850.      DATA C1/16.2962963/
851.      C   C1 IS THE NUMBER OF CUBIC YDS IN A LAYER 1 MILE BY 1 FOOT BY 1 IN
852.      C
853.      TH = THOV

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854.      VPO = WLANE*TH*C1
855.      IF (IP.EQ.IR) GO TO 10
856.      F = PPVDSH/100.
857.  C    FIND THE VOLUME/(LANE MILE) OF ROAD OVERLAY, OF PAVED SHOULDER
858.  C    OVERLAY, AND OF GRANULAR SHOULDER OVERLAY
859.      VPSO = WPSH*TH*C1
860.      VGSO = WGSH*TH*C1
861.      OVCST=BZ(NREG,1)+BZ(NREG,2)*(VPO+VPSO)+BZ(NREG,3)*VGSO
862.      RETURN
863.  10   OVCST= RBZ(NREG,1)+RBZ(NREG,2)*VPO
864.      RETURN
865.      END
866.  *****
867.  *
868.  *   SUBROUTINE ACCTFC: DETERMINES CUMULATIVE TRAFFIC BY YEAR   *
869.  *   FROM BASE YEAR (18 KIP ESAL OR 80 KN)                     *
870.  *
871.  *****
872.      SUBROUTINE ACCTFC (TFC1, AGF, NYR, TFCA)
873.  C    TFC1  - 18KIP EAL IN BASE YEAR (YEAR 1)
874.  C    AGF   - ANNUAL GROWTH FACTOR (PERCENT/100.)
875.  C    NYR   - NUMBER OF YEARS FOR WHICH ACCUMULATED TRAFFIC DESIRED.
876.  C    OUTPUT
877.  C    TFCA  - ARRAY OF CUMULATIVE 18 KIP EAL THROUGH END OF INDEX YEAR
878.      DIMENSION TFCA (NYR)
879.      TFCA(1) = TFC1
880.      T = TFC1
881.      DO 10 I=2,NYR
882.      T = T*(1. + AGF)
883.      TFCA(I) = TFCA(I-1) + T
884.  10   CONTINUE
885.      RETURN
886.      END
887.  *****
888.  *
889.  *   SUBROUTINE OVTHKF: CALCULATES OVERLAY THICKNESS FOR FLEXIBLE*
890.  *   PAVEMENTS                                                 *
891.  *
892.  *****
893.      SUBROUTINE OVTHKF (XNOV, THOV,YR)
894.      DOUBLE PRECISION THICK1(5),DMDRU,DMDRE
895.      COMMON /MECH/XKT,NRU,NLH,ND,NDEL,IACR,NREG,IYR,JYR,CONSTR(20)
896.      COMMON/HOR/A(10),B(10),C(10),DT(10),DF(10),S(10),T(10),TR(5),PI(5)
897.      *,PT(5),AC(5),AA,SCT(5),XMNW18(10),XKTD
898.      COMMON /EXTRA/ PTOVTK,TPE,PFO,XMNOTK,XXOTK,NIS
899.      COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
900.      COMMON /PSI/PF,PICON, PTERM, PIOV, PTOV
901.      COMMON /STRCOE/ STRCD(8),CC(4),NC,STRC(5),RFS(4),RFB(4)
902.      DIMENSION BETA(5,2,2),CO(5,2,2)
903.      BETA(1,1,1)=-1.5287
904.      BETA(1,1,2)=-1.5387
905.      BETA(2,1,1)=-1.4370
906.      BETA(2,1,2)=-1.4370
907.      BETA(3,1,1)=-1.5605
908.      BETA(3,1,2)=-1.5776
909.      BETA(1,2,1)=-1.53
910.      BETA(1,2,2)=-1.562
911.      BETA(2,2,1)=-1.4649
912.      BETA(2,2,2)=-1.4649
913.      BETA(3,2,1)=-1.5700
914.      BETA(3,2,2)=-1.6085

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915.      CO(2,1,1)=600.
916.      CO(2,1,2)=600.
917.      CO(1,1,1)=10000.0
918.      CO(3,1,1)=10000.0
919.      CO(1,1,2)=50000.0
920.      CO(3,1,2)=50000.0
921.      CO(2,2,1)=1000.
922.      CO(2,2,2)=1000.0
923.      CO(1,2,1)=10000.0
924.      CO(3,2,1)=10000.0
925.      CO(1,2,2)=100000.0
926.      CO(3,2,2)=100000.0
927.      NLAY1=NLAY+1
928.      DO 10 K=2, NLAY1
929.      10 THICK1(K)=THICK(K-1)
930.      THICK1(1)=XMNOTK
931.      IF (PF.GT.PTERM) GO TO 100
932.      TNPT=NPT
933.      IF (PFO.GE.PTOV) GOTO 3
934.      GO TO 8
935.      100 IF (PFO.GE.PTOV) GOTO 3
936.      8 IF (PFO.EQ.PTERM) PTERM=PTERM+0.05
937.      XKTO=-.8*XNOV*ALOG((PIOV-PTERM)/(PIOV-PFO))
938.      DMDRE=(100.0+XKTO/CO(NPT,NRU,NLH))* (BETA(NPT,NRU,NLH))
939.      N=(XMXOTK-XMNOTK)*4+0.9999
940.      DO 1 I=1,N
941.      CALL RUSIAN (THICK1,DMDRU,NLAY1,NPT,NRU,NLH)
942.      IF(DMDRU.LE.DMDRE)GO TO 2
943.      1 THICK1(1)=THICK1(1)+.25
944.      2 THOV=THICK1(1)
945.      GO TO 4
946.      3 THOV=XMNOTK
947.      4 RETURN
948.      END
949.      *****
950.      *
951.      * FUNCTION RWT18L: PERFORMS AASHTO-RIGID PREDICTION OF 18 KIP *
952.      * EAL TO TERMINAL PSI *
953.      *
954.      *****
955.      FUNCTION RWT18L(D,PI,PT)
956.      C AASHTO-RIGID PREDICTION OF 18 KIP EAL TO TERMINAL PSI
957.      GT = ALOG10((PI-PT)/(PI-1.5))
958.      GTERM = GT/(1.+1.624E7/(D+1.))*8.46)
959.      RWT18L= 7.35*ALOG10(D+1.)-0.06+GTERM
960.      RETURN
961.      END
962.      *****
963.      *
964.      * FUNCTION RNAASH: MODIFIES THE AASHTO-RIGID PREDICTION FOR *
965.      * NON-AASHTO CONDITIONS *
966.      *
967.      *****
968.      FUNCTION RNAASH(DA)
969.      C MODIFY AASHTO-RIGID PREDICTION FOR NON-AASHTO CONDITIONS
970.      COMMON /STRUC/ SN,SS,R,D,AGG,XJ,XK,E
971.      Z = E/XK
972.      CT = 223.3
973.      IKK = AGG
974.      IF( IKK .EQ. 0 ) CT=204.16
975.      IF(DA.LT.D) DA=D

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976.         D75 = DA**.75
977.         RNAASH = ALOG10((CT/215.63)*(D75-1.132)/
978.         1 (D75-18.42/Z**0.25))
979.         RETURN
980.         END
981. *****
982. *
983. *     FUNCTION GPSIR: PERFORMS AASHTO-RIGID PREDICTION OF PSI FOR *
984. *     A GIVEN 18 KIP EAL *
985. *
986. *****
987.         FUNCTION GPSIR (XN, PI, D)
988. C     AASHTO-RIGID PREDICTION OF PSI AFTER GIVEN 18 KIP EAL
989.         DATA MAX, TEST /10, .001 /
990.         EXP10(X) = EXP(2.302585*X)
991.         PTN = 3.
992.         ITER = 0
993.         RN = RNAASH(D)
994.         XNL = ALOG10(XN)
995.         DT1 = 7.35*ALOG10(D+1.) - 0.06
996.         DT2 = 1. + 1.624E7/(D+1.)**8.46
997. 10 ITER = ITER + 1
998.         IF (ITER .GT. MAX) GO TO 30
999.         PT = PTN
1000.        GT = (XNL - DT1 - (4.22 - 0.32*PT)*RN)*DT2
1001.        PTN = PI - (PI - 1.5)*EXP10(GT)
1002.        IF (ABS(PTN - PT) .LT. TEST) GO TO 20
1003.        GO TO 10
1004. 20 GPSIR = PTN
1005.        RETURN
1006. 30 GPSIR = PTN
1007.        WRITE (6,1) MAX, PTN, PT, XN
1008. 1  FORMAT (1X, 'FUNCTION GPSIR DID NOT CONVERGE AFTER', I5,
1009. 1      ' ITERATIONS' / 1X, 'LAST AND PREVIOUS PSI VALUES WERE',
1010. 2      2F10.6 / 1X, 'FOR ', F10.0, ' 18KIP EAL TO DATE. ABORT.')
1011.        STOP
1012.        END
1013. *****
1014. *
1015. *     SUBROUTINE GETD: CALCULATES SLAB THICKNESS D TO PROVIDE *
1016. *     GIVEN N-18 BETWEEN SPECIFIED INITIAL AND TERMINAL PSI VALUES *
1017. *     FOR RIGID PAVEMENTS *
1018. *****
1019.         SUBROUTINE GETD (W18, PI, PT, DB, DF)
1020.         DATA MAX, TEST /1000, 1. /
1021.         EXP10(X) = EXP(2.302585*X)
1022.         ITER = 0
1023.         DN = DB
1024. 10 ITER = ITER + 1
1025.         IF (ITER .GT. MAX) GO TO 99
1026.         D = DN
1027.         W = RWT18L(D,PI,PT) + (4.22-.32*PT)*RNAASH(D)
1028.         DTERM = 7.35*ALOG10(D + 1.)
1029.         D1NLOG = (W18 - (W - DTERM))/7.35
1030.         DN = EXP10(D1NLOG) - 1.
1031.         IF (ABS(D-DN) .LT. TEST) GO TO 20
1032.         GO TO 10
1033. 20 DF = DN
1034.        RETURN
1035. 99 DF=DN
1036.        WRITE (6,1) D, DN, W18, PI,PT,DB

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1037.      RETURN
1038.      1 FORMAT (1X, 'TOO MANY ITERATIONS IN GETD '//
1039.      1      1X, 'LAST TWO VALUES WERE ', 2F8.4 /
1040.      2      1X, 'INPUT LOG N18, PI, PT, STARTING D = '//
1041.      3      1X, 4F10.4 /)
1042.      END
1043.      *****
1044.      *
1045.      *   SUBROUTINE OVTHKR: CALCULATES THICKNESS OF AC OVER-
1046.      *   LAY NECESSARY TO BRING EQUIVALENT SLAB THICKNESS,D,*
1047.      *   OF COMBINATION UP TO NEW DESIGN LEVEL
1048.      *
1049.      *****
1050.      SUBROUTINE OVTHKR (D, EXD, TH)
1051.      COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
1052.      COMMON /PSI/ PF,PICDN, PTERM, PIOV, PTOV
1053.      COMMON /STRCOE/ STRCD(8),CC(4),NC,STRC(5),RFS(4),RFB(4)
1054.      COMMON /EXTRA/ PTOVTK,TPE,PFO,XMNOTK,XXOTK,NIS
1055.      DATA F/1./
1056.      INDX = 7.5 - 2.*PTERM
1057.      INDX = MINO(4,MAXO(1,INDX))
1058.      C = CC(INDX)
1059.      TH = 2.5*(F*D - C*EXD)
1060.      IF (TH.LT.XMNOTK) TH=XMNOTK
1061.      IF (TH.GT.XMOTK) TH=XMOTK
1062.      RETURN
1063.      END
1064.      *****
1065.      *
1066.      *   SUBROUTINE TRAFIC: COMPUTES THE FOLLOWING
1067.      *   1. THE ADJUSTED AVERAGE EMPTY WEIGHT OF VEHICLES
1068.      *   WEIGHED EMPTY
1069.      *   2. ADJUSTED GROSS WEIGHT AND TOTAL PAYLOAD CARRIED
1070.      *   FOR PRESENT AND PROPOSED REGULATIONS
1071.      *   3. DISTRIBUTION OF AXLE WEIGHTS--PRESENT AND PRO-
1072.      *   POSED REGULATIONS
1073.      *   4. AXLE WEIGHT DISTRIBUTIONS BY VEHICLE CLASSIFICA-
1074.      *   TION--PROPOSED REGULATIONS
1075.      *
1076.      *****
1077.      SUBROUTINE TRAFIC
1078.      COMMON /TRFFIC/ ELVWI(500), APVWE(500), APVWG(500), SAAPV(500),
1079.      1      TAAPV(500), TRAPV(500), STAPV(500), NGVW
1080.      COMMON /EXPVT/NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
1081.      COMMON /TRTYP/ TTYP(2,10), PTTY(10), PERCT(4),
1082.      1      NAXLES(10,4),NT(4), NTTY, NATT, NTT, NEWTRK
1083.      COMMON /NMBR/ SA(30,11), TA(30,11), TR(50,11), VE(30,11),
1084.      1      VG(500,11), NLDI(6), EMPTY(10), ST(30,11)
1085.      COMMON /LDS/ PGVWL, PSAL, PTAL, PTRAL, FGVWL, FSAL, FTAL, FTRAL,
1086.      1      PSTAW(10), FSTAW(10)
1087.      COMMON /CNSTS/ NAOV, PAOV, SIZE, AVRG
1088.      COMMON /IRINDX/ IIT
1089.      COMMON /IO/ LI, LO, LD
1090.      COMMON /OUTPUTS/ TD4(10,6,2)
1091.      COMMON EVWI(500), EVWMP(500), ELVWMP(500), GLVWNI(500), VWE(500),
1092.      2      PVWE(500), TWFAV(500), TPFAV(500), TVWE(500),
1093.      3      APPV(500), PPV(500), FACT(500), SAI(500), TAI(500), TRI(500),
1094.      4      SAA(500), TAA(500), TRA(500), SLA(500), TLA(500),
1095.      5      TRLA(500), APSA(500), APTA(500), APTR(500), APDV(500),
1096.      6      GWA(500), GWA(500), SLAR(500), TLAR(500), TRLAR(500),
1097.      7      SANOV(500), TANDV(500), TRNOV(500), PSA(500), PTA(500),

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1098.      8  PTR(500), SLAT(500), TLAT(500), TRLAT(500), STA(500),
1099.      9  PST(500), STLA(500), STLAR(500), STLAT(500), APST(500),
1100.      A  STI(500), STNOV(500), NLDISV(6)
1101.      IF (NEWTRK .EQ. 1) GO TO 9999
1102.      DO 6 K=1,2
1103.      DO 4 J=1,6
1104.      DO 2 I=1,10
1105.      TD4(I,J,K) = 0.0
1106.      2  CONTINUE
1107.      4  CONTINUE
1108.      6  CONTINUE
1109.      DO 7 I=1,6
1110.      NLDISV(I) = NLDI(I)
1111.      7  CONTINUE
1112.      DO 160 IT=1,NTT
1113.      PERC =PERCT(IT)
1114.      ITT = IT
1115.      VTN = 0.
1116.      NSA = 0
1117.      NTA = 0
1118.      NTR = 0
1119.      NNA = 0
1120.      NNT = 0
1121.      NNR = 0
1122.      APV = 0.
1123.      PAPV = 0.
1124.      DO 8 I=1,500
1125.      PSA(I) = 0.
1126.      PTA(I) = 0.
1127.      PTR(I) = 0.
1128.      PST(I) = 0.
1129.      SAI(I) = 0.
1130.      TAI(I) = 0.
1131.      TRI(I) = 0.
1132.      STI(I) = 0.
1133.      SANOV(I) = 0.
1134.      TANOV(I) = 0.
1135.      TRNOV(I) = 0.
1136.      STNOV(I) = 0.
1137.      ELVWI(I) = 0.
1138.      APVWE(I) = 0.
1139.      APVWG(I) = 0.
1140.      SAAPV(I) = 0.
1141.      TAAPV(I) = 0.
1142.      TRAPV(I) = 0.
1143.      STAPV(I) = 0.
1144.      FACT(I) = 0.
1145.      GLVWNI(I) = 0.
1146.      APSA(I) = 0.
1147.      APTA(I) = 0.
1148.      APTR(I) = 0.
1149.      APST(I) = 0.
1150.      8  CONTINUE
1151.      DO 9 I=1,6
1152.      NLDI(I) = NLDISV(I)
1153.      9  CONTINUE
1154.      C
1155.      C   *** ADJUSTED AVERAGE EMPTY WEIGHT SECTION ***
1156.      C
1157.      C   CALL INTVL (VE, EVWI, NLDI(5), NI, 5, 30, VWE, IT)
1158.      C

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1159. C   CALCULATE THE NUMBER OF EMPTY VEHICLES WEIGHED IN EACH 2-KIP GROSS
1160. C   EMPTY WEIGHT INTERVAL
1161. C
1162.     CALL PCTAGE (VWE, NI, PVWE)
1163.     CALL ACMLTE (PVWE, NI, APVWE)
1164.     CALL MIDPNT (EVWI, NI, EVWMP)
1165.     CALL MULT (PVWE, EVWMP, NI, TWFAV)
1166.     CALL AVRGE (TWFAV, NI, AVRG, AEW)
1167. C
1168. C   COMPUTE THE PRACTICAL MAXIMUM GROSS VEHICLE WEIGHT FOR PRESENT AND
1169. C   PROPOSED LIMITS AND MAKE SURE THAT THE VEHICLE GROSS INTERVALS
1170. C   INPUT HAS A MAXIMUM END-OF-INTERVAL VALUE GREATER THAN OR EQUAL TO
1171. C   THE CALCULATED PMGW.
1172. C
1173.     K = 1
1174.     TD4(IT,6,K) = AEW
1175.     TD4(IT,1,K) = PSTAW(IT)
1176.     TD4(IT,2,K) = PSAL
1177.     TD4(IT,3,K) = PTAL
1178.     TD4(IT,4,K) = PTRAL
1179.     TD4(IT,5,K) = PSTAW(IT) + PSAL*FLOAT(NAXLES(IT,1)) + PTAL *
1180.     1      FLOAT(NAXLES(IT,2)) + PTRAL*FLOAT(NAXLES(IT,3))
1181.     NLD = NLDI(4)
1182.     11 IF (TD4(IT,5,1) .LE. VG(NLD,11)) GO TO 15
1183.     NLD = NLD + 1
1184.     VG(NLD,11) = VG(NLD-1,11) + SIZE
1185.     DO 12 ID=1,NTT
1186.     VG(NLD,ID) = 0.
1187.     12 CONTINUE
1188.     GO TO 11
1189.     15 NLDI(4) = NLD
1190.     K = K+1
1191.     TD4(IT,6,K) = AEW + (EMPTY(IT) * 0.01 * AEW)
1192.     TD4(IT,1,K) = FSTAW(IT)
1193.     TD4(IT,2,K) = FSAL
1194.     TD4(IT,3,K) = FTAL
1195.     TD4(IT,4,K) = FTRAL
1196. C
1197. C   *** ADJUSTED GROSS WEIGHT AND TOTAL PAYLOAD CARRIED - PRESENT REGS
1198. C
1199.     TD4(IT,5,K) = FSTAW(IT) + FSAL*FLOAT(NAXLES(IT,1)) + FTAL *
1200.     1      FLOAT(NAXLES(IT,2)) + FTRAL*FLOAT(NAXLES(IT,3))
1201.     NLDS = NLDI(4)
1202.     CALL COUNT (VG(1,IT), NLDS)
1203.     CALL INTVL (VG, ELVWI, NLDS, NJ, 4, 500, TVWE, IT)
1204.     ELOAD = ELVWI(NJ)
1205.     CALL PCTAGE (TVWE, NJ, PVWE)
1206.     CALL ACMLTE (PVWE, NJ, APVWE)
1207.     DO 888 JU=1,50
1208.     888 CONTINUE
1209.     IF (IT .GT. NTTY) GO TO 50
1210.     CALL MIDPNT (ELVWI, NJ, ELVWMP)
1211.     DO 10 I=1,NJ
1212.     APPV(I) = ELVWMP(I) - AEW
1213.     10 CONTINUE
1214.     CALL MULT (PVWE, APPV, NJ, TPFVAV)
1215.     CALL AVRGE (TPFAV, NJ, AVRG, APV)
1216. C
1217. C   *** ADJUSTED GROSS WEIGHT AND TOTAL PAYLOAD CARRIED - PROPOSED REG
1218. C
1219. C   COMPUTE THE PROPOSED/PRESENT RATIO OF THE PMGW*5

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1220. C
1221. DO 200 J=1,500
1222. IF(APVWE(J) .GT. PERC) GO TO 202
1223. IF(APVWE(J) .LT. PERC) INN = J
1224. 200 CONTINUE
1225. 202 CONTINUE
1226. ESTART = ELVWI(INN)
1227. RATIO = TD4(IT,5,2) / TD4(IT,5,1)
1228. SMALL = AMIN1(TD4(IT,5,1),ELOAD)
1229. NK = INT(SMALL) - INT(ELVWI(1) + 0.5) + 1
1230. XNK = FLOAT(NK) / 2.0 + 0.5
1231. NK = INT(XNK)
1232. NK2 = INT(SMALL) - INT(ESTART + 0.5) + 1
1233. XNK2 = FLOAT(NK2)/2.0 + 0.5
1234. NK2 = INT(XNK2)
1235. NDIF = NK - NK2
1236. DO 210 L=1,NDIF
1237. FACT(L) = 1.0
1238. 210 CONTINUE
1239. C
1240. C FOR ALL INTERVALS GREATER THAN THE PRESENT PMGW VALUE, RECORD THE
1241. C VALUE OF THE RATIO OF THE PMGW*S IN *FACT*
1242. C
1243. DIST = (RATIO - 1.0) / FLOAT(NK2)
1244. NDDD = NDIF + 1
1245. NDIFF = NDDD + 1
1246. FACT(NDDD) = 1.0 + DIST
1247. DO 20 J=NDIFF,NK
1248. I = J-1
1249. FACT(J) = FACT(I) + DIST
1250. 20 CONTINUE
1251. DO 667 K2=1,NK
1252. 667 CONTINUE
1253. IF (NJ .LE. NK) GO TO 35
1254. J = NK+1
1255. DO 30 I=J,NJ
1256. FACT(I) = RATIO
1257. 30 CONTINUE
1258. NK = NJ
1259. C
1260. C COMPUTE THE END OF INTERVAL WEIGHT FOR THE PROPOSED REGULATIONS,
1261. C AND EXTEND THE 2-KIP INTERVAL ARRAY *ELVWI* TO THE MAXIMUM END OF
1262. C INTERVAL WEIGHT COMPUTED
1263. C
1264. 35 CALL MULT (ELVWI, FACT, NJ, GLVWNI)
1265. ELI = GLVWNI(NJ)
1266. I = NJ
1267. 40 NJ = NJ+1
1268. ELVWI(NJ) = ELVWI(I) + SIZE
1269. I = I+1
1270. IF (ELVWI(I) .LT. ELI) GO TO 40
1271. CALL ITRP (GLVWNI, APVWE, ELVWI, 1, NJ, NK, APVWG, O)
1272. PVWE(1) = APVWG(1)
1273. CALL DIFF (APVWG, NJ, PVWE)
1274. 50 CALL MIDPNT (ELVWI, NJ, ELVWMP)
1275. DO 60 I=1,NJ
1276. PPV(I) = ELVWMP(I) - TD4(IT,6,2)
1277. 60 CONTINUE
1278. CALL MULT (PVWE, PPV, NJ, TPFV)
1279. CALL AVRGE (TPFV, NJ, AVRG, PAPV)
1280. C

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1281. C   *** NUMBER OF VEHICLES REQUIRED TO CARRY TOTAL PAYLOAD (CARGO) -
1282. C   PROPOSED LIMITS ***
1283. C
1284.   IF (PAPV.EQ.O.) PAPV=1.
1285.   VTN = APV / PAPV * 100.
1286. C
1287. C   *** DISTRIBUTION OF AXLE WEIGHTS - PRESENT LIMITS ***
1288. C
1289.   IF (NAXLES(IT,1) .EQ. O) GO TO 64
1290. C
1291. C   SINGLE AXLES
1292. C
1293.   NLDS = NLDI(1)
1294.   CALL COUNT (SA(1,IT), NLDS)
1295.   CALL INTVL (SA, SAI, NLDS, NSA, 1, 30, SAA, IT)
1296.   CALL PCTAGE (SAA, NSA, PSA)
1297.   CALL ACMLTE (PSA, NSA, APSA)
1298.   NNA = NSA
1299. 64 IF (NAXLES(IT,2) .EQ. O) GO TO 66
1300. C
1301. C   TANDEM AXLES
1302. C
1303.   NLDS = NLDI(2)
1304.   CALL COUNT (TA(1,IT), NLDS)
1305.   CALL INTVL (TA, TAI, NLDS, NTA, 2, 30, TAA, IT)
1306.   CALL PCTAGE (TAA, NTA, PTA)
1307.   CALL ACMLTE (PTA, NTA, APTA)
1308.   NNT = NTA
1309. 66 IF (NAXLES(IT,3) .EQ. O) GO TO 68
1310. C
1311. C   TRIPLE AXLES ;
1312. C
1313.   NLDS = NLDI(3)
1314.   CALL COUNT (TR(1,IT), NLDS)
1315.   CALL INTVL (TR, TRI, NLDS, NTR, 3, 50, TRA, IT)
1316.   CALL PCTAGE (TRA, NTR, PTR)
1317.   CALL ACMLTE (PTR, NTR, APTR)
1318.   NNR = NTR
1319. 68 IF ((NAXLES(IT,4) .EQ. O) .OR. (IP .NE. IF)) GO TO 69
1320. C
1321. C   STEERING AXLES
1322. C
1323.   NLDS = NLDI(6)
1324.   CALL COUNT (ST(1,IT), NLDS)
1325.   CALL INTVL (ST, STI, NLDS, NST, 6, 30, STA, IT)
1326.   CALL PCTAGE (STA, NST, PST)
1327.   CALL ACMLTE (PST, NST, APST)
1328.   NNS = NST
1329. 69 IF (IT .GT. NTTY) GO TO 146
1330.   NGVW = NJ
1331. C
1332. C   *** DISTRIBUTION OF SINGLE/TANDEM/TRIDEM AXLE WEIGHTS - PROPOSED LIMITS **
1333. C
1334. C   SET UP THE TABLE OF SELECTED CUMULATIVE PERCENTAGES DEFINING THE
1335. C   GROSS WEIGHT AND AXLE WEIGHT CURVES
1336. C
1337.   P = 0.0
1338.   DO 70 I=1,NAPDV
1339.   APOV(I) = P
1340.   P = P + PAPOV
1341. 70 CONTINUE

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1342. C
1343. C   FOR THE GROSS WEIGHT PRESENT AND PROPOSED, AND FOR THE AXLE
1344. C   WEIGHTS, FIND, BY INTERPOLATION, THE WEIGHTS CORRESPONDING TO THE
1345. C   PERCENTAGES IN ARRAY *APOV*. COMPUTE THE RATIOS OF THE AXLE
1346. C   WEIGHTS TO THE GROSS WEIGHTS IN *GWA* AND FINALLY, COMPUTE THE
1347. C   AXLE WEIGHT DISTRIBUTIONS FOR THE PROPOSED REGS. USING *GWA*.
1348. C
1349.   GWA(1) = ELVWI(1) - SIZE
1350.   IF (GWA(1) .LT. 0.0) GWA(1) = 0.0
1351.   CALL ITRP (APVWE, ELVWI, APOV, 2, NAPOV, NK, GWA, 0)
1352.   GWAF(1) = ELVWI(1) - SIZE
1353.   IF (GWAF(1) .LT. 0.0) GWAF(1) = 0.0
1354.   CALL ITRP (APVWG, ELVWI, APOV, 2, NAPOV, NJ, GWAF, 0)
1355.   IF (NAXLES(IT,1) .EQ. 0) GO TO 72
1356.   SLA(1) = SAI(1) - SIZE
1357.   IF (SLA(1) .LT. 0.0) SLA(1) = 0.0
1358.   CALL ITRP (APSA, SAI, APOV, 2, NAPOV, NSA, SLA, 0)
1359.   DO 80 I=1,NAPOV
1360.   IF (GWA(I) .EQ. 0.0) GO TO 79
1361.   SLAR(I) = SLA(I) / GWA(I)
1362.   GO TO 80
1363. 79 SLAR(I) = 0.
1364. 80 CONTINUE
1365.   CALL MULT (SLAR, GWAF, NAPOV, SLAT)
1366. 72 IF (NAXLES(IT,2) .EQ. 0) GO TO 75
1367.   TLA(1) = TAI(1) - SIZE
1368.   IF (TLA(1) .LT. 0.0) TLA(1) = 0.0
1369.   CALL ITRP (APTA, TAI, APOV, 2, NAPOV, NTA, TLA, 0)
1370.   DO 82 I=1,NAPOV
1371.   IF (GWA(I) .EQ. 0.0) GO TO 81
1372.   TLAR(I) = TLA(I) / GWA(I)
1373.   GO TO 82
1374. 81 TLAR(I) = 0.
1375. 82 CONTINUE
1376.   CALL MULT (TLAR, GWAF, NAPOV, TLAT)
1377. 75 IF (NAXLES(IT,3) .EQ. 0) GO TO 86
1378.   TRLA(1) = TRI(1) - SIZE
1379.   IF (TRLA(1) .LT. 0.0) TRLA(1) = 0.0
1380.   CALL ITRP (APTR, TRI, APOV, 2, NAPOV, NTR, TRLA, 0)
1381.   DO 84 I=1,NAPOV
1382.   IF (GWA(I) .EQ. 0.0) GO TO 83
1383.   TRLAR(I) = TRLA(I) / GWA(I)
1384.   GO TO 84
1385. 83 TRLAR(I) = 0.
1386. 84 CONTINUE
1387.   CALL MULT (TRLAR, GWAF, NAPOV, TRLAT)
1388. 86 IF ((NAXLES(IT,4) .EQ. 0) .OR. (IP .NE. IF)) GO TO 88
1389.   STLA(1) = STI(1) - SIZE
1390.   IF (STLA(1) .LT. 0.0) STLA(1) = 0.0
1391.   CALL ITRP (APST, STI, APOV, 2, NAPOV, NST, STLA, 0)
1392.   DO 87 I=1,NAPOV
1393.   IF (GWA(I) .EQ. 0.0) GO TO 85
1394.   STLAR(I) = STLA(I) / GWA(I)
1395.   GO TO 87
1396. 85 STLAR(I) = 0.
1397. 87 CONTINUE
1398.   CALL MULT (STLAR, GWAF, NAPOV, STLAT)
1399. 88 CONTINUE
1400. C
1401. C   *** AXLE WEIGHT DISTRIBUTIONS BY VEHICLE CLASSIFICATION - PROPOSED
1402. C   LIMITS ***

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1403. C
1404. C   DETERMINE THE PERCENTAGE OF EACH 2-KIP INTERVAL OF WEIGHT FOR THE
1405. C   PROPOSED DISTRIBUTION
1406. C
1407. C   IF (NAXLES(IT,1) .EQ. 0) GO TO 105
1408. C
1409. C   SINGLE AXLES
1410. C
1411. C   IF (SLAT(NAPOV) .LE. SAI(NSA)) GO TO 100
1412. C   ELI = SLAT(NAPOV)
1413. 90 I = NSA + 1
1414. C   SAI(I) = SAI(NSA) + SIZE
1415. C   NSA = I
1416. C   IF (SAI(I) .LT. ELI) GO TO 90
1417. 100 CALL ITRP (SLAT, APOV, SAI, 1, NSA, NAPOV, SAAPV, 0)
1418. C   CALL DIFF (SAAPV, NSA, SANOV)
1419. 105 IF (NAXLES(IT,2) .EQ. 0) GO TO 125
1420. C
1421. C   TANDEM AXLES
1422. C
1423. C   IF (TLAT(NAPOV) .LE. TAI(NTA)) GO TO 120
1424. C   ELI = TLAT(NAPOV)
1425. 110 I = NTA + 1
1426. C   TAI(I) = TAI(NTA) + SIZE
1427. C   NTA = I
1428. C   IF (TAI(I) .LT. ELI) GO TO 110
1429. 120 CALL ITRP (TLAT, APOV, TAI, 1, NTA, NAPOV, TAAPV, 0)
1430. C   CALL DIFF (TAAPV, NTA, TANOV)
1431. 125 IF (NAXLES(IT,3) .EQ. 0) GO TO 145
1432. C
1433. C   TRIPLE AXLES
1434. C
1435. C   IF (TRLAT(NAPOV) .LE. TRI(NTR)) GO TO 140
1436. C   ELI = TRLAT(NAPOV)
1437. 130 I = NTR + 1
1438. C   TRI(I) = TRI(NTR) + SIZE
1439. C   NTR = I
1440. C   IF (TRI(I) .LT. ELI) GO TO 130
1441. 140 CALL ITRP (TRLAT, APOV, TRI, 1, NTR, NAPOV, TRAPV, 0)
1442. C   CALL DIFF (TRAPV, NTR, TRNOV)
1443. 145 IF ((NAXLES(IT,4) .EQ. 0) .OR. (IP .NE. IF)) GO TO 170
1444. C
1445. C   STEERING AXLES
1446. C
1447. C   IF (STLAT(NAPOV) .LE. STI(NST)) GO TO 168
1448. C   ELI = STLAT(NAPOV)
1449. 162 I = NST + 1
1450. C   STI(I) = STI(NST) + SIZE
1451. C   NST = I
1452. C   IF (STI(I) .LT. ELI) GO TO 162
1453. 168 CALL ITRP (STLAT, APOV, STI, 1, NST, NAPOV, STAPV, 0)
1454. C   CALL DIFF (STAPV, NST, SINOV)
1455. 170 CONTINUE
1456. C   GO TO 150
1457. 146 DO 147 I=1,NSA
1458. C   SAAPV(I) = APSA(I)
1459. C   SANOV(I) = PSA(I)
1460. C   PSA(I) = 0.
1461. 147 CONTINUE
1462. C   NNA = NSA
1463. C   DO 148 I=1,NTA

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1464.      TAAPV(I) = APTA(I)
1465.      TANOV(I) = PTA(I)
1466.      PTA(I) = 0.
1467. 148 CONTINUE
1468.      NNT = NTA
1469.      DO 149 I=1,NTR
1470.      TRAPV(I) = APTR(I)
1471.      TRNOV(I) = PTR(I)
1472.      PTR(I) = 0.
1473. 149 CONTINUE
1474.      NNR = NTR
1475.      DO 151 I=1,NST
1476.      STAPV(I) = APST(I)
1477.      STNOV(I) = PST(I)
1478.      PST(I) = 0.
1479. 151 CONTINUE
1480.      NNS = NST
1481.      DO 152 I=1,NJ
1482.      APVWG(I) = APVWE(I)
1483. 152 CONTINUE
1484.      NGVW = MAXO(NSA,NTA,NTR,NST,NJ)
1485. C
1486. C      WRITE TO DISK FOR RECALL IN EQUIVALENT LOAD APPLICATIONS ROUTINE
1487. C
1488. 150 WRITE (LD) NSA, NTA, NTR, NST, NNA, NNT, NNR, NNS,
1489. 1      (PSA(I),I=1,NNA), (PTA(I),I=1,NNT), (PTR(I),I=1,NNR),
1490. 2      (PST(I),I=1,NNS), (SANOV(I),I=1,NSA),
1491. 3      (TANOV(I),I=1,NTA), (TRNOV(I),I=1,NTR),
1492. 4      (STNOV(I),I=1,NST), (SAI(I),I=1,NSA), (TAI(I),I=1,NTA),
1493. 5      (TRI(I),I=1,NTR), (STI(I),I=1,NST), VTN, APV, PAPV
1494. 160 CONTINUE
1495. 9999 RETURN
1496.      END
1497. *****
1498. *
1499. *      SUBROUTINE EAL18: CALCULATES THE EQUIVALENT 18 KIP *
1500. *      AXLE LOAD APPLICATIONS FOR EACH VEHICLE USING IN- *
1501. *      FORMATION FROM SUBROUTINE TRAFIC *
1502. *
1503. *****
1504.      SUBROUTINE EAL18 (STRNUM, SLBTHK, TPSI, IPVT)
1505.      DIMENSION PSA(500), PTA(500), PTR(500), SANOV(500), TANOV(500),
1506. 1      TRNOV(500), EFSA(500), EFIA(500), EFTR(500), SAN18(500),
1507. 2      TAN18(500), TRN18(500), SPN18(500), DPN18(500), TPN18(500),
1508. 3      SAI(500), TAI(500), TRI(500), SAM(500), TAM(500), TRM(500),
1509. 4      PST(500), STNOV(500), EFST(500), STN18(500), STPN18(500),
1510. 5      STI(500), STM(500)
1511.      COMMON /EALPAY/ EALPT(10,2), APPT(10,2)
1512.      COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
1513.      COMMON /CNSTS/ NPOV, PAPOV, SIZE, AVRG
1514.      COMMON /TRTYP/ ITYP(2,10), PTYP(10),PERCT(4),
1515. 1      NAXLES(10,4),NT(4), NITY, NATT, NTT, NEWTRK
1516.      COMMON /IO/ LI, LO, LD
1517.      COMMON /PSI/ PF,PICON, PTERM, PIOV, PTOV
1518.      DATA PSI1, PK1, PSI2, PK2 /4.2, 2.7, 4.5, 3.0/
1519.      REWIND 1
1520.      NTT = NITY + NATT
1521.      DO 1000 IT=1,NTT
1522. C
1523. C      READ FROM DISK THE INFORMATION STORED BY SUBROUTINE TRAFIC
1524. C

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1525.      READ (LD) NSA, NTA, NTR, NST, NNA, NNT, NNR, NNS,
1526.      1      (PSA(I),I=1,NNA), (PTA(I),I=1,NNT), (PTR(I),I=1,NNR),
1527.      2      (PST(I),I=1,NNS), (SANOV(I),I=1,NSA),
1528.      3      (TANOV(I),I=1,NTA), (TRNOV(I),I=1,NTR),
1529.      4      (STNOV(I),I=1,NST), (SAI(I),I=1,NSA), (TAI(I),I=1,NTA),
1530.      5      (TRI(I),I=1,NTR), (STI(I),I=1,NST), VTN, APV, PAPV
1531.      APPT(IT,1) = APV
1532.      APPT(IT,2) = PAPV
1533.      C
1534.      C      COMPUTE THE 18-KIP EAL FOR EACH AXLE TYPE
1535.      C
1536.      TSN18 = 0.
1537.      TXN18 = 0.
1538.      IF (NAXLES(IT,1) .EQ. 0) GO TO 50
1539.      C
1540.      C      SINGLE AXLES
1541.      C
1542.      CALL MIDPNT (SAI, NSA, SAM)
1543.      IF (IPVT .EQ. 2) GO TO 10
1544.      GT = ALOG10((PSI1 - TPSI) / PK1)
1545.      CALL FLEXEQ (SAM, NSA, 1.0, STRNUM, GT, EFSA)
1546.      GO TO 20
1547.      10 GT = ALOG10((PSI2 - TPSI) / PK2)
1548.      CALL RIGEQ (SAM, NSA, 1.0, SLBTHK, GT, EFSA)
1549.      20 CALL MULT (EFSA, PSA, NNA, SAN18)
1550.      CALL MULT (EFSA, SANOV, NSA, SPN18)
1551.      CALL SUM (SAN18, NNA, TSN18)
1552.      CALL SUM (SPN18, NSA, TXN18)
1553.      50 CONTINUE
1554.      TDN18 = 0.
1555.      TYN18 = 0.
1556.      IF (NAXLES(IT,2) .EQ. 0) GO TO 100
1557.      C
1558.      C      TANDEM AXLES
1559.      C
1560.      CALL MIDPNT (TAI, NTA, TAM)
1561.      IF (IPVT .EQ. 2) GO TO 12
1562.      GT = ALOG10((PSI1 - TPSI) / PK1)
1563.      CALL FLEXEQ (TAM, NTA, 2.0, STRNUM, GT, EFTA)
1564.      GO TO 22
1565.      12 GT = ALOG10((PSI2 - TPSI) / PK2)
1566.      CALL RIGEQ (TAM, NTA, 2.0, SLBTHK, GT, EFTA)
1567.      22 CALL MULT (EFTA, PTA, NNT, TAN18)
1568.      CALL MULT (EFTA, TANOV, NTA, DPN18)
1569.      CALL SUM (TAN18, NNT, TDN18)
1570.      CALL SUM (DPN18, NTA, TYN18)
1571.      100 CONTINUE
1572.      TTN18 = 0.
1573.      TZN18 = 0.
1574.      IF (NAXLES(IT,3) .EQ. 0) GO TO 150
1575.      C
1576.      C      TRIPLE AXLES
1577.      C
1578.      CALL MIDPNT (TRI, NTR, TRM)
1579.      IF (IPVT .EQ. 2) GO TO 14
1580.      GT = ALOG10((PSI1 - TPSI) / PK1)
1581.      CALL FLEXEQ (TRM, NTR, 3.0, STRNUM, GT, EFTR)
1582.      GO TO 24
1583.      14 GT = ALOG10((PSI2 - TPSI) / PK2)
1584.      CALL RIGEQ (TRM, NTR, 3.0, SLBTHK, GT, EFTR)
1585.      24 CALL MULT (EFTR, PTR, NNR, TRN18)

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1586.      CALL MULT (EFTR, TRNOV, NTR, TPN18)
1587.      CALL SUM (TRN18, NNR, TTN18)
1588.      CALL SUM (TPN18, NTR, TZN18)
1589.      150 CONTINUE
1590.      TSTN18 = 0.
1591.      TWN18 = 0.
1592.      IF ((NAXLES(IT,4) .EQ. 0) .OR. (IP .NE. IF)) GO TO 200
1593.      C
1594.      C   STEERING AXLES
1595.      C
1596.      CALL MIDPNT (STI, NST, STM)
1597.      IA = -1.5 + 2. * TPSI
1598.      IF(IP. EQ. IF) IA = -1*PF + 2* TPSI
1599.      IA = MAXO(1, MINO(4,IA))
1600.      CALL STEREQ (IA, EFST, NST, STM)
1601.      CALL MULT (EFST, PST, NNS, STN18)
1602.      CALL MULT (EFST, STNOV, NST, STPN18)
1603.      CALL SUM (STN18, NNS, TSTN18)
1604.      CALL SUM (STPN18, NST, TWN18)
1605.      200 EALPT(IT,1) = (TSN18*FLOAT(NAXLES(IT,1)) + TDN18 *
1606.      1          FLOAT(NAXLES(IT,2)) + TTN18*FLOAT(NAXLES(IT,3)) +
1607.      2          TSTN18*FLOAT(NAXLES(IT,4))) * 0.01
1608.      EALPT(IT,2) = (TXN18*FLOAT(NAXLES(IT,1)) + TYN18 *
1609.      1          FLOAT(NAXLES(IT,2)) + TZN18*FLOAT(NAXLES(IT,3)) +
1610.      2          TWN18*FLOAT(NAXLES(IT,4))) * 0.01
1611.      1000 CONTINUE
1612.      REWIND 1
1613.      RETURN
1614.      END
1615.      *****
1616.      *
1617.      *   SUBROUTINE RIGEQ: CALCULATES EQUIVALENCY FACTORS   *
1618.      *   FOR RIGID PAVEMENTS                               *
1619.      *
1620.      *****
1621.      SUBROUTINE RIGEQ (XL, NL, ST, D, GT, EQ)
1622.      DIMENSION XL(1), EQ(1)
1623.      D1 = D + 1.0
1624.      D1P = D1 ** 8.46
1625.      C = 3.28 * ALOG10(ST)
1626.      GTB18 = GT / (1.0 + 1.620E+7 / D1P)
1627.      STP = ST ** 3.52
1628.      CON = 5.908 + C - GTB18
1629.      DO 10 L=1,NL
1630.      B2 = 3.63 * (XL(L) + ST) ** 5.20
1631.      BX = 1.0 + B2 / (D1P * STP)
1632.      E = CON - 4.62 * ALOG10(XL(L) + ST) + GT / BX
1633.      10 EQ(L) = 10.0 ** (-E)
1634.      RETURN
1635.      END
1636.      *****
1637.      *
1638.      *   SUBROUTINE FLESEQ: CALCULATES EQUIVALENCY FACTORS *
1639.      *   FOR FLEXIBLE PAVEMENTS                           *
1640.      *
1641.      *****
1642.      SUBROUTINE FLESEQ (XL, NL, ST, SN, GT, EQ)
1643.      DIMENSION XL(1), EQ(1)
1644.      SNP = (SN + 1.0) ** 5.19
1645.      GTB18 = GT / (0.40 + 1094.0 / SNP)
1646.      B1 = SNP * ST ** 3.23

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1647.      CON = 6.125 + 4.33 * ALOG10(ST) - GTB18
1648.      DO 20 L=1,NL
1649.      B2 = 4.79 * ALOG10(XL(L) + ST)
1650.      BX = 0.40 + 0.081 * (XL(L) + ST) ** 3.23 / B1
1651.      E = CON - B2 + GT / BX
1652.      20 EQ(L) = 10.0 ** (-E)
1653.      RETURN
1654.      END
1655.      *****
1656.      *
1657.      *   SUBROUTINE STEREQ: COMPUTES STEERING AXLE EQUIVA- *
1658.      *   LENCY FACTORS *
1659.      * *
1660.      *****
1661.      SUBROUTINE STEREQ (IEQ, SEQ, NEQ, EQM)
1662.      DIMENSION SEQ(1), EQM(1)
1663.      COMMON /STEER/ EQFACT(15,5), PTST(4)
1664.      C   EQFACT(J,1) CONTAINS THE LOAD VALUES (J).
1665.      C   EQFACT(J,K) CONTAINS THE EQUIVALENCY FOR LOAD J, TERM PSI PTST(K-
1666.      C
1667.      DO 30 I=1,NEQ
1668.      IF (EQM(I) .LT. EQFACT(1,1)) GO TO 25
1669.      DO 10 J=2,15
1670.      IF (EQFACT(J,1) .GE. EQM(I)) GO TO 20
1671.      10 CONTINUE
1672.      SEQ(I) = EQFACT(15,IEQ)
1673.      20 K = J-1
1674.      SEQ(I) = EQFACT(K,IEQ) + (EQM(I) - EQFACT(K,1)) *
1675.      1      ((EQFACT(J,IEQ)-EQFACT(K,IEQ)) / (EQFACT(J,1)-EQFACT(K,1)
1676.      2      ))
1677.      GO TO 30
1678.      25 SEQ(I) = EQFACT(1,IEQ) * EQM(I) / EQFACT(1,1)
1679.      30 CONTINUE
1680.      RETURN
1681.      END
1682.      *****
1683.      *
1684.      *   SUBROUTINE INTVL: CONVERTS THE END-OF-INTERVAL KIP *
1685.      *   TABLES TO EVENLY DISTRIBUTED INTERVALS *
1686.      * *
1687.      *****
1688.      SUBROUTINE INTVL (A1, A2, N, N1, IS, NN, A3, NM)
1689.      COMMON /INTVLS/ STARTS(6)
1690.      COMMON /CNSTS/ NAPOV, PAPOV, SIZE, AVRG
1691.      DIMENSION A1(NN,11), A2(500), A3(500), ACC(500)
1692.      XMLoad = A1(N,11)
1693.      A2(1) = SIZE
1694.      C
1695.      C   SET *S* TO THE LARGEST EVEN NUMBER GREATER THAN OR EQUAL TO THE
1696.      C   FIRST END-OF-INTERVAL KIP VALUE
1697.      C
1698.      S = 0.
1699.      K = 0
1700.      5 IF (S .GE. STARTS(1S)) GO TO 7
1701.      S = S + SIZE
1702.      K = K+1
1703.      GO TO 5
1704.      C
1705.      C   SET UP THE EVENLY DISTRIBUTED END-OF-INTERVAL KIP TABLE AND ZERO
1706.      C   ALL INTERVALS AT BEGINNING OF TABLE IN WHICH NO TRUCKS/AXLES WERE
1707.      C   WEIGHED

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1708. C
1709.   7 I = 1
1710.     J = 1
1711.   10 IF (A2(I) .GE. XMLOAD) GO TO 20
1712.     I = I+1
1713.     A2(I) = A2(J) + SIZE
1714.     J = J+1
1715.     GO TO 10
1716.   20 N1 = I
1717.     DO 30 I=1,K
1718.     A3(I) = 0.
1719.   30 CONTINUE
1720.     I = K+1
1721.     CALL ACMLTE (A1(1,NM), N, ACC)
1722.     CALL ITRP (A1(1,11), ACC, A2, I, N1, N, A3, 1)
1723.     RETURN
1724.     END
1725. *****
1726. *
1727. *   SUBROUTINE ITRP: PERFORMS LINEAR INTERPOLATION
1728. *
1729. *****
1730.   SUBROUTINE ITRP (V1, V2, V3, LIS, NV, NL, V4, IV)
1731.   DIMENSION V1(500), V2(500), V3(500), V4(500)
1732.   IF (LIS .EQ. 1) V4(1) = 0.0
1733.   J = 1
1734.   DO 50 I=LIS,NV
1735.   DO 10 K=J,NL
1736. C
1737. C   FIND THE SMALLEST X1 GREATER THAN OR EQUAL TO X
1738. C
1739.   IF (V1(K) .GE. V3(I)) GO TO 20
1740.  10 CONTINUE
1741.     K = NL+1
1742.     V2SV = V2(K)
1743.     V1SV = V1(K)
1744.     V2(K) = V2(NL)
1745.     V1(K) = V3(I)
1746.     L = NL
1747.     GO TO 25
1748. C
1749. C   SET X1 AND F1 VALUES APPROPRIATELY, THEN INTERPOLATE
1750. C
1751.  20 J = K
1752.     L = K-1
1753.     IF (L .EQ. 0) GO TO 30
1754.  25 F1 = V2(L)
1755.     X1 = V1(L)
1756.     GO TO 40
1757.  30 X1 = 0.0
1758.     F1 = V4(1)
1759.  40 V4(I) = F1 + (V3(I)-X1) * ((V2(K)-F1) / (V1(K)-X1))
1760.     IF (K .LE. NL) GO TO 50
1761.     V2(K) = V2SV
1762.     V1(K) = V1SV
1763.  50 CONTINUE
1764. C
1765. C   IF VALUES ARE CUMULATIVE, SUBTRACT TO GET CORRECT VALUES PER
1766. C   INTERVAL
1767. C
1768.   IF (IV .EQ. 0) GO TO 999

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1769.      J = NV
1770.      DO 60 I=2,NV
1771.      V4(J) = V4(J) - V4(J-1)
1772.      J = J-1
1773.      60 CONTINUE
1774.      999 RETURN
1775.      END
1776.      *****
1777.      *
1778.      *   SUBROUTINE PCTAGE: CONVERTS A SET OF NUMBERS TO
1779.      *   CORRESPONDING PERCENTAGES OF THEIR SUM
1780.      *
1781.      *****
1782.      SUBROUTINE PCTAGE (P1, NP, P2)
1783.      DIMENSION P1(500), P2(500)
1784.      TOT = 0.0
1785.      DO 10 I=1,NP
1786.      TOT = TOT + P1(I)
1787.      10 CONTINUE
1788.      IF (TOT.EQ.0) TOT=1
1789.      DO 20 I=1,NP
1790.      P2(I) = P1(I) / TOT * 100.0
1791.      20 CONTINUE
1792.      RETURN
1793.      END
1794.      *****
1795.      *
1796.      *   SUBROUTINE COUNT: DETERMINES WHICH OF THE "ICA"
1797.      *   VALUES IN ARRAY CA IS THE LAST NON-ZERO VALUE
1798.      *
1799.      *****
1800.      SUBROUTINE COUNT (CA, ICA)
1801.      DIMENSION CA(500)
1802.      DO 10 I=1,ICA
1803.      IF (CA(I) .GT. 0.0) J = I
1804.      10 CONTINUE
1805.      ICA = J
1806.      RETURN
1807.      END
1808.      *****
1809.      *
1810.      *   SUBROUTINE ACMLTE: CONVERTS A LIST OF NUMBERS TO A
1811.      *   CUMULATIVE FUNCTION
1812.      *
1813.      *****
1814.      SUBROUTINE ACMLTE (AIN, NA, AOUT)
1815.      DIMENSION AIN(500), AOUT(500)
1816.      AOUT(1) = AIN(1)
1817.      NB = NA-1
1818.      DO 10 I=1,NB
1819.      J = I+1
1820.      AOUT(J) = AOUT(I) + AIN(J)
1821.      10 CONTINUE
1822.      RETURN
1823.      END
1824.      *****
1825.      *
1826.      *   SUBROUTINE MIDPNT: DETERMINES THE MIDPOINT OF EACH
1827.      *   INTERVAL BETWEEN MEMBERS OF A LIST OF NUMBERS
1828.      *
1829.      *****

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1830.      SUBROUTINE MIDPNT (X1, NM, X2)
1831.      COMMON /CNSTS/ NAPOV, PAPOV, SIZE, AVRG
1832.      DIMENSION X1(500), X2(500)
1833.      I = 0
1834.      J = 1
1835.      ELI = X1(NM)
1836.      X2(1) = X1(1) - (SIZE/2.)
1837.      10 I = I+1
1838.      J = J+1
1839.      X2(J) = X2(I) + SIZE
1840.      IF (X1(J) .LT. ELI) GO TO 10
1841.      RETURN
1842.      END
1843.      *****
1844.      *
1845.      *      SUBROUTINE MULT: MULTIPLIES TWO VECTORS SUCH THAT *
1846.      *      YC(I) = YA(I)*YB(I) *
1847.      *
1848.      *****
1849.      SUBROUTINE MULT (YA, YB, NU, YC)
1850.      DIMENSION YA(500), YB(500), YC(500)
1851.      DO 10 I=1,NU
1852.      YC(I) = YA(I) * YB(I)
1853.      10 CONTINUE
1854.      RETURN
1855.      END
1856.      *****
1857.      *
1858.      *      SUBROUTINE AVRGE: COMPUTES THE AVERAGE OF THE VAL- *
1859.      *      UES IN ARRAY AV OVER AN *
1860.      *
1861.      *****
1862.      SUBROUTINE AVRGE (AV, NV, AN, AVG)
1863.      DIMENSION AV(500)
1864.      AVG = 0.0
1865.      DO 10 I=1,NV
1866.      AVG = AV(I) + AVG
1867.      10 CONTINUE
1868.      AVG = AVG / AN
1869.      RETURN
1870.      END
1871.      *****
1872.      *
1873.      *      SUBROUTINE DIFF: TAKES SUCCESSIVE DIFFERENCES OF *
1874.      *      THE VALUES IN ARRAY D1 *
1875.      *
1876.      *****
1877.      SUBROUTINE DIFF (D1, ND, D2)
1878.      DIMENSION D1(1), D2(1)
1879.      D2(1) = D1(1)
1880.      DO 10 I=2,ND
1881.      J = I-1
1882.      D2(I) = D1(I) - D1(J)
1883.      10 CONTINUE
1884.      RETURN
1885.      END
1886.      *****
1887.      *
1888.      *      SUBROUTINE SUM: COMPUTES THE SUM OF VALUES IN ARRAY *
1889.      *      S1 *
1890.      *

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1891. *****
1892.     SUBROUTINE SUM (S1, NS, S2)
1893.     DIMENSION S1(500)
1894.     S2 = 0.0
1895.     DO 10 I=1,NS
1896.     S2 = S2 + S1(I)
1897.     10 CONTINUE
1898.     RETURN
1899.     END
1900. *****
1901. *
1902. *     SUBROUTINE RUSIAN: CALCULATES OVERLAY THICKNESS FOR*
1903. *     FLEXIBLE PAVEMENTS
1904. *
1905. *****
1906.     SUBROUTINE RUSIAN (DPTEMP,DMDRU,NLAY,NPT,NRU,NLH)
1907.     IMPLICIT DOUBLE PRECISION (A-H,O-Z)
1908.     DOUBLE PRECISION MTERM, NTERM
1909.     DIMENSION X(5), EX(5), DP(5), R(6), E(6), WHAT(5), DPTEMP(5)
1910.     IF(NPT.NE.2.OR.NRU.NE.1) GO TO 112
1911.     E(1)=65000.0
1912.     E(2)=20000.0
1913.     E(3)=12000.0
1914.     E(4)=5000.0
1915.     112 IF(NPT.NE.2.OR.NRU.NE.2) GO TO 120
1916.     E(1)=65000.0
1917.     E(2)=20000.0
1918.     E(3)=12800.0
1919.     E(4)=5100.0
1920.     120 IF(NPT.NE.1.OR.NRU.NE.1.OR.NLH.NE.1)GO TO 30
1921.     E(1)=300000.0
1922.     E(2)=80000.0
1923.     E(3)=15000.0
1924.     E(4)=6000.0
1925.     30 IF(NPT.NE.1.OR.NRU.NE.1.OR.NLH.NE.2) GO TO 40
1926.     E(1)=305000.
1927.     E(2)=100000.0
1928.     E(3)=16500.0
1929.     E(4)=6000.0
1930.     40 IF(NPT.NE.1.OR.NRU.NE.2.OR.NLH.NE.1) GO TO 50
1931.     E(1)=300000.
1932.     E(2)= 85000.0
1933.     E(3)=22000.0
1934.     E(4)=16400.0
1935.     E(5)=6000.
1936.     50 IF(NPT.NE.1.OR.NRU.NE.2.OR.NLH.NE.2) GO TO 60
1937.     E(1)=325000.
1938.     E(2)= 95000.0
1939.     E(3)=35000.0
1940.     E(4)=18500.0
1941.     E(5)=6000.
1942.     60 IF(NPT.NE.3.OR.NRU.NE.1.OR.NLH.NE.1) GO TO 70
1943.     E(1)=325000.
1944.     E(2)=130000.0
1945.     E(3)=90000.0
1946.     E(4)=16800.0
1947.     E(5)=6000.0
1948.     70 IF(NPT.NE.3.OR.NRU.NE.1.OR.NLH.NE.2) GO TO 80
1949.     E(1)=325000.
1950.     E(2)=130000.0
1951.     E(3)=90000.0

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1952.      E(4)=18500.0
1953.      E(5)=6000.0
1954. 80    IF(NPT.NE.3.OR.NRU.NE.2.OR.NLH.NE.1) GO TO 90
1955.      E(1)=325000.
1956.      E(2)=130000.0
1957.      E(3)=90000.0
1958.      E(4)=38000.0
1959.      E(5)=19000.0
1960.      E(6)=6000.
1961. 90    IF(NPT.NE.3.OR.NRU.NE.2.OR.NLH.NE.2) GO TO 100
1962.      E(1)=325000.
1963.      E(2)=150000.0
1964.      E(3)=115000.0
1965.      E(4)=42000.0
1966.      E(5)=22000.0
1967.      E(6)=6000.
1968. 100   CONTINUE
1969.      DO 915 K=1,5
1970.          RTEMP =10.**2.+(12*(K-1))**2.
1971. 915     R(K)=DSQRT(RTEMP)
1972. C
1973.      DO 916 K=1,NLAY
1974. 916     DP(K)=DPTEMP(K)
1975.          IPVMT = 3
1976.          NW = 5
1977.          LEQ = 0
1978.          NOL = NLAY
1979. C
1980.      DO 5 K = 1, NLAY
1981. 5 X(K) = E(K)/1000000.
1982. C
1983.      IF( DP( NOL-1) .LE. 10.0 ) LEQ = 1
1984.      NC = NOL
1985.      IF( LEQ .EQ. 1 ) NC = NOL - 1
1986.      IF( LEQ .EQ. 1 ) X(NOL-1) = X(NOL)
1987. C
1988. 53 BTERM = 10.0 ** (-0.05071) * DP(1) ** 0.10148
1989.      NTERM = 10.0 ** (-0.50233) * DP(1) ** 0.087879
1990.      CTERM = 10.0 ** (-0.060039) * DP(1) ** 0.0095198
1991.      MTERM = 0.704 - 0.026 * DP(1)
1992.      HTERM = 10.0 ** 1.8631 * DP(1) ** (-0.0038499)
1993. C
1994.      TMB = 2.0 * MTERM * BTERM
1995. C
1996.      NL = NLAY
1997.      EI = X(NC)
1998.      N1 = NL - 1
1999.      SUM = 0.0
2000.      DO 10 I = 1, N1
2001. 10 SUM = SUM + DP(I)
2002.      HS = HTERM - SUM
2003.      DP( NL) = HS
2004. C
2005.      NT = NC - 1
2006. C
2007.      DO 11 I = 1, NT
2008. 11 EX(I) = X(I)
2009.      EX(NL) = X(NC)
2010.      EXT = EX(NL) * 1000000.0
2011.      IF( LEQ .EQ. 0 ) GO TO 14
2012. C

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2013.      GO TO ( 12, 12, 13, 13, 12, 12 ), IPVMT
2014.      GO TO 14
2015.      C
2016.      12 EX(NL - 1) = EX(NL) * (1.0 + 7.18 * DLOG10( DP(  NC)) - 1.56 *
2017.      = ( DLOG10( EXT  ) * DLOG10( DP(  NC)) ))
2018.      GO TO 14
2019.      C
2020.      13 EX(NL - 1) = EX(NL) * (1.0 + 10.52 * DLOG10( DP(  NC)) - 2.10 *
2021.      = ( DLOG10( EXT  ) * DLOG10( DP(  NC)) ))
2022.      C
2023.      14 CONTINUE
2024.      C
2025.      HPR = 0.0
2026.      DO 15 I = 1, NL
2027.      XNUM = EX(I)/EI
2028.      HPR = HPR + ( XNUM      ** NTERM) * DP(  I)
2029.      15 CONTINUE
2030.      C
2031.      C
2032.      PHIALF = TMB * ((TMB + 1.0)/(TMB - 1.0)) ** 0.5
2033.      ALPHA = PHIALF/HPR
2034.      TTM = 2.0 * MTERM
2035.      C
2036.      DO 20 I = 1, NW
2037.      ARG = ALPHA * R(I)
2038.      C
2039.      WHAT(  I) = 0.47746 * (CTERM/( EI *1000000.0)) * (1000.0/HPR) *
2040.      = (TTM + 1.0) * BESJO( ARG )
2041.      C
2042.      20 CONTINUE
2043.      DMDRU=WHAT(1)
2044.      RETURN
2045.      END
2046.      *****
2047.      *
2048.      * FUNCTION BESJO:BESSEL FUNCTION JO(X) USING POLYNOM-*
2049.      * IAL APPROXIMATION IN SUBROUTINE RUSIAN
2050.      *
2051.      *****
2052.      FUNCTION BESJO ( X )
2053.      IMPLICIT DOUBLE PRECISION (A-H, O-Z)
2054.      ASSIGN 2 TO JOJ1
2055.      1 CONTINUE
2056.      X3 = X/3.0
2057.      IF( X.GT. 3.0) X3 = 3.0/ X
2058.      X32= X3*X3
2059.      X33=X32*X3
2060.      X34=X32*X32
2061.      X35=X32*X33
2062.      X36=X33*X33
2063.      GO TO JOJ1,(2,10)
2064.      2 IF(DABS( X ) .LE. 3.3 ) GO TO 3
2065.      X1 = X - 0.7853982 -0.04166397*X3 - 0.3954E-04 * X32 +
2066.      + 0.262573E-02*X33 - 0.54125E-03* X34 - 0.29333E-03 * X35 +
2067.      + 0.13558E-03 * X36
2068.      BESJO=(( .7978846 - .77E-6 * X3 - 0.552740E-02 * X32 -
2069.      - 0.9512E-04 * X33 + 0.137237E-02 * X34 - 0.72805E-03 * X35+
2070.      + 0.14476E-03 * X36 ) /DSQRT(X) ) * DCOS(X1 )
2071.      RETURN
2072.      3 BES JO= 1.0 - 2.2499997 * X32 + 1.2656208 * X34 -
2073.      - 0.3163866 * X36 + 0.0444479*(X34*X34)-0.0039444 *(X35*X35) +

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2074.      * 0.000210* (X36*X36)
2075.      RETURN
2076.      ENTRY BES J1(X)
2077. C     BESSEL FUNCTION J1 WHERE X IS BETWEEN -3 AND + INFINITY.
2078.      ASSIGN 10 TO JOJ1
2079.      GO TO 1
2080.      10 IF ( DABS (X) .LT. 3.0 ) GO TO 30
2081.          X1 = X - 2.3561945 + 0.1249961 * X3 + 0.565E-4 * X32 -
2082.          ‡ 0.637879E-02 * X33 + 0.74348E-03 * X34 + 0.79824E-03 * X35
2083.          / - 0.29166E-03 * X36
2084.          BESJ1 = DCOS( X1 ) *
2085.          = ( 0.79788456 + 0.156E-05 * X3
2086.          1 + 0.01659667 * X32 + 0.17105E-03 * X33 - 0.249511E-02 * X34
2087.          2 + 0.113653E-02 * X35 - 0.20033E-03 * X36 ) / DSQRT(X)
2088.      RETURN
2089.      30 BES J1 = X * ( 0.5 - 0.5624999 * X32 + 0.2109357 * X34 -
2090.          1 0.03954289 * X36 + 0.443319E-02 * (X34 * X34) - 0.31761E-03
2091.          2 * (X35*X35) + 0.1109E-04* (X36*X36) )
2092.      RETURN
2093.      END
2094.      *****
2095.      *
2096.      * SUBROUTINE SURVIV: SETS SURVIVAL CURVE PARAMETERS, *
2097.      * XLAMB AND GAMM,FOR FLEXIBLE PAVEMENTS *
2098.      *
2099.      *****
2100.      SUBROUTINE SURVIV
2101.      COMMON /EXPVT/ NPT, THICK (4), MTYPE(4), NLAY, IP, IF, IR, IC
2102.      COMMON /MECH/XKT, NRU, NLH, ND, NDEL, IACR, NREG, LYR, JYR, CONSTR(20)
2103.      COMMON /PSI/ PF, PICON, PTERM, PIOV, PTOV
2104.      COMMON /BURKE/ XLAMB, GAMMA, TFBAP
2105.      COMMON /SURVP/ FPLAM(3,3,5), FPGAM(3,3,5), FDGAM(3,3,5),
2106.      -FDLAM(3,3,5), RPLAM(2,3,2), RPGAM(2,3,2), RDLAM(2,3,2), RDGAM(2,3,2)
2107.      IF (IP .NE. IF) GO TO 400
2108.      C->FIND OUT TYPE OF FAILURE (PSI OR DISTRESS)
2109.      IF (PF .GE. PTERM) GO TO 200
2110.      C->SET XLAMB AND GAMMA FOR PSI SURVIVAL CURVES BY QUALITY STD. AND PAVT
2111.      XLAMB=FPLAM(NPT,IACR,NREG)
2112.      GAMMA=FPGAM(NPT,IACR,NREG)
2113.      RETURN
2114.      200 CONTINUE
2115.      C->SET XLAMB AND GAMMA FOR DISTRESS SURV. CURVES BY QUAL. STD. AND PAVT
2116.      XLAMB=FDLAM(NPT,IACR,NREG)
2117.      GAMMA=FDGAM(NPT,IACR,NREG)
2118.      RETURN
2119.      400 CONTINUE
2120.      IF (PF.GT.PTERM) GO TO 500
2121.      C->SET XLAMB AND GAMMA FOR PSI SURV. CURVES - RIGID PAVEMENTS
2122.      XLAMB=RPLAM(NPT,IACR,NREG)
2123.      GAMMA=RPGAM(NPT,IACR,NREG)
2124.      RETURN
2125.      500 CONTINUE
2126.      C->SET XLAMB AND GAMMA FOR DISTRESS SURV. CURVES - RIGID PAVEMENTS
2127.      XLAMB=RDLAM(NPT,IACR,NREG)
2128.      GAMMA=RDGAM(NPT,IACR,NREG)
2129.      RETURN
2130.      END
2131.      SUBROUTINE COSRIG (A)
2132.      COMMON /MNTPAR/ S,DISS,DCON,DIN
2133.      COMMON /TEMPC/ CONTP(25),DISTCT
2134.      COMMON /STRUC/ SN,SS,R,D,AGG,XJ,XK,E

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2135. COMMON /CMAT/ UNTCST(5,4),BZ(5,3),BB(5,2),RBZ(2,2)
2136. COMMON /MECH/XKT,NRU,NLH,ND,NDEL,IACR,NREG,IYR,JYR,CONSTR(20)
2137. DIMENSION FO(3),XO(3),A(50)
2138. X1=DCON
2139. X3=DISS
2140. X2=DIN
2141. JT=DISTCT
2142. X4=CONTP(JT)
2143. X5=0.0
2144. IF (AGG.EQ.0) X5=-5.840+1.1856*X2
2145. XO(1)=0.0
2146. XO(2)=X1
2147. XO(3)=X2
2148. FO(1)=0.0
2149. FO(2)=DISS
2150. IDIN=INT(X2+0.5)
2151. IF (NREG.EQ.1) UCPF=UNTCST(1,4)
2152. IF (NREG.EQ.2) UCPF=UNTCST(2,4)
2153. DO 40 I=1,50
2154. X2=I
2155. FAIL = (-.381 - .4272*X1 + .018864*(X2**2) + .5532*X3*(X2-X1)
2156.          + .0005928*X2*X4 +X5)
2157. C**** 0.50 = LANE DISTRIBUTION FACTOR ****
2158. SUM = FAIL * UCPF * 0.50
2159. IF(I .EQ. IDIN) FO(3) = FAIL
2160. A(I) = SUM
2161. X2 = X2 + 1.0
2162. 40 CONTINUE
2163. ILOOP=IDIN-1
2164. DO 900 I=1,ILOOP
2165. XIN = I
2166. CALL INTERP(XO,FO,3,XIN,FROUT)
2167. A(I) = FROUT * UCPF
2168. 900 CONTINUE
2169. RETURN
2170. END
2171. *****
2172. * *
2173. * SUBROUTINE INTERP: PARABOLIC INTERPOLATION (LINEAR*
2174. * IF ONLY TWO POINTS GIVEN) FOR FR(XR) GIVEN N VAL-*
2175. * UES FOR F(X)--INOUT VALUES OF X MUST BE MONOTONIC *
2176. * INCREASING OR DECREASING,WHEN NEEDED, IS PARABOLIC*
2177. * *
2178. *****
2179. SUBROUTINE INTERP (X, F, N, XR, FR)
2180. DIMENSION X(N), F(N)
2181. IF (N .GT. 2) GO TO 10
2182. FI = F(1) + (XR-X(1))*(F(2)-F(1))/(X(2)-X(1))
2183. GO TO 99
2184. 10 CONTINUE
2185. IB = 1
2186. IF (N .EQ. 3) GO TO 30
2187. R = +1.
2188. IF (X(2) .LT. X(1)) R = -1.
2189. DO 15 I=2,N
2190. IX = I
2191. IF ((X(1) - XR)*R .GT. 0.) GO TO 20
2192. 15 CONTINUE
2193. 20 IF ((2.*XR - X(IX-1) - X(IX))*R .LT. 0.) IX = IX - 1
2194. IB = IX - 1
2195. IF (IB .LT. 1) IB = 1

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2196.      IF (IB .GT. (N-2)) IB = N-2
2197.      30 FI = PARAB (XR, X(IB), F(IB))
2198.      99 FR = FI
2199.      RETURN
2200.      END
2201.      *****
2202.      *
2203.      *      FUNCTION PARAB: FUNCTION IS F(XR),GIVEN THREE VALUES*
2204.      *      F(X)
2205.      *
2206.      *****
2207.      FUNCTION PARAB (XR, X, F)
2208.      DIMENSION X(3), F(3)
2209.      XL = X(2) - X(1)
2210.      XU = X(3) - X(2)
2211.      D = XL*XU*(X(3) - X(1))
2212.      P1 = XL*(F(3)-F(2))
2213.      P2 = XU*(F(2)-F(1))
2214.      S1 = P1*XL+P2*XU
2215.      S2 = P1 - P2
2216.      T = XR - X(2)
2217.      PARAB =F(2)+ (S1 +S2*T)*T/D
2218.      RETURN
2219.      END
2220.      *****
2221.      *
2222.      *      SUBROUTINE COSCAL: CALCULATES REHABILITATION AND
2223.      *      MAINTENANCE COSTS FOR EACH PERIOD OF THE PLANNING
2224.      *      HORIZON USING COST DATA AND FAILURE PROBABILITIES
2225.      *
2226.      *****
2227.      SUBROUTINE COSCAL (ADT)
2228.      LOGICAL ADJUST
2229.      COMMON /TEMPC/ CONTP(25),DISTCT
2230.      COMMON /PSI/ PF, PICON, PTERM, PIOV, PTOV
2231.      COMMON /TITLE/ TITLE(20,3), SECTIL(20)
2232.      COMMON /MECH/XKT,NRU,NLH,ND,NDEL,IACR,NREG,IYR,JYR,CONSTR(20)
2233.      COMMON /LMP/ XLM(30),YLM(30),POTLM(20,2),OUTP(20,2),
2234.      1      TOTALM, PPF, TPF, PFNO, NASL, NSLR,TOVLM(30,2),XLM2(30)
2235.      COMMON /OVRLAY/XHCID,XHCIM,WLANE,WPSH,WGSH,PPVDSH,NRHC,CAC,CGR
2236.      1      ,CSCOAT,NPMC,AGF
2237.      COMMON /FUNDS/ APOF(20,2), RTINT, RTINF
2238.      COMMON /CMAT/ UNTCST(5,4),BZ(5,3),BB(5,2),RBZ(2,2)
2239.      COMMON /TIME/ OVLIF, NYAP,NYR,YR(40)
2240.      COMMON /MNTPAR/ S,DISS,DCON,DIN
2241.      COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
2242.      COMMON /COST/ COSTRH(20), COSTRM(20), COSTPM(20),FMILES(20)
2243.      -,FMILEP(20)
2244.      COMMON /EXTRA/ PTOVTK,TPE,PFO,XMNOTK,XXOTK,NIS
2245.      COMMON /IO/ LI, LO, LD
2246.      COMMON /SHIFT/ ISHIFT
2247.      REAL MAINTC(50)
2248.      DIMENSION PFAIL(50),ZMILES(50),REHPLM(30),PEHPLM(30),RIGCPY(50)
2249.      C
2250.      C---> EARMAR FUNCTION DEFINITION
2251.      C
2252.      EARMAR(N,IT)=(110*UNTCST(N,1)+1000*UNTCST(N,2)+5*UNTCST(N,3))/
2253.      1      (1+EXP(-(IT-10)/1.16))
2254.      C
2255.      C---> WRITE HEADER
2256.      C

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2257. DATA ZMILES /50*0./
2258. WRITE (LO,1234)
2259. WRITE(LO,610) DISTCT
2260. 610 FORMAT (1H1,////,40X,'DISTRICT:',2X,F5.0)
2261. IF (ISHIFT.EQ.1) WRITE (LO,611)
2262. IF (ISHIFT.EQ.0) WRITE (LO,612)
2263. 611 FORMAT (41X,'FUTURE LIMITS')
2264. 612 FORMAT (40X,'PRESENT LIMITS')
2265. C----> SET MAINTENANCE COST FUNCTION FOR RIGID OR FLEXIBLE
2266. IF (IP.EQ.IR) CALL COSRIG(RIGCPY)
2267. DO 15 I=1,50
2268. IF (IP.EQ.IF) MAINTC(I)=EARMAR(NREG,I)
2269. IF (IP.EQ.IR) MAINTC(I)=RIGCPY(I)
2270. 15 CONTINUE
2271. C
2272. C----> DEFINE "WORKING" AGE DISTRIBUTION ZMILES (=YLM AT YEAR ZERO)
2273. C YLM IS ORIGINAL, READ-IN AGE DISTRIBUTION
2274. C
2275. DO 7 IAGE=1,NASL
2276. ZMILES(IAGE)=YLM(IAGE)
2277. 7 CONTINUE
2278. C
2279. C----> GET REHABILITATION COSTS PER LANE-MILE THROUGHOUT ANALYSIS PERIOD
2280. C FOR "REGULAR" AND "POTTS" PAVEMENTS
2281. C
2282. CALL RHBLT(REHPLM,PEHPLM)
2283. C
2284. C----> PERFORM PAVEMENT BEHAVIOR "SIMULATION" THROUGHOUT A.P.
2285. C
2286. DO 199 IYEAR=1,NYAP
2287. C
2288. C-----> ESTIMATE FAILING MILES, SURVIVING MILES,
2289. C AND ROUTINE MAINTENANCE COSTS FOR CURRENT YEAR IYEAR
2290. C FAILML AND CMAIN ARE ACCUMULATORS. PFAILC IS
2291. C THE CUMMULATIVE PROBABILITY OF FAILURE AFTER
2292. C IAGE-1 YEARS.
2293. C
2294. C FAILML=0
2295. C CMAIN=0
2296. C PFAILC=0
2297. C ADJUST=.FALSE.
2298. C
2299. C LIM10=IYEAR+NASL-1
2300. C DO 10 IAGE=1,LIM10
2301. C
2302. C-----> IF PAVEMENT FAILS BY DISTRESS, IT IS REHABILITATED
2303. C EVERY NDEL YEARS; OTHERWISE, WHEN IT FAILS,
2304. C ACCORDING TO FAILURE PROBABILITY PFAIL
2305. C
2306. C IF (PF.GE.PTERM.AND.IAGE.GE.NDEL) ADJUST=.TRUE.
2307. C IF (ADJUST) GO TO 12
2308. C ELSE
2309. C CALL DISTR (PFAIL,IAGE,IAGE)
2310. C IF (PFAILC+PFAIL(IAGE).LE.1.) GO TO 14
2311. C ELSE
2312. C ADJUST=.TRUE.
2313. C GO TO 12
2314. C ENDIF
2315. C THEN
2316. C 12 IF (PFAILC.EQ. 1) PFAILC=0.
2317. C

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2318. C           (THIS TRICK IS NECESSARY TO AVOID DIVISION BY ZERO)
2319. C
2320.           PFAIL(IAGE)=1-PFAILC
2321.           IF (IP.EQ.IR) GO TO 14
2322.           IF (IYEAR.NE.1) GO TO 14
2323. C           ELSE
2324.           ZMILES(IAGE)=0
2325. C           ENDIF
2326. C           ENDIF
2327. 14          ORIGML=ZMILES(IAGE)/(1-PFAILC)
2328.           FAILML=FAILML+ORIGML*PFAIL(IAGE)
2329.           ZMILES(IAGE)=ZMILES(IAGE)-ORIGML*PFAIL(IAGE)
2330.           CMAIN=CMAIN+MAINTC(IAGE)*ZMILES(IAGE)
2331.           PFAILC=PFAILC+PFAIL(IAGE)
2332. 10          CONTINUE
2333. C
2334. C-----> CALCULATE ADJUSTED COSTS FOR CURRENT YEAR IYEAR INCLUDING
2335. C          COSTS FOR REHABILITATING PAVEMENTS IN POTTS
2336. C
2337.           IF (IP.EQ.IF) CALL POTSET(POTMIL)
2338.           IF (IP.EQ.IR) POTMIL=0.
2339.           IF (IYEAR.GT.IYR) POTMIL=0.
2340.           POTRHC=POTMIL*PEHPLM(IYEAR)
2341.           COSTRH(IYEAR)=(FAILML*REHPLM(IYEAR)+POTRHC)*(1+XHCIO)**IYEAR
2342.           COSTRM(IYEAR)=CMAIN*(1+XHCIM)**IYEAR
2343.           FMILES(IYEAR)=FAILML
2344.           FMILEP(IYEAR)=POTMIL
2345. C
2346. C-----> UPDATE AGE DISTRIBUTION FOR NEXT YEAR IYEAR+1
2347. C
2348.           LIM20=IYEAR+NASL
2349.           DO 20 I=2,LIM20
2350.             IAGE=LIM20+2-I
2351.             ZMILES(IAGE)=ZMILES(IAGE-1)
2352. 20          CONTINUE
2353.           ZMILES(1)=FAILML+CONSTR(IYEAR)+POTMIL
2354. C
2355. 199          CONTINUE
2356.           DO 100 I=1,20
2357.             COSTPM(I)=0.
2358. 100          CONTINUE
2359.           TINTML=0.
2360.           DO 110 K=1,NASL
2361.             TINTML=TINTML+YLM(K)
2362. 110          CONTINUE
2363.           IF (IP.NE.IF.OR.JYR.EQ.0) GO TO 132
2364.           TCNSTR=0.
2365.           DO 120 I=1,NYAP
2366.             TCNSTR=TCNSTR+CONSTR(I)
2367. 120          CONTINUE
2368. C--> CALCULATION OF PREVENTIVE MAINTENANCE COST
2369. C--> CONVERT ADT PER LANEMILE INTO OVERALL ADT
2370.           IF (NPT.EQ.1) ADT=ADT*4.169
2371.           IF (NPT.EQ.2) ADT=ADT*2.446
2372.           IF (NPT.EQ.3) ADT=ADT*2.016
2373.           DO 130 I=1,NYAP
2374.             XMPM=(TINTML+TCNSTR/2.)*WLANE*1760./3.
2375.             COSTPM(I)=BB(NREG,1)*ADT+BB(NREG,2)*XMPM
2376.             COSTPM(I)=(COSTPM(I)/JYR)*(1.+XHCIM)**I
2377. 130          CONTINUE
2378. 132          WRITE (LO,613) (SECTTL(J),J=1,20)

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2379. 613 FORMAT (/,20X,20A4,///)
2380.     IF (TINTML.NE.O) GO TO 665
2381.     DO 664 I=1,NYAP
2382.     COSTRM(I)=O.
2383. 664 CONTINUE
2384. 665 WRITE (LO,600)
2385. 600 FORMAT (12X,'YEAR ',12X,'ROUT MAINT',13X,'REHAB MILES',
2386.     1      14X,' REHAB ',13X,
2387.     1      'PREV MAINT',/,29X,' COST ($) ',13X,'NPOT   POT',13X,
2388.     2      ' COST ($) ',14X,' COST ($) ',/)
2389.     DO 666 I=1,NYAP
2390.     IF (NIS.EQ.2) COSTRM(I)=COSTRM(I)*O.382
2391.     IF (NIS.EQ.3) COSTRM(I)=COSTRM(I)*O.316
2392.     COSTRM(I)=ANINT(COSTRM(I))
2393.     COSTRH(I)=ANINT(COSTRH(I))
2394.     COSTPM(I)=ANINT(COSTPM(I))
2395. 666 CONTINUE
2396.     WRITE(LO,601) (I,COSTRM(I),FMILES(I),FMILEP(I),COSTRH(I),
2397.     -COSTPM(I),I=1,NYAP)
2398. 601 FORMAT ((10X,I5,10X,F14.2,09X,F7.2,2X,F7.2,2(09X,F14.2)))
2399.     PRMS=O.
2400.     PRHS=O.
2401.     PPMS=O.
2402.     TFMS=O.
2403.     TPMS=O.
2404.     FCTR=1/(1+RTINT)
2405.     DO 150 J=1,NYAP
2406.     PRMS=PRMS+COSTRM(J)*FCTR**J
2407.     PRHS=PRHS+COSTRH(J)*FCTR**J
2408.     PPMS=PPMS+COSTPM(J)*FCTR**J
2409.     TFMS=TFMS+FMILES(J)
2410.     TPMS=TPMS+FMILEP(J)
2411. 150 CONTINUE
2412.     PRMS=ANINT(PRMS)
2413.     PRHS=ANINT(PRHS)
2414.     PPMS=ANINT(PPMS)
2415.     WRITE (LO,603) TFMS,TPMS,PRMS,PRHS,PPMS,TFMS+TPMS
2416. 603 FORMAT(//,2X,'TOTAL',18X,23X,F7.2,2X,F7.2,
2417.     -      /,2X,'PRESENT COSTS',10X,F14.2,9X,16(' '),
2418.     -      2(9X,F14.2),/,2X,'TOTAL LANE MILES',34X,F9.2,///)
2419.     WRITE (LO,1234)
2420. 1234 FORMAT (1X,'-----',
2421.     1      '-----',
2422.     2      '-----')
2423. 99 RETURN
2424.     END
2425. *****
2426. *
2427. *   SUBROUTINE POTSET: INITIALIZE TOTALM AND POTTS,
2428. *   TOTAL MILEAGE AND POTTS MILEAGE COUNTERS,RESPEC-
2429. *   TIVELY
2430. *
2431. *****
2432.     SUBROUTINE POTSET(POTMIL)
2433.     COMMON /PSI/ PF,PICON,PTERM,PIOV,PTOV
2434.     COMMON /MECH/XKT,NRU,NLH,ND,NDEL,IACR,NREG,IYR,JYR,CONSTR(20)
2435.     COMMON /LMP/ XLM(30),YLM(30),POTLM(20,2),OUTP(20,2),
2436.     1      TOTALM,PPF,TPF,PFNO,NASL,NSLR,TOVLM(30,2),XLM2(30)
2437.     TOTALM=O
2438.     POTTS=O
2439.

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C

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2440. C---> SELECT POTTS CUTOFF AGE, DEPENDING ON WHETHER THE PAVEMENT
2441. C     FAILS BY PSI (25 YEARS) OR DISTRESS (NDEL YEARS)
2442. C
2443.     AGEPOT=25
2444.     IF (PF.GE.PTERM) AGEPOT=NDEL
2445. C     ENDF
2446. C
2447. C---> COUNT INITIAL TOTAL MILEAGE AND MILEAGE IN POTTS
2448. C
2449.     DO 10 IAGE=1,NASL
2450.         TOTALM=TOTALM+YLM(IAGE)
2451.         IF (IAGE.GE.AGEPOT) POTTS=POTTS+YLM(IAGE)
2452. C     ENDF
2453.     10 CONTINUE
2454. C
2455. C---> COMPUTE PERCENTAGE OF PAVEMENTS IN POTTS, PPF
2456. C     AND POTTS MILEAGE TO FIX IN CURRENT YEAR, POTMIL
2457. C
2458.     PPF=POTTS/TOTALM
2459.     POTMIL=POTTS/FLOAT(IYR)
2460. C
2461.     RETURN
2462.     END
2463. *****
2464. *
2465. *     SUBROUTINE RHBLT: CALCULATES THE COST OF REHABILI- *
2466. *     TATION PER LANE MILE USING SUBROUTINES OVTHKF( OR *
2467. *     OVTHKR)AND OVCOST *
2468. *
2469. *****
2470.     SUBROUTINE RHBLT(REHPLM,PEHPLM)
2471.     COMMON /OVLAY/XHCIO,XHCIM,WLANE,WPSH,WGSH,PPVDSH,NRHC,CAC,CGR
2472.     1     , CSCOAT,NPMC,AGF
2473.     COMMON /BURKE/ XLAMB, GAMMA, TFBAP
2474.     COMMON /TIME/ OVLIF, NYAP, NYR, YR(40)
2475.     COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
2476.     COMMON /PSI/ PF,PICON, PTERM, PIOV, PTOV
2477.     COMMON /IO/ LI, LO, LD
2478.     COMMON /STRUC/ SN,SS,R,D,AGG,XJ,XK,E
2479.     DIMENSION REHPLM(20),CUMEAL(50),PEHPLM(20)
2480.     CALL ACCTFC(TFBAP,AGF,50,CUMEAL)
2481.     DO 10 I=1,NYAP
2482.         NOVLF=IFIX(OVLIF+.5)
2483.         IF (I+NOVLF.GT.50) GO TO 40
2484.         XNOV=CUMEAL(I+NOVLF)-CUMEAL(I)
2485.         IF (IP.NE.IF) GO TO 20
2486.         CALL OVTHKF(XNOV,THOV,YR)
2487.         CALL OVCOST(THOV,REHPLM(I))
2488.         THOV= THOV + 0.5
2489.         CALL OVCOST(THOV,PEHPLM(I))
2490.         GO TO 10
2491.     20     CALL GETD(ALOG10(XNOV),PIOV,PTOV,D,DOV)
2492.         DEX=D
2493.         CALL OVTHKR(DOV,DEX,THOV)
2494.
2495.         CALL OVCOST(THOV,REHPLM(I))
2496.     10 CONTINUE
2497.     GO TO 99
2498.     40 WRITE (LO,601)
2499.     601 FORMAT (10X,'TRAFFIC FORECAST PERIOD EXCEEDED')
2500.     99 RETURN

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2501.      END
2502.      *****
2503.      *
2504.      *   SUBROUTINE ACOST: CALCULATES THE TOTAL COST OF ROU-
2505.      *   TIME AND PREVENTIVE MAINTENANCE, AND REHABILITATION *
2506.      *   COST FOR THE PLANNING HORIZON *
2507.      *
2508.      *****
2509.      SUBROUTINE ACOST
2510.      COMMON /TIME/ OVLIF, NYAP, NYR, YR(40)
2511.      COMMON /COST/ COSTRH(20), COSTRM(20), COSTPM(20), FMILES(20)
2512.      -, FMILEP(20)
2513.      COMMON /ACOST/ ACCRM(20), ACCRH(20), ACCPM(20), ACCFM(20)
2514.      -, ACCFP(20)
2515.      DO 100 I=1, NYAP
2516.          ACCRM(I)=ACCRM(I)+COSTRM(I)
2517.          ACCRH(I)=ACCRH(I)+COSTRH(I)
2518.          ACCPM(I)=ACCPM(I)+COSTPM(I)
2519.          ACCFM(I)=ACCFM(I)+FMILES(I)
2520.          ACCFP(I)=ACCFP(I)+FMILEP(I)
2521.      100 CONTINUE
2522.      RETURN
2523.      END
2524.      *****
2525.      *
2526.      *   SUBROUTINE PCOST: CALCULATES PRESENT VALUE OF COST *
2527.      *   STREAM OVER PLANNING HORIZON FOR SPECIFIED INTEREST *
2528.      *   RATE *
2529.      *
2530.      *****
2531.
2532.      SUBROUTINE PCOST
2533.      COMMON /TIME/ OVLIF, NYAP, NYR, YR(40)
2534.      COMMON /ACOST/ ACCRM(20), ACCRH(20), ACCPM(20), ACCFM(20)
2535.      -, ACCFP(20)
2536.      COMMON /SHIFT/ ISHIFT
2537.      COMMON /FUNDS/ APOF(20,2), RTINT, RTINF
2538.      COMMON /IO/ LI, LO, LD
2539.      COMMON /EXPVT/ NPT, THICK(4), MTYPE(4), NLAY, IP, IF, IR, IC
2540.      COMMON /MECH/XKT, NRU, NLH, ND, NDEL, IACR, NREG, IYR, JYR, CONSTR(20)
2541.      COMMON /TEMPC/ CONTP(25), DISTCI
2542.      DIMENSION INCOV(6)
2543.      PRM=0.
2544.      PRH=0.
2545.      PPM=0.
2546.      TFM=0.
2547.      TPM=0.
2548.      FCTR=1/(1+RTINT)
2549.      DO 100 J=1, NYAP
2550.          PRM=PRM+ACCRM(J)*FCTR**J
2551.          PRH=PRH+ACCRH(J)*FCTR**J
2552.          PPM=PPM+ACCPM(J)*FCTR**J
2553.          TFM=TFM+ACCFM(J)
2554.          TPM=TPM+ACCFP(J)
2555.      100 CONTINUE
2556.      WRITE (LO,600)
2557.      600 FORMAT (1X, '-----',
2558.      1 '-----',
2559.      2 '-----', ///, 42X, 'COST SUMMARY')
2560.      IF (ISHIFT.EQ.0) WRITE(LO,615)
2561.      IF (ISHIFT.EQ.1) WRITE(LO,616)

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2562. 615 FORMAT(40X,'PRESENT LIMITS')
2563. 616 FORMAT(40X,'PROPOSED LIMITS')
2564. IF (IP.EQ.IF) WRITE(LO,610) NREG
2565. IF (IP.EQ.IR) WRITE(LO,617)
2566. 617 FORMAT(40X,'RIGID PAVEMENTS')
2567. 610 FORMAT (40X,'REGION :',.2X,I5,/)
2568. WRITE (LO,601)
2569. 601 FORMAT (12X,'YEAR ',12X,'ROUT MAINT',13X,'REHAB MILES',
2570. 1 14X,' REHAB ',13X,
2571. 1 'PREV MAINT',/,29X,' COST ($) ',13X,'NPOT POT',13X,
2572. 2 ' COST ($) ',14X,' COST ($) ',/)
2573. DO 666 I=1,NYAP
2574. ACCRM(I)=ANINT(ACCRM(I))
2575. ACCRH(I)=ANINT(ACCRH(I))
2576. ACCPM(I)=ANINT(ACCPM(I))
2577. 666 CONTINUE
2578. WRITE(LO,602) (I,ACCRM(I),ACCFM(I),ACCFP(I),ACCRH(I),
2579. -ACCPM(I),I=1,NYAP)
2580. 602 FORMAT ((10X,I5,10X,F14.2,09X,F7.2,2X,F7.2,2(09X,F14.2)))
2581. PRM=ANINT(PRM)
2582. PRH=ANINT(PRH)
2583. PPM=ANINT(PPM)
2584. WRITE (LO,603) TFM,TPM,PRM,PRH,PPM,TFM+TPM
2585. 603 FORMAT(//,2X,'TOTAL',18X,23X,F7.2,1X,F8.2,
2586. /,2X,'PRESENT COSTS',10X,F14.2,9X,16(' '),
2587. - 2(9X,F14.2),/,2X,'TOTAL LANE MILES',34X,F9.2,///)
2588. WRITE(LO,619)
2589. 619 FORMAT (1X,'-----',
2590. 1 '-----',
2591. 2 '-----')
2592. RETURN
2593. END

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APPENDIX E:

AUXILIARY PROGRAMS FOR AUTOMATED INPUT PROCEDURE

```
1. \* PROGRAM. SORT1
2. \* PROGRAM-NO. 01
3. DATA ONE;
4.     INFILE VEHICLE.CLASS.1985;
5.     INPUT  SPAC1 $ 1-5      STATC $ 6-8
6.           SPAC2 $ 9-80;
7.     ;
8. PROC SORT DATA=ONE;
9.     BY STATC;
10.    ;
11. DATA _NULL_;
12. SET ONE;
13. FILE CLS1985;
14.     PUT   SPAC1 $ 1-5      STATC $ 6-8
15.         SPAC2 $ 9-80;
```

1. IDENTIFICATION DIVISION.
2. PROGRAM-ID. TRUCKCOB.
3. *PROGRAM-NO. 02
4. AUTHOR. JUAN C. GARCIA.
5. INSTALLATION. TEXAS A&M UNIVERSITY - TCC.
6. DATE-WRITTEN. SEPTEMBER, 1986.
7. REMARKS. THIS PROGRAM GENERATES PERCENTAGES OF EACH TYPE
8. OF TRUCK FOR A GIVEN SCENARIO. IT IS PART OF
9. THE RENU3 INPUT AUTOMATION PACKAGE.
10. ENVIRONMENT DIVISION.
11. CONFIGURATION SECTION.
12. SOURCE-COMPUTER. AMDAHL-5860.
13. OBJECT-COMPUTER. AMDAHL-5860.
14. INPUT-OUTPUT SECTION.
15. FILE-CONTROL.
16. SELECT CLS1985 ASSIGN TO UT-S-CLS1985.
17. SELECT TRUCKS ASSIGN TO UT-S-TRUCKS.
18. SELECT STATIONS ASSIGN TO UT-S-STATIONS
19. FILE STATUS SKSTA.
20. DATA DIVISION.
21. FILE SECTION.
22.
23. FD CLS1985
24. LABEL RECORDS ARE STANDARD
25. RECORD CONTAINS 80 CHARACTERS
26. BLOCK CONTAINS 0 RECORDS
27. RECORDING MODE IS F.
28. 01 F1-RECORD.
29. 02 CARD-F1 PIC X(79).
30. 02 CONT-F1 PIC X(01).
31.
32. FD STATIONS
33. LABEL RECORDS ARE STANDARD
34. RECORD CONTAINS 10 CHARACTERS
35. BLOCK CONTAINS 0 RECORDS
36. RECORDING MODE IS F.
37. 01 ST-RECORD.
38. 02 DISTRI-S PIC 9(02).
39. 02 DESCOM-S PIC 9(02).
40. 02 COUNST-S PIC X(03).
41. 02 WEIGST-S PIC X(03).
42.
43. FD TRUCKS
44. LABEL RECORDS ARE STANDARD
45. RECORD CONTAINS 66 CHARACTERS
46. BLOCK CONTAINS 0 RECORDS
47. RECORDING MODE IS F.
48. 01 TR-RECORD.
49. 02 DISTRI-T PIC 9(02).
50. 02 COMNUM-T PIC 9(04).
51. 02 PERCENT-T.
52. 03 PER PIC 9(06) OCCURS 10.
53.
54. WORKING-STORAGE SECTION.
55. 01 PERTAB.
56. 03 PERTAB-B OCCURS 25.
57. 04 PERTAB-C OCCURS 36.
58. 05 P PIC 9(06) OCCURS 10.
59. 01 FRECORD.
60. 02 FILLER PIC X(05).

61.	02	STATID	PIC X(03).
62.	02	FILLER	PIC X(09).
63.	02	C1	PIC 9(05) VALUE 0.
64.	02	C2	PIC 9(05) VALUE 0.
65.	02	C3	PIC 9(05) VALUE 0.
66.	02	C4	PIC 9(05) VALUE 0.
67.	02	S1	PIC 9(03) VALUE 0.
68.	02	B1	PIC 9(04) VALUE 0.
69.	02	B2	PIC 9(03) VALUE 0.
70.	02	T1	PIC 9(04) VALUE 0.
71.	02	T2	PIC 9(04) VALUE 0.
72.	02	N2D	PIC 9(04) VALUE 0.
73.	02	N3A	PIC 9(03) VALUE 0.
74.	02	N2S1	PIC 9(03) VALUE 0.
75.	02	N2S2	PIC 9(04) VALUE 0.
76.	02	N3S2	PIC 9(04) VALUE 0.
77.	02	FILLER	PIC X(06).
78.	01	FRECORDC.	
79.	02	C5	PIC X(23).
80.	02	T5	PIC 9(04) VALUE 0.
81.	02	C6	PIC X(06).
82.	02	T6	PIC 9(04) VALUE 0.
83.	02	C7	PIC X(06).
84.	02	T7	PIC 9(04) VALUE 0.
85.	02	C8	PIC X(06).
86.	02	T8	PIC 9(04) VALUE 0.
87.	02	C9	PIC X(06).
88.	02	T9	PIC 9(04) VALUE 0.
89.	02	FILLER	PIC X(12).
90.	01	TOTAL	PIC 9(06).
91.	01	D1	PIC 9(02).
92.	01	D2	PIC 9(02).
93.	01	D3	PIC 9(02).
94.	01	D4	PIC 9(02).
95.	01	D5	PIC 9(02).
96.	01	D6	PIC 9(02).
97.	01	D	PIC 9(02).
98.	01	C	PIC 9(02).
99.	01	Y	PIC 9(02).
100.	01	CN	PIC 9(04) VALUE 0.
101.	01	STATION	PIC X(03).
102.	01	J	PIC 9(02).
103.	01	S	PIC 9(02).
104.	01	I	PIC 9(02).
105.	01	SKSTA	PIC X(02).
106.	01	COMNUM	PIC 9(04).
107.	01	N2S12	PIC 9(04) VALUE 0.
108.	01	N3S1	PIC 9(04) VALUE 0.
109.	01	N3S3	PIC 9(04) VALUE 0.
110.	01	N3S12	PIC 9(04) VALUE 0.
111.	01	N2S22	PIC 9(04) VALUE 0.
112.			
113.		PROCEDURE DIVISION.	
114.		OPEN INPUT STATIONS	
115.		OUTPUT TRUCKS.	
116.		MOVE ZEROES TO PERTAB.	
117.			
118.		P2.	
119.		READ STATIONS AT END GO TO WRITE-TRUCKS.	
120.		OPEN INPUT CLS1985.	
121.		MOVE COUNST-S TO STATION.	

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122.      PERFORM IF-DESCOMP.
123.
124.      READ-FILE1.
125.      READ CLS1985 AT END PERFORM MERROR1
126.              GO TO P2.
127.      MOVE F1-RECORD TO FRECORD.
128.      IF STATID > STATION PERFORM FINAL-P
129.              GO TO P2.
130.      IF (C1 NOT NUMERIC) OR (C2 NOT NUMERIC) OR
131.          (C3 NOT NUMERIC) OR (C4 NOT NUMERIC) OR
132.          (S1 NOT NUMERIC) OR (B1 NOT NUMERIC) OR
133.          (B2 NOT NUMERIC) OR (T1 NOT NUMERIC) OR
134.          (N2D NOT NUMERIC) OR (N3A NOT NUMERIC) OR
135.          (N2S1 NOT NUMERIC) OR (N2S2 NOT NUMERIC) OR
136.          (N3S2 NOT NUMERIC) GO TO READ-FILE1.
137.      IF STATID < COUNST-S GO TO READ-FILE1.
138.      MOVE ZEROES TO T5 T6 N2S12 T7 T8.
139.      IF CONT-F1 = 9 GO TO READ-FILE1.
140.      IF CONT-F1 = 1 PERFORM READ-CARD2.
141.      IF (T5 NOT NUMERIC) OR (T6 NOT NUMERIC) OR
142.          (T7 NOT NUMERIC) OR (T8 NOT NUMERIC) OR
143.          (T9 NOT NUMERIC) GO TO READ-FILE1.
144.      MOVE DISTRI-S TO D.
145.      COMPUTE TOTAL = C1 + C2 + C3 + C4 + S1 + B1 + B2 +
146.          T1 + T2 + N2S1 + N2S2 + T5 + T6 + T7 +
147.          T8 + N2D + N3A + N3S2 + T9.
148.      ADD 1 TO CN.
149.      IF TOTAL = 0 MOVE 10 TO TOTAL.
150.      IF C5 = '521200' MOVE T5 TO N2S12 GO TO FC1.
151.      IF C5 = '331000' MOVE T5 TO N3S1 GO TO FC1.
152.      IF C5 = '333000' MOVE T5 TO N3S3 GO TO FC1.
153.      IF C5 = '531200' MOVE T5 TO N3S12 GO TO FC1.
154.      IF C5 = '522200' MOVE T5 TO N2S22.
155.      FC1.
156.      IF C6 = '521200' MOVE T6 TO N2S12 GO TO FC2.
157.      IF C6 = '331000' MOVE T6 TO N3S1 GO TO FC2.
158.      IF C6 = '333000' MOVE T6 TO N3S3 GO TO FC2.
159.      IF C6 = '531200' MOVE T6 TO N3S12 GO TO FC2.
160.      IF C6 = '522200' MOVE T6 TO N2S22 GO TO FC2.
161.      FC2.
162.      IF C7 = '521200' MOVE T7 TO N2S12 GO TO FC3.
163.      IF C7 = '331000' MOVE T7 TO N3S1 GO TO FC3.
164.      IF C7 = '333000' MOVE T7 TO N3S3 GO TO FC3.
165.      IF C7 = '531200' MOVE T7 TO N3S12 GO TO FC3.
166.      IF C7 = '522000' MOVE T7 TO N2S22.
167.      FC3.
168.      IF C8 = '521200' MOVE T8 TO N2S12 GO TO FC4.
169.      IF C8 = '331000' MOVE T8 TO N3S1 GO TO FC4.
170.      IF C8 = '333000' MOVE T8 TO N3S3 GO TO FC4.
171.      IF C8 = '531200' MOVE T8 TO N3S12 GO TO FC4.
172.      IF C8 = '522000' MOVE T8 TO N2S22.
173.      FC4.
174.      IF C9 = '521200' MOVE T9 TO N2S12 GO TO FC5.
175.      IF C9 = '331000' MOVE T9 TO N3S1 GO TO FC5.
176.      IF C9 = '333000' MOVE T9 TO N3S3 GO TO FC5.
177.      IF C9 = '531200' MOVE T9 TO N3S12 GO TO FC5.
178.      IF C9 = '522200' MOVE T9 TO N2S22.
179.      FC5.
180.      COMPUTE P (D, D1, 1) = P (D, D1, 1) + N2D * 100 / TOTAL.
181.      COMPUTE P (D, D1, 2) = P (D, D1, 2) + N3A * 100 / TOTAL.
182.      COMPUTE P (D, D1, 3) = P (D, D1, 3) + N2S1 * 100 / TOTAL.

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183. COMPUTE P (D, D1, 4) = P (D, D1, 4) + N2S2 * 100 / TOTAL.
184. COMPUTE P (D, D1, 5) = P (D, D1, 5) + N3S2 * 100 / TOTAL.
185. COMPUTE P (D, D1, 6) = P (D, D1, 6) + N2S12 * 100 / TOTAL.
186. COMPUTE P (D, D1, 7) = P (D, D1, 7) + N3S1 * 100 / TOTAL.
187. COMPUTE P (D, D1, 8) = P (D, D1, 8) + N3S3 * 100 / TOTAL.
188. COMPUTE P (D, D1, 9) = P (D, D1, 9) + N3S12 * 100 / TOTAL.
189. COMPUTE P (D, D1, 10) = P (D, D1, 10) + N2S22 * 100 / TOTAL.
190. GO TO READ-FILE1.

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FINAL-P.

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191.
192. IF CN = 0 MOVE 1 TO CN.
193. COMPUTE P (D, D1, 1) ROUNDED = P (D, D1, 1) * 100 / CN.
194. COMPUTE P (D, D1, 2) ROUNDED = P (D, D1, 2) * 100 / CN.
195. COMPUTE P (D, D1, 3) ROUNDED = P (D, D1, 3) * 100 / CN.
196. COMPUTE P (D, D1, 4) ROUNDED = P (D, D1, 4) * 100 / CN.
197. COMPUTE P (D, D1, 5) ROUNDED = P (D, D1, 5) * 100 / CN.
198. COMPUTE P (D, D1, 6) ROUNDED = P (D, D1, 6) * 100 / CN.
199. COMPUTE P (D, D1, 7) ROUNDED = P (D, D1, 7) * 100 / CN.
200. COMPUTE P (D, D1, 8) ROUNDED = P (D, D1, 8) * 100 / CN.
201. COMPUTE P (D, D1, 9) ROUNDED = P (D, D1, 9) * 100 / CN.
202. COMPUTE P (D, D1, 10) ROUNDED = P (D, D1, 10) * 100 / CN.
203. MOVE 0 TO CN.
204. PERFORM COPY1 THRU END-COPY1
205. VARYING I FROM 1 BY 1 UNTIL I > 4.
206. CLOSE CLS1985.
207.
208.

```

COPY1.

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209. MOVE P (D, D1, I) TO P (D, D2, I), P (D, D3, I)
210. P (D, D4, I), P (D, D5, I), P (D, D6, I).
211.
212. END-COPY1.
213.

```

IF-DESCOMP.

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214. IF DESCOM-S = 11 MOVE 1 TO D1
215. MOVE 2 TO D2
216. MOVE 5 TO D3
217. MOVE 6 TO D4
218. MOVE 9 TO D5
219. MOVE 10 TO D6.
220. IF DESCOM-S = 12 MOVE 3 TO D1
221. MOVE 4 TO D2
222. MOVE 7 TO D3
223. MOVE 8 TO D4
224. MOVE 11 TO D5
225. MOVE 12 TO D6.
226. IF DESCOM-S = 21 MOVE 13 TO D1
227. MOVE 14 TO D2
228. MOVE 17 TO D3
229. MOVE 18 TO D4
230. MOVE 21 TO D5
231. MOVE 22 TO D6.
232. IF DESCOM-S = 22 MOVE 15 TO D1
233. MOVE 16 TO D2
234. MOVE 19 TO D3
235. MOVE 20 TO D4
236. MOVE 23 TO D5
237. MOVE 24 TO D6.
238. IF DESCOM-S = 31 MOVE 25 TO D1
239. MOVE 26 TO D2
240. MOVE 29 TO D3
241. MOVE 30 TO D4
242. MOVE 33 TO D5
243.

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244.          MOVE 34 TO D6.
245.      IF DESCOM-S = 32 MOVE 27 TO D1
246.          MOVE 28 TO D2
247.          MOVE 31 TO D3
248.          MOVE 32 TO D4
249.          MOVE 35 TO D5
250.          MOVE 36 TO D6.
251.
252.      WRITE-TRUCKS.
253.          PERFORM TRUCK1 THRU END-TRUCK1
254.              VARYING D FROM 1 BY 1 UNTIL D > 25.
255.          GO TO CLOSE-FILES.
256.
257.      TRUCK1.
258.          IF D = 22 GO TO END-TRUCK1.
259.          MOVE D TO DISTRI-T.
260.          PERFORM TRUCK2 THRU END-TRUCK2
261.              VARYING C FROM 1 BY 1 UNTIL C > 36.
262.      END-TRUCK1.
263.
264.      TRUCK2.
265.          PERFORM IF-COMB.
266.          PERFORM TRUCK3 THRU END-TRUCK3
267.              VARYING J FROM 1 BY 1 UNTIL J > 10.
268.          MOVE D TO DISTRI-T.
269.          MOVE COMNUM TO COMNUM-T.
270.          WRITE TR-RECORD.
271.      END-TRUCK2.
272.
273.      IF-COMB.
274.          IF C = 1 MOVE 1111 TO COMNUM.
275.          IF C = 2 MOVE 1112 TO COMNUM.
276.          IF C = 3 MOVE 1121 TO COMNUM.
277.          IF C = 4 MOVE 1122 TO COMNUM.
278.          IF C = 5 MOVE 1211 TO COMNUM.
279.          IF C = 6 MOVE 1212 TO COMNUM.
280.          IF C = 7 MOVE 1221 TO COMNUM.
281.          IF C = 8 MOVE 1222 TO COMNUM.
282.          IF C = 9 MOVE 1311 TO COMNUM.
283.          IF C = 10 MOVE 1312 TO COMNUM.
284.          IF C = 11 MOVE 1321 TO COMNUM.
285.          IF C = 12 MOVE 1322 TO COMNUM.
286.          IF C = 13 MOVE 2111 TO COMNUM.
287.          IF C = 14 MOVE 2112 TO COMNUM.
288.          IF C = 15 MOVE 2121 TO COMNUM.
289.          IF C = 16 MOVE 2122 TO COMNUM.
290.          IF C = 17 MOVE 2211 TO COMNUM.
291.          IF C = 18 MOVE 2212 TO COMNUM.
292.          IF C = 19 MOVE 2221 TO COMNUM.
293.          IF C = 20 MOVE 2222 TO COMNUM.
294.          IF C = 21 MOVE 2311 TO COMNUM.
295.          IF C = 22 MOVE 2312 TO COMNUM.
296.          IF C = 23 MOVE 2321 TO COMNUM.
297.          IF C = 24 MOVE 2322 TO COMNUM.
298.          IF C = 25 MOVE 3111 TO COMNUM.
299.          IF C = 26 MOVE 3112 TO COMNUM.
300.          IF C = 27 MOVE 3121 TO COMNUM.
301.          IF C = 28 MOVE 3122 TO COMNUM.
302.          IF C = 29 MOVE 3211 TO COMNUM.
303.          IF C = 30 MOVE 3212 TO COMNUM.
304.          IF C = 31 MOVE 3221 TO COMNUM.

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305.          IF C = 32 MOVE 3222 TO COMNUM.
306.          IF C = 33 MOVE 3311 TO COMNUM.
307.          IF C = 34 MOVE 3312 TO COMNUM.
308.          IF C = 35 MOVE 3321 TO COMNUM.
309.          IF C = 36 MOVE 3322 TO COMNUM.
310.
311.          TRUCK3.
312.             MOVE P (D, C, J) TO PER (J).
313.          END-TRUCK3.
314.
315.          READ-CARD2.
316.             READ CLS1985 INTO FRECORDC.
317.
318.          MERROR2.
319.             DISPLAY 'ERROR I/O ' SKSTA.
320.          MERROR1.
321.             CLOSE CLS1985.
322.             DISPLAY 'STATION NOT FOUND IN FILE1'.
323.             DISPLAY COUNST-S.
324.
325.          CLOSE-FILES.
326.             CLOSE STATIONS TRUCKS.
327.             STOP RUN.
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1. IDENTIFICATION DIVISION.
2. PROGRAM-ID. LOADCOB.
3. *PROGRAM-NO. 03
4. AUTHOR. JUAN C. GARCIA.
5. INSTALLATION. TEXAS A&M UNIVERSITY - TCC.
6. DATE-WRITTEN. DEC, 1986.
7. DATE-COMPILED. DEC 8, 1986.
8. REMARKS.
9. THIS PROGRAM GENERATES THE FOLLOWING DISTRIBUTIONS
10. USING CLASSIFICATION AND WEIGHING-IN-MOTION DATA FILES:
11. 1) SINGLE AXLE WEIGHT DISTRIBUTION
12. 2) TANDEM AXLE WEIGHT DISTRIBUTION
13. 3) GROSS VEHICLE WEIGHT DISTRIBUTION
14. 4) EMPTY VEHICLE WEIGHT DISTRIBUTION
15. THIS PROGRAM IS PART OF THE RENU3 INPUT AUTOMATION
16. PACKAGE.
17. ENVIRONMENT DIVISION.
18. CONFIGURATION SECTION.
19. SOURCE-COMPUTER. AMDAHL-5860.
20. OBJECT-COMPUTER. AMDAHL-5860.
21. INPUT-OUTPUT SECTION.
22. FILE-CONTROL.
23. SELECT TRWEIGHT ASSIGN TO UT-S-TRWEIGHT.
24. SELECT LOADDIS ASSIGN TO UT-S-LOADDIS.
25. SELECT GVEMDIS ASSIGN TO UT-S-GVEMDIS.
26.
27. DATA DIVISION.
28. FILE SECTION.
29.
30. FD TRWEIGHT
31. LABEL RECORDS ARE STANDARD
32. RECORD CONTAINS 80 CHARACTERS
33. BLOCK CONTAINS 0 RECORDS
34. RECORDING MODE IS F.
35. 01 TW-RECORD.
36. 02 CARD-TW PIC X(79).
37. 02 CONT-TW PIC X(01).
38.
39.
40. FD LOADDIS
41. LABEL RECORDS ARE STANDARD
42. RECORD CONTAINS 120 CHARACTERS
43. BLOCK CONTAINS 0 RECORDS
44. RECORDING MODE IS F.
45. 01 LD-RECORD.
46. 02 CARD-LD PIC X(120).
47.
48.
49. FD GVEMDIS
50. LABEL RECORDS ARE STANDARD
51. BLOCK CONTAINS 0 RECORDS
52. RECORDING MODE IS F.
53. 01 GE-RECORD.
54. 02 CARD-GE PIC X(112).
55.
56.
57. WORKING-STORAGE SECTION.
58. 01 TWO.
59. 02 FILLER PIC X(05).
60. 02 STATID PIC X(03).

61.	02	FILLER	PIC X(09).
62.	02	TRTYPE	PIC X(06).
63.	02	FILLER	PIC X(18).
64.	02	HGVW	PIC 9(04).
65.	02	A-AXLE	PIC 9(03).
66.	02	B-AXLE	PIC 9(03).
67.	02	C-AXLE	PIC 9(03).
68.	02	D-AXLE	PIC 9(03).
69.	02	E-AXLE	PIC 9(03).
70.	02	AB-SPC	PIC 9(03).
71.	02	BC-SPC	PIC 9(03).
72.	02	CD-SPC	PIC 9(03).
73.	02	DE-SPC	PIC 9(03).
74.	02	FILLER	PIC X(07).
75.	01	STATHD.	
76.	02	CODSTA	PIC X(03).
77.	02	FILLER	PIC X(117).
78.	01	DISHEAD.	
79.	02	DISTHD	PIC 9(02).
80.	02	COMBHD	PIC 9(02).
81.	02	TDISHD	PIC 9(01).
82.	02	FILLER	PIC X(115).
83.	01	DISTHEAD.	
84.	02	DISHDT	PIC 9(02).
85.	02	COMHDT	PIC 9(04).
86.	02	TDIHDT	PIC 9(01).
87.	02	FILLER	PIC X(113).
88.	01	SINGLE.	
89.	02	SINTAB.	
90.	03	SIN	PIC 9(08) OCCURS 11.
91.	02	FILLER	PIC X(32).
92.	01	TANDEM.	
93.	02	TANTAB.	
94.	03	TAN	PIC 9(08) OCCURS 15.
95.	01	SINMAR.	
96.	02	SINM	OCCURS 12 TIMES.
97.	03	SINMAC	OCCURS 10 TIMES.
98.	04	SING	PIC 9(08).
99.	01	TANMAR.	
100.	02	TANM	OCCURS 16 TIMES.
101.	03	TANMAC	OCCURS 10 TIMES.
102.	04	TAND	PIC 9(08).
103.	01	SINMAR1.	
104.	02	SINM1	OCCURS 36.
105.	03	SINMA1	OCCURS 10.
106.	04	SING1	PIC 9(08) OCCURS 11.
107.	01	TANMAR1.	
108.	02	TANM1	OCCURS 36.
109.	03	TANMA1	OCCURS 10.
110.	04	TAND1	PIC 9(08) OCCURS 15.
111.	01	GVWREC.	
112.	02	GVWTAB.	
113.	03	GVW	PIC 9(04) OCCURS 28.
114.	01	EMPREC.	
115.	02	EMPTAB.	
116.	03	EMP	PIC 9(04) OCCURS 14.
117.	02	FILLER	PIC X(56).
118.	01	GVWMAR.	
119.	02	GVWM	OCCURS 28 TIMES.
120.	03	GVWMAC	OCCURS 10 TIMES.
121.	04	GVWT	PIC 9(04).

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122.      01  EMPMAR.
123.          02  EMPM OCCURS 14 TIMES.
124.          03  EMPMAC OCCURS 10 TIMES.
125.              04  EMPT          PIC 9(04).
126.      01  GVWMAR1.
127.          02  GVWM1 OCCURS 3.
128.              03  GVWMA1 OCCURS 10.
129.                  04  GVW1          PIC 9(04) OCCURS 28.
130.      01  EMPMAR1.
131.          02  EMPM1 OCCURS 3.
132.              03  EMPMA1 OCCURS 10.
133.                  04  EMPT1          PIC 9(04) OCCURS 14.
134.      01  AXLTAB.
135.          02  AXLE          PIC 9(06) OCCURS 15.
136.      01  SPCTAB.
137.          02  SPAC          PIC 9(03) OCCURS 15.
138.      01  TNTAB.
139.          02  TN          PIC 9(06) OCCURS 10.
140.      01  SNTAB.
141.          02  SN          PIC 9(06) OCCURS 10.
142.      01  NGVW          PIC 9(08) VALUE ZEROS.
143.      01  I          PIC 9(02).
144.      01  II          PIC 9(02).
145.      01  J          PIC 9(02).
146.      01  K          PIC 9(02).
147.      01  N          PIC 9(02).
148.      01  L          PIC 9(02).
149.      01  ERRSW          PIC 9(01).
150.      01  NX          PIC 9(02).
151.      01  STATION          PIC X(04).
152.      01  NAXLE          PIC 9(02).
153.      01  IND          PIC 9(01).
154.      01  C          PIC 9(02).
155.      01  DISTRIC          PIC 9(02).
156.      01  C1          PIC 9(02).
157.      01  C2          PIC 9(02).
158.      01  C3          PIC 9(02).
159.      01  C4          PIC 9(02).
160.      01  C5          PIC 9(02).
161.      01  C6          PIC 9(02).
162.
163.      PROCEDURE DIVISION.
164.          OPEN INPUT TRWEIGHT
165.              OUTPUT LOADDIS GVEMDIS.
166.          MOVE '505' TO STATION.
167.          MOVE ZEROES TO SINMAR TANMAR GVWMAR EMPMAR.
168.
169.      P2.
170.          READ TRWEIGHT AT END PERFORM WRITE-LOAD
171.              GO TO GENERATE-DIST.
172.          MOVE CARD-TW TO TWO.
173.          IF STATID NOT = STATION PERFORM WRITE-LOAD.
174.          IF (A-AXLE NOT NUMERIC) OR (B-AXLE NOT NUMERIC) OR
175.              (C-AXLE NOT NUMERIC) OR (D-AXLE NOT NUMERIC) OR
176.              (E-AXLE NOT NUMERIC) OR (AB-SPC NOT NUMERIC) OR
177.              (BC-SPC NOT NUMERIC) OR (CD-SPC NOT NUMERIC) OR
178.              (DE-SPC NOT NUMERIC) GO TO P2.
179.          IF CONT-TW = '1' GO TO P2.
180.          IF ((TRTYPE NOT = '220000') AND (TRTYPE NOT = '321000')
181.              AND (TRTYPE NOT = '332000') AND (TRTYPE NOT = '521200')
182.              AND (TRTYPE NOT = '230000') AND (TRTYPE NOT = '331000'))

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183.      AND (TRTYPE NOT = '332000') AND (TRTYPE NOT = '333000')
184.      AND (TRTYPE NOT = '521200') AND (TRTYPE NOT = '522200')
185.      GO TO P2.
186.      MOVE ZEROES TO TINTAB SNTAB AXLTAB SPCTAB NAXLE.
187.      MOVE CARD-TW TO TWO.
188.      IF A-AXLE NOT = 0  ADD 1 TO NAXLE
189.                          COMPUTE AXLE (NAXLE) = A-AXLE * 100.
190.      IF B-AXLE NOT = 0  MOVE AB-SPC TO SPAC (NAXLE)
191.                          COMPUTE AXLE (NAXLE) = B-AXLE * 100
192.                          ADD 1 TO NAXLE.
193.      IF C-AXLE NOT = 0  MOVE BC-SPC TO SPAC (NAXLE)
194.                          COMPUTE AXLE (NAXLE) = C-AXLE * 100
195.                          ADD 1 TO NAXLE.
196.      IF D-AXLE NOT = 0  MOVE CD-SPC TO SPAC (NAXLE)
197.                          COMPUTE AXLE (NAXLE) = D-AXLE * 100
198.                          ADD 1 TO NAXLE.
199.      IF E-AXLE NOT = 0  MOVE DE-SPC TO SPAC (NAXLE)
200.                          COMPUTE AXLE (NAXLE) = E-AXLE * 100
201.                          ADD 1 TO NAXLE.
202.      *
203.      *
204.      *
205.      LOAD.
206.      MOVE O TO ERRSW.
207.      COMPUTE NX = NAXLE - 1.
208.      PERFORM CHECK-SPC THRU END-CHECK
209.      VARYING I FROM 1 BY 1 UNTIL (I > NX) OR (ERRSW = 1).
210.      IF ERRSW = 1 GO TO P2.
211.      GO TO CHECK-TYP.
212.
213.      CHECK-SPC.
214.          IF (SPAC (I) NOT > 0) OR (SPAC (I) NOT < 800)
215.              MOVE 1 TO ERRSW.
216.      END-CHECK.
217.
218.      CHECK-TYP.
219.          IF TRTYPE = '220000'  MOVE 1 TO J.
220.          IF TRTYPE = '230000'  MOVE 2 TO J.
221.          IF TRTYPE = '332000'  MOVE 3 TO J.
222.          IF TRTYPE = '521200'  MOVE 4 TO J.
223.          IF TRTYPE = '321000'  MOVE 5 TO J.
224.          IF TRTYPE = '322000'  MOVE 6 TO J.
225.          IF TRTYPE = '331000'  MOVE 7 TO J.
226.          IF TRTYPE = '333000'  MOVE 8 TO J.
227.          IF TRTYPE = '531200'  MOVE 9 TO J.
228.          IF TRTYPE = '522200'  MOVE 10 TO J.
229.          MOVE O TO L.
230.          PERFORM CALC-SING THRU END-SING
231.              VARYING I FROM 1 BY 1 UNTIL I > NX.
232.          GO TO CHECK1-TAN.
233.
234.      CALC-SING.
235.          IF SPAC (I) > 50  GO TO END-SING.
236.          ADD 1 TO L.
237.          COMPUTE II = I + 1.
238.          COMPUTE TN (L) = AXLE (I) + AXLE (II)
239.          MOVE 9999 TO AXLE (I).
240.          MOVE 9999 TO AXLE (II).
241.          IF SPAC (II) NOT > 50  ADD 1 TO I
242.              ADD 1 TO II
243.              ADD AXLE (II) TO TN (L)

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244.                                MOVE 9999 TO AXLE (II).
245.    END-SING.
246.
247.    CHECK1-TAN.
248.        MOVE 0 TO K.
249.        PERFORM CHECK-TAN THRU END-TAN
250.        VARYING I FROM 1 BY 1 UNTIL I > NX.
251.        GO TO TANDDIS.
252.
253.    CHECK-TAN.
254.        IF AXLE (I) = 9999 GO TO END-TAN.
255.        ADD 1 TO K.
256.        MOVE AXLE (I) TO SN (K).
257.    END-TAN.
258.
259.    TANDDIS.
260.        IF L = 0 AND K > 0 GO TO SINGDIS.
261.        PERFORM TANDINT THRU END-TANDINT
262.        VARYING I FROM 1 BY 1 UNTIL I > L.
263.        GO TO SINGDIS.
264.
265.    TANDINT.
266.        IF TN (I) NOT > 6000 MOVE 1 TO N
267.            GO TO T1.
268.        IF TN (I) NOT > 12000 MOVE 2 TO N
269.            GO TO T1.
270.        IF TN (I) NOT > 18000 MOVE 3 TO N
271.            GO TO T1.
272.        IF TN (I) NOT > 24000 MOVE 4 TO N
273.            GO TO T1.
274.        IF TN (I) NOT > 30000 MOVE 5 TO N
275.            GO TO T1.
276.        IF TN (I) NOT > 32000 MOVE 6 TO N
277.            GO TO T1.
278.        IF TN (I) NOT > 33000 MOVE 7 TO N
279.            GO TO T1.
280.        IF TN (I) NOT > 34000 MOVE 8 TO N
281.            GO TO T1.
282.        IF TN (I) NOT > 36000 MOVE 9 TO N
283.            GO TO T1.
284.        IF TN (I) NOT > 38000 MOVE 10 TO N
285.            GO TO T1.
286.        IF TN (I) NOT > 40000 MOVE 11 TO N
287.            GO TO T1.
288.        IF TN (I) NOT > 42000 MOVE 12 TO N
289.            GO TO T1.
290.        IF TN (I) NOT > 44000 MOVE 13 TO N
291.            GO TO T1.
292.        IF TN (I) NOT > 46000 MOVE 14 TO N
293.            GO TO T1.
294.        IF TN (I) NOT > 50000 MOVE 15 TO N
295.            GO TO T1.
296.        MOVE 16 TO N.
297.    T1. ADD 1 TO TAND (N, J).
298.    END-TANDINT.
299.
300.    SINGDIS.
301.        IF K = 0 GO TO P2.
302.        PERFORM SINGINT THRU END-SINGINT
303.        VARYING I FROM 1 BY 1 UNTIL I > K.
304.        GO TO GVWDIS.

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305.
306. SINGINT.
307.     IF SN (I) NOT > 3000 MOVE 1 TO N
308.         GO TO S1.
309.     IF SN (I) NOT > 7000 MOVE 2 TO N
310.         GO TO S1.
311.     IF SN (I) NOT > 8000 MOVE 3 TO N
312.         GO TO S1.
313.     IF SN (I) NOT > 12000 MOVE 4 TO N
314.         GO TO S1.
315.     IF SN (I) NOT > 16000 MOVE 5 TO N
316.         GO TO S1.
317.     IF SN (I) NOT > 18000 MOVE 6 TO N
318.         GO TO S1.
319.     IF SN (I) NOT > 19000 MOVE 7 TO N
320.         GO TO S1.
321.     IF SN (I) NOT > 20000 MOVE 8 TO N
322.         GO TO S1.
323.     IF SN (I) NOT > 22000 MOVE 9 TO N
324.         GO TO S1.
325.     IF SN (I) NOT > 24000 MOVE 10 TO N
326.         GO TO S1.
327.     IF SN (I) NOT > 26000 MOVE 11 TO N
328.         GO TO S1.
329.     MOVE 12 TO N.
330. S1. ADD 1 TO SING (N, J).
331. END-SINGINT.
332.
333.
334.

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335. GVWDIS.
336.     COMPUTE NGVW = HG VW * 100.
337.     IF NGVW NOT > 10000 MOVE 1 TO N GO TO G1.
338.     IF NGVW NOT > 14000 MOVE 2 TO N GO TO G1.
339.     IF NGVW NOT > 20000 MOVE 3 TO N GO TO G1.
340.     IF NGVW NOT > 22000 MOVE 4 TO N GO TO G1.
341.     IF NGVW NOT > 24000 MOVE 5 TO N GO TO G1.
342.     IF NGVW NOT > 26000 MOVE 6 TO N GO TO G1.
343.     IF NGVW NOT > 28000 MOVE 7 TO N GO TO G1.
344.     IF NGVW NOT > 30000 MOVE 8 TO N GO TO G1.
345.     IF NGVW NOT > 32000 MOVE 9 TO N GO TO G1.
346.     IF NGVW NOT > 34000 MOVE 10 TO N GO TO G1.
347.     IF NGVW NOT > 36000 MOVE 11 TO N GO TO G1.
348.     IF NGVW NOT > 38000 MOVE 12 TO N GO TO G1.
349.     IF NGVW NOT > 40000 MOVE 13 TO N GO TO G1.
350.     IF NGVW NOT > 45000 MOVE 14 TO N GO TO G1.
351.     IF NGVW NOT > 50000 MOVE 15 TO N GO TO G1.
352.     IF NGVW NOT > 55000 MOVE 16 TO N GO TO G1.
353.     IF NGVW NOT > 60000 MOVE 17 TO N GO TO G1.
354.     IF NGVW NOT > 65000 MOVE 18 TO N GO TO G1.
355.     IF NGVW NOT > 70000 MOVE 19 TO N GO TO G1.
356.     IF NGVW NOT > 72000 MOVE 20 TO N GO TO G1.
357.     IF NGVW NOT > 75000 MOVE 21 TO N GO TO G1.
358.     IF NGVW NOT > 80000 MOVE 22 TO N GO TO G1.
359.     IF NGVW NOT > 85000 MOVE 23 TO N GO TO G1.
360.     IF NGVW NOT > 90000 MOVE 24 TO N GO TO G1.
361.     IF NGVW NOT > 95000 MOVE 25 TO N GO TO G1.
362.     IF NGVW NOT > 100000 MOVE 26 TO N GO TO G1.
363.     IF NGVW NOT > 105000 MOVE 27 TO N GO TO G1.
364.     MOVE 28 TO N.
365. G1. ADD 1 TO GVWT (N, J).
     IF J = 1 AND NGVW NOT > 9700 GO TO E1.

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366.      IF J = 2 AND NGVW NOT > 17684 GO TO E1.
367.      IF J = 3 AND NGVW NOT > 20082 GO TO E1.
368.      IF J = 4 AND NGVW NOT > 25160 GO TO E1.
369.      IF J = 5 AND NGVW NOT > 28173 GO TO E1.
370.      IF J = 6 AND NGVW NOT > 29258 GO TO E1.
371.      IF J = 7 AND NGVW NOT > 30258 GO TO E1.
372.      IF J = 8 AND NGVW NOT > 35594 GO TO E1.
373.      IF J = 9 AND NGVW NOT > 36594 GO TO E1.
374.      IF J = 10 AND NGVW NOT > 37594 GO TO E1.
375.      GO TO P2.
376.      E1. ADD 1 TO EMPT (N, J).
377.      GO TO P2.
378.
379.      WRITE-LOAD.
380.      MOVE STATION TO CODSTA.
381.      WRITE LD-RECORD FROM STATHD.
382.      WRITE GE-RECORD FROM STATHD.
383.      PERFORM PSING1 THRU END-PSING1
384.          VARYING J FROM 1 BY 1 UNTIL J > 10.
385.      PERFORM PTAND1 THRU END-PTAND1
386.          VARYING J FROM 1 BY 1 UNTIL J > 10.
387.      PERFORM PGVW1 THRU END-PGVW1
388.          VARYING J FROM 1 BY 1 UNTIL J > 10.
389.      PERFORM PEMPT1 THRU END-PEMPT1
390.          VARYING J FROM 1 BY 1 UNTIL J > 10.
391.      MOVE ZEROES TO SINMAR TANMAR GVVWVW EMPMAR.
392.      MOVE STATID TO STATION.
393.
394.      PSING1.
395.      PERFORM SING2 THRU END-SING2
396.          VARYING I FROM 1 BY 1 UNTIL I > 11.
397.      WRITE LD-RECORD FROM SINGLE.
398.      END-PSING1.
399.
400.      SING2.
401.      MOVE SING (I, J) TO SIN (I).
402.      END-SING2.
403.
404.      PTAND1.
405.      PERFORM TAND2 THRU END-TAND2
406.          VARYING I FROM 1 BY 1 UNTIL I > 15.
407.      WRITE LD-RECORD FROM TANDEM.
408.      END-PTAND1.
409.
410.      TAND2.
411.      MOVE TAND (I, J) TO TAN (I).
412.      END-TAND2.
413.      PGVW1.
414.      PERFORM GVVW2 THRU END-GVVW2
415.          VARYING I FROM 1 BY 1 UNTIL I > 28.
416.      WRITE GE-RECORD FROM GVVWREC.
417.      END-PGVW1.
418.
419.      GVVW2.
420.      MOVE GVVW (I, J) TO GVVW (I).
421.      END-GVVW2.
422.
423.      PEMPT1.
424.      PERFORM EMPT2 THRU END-EMPT2
425.          VARYING I FROM 1 BY 1 UNTIL I > 14.
426.      WRITE GE-RECORD FROM EMPREC.

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427.      END-PEMPT1.
428.
429.      EMPT2.
430.          MOVE EMPT (I, J) TO EMP (I).
431.      END-EMPT2.
432.
433.      GENERATE-DIST.
434.          CLOSE TRWEIGHT LOADDIS GVEMDIS.
435.          STOP RUN.
```

1. IDENTIFICATION DIVISION.
2. PROGRAM-ID. LOADCOB2.
3. *PROGRAM-NO. 04
4. AUTHOR. JUAN C. GARCIA.
5. INSTALLATION. TEXAS A&M UNIVERSITY - TCC.
6. DATE-WRITTEN. DEC, 1986.
7. DATE-COMPILED. DEC 8, 1986.
8. REMARKS.
9. THIS PROGRAM GENERATES THE FOLLOWING DISTRIBUTIONS
10. USING CLASSIFICATION AND WEIGHING-IN-MOTION DATA FILES:
11. 1) SINGLE AXLE WEIGHT DISTRIBUTION
12. 2) TANDEM AXLE WEIGHT DISTRIBUTION
13. 3) GROSS VEHICLE WEIGHT DISTRIBUTION
14. 4) EMPTY VEHICLE WEIGHT DISTRIBUTION
15. THIS PROGRAM IS PART OF THE RENU3 INPUT AUTOMATION
16. PACKAGE.
17. ENVIRONMENT DIVISION.
18. CONFIGURATION SECTION.
19. SOURCE-COMPUTER. AMDAHL-5860.
20. OBJECT-COMPUTER. AMDAHL-5860.
21. INPUT-OUTPUT SECTION.
22. FILE-CONTROL.
23. SELECT STATIONS ASSIGN TO UT-S-STATIONS.
24. SELECT LOADDIS ASSIGN TO UT-S-LOADDIS.
25. SELECT LOADDIST ASSIGN TO UT-S-LOADDIST.
26. SELECT GVEMDIS ASSIGN TO UT-S-GVEMDIS.
27. SELECT GVEMDIST ASSIGN TO UT-S-GVEMDIST.
28.
29. DATA DIVISION.
30. FILE SECTION.
31.
32. FD STATIONS
33. LABEL RECORDS ARE STANDARD
34. BLOCK CONTAINS 0 RECORDS.
35. 01 ST-RECORD.
36. 02 DISTRI-S PIC 9(02).
37. 02 DESCOM-S PIC 9(02).
38. 02 COUNST-S PIC X(03).
39. 02 WEIGST-S PIC X(03).
40.
41. FD LOADDIS
42. LABEL RECORDS ARE STANDARD
43. RECORD CONTAINS 120 CHARACTERS
44. BLOCK CONTAINS 0 RECORDS
45. RECORDING MODE IS F.
46. 01 LD-RECORD.
47. 02 CARD-LD PIC X(120).
48.
49. FD LOADDIST
50. LABEL RECORDS ARE STANDARD
51. RECORD CONTAINS 120 CHARACTERS
52. BLOCK CONTAINS 0 RECORDS
53. RECORDING MODE IS F.
54. 01 LT-RECORD.
55. 02 CARD-LT PIC X(120).
56.
57. FD GVEMDIS
58. LABEL RECORDS ARE STANDARD
59. BLOCK CONTAINS 0 RECORDS
60. RECORDING MODE IS F.

61.	01	GE-RECORD.	
62.	02	CARD-GE	PIC X(112).
63.			
64.	FD	GVEMDIST	
65.		LABEL RECORDS ARE STANDARD	
66.		BLOCK CONTAINS 0 RECORDS	
67.		RECORDING MODE IS F.	
68.	01	GT-RECORD.	
69.	02	CARD-GT	PIC X(112).
70.			
71.		WORKING-STORAGE SECTION.	
72.	01	TWO.	
73.	02	FILLER	PIC X(05).
74.	02	STATID	PIC X(03).
75.	02	FILLER	PIC X(09).
76.	02	TRTYPE	PIC X(06).
77.	02	FILLER	PIC X(18).
78.	02	HGVW	PIC 9(04).
79.	02	A-AXLE	PIC 9(03).
80.	02	B-AXLE	PIC 9(03).
81.	02	C-AXLE	PIC 9(03).
82.	02	D-AXLE	PIC 9(03).
83.	02	E-AXLE	PIC 9(03).
84.	02	AB-SPC	PIC 9(03).
85.	02	BC-SPC	PIC 9(03).
86.	02	CD-SPC	PIC 9(03).
87.	02	DE-SPC	PIC 9(03).
88.	02	FILLER	PIC X(07).
89.	01	STATHD.	
90.	02	CODSTA	PIC X(03).
91.	02	FILLER	PIC X(117).
92.	01	DISHEAD.	
93.	02	DISTHD	PIC 9(02).
94.	02	COMBHD	PIC 9(02).
95.	02	TDISHD	PIC 9(01).
96.	02	FILLER	PIC X(115).
97.	01	DISTHEAD.	
98.	02	DISHDT	PIC 9(02).
99.	02	COMHDT	PIC 9(04).
100.	02	TDIHDT	PIC 9(01).
101.	02	FILLER	PIC X(113).
102.	01	SINGLE.	
103.	02	SINTAB.	
104.	03	SIN	PIC 9(08) OCCURS 11.
105.	02	FILLER	PIC X(32).
106.	01	TANDEM.	
107.	02	TANTAB.	
108.	03	TAN	PIC 9(08) OCCURS 15.
109.	01	SINMAR.	
110.	02	SINM OCCURS 12 TIMES.	
111.	03	SINMAC OCCURS 10 TIMES.	
112.	04	SING	PIC 9(08).
113.	01	TANMAR.	
114.	02	TANM OCCURS 16 TIMES.	
115.	03	TANMAC OCCURS 10 TIMES.	
116.	04	TAND	PIC 9(08).
117.	01	SINMAR1.	
118.	02	SINM1 OCCURS 36.	
119.	03	SINMA1 OCCURS 10.	
120.	04	SING1	PIC 9(08) OCCURS 11.
121.	01	TANMAR1.	

122. 02 TANM1 OCCURS 36.
123. 03 TANMA1 OCCURS 10.
124. 04 TAND1 PIC 9(08) OCCURS 15.
125. 01 GVVREC.
126. 02 GVWTAB.
127. 03 GVW PIC 9(04) OCCURS 28.
128. 01 EMPREC.
129. 02 EMPTAB.
130. 03 EMP PIC 9(04) OCCURS 14.
131. 02 FILLER PIC X(56).
132. 01 GVVMMAR.
133. 02 GVVMM OCCURS 28 TIMES.
134. 03 GVVMMAC OCCURS 10 TIMES.
135. 04 GVWT PIC 9(04).
136. 01 EMPMAR.
137. 02 EMPM OCCURS 14 TIMES.
138. 03 EMPMAC OCCURS 10 TIMES.
139. 04 EMPT PIC 9(04).
140. 01 GVVMMAR1.
141. 02 GVVMM1 OCCURS 36.
142. 03 GVVMA1 OCCURS 10.
143. 04 GVW1 PIC 9(04) OCCURS 28.
144. 01 EMPMAR1.
145. 02 EMPM1 OCCURS 36.
146. 03 EMPMA1 OCCURS 10.
147. 04 EMPT1 PIC 9(04) OCCURS 14.
148. 01 AXLTAB.
149. 02 AXLE PIC 9(06) OCCURS 15.
150. 01 SPCTAB.
151. 02 SPAC PIC 9(03) OCCURS 15.
152. 01 TNTAB.
153. 02 TN PIC 9(06) OCCURS 10.
154. 01 SNTAB.
155. 02 SN PIC 9(06) OCCURS 10.
156. 01 NGVW PIC 9(08) VALUE ZEROS.
157. 01 I PIC 9(02).
158. 01 II PIC 9(02).
159. 01 J PIC 9(02).
160. 01 K PIC 9(02).
161. 01 N PIC 9(02).
162. 01 L PIC 9(02).
163. 01 ERRSW PIC 9(01).
164. 01 NX PIC 9(02).
165. 01 STATION PIC X(04).
166. 01 NAXLE PIC 9(02).
167. 01 IND PIC 9(01).
168. 01 C PIC 9(02).
169. 01 DISTRIC PIC 9(02).
170. 01 C1 PIC 9(02).
171. 01 C2 PIC 9(02).
172. 01 C3 PIC 9(02).
173. 01 C4 PIC 9(02).
174. 01 C5 PIC 9(02).
175. 01 C6 PIC 9(02).

176.
177. PROCEDURE DIVISION.

178.
179. GENERATE-DIST.

180. OPEN INPUT STATIONS
181. OUTPUT LOADDIST.
182. MOVE 1 TO DISTRIC.

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183.
184.
185. R1. READ STATIONS AT END PERFORM WRITE-MATRIX
186.          GO TO GENERATE-GVWEMPT.
187.          IF DISTRIC NOT = DISTRI-S PERFORM WRITE-MATRIX
188.          GO TO R2.
189.          OPEN INPUT LOADDIS.
190.
191. R2.
192. READ LOADDIS AT END PERFORM MERROR1
193.          GO TO R1.
194. MOVE LD-RECORD TO STATHD.
195. IF CODSTA NOT = WEIGST-S PERFORM READ-LOAD 20 TIMES
196.          GO TO R2.
197. PERFORM IF-DESCOMP.
198. PERFORM MSING1 VARYING J FROM 1 BY 1 UNTIL J > 10.
199. GO TO MTAND1.
200.
201. MSING1.
202. READ LOADDIS INTO SINGLE.
203. MOVE SINTAB TO SINMA1 (C1, J), SINMA1 (C2, J),
204.          SINMA1 (C3, J), SINMA1 (C4, J),
205.          SINMA1 (C5, J), SINMA1 (C6, J).
206.
207. MTAND1.
208. PERFORM MTAND2 VARYING J FROM 1 BY 1 UNTIL J > 10.
209. CLOSE LOADDIS.
210. GO TO R1.
211.
212. MTAND2.
213. READ LOADDIS INTO TANDEM.
214. MOVE TANTAB TO TANMA1 (C1, J), TANMA1 (C2, J),
215.          TANMA1 (C3, J), TANMA1 (C4, J),
216.          TANMA1 (C5, J), TANMA1 (C6, J).
217.
218. WRITE-MATRIX.
219. MOVE DISTRIC TO DISHDT.
220. PERFORM WRITE-COMB THRU END-COMB
221.          VARYING C FROM 1 BY 1 UNTIL C > 36.
222. OPEN INPUT LOADDIS.
223. MOVE DISTRI-S TO DISTRIC.
224.
225. WRITE-COMB.
226. PERFORM IF-COMB THRU END-IFCOMB.
227. MOVE 1 TO TDIHDT.
228. WRITE LT-RECORD FROM DISTHEAD.
229. DISPLAY 'DISTRICT>>>' ' DISHDT.
230. PERFORM WRITE-SING1
231.          VARYING J FROM 1 BY 1 UNTIL J > 10.
232. GO TO WRITE-TAND1.
233.
234. WRITE-SING1.
235. MOVE SINMA1 (C, J) TO SINTAB.
236. WRITE LT-RECORD FROM SINGLE.
237.
238. WRITE-TAND1.
239. MOVE 2 TO TDIHDT.
240. WRITE LT-RECORD FROM DISTHEAD.
241. PERFORM WRITE-TAND2
242.          VARYING J FROM 1 BY 1 UNTIL J > 10.
243. GO TO END-COMB.

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244.
245. WRITE-TAND2.
246. MOVE TANMA1 (C, J) TO TANTAB.
247. WRITE LT-RECORD FROM TANDEM.
248. END-COMB.
249.
250. GENERATE-GVWEMPT.
251. CLOSE LOADDIST, STATIONS.
252. OPEN INPUT STATIONS
253. OUTPUT GVEMDIST.
254. MOVE 1 TO DISTRIC.
255.
256. GR1.
257. READ STATIONS AT END PERFORM WRITE-GVEMPT
258. GO TO CLOSE-FILES.
259. IF DISTRIC NOT = DISTRI-S PERFORM WRITE-GVEMPT
260. GO TO GR2.
261. OPEN INPUT GVEMDIS.
262.
263. GR2.
264. READ GVEMDIS AT END PERFORM MERROR2
265. GO TO GR1.
266. MOVE GE-RECORD TO STATHD.
267. IF CODSTA NOT = WEIGST-S PERFORM READ-GVEM 20 TIMES
268. GO TO GR2.
269. PERFORM IF-DESCOMP.
270. PERFORM MGVWT1 VARYING J FROM 1 BY 1 UNTIL J > 10.
271. GO TO MEMPT1.
272.
273. MGVWT1.
274. READ GVEMDIS INTO GVWREC.
275. MOVE GVWTAB TO GVVMA1 (C1, J), GVVMA1 (C2, J),
276. GVVMA1 (C3, J), GVVMA1 (C4, J),
277. GVVMA1 (C5, J), GVVMA1 (C6, J).
278.
279. MEMPT1.
280. PERFORM MEMPT2 VARYING J FROM 1 BY 1 UNTIL J > 10.
281. CLOSE GVEMDIS.
282. GO TO GR1.
283.
284. MEMPT2.
285. READ GVEMDIS INTO EMPREC.
286. MOVE EMPTAB TO EMPMA1 (C1, J), EMPMA1 (C2, J),
287. EMPMA1 (C3, J), EMPMA1 (C4, J),
288. EMPMA1 (C5, J), EMPMA1 (C6, J).
289.
290. WRITE-GVEMPT.
291. MOVE DISTRIC TO DISHDT.
292. PERFORM WRITE-COMB1 THRU END-COMB1
293. VARYING C FROM 1 BY 1 UNTIL C > 36.
294. OPEN INPUT GVEMDIS.
295. MOVE DISTRI-S TO DISTRIC.
296.
297. WRITE-COMB1.
298. PERFORM IF-COMB THRU END-IFCOMB.
299. MOVE 1 TO TDIHDT.
300. WRITE GT-RECORD FROM DISTHEAD.
301. PERFORM WRITE-GVWT1
302. VARYING J FROM 1 BY 1 UNTIL J > 10.
303. GO TO WRITE-EMPT1.
304.

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305. WRITE-GVWT1.
306.     MOVE GVWMA1 (C, J) TO GVWTAB.
307.     WRITE GT-RECORD FROM GVWREC.
308.
309. WRITE-EMPT1.
310.     MOVE 2 TO TDIHDT.
311.     WRITE GT-RECORD FROM DISTHEAD.
312.     PERFORM WRITE-EMPT2
313.         VARYING J FROM 1 BY 1 UNTIL J > 10.
314.     GO TO END-COMB1.
315.
316. WRITE-EMPT2.
317.     MOVE EMPMA1 (C, J) TO EMPTAB.
318.     WRITE GT-RECORD FROM EMPREC.
319. END-COMB1.
320.
321. IF-DESCOMP.
322.     IF DESCOM-S = 11  MOVE 1  TO C1
323.                       MOVE 2  TO C2
324.                       MOVE 5  TO C3
325.                       MOVE 6  TO C4
326.                       MOVE 9  TO C5
327.                       MOVE 10 TO C6.
328.     IF DESCOM-S = 12  MOVE 3  TO C1
329.                       MOVE 4  TO C2
330.                       MOVE 7  TO C3
331.                       MOVE 8  TO C4
332.                       MOVE 11 TO C5
333.                       MOVE 12 TO C6.
334.     IF DESCOM-S = 21  MOVE 13 TO C1
335.                       MOVE 14 TO C2
336.                       MOVE 17 TO C3
337.                       MOVE 18 TO C4
338.                       MOVE 21 TO C5
339.                       MOVE 22 TO C6.
340.     IF DESCOM-S = 22  MOVE 15 TO C1
341.                       MOVE 16 TO C2
342.                       MOVE 19 TO C3
343.                       MOVE 20 TO C4
344.                       MOVE 23 TO C5
345.                       MOVE 24 TO C6.
346.     IF DESCOM-S = 31  MOVE 25 TO C1
347.                       MOVE 26 TO C2
348.                       MOVE 29 TO C3
349.                       MOVE 30 TO C4
350.                       MOVE 33 TO C5
351.                       MOVE 34 TO C6.
352.     IF DESCOM-S = 32  MOVE 27 TO C1
353.                       MOVE 28 TO C2
354.                       MOVE 31 TO C3
355.                       MOVE 32 TO C4
356.                       MOVE 35 TO C5
357.                       MOVE 36 TO C6.
358.
359. IF-COMB.
360.     IF C = 1  MOVE 1111 TO COMHDT
361.               GO TO END-IFCOMB.
362.     IF C = 2  MOVE 1112 TO COMHDT
363.               GO TO END-IFCOMB.
364.     IF C = 3  MOVE 1121 TO COMHDT
365.               GO TO END-IFCOMB.

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366.      IF C = 4  MOVE 1122 TO COMHDT
367.      GO TO END-IFCOMB.
368.      IF C = 5  MOVE 1211 TO COMHDT
369.      GO TO END-IFCOMB.
370.      IF C = 6  MOVE 1212 TO COMHDT
371.      GO TO END-IFCOMB.
372.      IF C = 7  MOVE 1221 TO COMHDT
373.      GO TO END-IFCOMB.
374.      IF C = 8  MOVE 1222 TO COMHDT
375.      GO TO END-IFCOMB.
376.      IF C = 9  MOVE 1311 TO COMHDT
377.      GO TO END-IFCOMB.
378.      IF C = 10 MOVE 1312 TO COMHDT
379.      GO TO END-IFCOMB.
380.      IF C = 11 MOVE 1321 TO COMHDT
381.      GO TO END-IFCOMB.
382.      IF C = 12 MOVE 1322 TO COMHDT
383.      GO TO END-IFCOMB.
384.      IF C = 13 MOVE 2111 TO COMHDT
385.      GO TO END-IFCOMB.
386.      IF C = 14 MOVE 2112 TO COMHDT
387.      GO TO END-IFCOMB.
388.      IF C = 15 MOVE 2121 TO COMHDT
389.      GO TO END-IFCOMB.
390.      IF C = 16 MOVE 2122 TO COMHDT
391.      GO TO END-IFCOMB.
392.      IF C = 17 MOVE 2211 TO COMHDT
393.      GO TO END-IFCOMB.
394.      IF C = 18 MOVE 2212 TO COMHDT
395.      GO TO END-IFCOMB.
396.      IF C = 19 MOVE 2221 TO COMHDT
397.      GO TO END-IFCOMB.
398.      IF C = 20 MOVE 2222 TO COMHDT
399.      GO TO END-IFCOMB.
400.      IF C = 21 MOVE 2311 TO COMHDT
401.      GO TO END-IFCOMB.
402.      IF C = 22 MOVE 2312 TO COMHDT
403.      GO TO END-IFCOMB.
404.      IF C = 23 MOVE 2321 TO COMHDT
405.      GO TO END-IFCOMB.
406.      IF C = 24 MOVE 2322 TO COMHDT
407.      GO TO END-IFCOMB.
408.      IF C = 25 MOVE 3111 TO COMHDT
409.      GO TO END-IFCOMB.
410.      IF C = 26 MOVE 3112 TO COMHDT
411.      GO TO END-IFCOMB.
412.      IF C = 27 MOVE 3121 TO COMHDT
413.      GO TO END-IFCOMB.
414.      IF C = 28 MOVE 3122 TO COMHDT
415.      GO TO END-IFCOMB.
416.      IF C = 29 MOVE 3211 TO COMHDT
417.      GO TO END-IFCOMB.
418.      IF C = 30 MOVE 3212 TO COMHDT
419.      GO TO END-IFCOMB.
420.      IF C = 31 MOVE 3221 TO COMHDT
421.      GO TO END-IFCOMB.
422.      IF C = 32 MOVE 3222 TO COMHDT
423.      GO TO END-IFCOMB.
424.      IF C = 33 MOVE 3311 TO COMHDT
425.      GO TO END-IFCOMB.
426.      IF C = 34 MOVE 3312 TO COMHDT
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427.          GO TO END-IFCOMB.
428.          IF C = 35 MOVE 3321 TO COMHDT
429.          GO TO END-IFCOMB.
430.          IF C = 36 MOVE 3322 TO COMHDT.
431. END-IFCOMB.
432.
433. MERROR1.
434.     DISPLAY 'STATION IN STATIONS IS WRONG'.
435.     DISPLAY 'WEIGST-S==> ' WEIGST-S.
436.     DISPLAY 'CODSTA ==> ' CODSTA.
437.     CLOSE LOADDIS.
438.
439. MERROR2.
440.     DISPLAY 'STATION IN STATIONS IS WRONG'.
441.     DISPLAY 'WEIGST-S==> ' WEIGST-S.
442.     DISPLAY 'CODSTA ==> ' CODSTA.
443.     CLOSE GVEMDIS.
444.
445. READ-LOAD.
446.     READ LOADDIS AT END DISPLAY '---ERROR---'.
447.
448. READ-GVEM.
449.     READ GVEMDIS AT END DISPLAY '---ERROR---'.
450.
451. CLOSE-FILES.
452.     CLOSE GVEMDIST STATIONS.
453.     STOP RUN.
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1. IDENTIFICATION DIVISION.
2. PROGRAM-ID. FAGECOB.
3. *PROGRAM-NO. 05
4. AUTHOR. ALAN W. JARL AND JUAN C. GARCIA.
5. INSTALLATION. TEXAS A&M UNIVERSITY - TCC.
6. DATE-WRITTEN. DEC, 1986.
7. DATE-COMPILED. DEC 8, 1986.
8. REMARKS.
9. THIS PROGRAM PRORATES RIFILE FLEXIBLE LANEMILES BY AGE,
10. USING THE RL1 FILE. IT IS PART OF THE RENU3 INPUT
11. AUTOMATION PACKAGE.
12. ENVIRONMENT DIVISION.
13. INPUT-OUTPUT SECTION.
14. FILE-CONTROL.
15. SELECT RI-FILE ASSIGN TO UT-S-RIFILE.
16. SELECT RL1-FILE ASSIGN TO UT-S-RL1FILE.
17. SELECT YEAR-CARD ASSIGN TO UR-S-YEARIN.
18. SELECT AGED-LANE-MILES-FILE ASSIGN TO UR-S-FAGEDIS.
19. DATA DIVISION.
20. FILE SECTION.
21.
22. FD RI-FILE,
23. LABEL RECORDS ARE STANDARD,
24. BLOCK CONTAINS 0 RECORDS,
25. RECORDING MODE IS F,
26. DATA RECORD IS RI-RECORD.
27. 01 RI-RECORD.
28. 02 FILLER PIC X(1).
29. 02 RI-SUBFILE PIC X(1).
30. 02 DISTRICT PIC X(2).
31. 02 RI-DISTRICT REDEFINES DISTRICT PIC 9(2).
32. 02 FILLER PIC X(19).
33. 02 RI-LENGTH PIC X(5).
34. 02 RI-LENGTH-N REDEFINES RI-LENGTH PIC 99V999.
35. 02 LENGTH-N REDEFINES RI-LENGTH PIC 9(5).
36. 02 RI-HWY-SYSTEM PIC X(2).
37. 02 FILLER PIC X(4).
38. 02 RI-HWY-STATUS PIC X(1).
39. 02 FILLER PIC X(3).
40. 02 RI-HWY-DESIGN PIC X(1).
41. 02 FILLER PIC X(8).
42. 02 RI-SURFACE-TYPE PIC X(2).
43. 02 FILLER PIC X(1).
44. 02 RI-NO-LANES PIC X(2).
45. 02 RI-NO-LANES-N REDEFINES RI-NO-LANES PIC 9(2).
46. 02 FILLER PIC X(14).
47. 02 RI-URBRUR PIC X(01).
48. 02 FILLER PIC X(54).
49. 02 ADTSEC PIC X(06).
50. 02 RI-ADTSEC REDEFINES ADTSEC PIC 9(06).
51. 02 FILLER PIC X(129).
52.
53. FD RL1-FILE,
54. LABEL RECORDS ARE STANDARD,
55. BLOCK CONTAINS 0 RECORDS,
56. RECORDING MODE IS F,
57. DATA RECORD IS RL1-RECORD.
58. 01 RL1-RECORD.
59. 02 RL1-DISTRICT PIC X(2).
60. 02 FILLER PIC X(26).

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61.	02	RL1-HWY-SYSTEM	PIC X(2).
62.	02	FILLER	PIC X(8).
63.	02	RL1-YEAR-COMP	PIC X(2).
64.	02	FILLER	PIC X(7).
65.	02	RL1-SURFACE-TYPE	PIC X(2).
66.	02	FILLER	PIC X(30).
67.	02	RL1-MILEAGE-CLASS	PIC X(1).
68.	02	FILLER	PIC X(11).
69.	02	RL1-MILES-REMAINING	PIC X(5).
70.	02	RL1-MILES REDEFINES	RL1-MILES-REMAINING PIC 99V999.
71.	02	FILLER	PIC X(110).
72.			
73.	FD	YEAR-CARD,	
74.		LABEL RECORDS ARE OMITTED,	
75.		RECORDING MODE IS F,	
76.		DATA RECORD IS YEAR-IN.	
77.	01	YEAR-IN.	
78.	02	YC-YEAR	PIC 9(2).
79.	02	FILLER	PIC X(78).
80.			
81.	FD	AGED-LANE-MILES-FILE,	
82.		LABEL RECORDS ARE STANDARD,	
83.		BLOCK CONTAINS 0 RECORDS,	
84.		RECORDING MODE IS F,	
85.		DATA RECORD IS AGED-LANE-MILES-RECORD.	
86.	01	AGED-LANE-MILES-RECORD	PIC X(133).
87.			
88.		WORKING-STORAGE SECTION.	
89.	77	AGE	PIC 9(2) VALUE ZEROS.
90.	77	BP	PIC 9(2) VALUE ZEROS.
91.	77	C	PIC 9(1) VALUE ZEROS.
92.	77	COL	PIC 9(2) VALUE ZEROS.
93.	77	DIFF	PIC 9(3)V9(4) VALUE ZEROS.
94.	77	DIST-CK	PIC 9(2) VALUE ZEROS.
95.	77	INDX-CNT	PIC 9(2) VALUE ZEROS.
96.	77	L	PIC 9(2) VALUE ZEROS.
97.	77	LEV	PIC 9(2) VALUE ZEROS.
98.	77	LANEMILES	PIC 999V999 VALUE ZEROS.
99.	01	TOTLMF	PIC 9(10) VALUE ZEROES.
100.	77	LANEMILES-FR	PIC 999V999 VALUE ZEROS.
101.	77	R	PIC 9(2) VALUE ZEROS.
102.	77	ROW	PIC 9(2) VALUE ZEROS.
103.	77	YEAR-WS	PIC 9(2) VALUE ZEROS.
104.	01	R6	PIC 9(02) VALUE ZEROS.
105.	01	C6	PIC 9(02) VALUE ZEROS.
106.	01	C0	PIC 9(02) VALUE ZEROS.
107.	01	RO	PIC 9(02) VALUE ZEROS.
108.	01	RU	PIC 9(01) VALUE ZEROS.
109.	01	TR	PIC 9(01) VALUE ZEROS.
110.	01	COUNRIF	PIC 9(07) VALUE ZEROS.
111.	01	COUNRL1	PIC 9(07) VALUE ZEROS.
112.			
113.	01	OUT-RECORD.	
114.	02	FILLER	PIC X(01).
115.	02	OR-SECTIO.	
116.	03	OR-DISTRI	PIC 9(02).
117.	03	OR-DESCOM	PIC 9(04).
118.	02	OR-TABAGE.	
119.	03	OR-AGEDIS	PIC 9(04) OCCURS 30.
120.	02	OR-ADTSEC	PIC 9(06).
121.	*		

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122. * RI-FILE LANE MILES
123. *
124. O1 TABLE-2.
125.     O2 TAB-2-R OCCURS 9 TIMES.
126.     O3 TAB-2-C OCCURS 4 TIMES.
127.     O4 T2-LANE-MILES PIC 9(6)V9(3).
128. *
129. * AGE MILES
130. *
131. O1 TABLE-3.
132.     O2 TAB-3-R OCCURS 9 TIMES.
133.     O3 TAB-3-C OCCURS 4 TIMES.
134.     O4 TAB-3-L OCCURS 30 TIMES.
135.     O5 T3-AGE-MILES PIC 9(5).
136. *
137. * RL1-FILE LENGTHS
138. *
139. O1 TABLE-4.
140.     O2 TAB-4-R OCCURS 3 TIMES.
141.     O3 TAB-4-C OCCURS 3 TIMES.
142.     O4 TAB-4-L OCCURS 30 TIMES.
143.     O5 T4-RL1-MILES PIC 9(4)V9(3).
144. *
145. * RL1-TOTAL MILES
146. *
147. O1 TABLE-5.
148.     O2 TAB-5-R OCCURS 3 TIMES.
149.     O3 TAB-5-C OCCURS 3 TIMES.
150.     O4 T5-RL1-TOTAL-MILES PIC 9(5)V9(3).
151. *
152. * PERCENT RL1-TOTAL MILES
153. *
154. O1 TABLE-6.
155.     O2 TAB-6-R OCCURS 3 TIMES.
156.     O3 TAB-6-C OCCURS 3 TIMES.
157.     O4 TAB-6-L OCCURS 30 TIMES.
158.     O5 T6-RL1-PERCENTAGE PIC 9V9(4).
159. O1 VADTAB.
160.     O2 VADTAB-A OCCURS 9 TIMES.
161.     O3 VADTAB-B OCCURS 4 TIMES.
162.     O4 VADT PIC 9(10).
163. O1 COUNTAB.
164.     O2 COUN-A OCCURS 9 TIMES.
165.     O3 COUN-B OCCURS 4 TIMES.
166.     O4 COUN PIC 9(08).
167. *
168. * ADJUST PERCENTAGES
169. *
170. O1 TABLE-10.
171.     O2 TAB-10-R OCCURS 9 TIMES.
172.     O3 TAB-10-C OCCURS 4 TIMES.
173.     O4 T10-TOTPRCNT PIC 9V9(4).
174. O1 ERROR-1.
175.     O2 FILLER PIC X(51) VALUE ' YEAR CARD IS MISSING
176.     'OR IN ERROR. JOB TERMINATED.'.
177.     O2 FILLER PIC X(82) VALUE SPACES.
178. O1 ERROR-2.
179.     O2 FILLER PIC X(49) VALUE ' RI FILE IS MISSING OR
180.     ' IN ERROR. JOB TERMINATED.'.
181.     O2 FILLER PIC X(84) VALUE SPACES.
182. O1 ERROR-3.

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183.      O2 FILLER          PIC X(50)  VALUE ' RL1 FILE IS MISSING 0
184.      'R IN ERROR.  JOB TERMINATED.'
185.      O2 FILLER          PIC X(83)  VALUE SPACES.
186.
187.      PROCEDURE DIVISION.
188.      OPEN INPUT RI-FILE, RL1-FILE, YEAR-CARD,
189.      OUTPUT AGED-LANE-MILES-FILE.
190.      PERFORM ZERO-TABLE.
191.      MOVE ZEROES TO COUNTAB, VADTAB.
192.      MOVE O1 TO DIST-CK.
193.      READ YEAR-CARD,
194.      AT END,
195.      DISPLAY ERROR-1,
196.      GO TO CLOSE-FILES.
197.      IF YC-YEAR IS NUMERIC,
198.      IF YC-YEAR > '80',
199.      GO TO INITIAL-RI-FILE-READ.
200.      DISPLAY ERROR-1.
201.      GO TO CLOSE-FILES.
202.      INITIAL-RI-FILE-READ.
203.      READ RI-FILE,
204.      AT END,
205.      DISPLAY ERROR-2,
206.      GO TO CLOSE-FILES.
207.      IF RI-SUBFILE NOT = '1',
208.      DISPLAY ERROR-2,
209.      GO TO CLOSE-FILES.
210.      READ RL1-FILE,
211.      AT END,
212.      DISPLAY ERROR-3,
213.      GO TO CLOSE-FILES.
214.      GO TO CK-STATUS.
215.      READ-RI-FILE.
216.      READ RI-FILE,
217.      AT END,
218.      GO TO CK-EM.
219.      ADD 1 TO COUNRIF.
220.      IF RI-SUBFILE > '1',
221.      GO TO CK-EM.
222.      CK-STATUS.
223.      EXAMINE DISTRICT REPLACING ALL ' ' BY '0'.
224.      EXAMINE RI-SURFACE-TYPE REPLACING ALL ' ' BY '0'.
225.      EXAMINE RI-LENGTH REPLACING ALL ' ' BY '0'.
226.      EXAMINE RI-NO-LANES REPLACING ALL ' ' BY '0'.
227.      EXAMINE ADTSEC  REPLACING ALL ' ' BY '0'.
228.      IF RI-HWY-STATUS NOT = '1',
229.      GO TO READ-RI-FILE.
230.      IF RI-HWY-SYSTEM = '00' OR '13',
231.      GO TO READ-RI-FILE.
232.      CK-DIST.
233.      IF RI-DISTRICT NOT = DIST-CK,
234.      GO TO CK-EM.
235.      BACK-AGAIN.
236.      CK-SURF.
237.      IF RI-SURFACE-TYPE = '53' OR '54' OR '55',
238.      MOVE 1 TO CO,
239.      GO TO FIND-RI-HWY-SYS.
240.      IF RI-SURFACE-TYPE = '52',
241.      MOVE 2 TO CO,
242.      GO TO FIND-RI-HWY-SYS.
243.      IF RI-SURFACE-TYPE = '51' OR '56',

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244.         MOVE 3 TO CO,
245.             GO TO FIND-RI-HWY-SYS.
246.     GO TO READ-RI-FILE.
247. FIND-RI-HWY-SYS.
248.     IF RI-HWY-SYSTEM = '08',
249.         MOVE 1 TO RO,
250.             GO TO ADD-RI-FILE-MILES.
251.     IF RI-HWY-SYSTEM = '05' OR '09',
252.         MOVE 2 TO RO,
253.             GO TO ADD-RI-FILE-MILES.
254.     IF RI-HWY-SYSTEM = '01' OR '06' OR '10',
255.         MOVE 3 TO RO,
256.             GO TO ADD-RI-FILE-MILES.
257.     IF RI-HWY-SYSTEM = '02' OR '03' OR '04' OR '07' OR '11' OR
258.         '12',
259.         MOVE 3 TO RO,
260.             GO TO ADD-RI-FILE-MILES.
261.     MOVE 2 TO RO.
262. ADD-RI-FILE-MILES.
263.     PERFORM SUBSCRIPTS.
264.     COMPUTE VADT (ROW, COL) =
265.         VADT (ROW, COL) + RI-ADTSEC * LENGTH-N / RI-NO-LANES-N
266.     ON SIZE ERROR MOVE 0 TO VADT (ROW, COL).
267.     ADD LENGTH-N TO COUN (ROW, COL).
268.     COMPUTE LANEMILES = RI-LENGTH-N * RI-NO-LANES-N.
269.     ADD LANEMILES TO T2-LANE-MILES (ROW, COL).
270.     MOVE 0 TO LANEMILES-FR.
271.     IF RI-HWY-DESIGN = '5' OR '8',
272.         COMPUTE LANEMILES-FR = RI-LENGTH-N * 2.
273.     IF RI-HWY-DESIGN = '6' OR '9',
274.         COMPUTE LANEMILES-FR = RI-LENGTH-N * 4.
275.     IF RI-DISTRICT NOT = '12',
276.         ADD LANEMILES-FR TO T2-LANE-MILES (ROW, COL).
277.     GO TO READ-RI-FILE.
278. READ-RL1.
279.     READ RL1-FILE,
280.         AT END,
281.             PERFORM BUILD-PERCENT,
282.             PERFORM TMILE-TABLE THRU EXIT99,
283.             GO TO CLOSE-FILES.
284.     ADD 1 TO COUNRL1.
285. CK-EM.
286.     EXAMINE RL1-DISTRICT REPLACING ALL ' ' BY '0'.
287.     EXAMINE RL1-SURFACE-TYPE REPLACING ALL ' ' BY '0'.
288.     EXAMINE RL1-HWY-SYSTEM REPLACING ALL ' ' BY '0'.
289.     EXAMINE RL1-YEAR-COMP REPLACING ALL ' ' BY '0'.
290.     EXAMINE RL1-MILES-REMAINING REPLACING ALL ' ' BY '0'.
291.     IF RL1-MILES-REMAINING IS NOT NUMERIC,
292.         GO TO READ-RL1.
293.     IF RL1-MILES-REMAINING = '00000',
294.         GO TO READ-RL1.
295.     IF RL1-HWY-SYSTEM = '00' OR '13',
296.         GO TO READ-RL1.
297.     IF RL1-MILEAGE-CLASS NOT = '1',
298.         GO TO READ-RL1.
299. DISTRICT-CK.
300.     IF RL1-DISTRICT NOT EQUAL TO DIST-CK,
301.         PERFORM BUILD-PERCENT,
302.         GO TO TMILE-TABLE.
303.
304. FIND-AGE.

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305.         MOVE RL1-YEAR-COMP TO YEAR-WS.
306.         COMPUTE AGE ROUNDED = (YC-YEAR - YEAR-WS) + 1.
307.         IF AGE > 30,
308.             MOVE 30 TO AGE.
309.     FIND-SURF.
310.         IF RL1-SURFACE-TYPE = '53' OR '54' OR '55',
311.             MOVE 1 TO CO,
312.             GO TO FIND-RL1-HWY-SYS.
313.         IF RL1-SURFACE-TYPE = '52',
314.             MOVE 2 TO CO,
315.             GO TO FIND-RL1-HWY-SYS.
316.         IF RL1-SURFACE-TYPE = '51' OR '56',
317.             MOVE 3 TO CO,
318.             GO TO FIND-RL1-HWY-SYS.
319.     GO TO READ-RL1.
320.     FIND-RL1-HWY-SYS.
321.         IF RL1-HWY-SYSTEM = '08',
322.             MOVE 1 TO RO,
323.             GO TO ADD-RL1-LENGTH.
324.         IF RL1-HWY-SYSTEM = '05' OR '09',
325.             MOVE 2 TO RO,
326.             GO TO ADD-RL1-LENGTH.
327.         IF RL1-HWY-SYSTEM = '01' OR '06' OR '10',
328.             MOVE 3 TO RO,
329.             GO TO ADD-RL1-LENGTH.
330.         IF RL1-HWY-SYSTEM = '02' OR '03' OR '04' OR '07' OR '11' OR
331.             '12',
332.             MOVE 3 TO RO,
333.             GO TO ADD-RL1-LENGTH.
334.     GO TO READ-RL1.
335.     ADD-RL1-LENGTH.
336.         MOVE AGE TO LEV.
337.         ADD RL1-MILES TO T4-RL1-MILES (RO, CO, LEV),
338.             T5-RL1-TOTAL-MILES (RO, CO).
339.     GO TO READ-RL1.
340.     BUILD-PERCENT.
341.         PERFORM BP1 THRU END-BP1
342.             VARYING R FROM 1 BY 1 UNTIL R > 3.
343.         PERFORM FP1 THRU END-FP1
344.             VARYING R FROM 1 BY 1 UNTIL R > 3.
345.
346.     BP1.
347.         PERFORM BP2 THRU END-BP2
348.             VARYING C FROM 1 BY 1 UNTIL C > 3.
349.     END-BP1.
350.     BP2.
351.         PERFORM BP3 THRU END-BP3
352.             VARYING L FROM 1 BY 1 UNTIL L > 30.
353.     END-BP2.
354.     BP3.
355.         IF T5-RL1-TOTAL-MILES (R, C) = 0,
356.             MOVE 0 TO T6-RL1-PERCENTAGE (R, C, L),
357.             GO TO END-BP3.
358.         COMPUTE T6-RL1-PERCENTAGE (R, C, L) =
359.             T4-RL1-MILES (R, C, L) / T5-RL1-TOTAL-MILES (R, C).
360.         ADD T6-RL1-PERCENTAGE (R, C, L) TO T10-TOTPRCNT (R, C).
361.     END-BP3.
362.     FP1.
363.         PERFORM FP2 THRU END-FP2
364.             VARYING C FROM 1 BY 1 UNTIL C > 3.
365.     END-FP1.

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366.      FP2.
367.      IF T10-TOTPRCNT (R, C) = 1.0.
368.          GO TO END-FP2.
369.      MOVE 1 TO BP.
370.      PERFORM FIND-BIGPRCNT THRU END-FIND-BIGPRCNT
371.          VARYING L FROM 1 BY 1 UNTIL L > 30.
372.      IF T10-TOTPRCNT (R, C) > 1.0.
373.          COMPUTE DIFF = T10-TOTPRCNT (R, C) - 1.0.
374.          COMPUTE T6-RL1-PERCENTAGE (R, C, BP) =
375.              T6-RL1-PERCENTAGE (R, C, BP) - DIFF.
376.          GO TO END-FP2.
377.      COMPUTE DIFF = 1.0 - T10-TOTPRCNT (R, C).
378.      COMPUTE T6-RL1-PERCENTAGE (R, C, BP) =
379.          T6-RL1-PERCENTAGE (R, C, BP) + DIFF.
380.      END-FP2.
381.      FIND-BIGPRCNT.
382.          IF T6-RL1-PERCENTAGE (R, C, L) >
383.              T6-RL1-PERCENTAGE (R, C, BP).
384.              MOVE L TO BP.
385.      END-FIND-BIGPRCNT.
386.      TMILE-TABLE.
387.          PERFORM ADT1 THRU END-ADT1
388.              VARYING R FROM 1 BY 1 UNTIL R > 9.
389.          PERFORM BT1 THRU END-BT1
390.              VARYING R FROM 1 BY 1 UNTIL R > 9.
391.          MOVE SPACES TO OUT-RECORD.
392.          PERFORM WR1 THRU END-WR1
393.              VARYING R FROM 1 BY 1 UNTIL R > 9.
394.      EXIT99. EXIT.
395.      INCR-DIST-CK.
396.          ADD 1 TO DIST-CK.
397.          IF DIST-CK = 22.
398.              ADD 1 TO DIST-CK.
399.          MOVE ZEROES TO VADTAB, COUNTAB.
400.          PERFORM ZERO-TABLE.
401.          GO TO BACK-AGAIN.
402.      BT1.
403.          IF R = 1, MOVE 1 TO R6, MOVE 1 TO C6.
404.          IF R = 2, MOVE 1 TO R6, MOVE 2 TO C6.
405.          IF R = 3, MOVE 1 TO R6, MOVE 3 TO C6.
406.          IF R = 4, MOVE 2 TO R6, MOVE 1 TO C6.
407.          IF R = 5, MOVE 2 TO R6, MOVE 2 TO C6.
408.          IF R = 6, MOVE 2 TO R6, MOVE 3 TO C6.
409.          IF R = 7, MOVE 3 TO R6, MOVE 1 TO C6.
410.          IF R = 8, MOVE 3 TO R6, MOVE 2 TO C6.
411.          IF R = 9, MOVE 3 TO R6, MOVE 3 TO C6.
412.          PERFORM BT2 THRU END-BT2
413.              VARYING C FROM 1 BY 1 UNTIL C > 4.
414.      END-BT1.
415.      BT2.
416.          PERFORM BT3 THRU END-BT3
417.              VARYING L FROM 1 BY 1 UNTIL L > 30.
418.      END-BT2.
419.      BT3.
420.          COMPUTE T3-AGE-MILES (R, C, L) ROUNDED =
421.              T6-RL1-PERCENTAGE (R6, C6, L) * T2-LANE-MILES (R, C).
422.      END-BT3.
423.
424.
425.      WR1.
426.          PERFORM WR2 THRU END-WR2

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427.          VARYING C FROM 1 BY 1 UNTIL C > 4.
428. END-WR1.
429. WR2.
430.     PERFORM WR3 THRU END-WR3
431.         VARYING L FROM 1 BY 1 UNTIL L > 30.
432.     PERFORM ASSIGN-DESCOM THRU END-DESCOM.
433.     MOVE ZEROES TO OR-ADTSEC.
434.     MOVE VADT (R, C) TO OR-ADTSEC.
435.     MOVE DIST-CK TO OR-DISTRI.
436.     WRITE AGED-LANE-MILES-RECORD FROM OUT-RECORD.
437.     MOVE SPACES TO OUT-RECORD.
438. END-WR2.
439. WR3.
440.     MOVE T3-AGE-MILES (R, C, L) TO OR-AGEDIS (L).
441.     ADD T3-AGE-MILES (R, C, L) TO TOTLMF.
442. END-WR3.
443.
444. ZERO-TABLE.
445.     MOVE ZEROES TO TABLE-2.
446.     MOVE ZEROES TO TABLE-3.
447.     MOVE ZEROES TO TABLE-4.
448.     MOVE ZEROES TO TABLE-5.
449.     MOVE ZEROES TO TABLE-6.
450.     MOVE ZEROES TO TABLE-10.
451.
452. SUBSCRIPTS.
453.     IF RO = 1 AND CO = 1, MOVE 1 TO ROW.
454.     IF RO = 1 AND CO = 2, MOVE 2 TO ROW.
455.     IF RO = 1 AND CO = 3, MOVE 3 TO ROW.
456.     IF RO = 2 AND CO = 1, MOVE 4 TO ROW.
457.     IF RO = 2 AND CO = 2, MOVE 5 TO ROW.
458.     IF RO = 2 AND CO = 3, MOVE 6 TO ROW.
459.     IF RO = 3 AND CO = 1, MOVE 7 TO ROW.
460.     IF RO = 3 AND CO = 2, MOVE 8 TO ROW.
461.     IF RO = 3 AND CO = 3, MOVE 9 TO ROW.
462.     PERFORM ASK-TRAFFIC THRU END-ASK.
463.     IF RU = 1 AND TR = 1, MOVE 1 TO COL.
464.     IF RU = 1 AND TR = 2, MOVE 2 TO COL.
465.     IF RU = 2 AND TR = 1, MOVE 3 TO COL.
466.     IF RU = 2 AND TR = 2, MOVE 4 TO COL.
467.
468. ASK-TRAFFIC.
469.     MOVE 1 TO TR.
470.     IF RI-URBRUR = 1, MOVE 1 TO RU
471.         ELSE MOVE 2 TO RU.
472.     IF RO = 1 AND RU = 1
473.         AND RI-ADTSEC > 7000
474.         MOVE 2 TO TR
475.         GO TO END-ASK.
476.     IF RO = 1 AND RU = 2
477.         AND RI-ADTSEC > 10000
478.         MOVE 2 TO TR
479.         GO TO END-ASK.
480.     IF RO = 2 AND RU = 1
481.         AND RI-ADTSEC > 1000
482.         MOVE 2 TO TR
483.         GO TO END-ASK.
484.     IF RO = 2 AND RU = 2
485.         AND RI-ADTSEC > 2500
486.         MOVE 2 TO TR
487.         GO TO END-ASK.

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488.         IF RO = 3 AND RU = 1
489.           AND RI-ADTSEC > 2500
490.             MOVE 2 TO TR
491.             GO TO END-ASK.
492.         IF RO = 3 AND RU = 2
493.           AND RI-ADTSEC > 7000
494.             MOVE 2 TO TR.
495.     END-ASK.
496.
497.
498.     ASSIGN-DESCOM.
499.         IF R = 1 AND C = 1, MOVE 1111 TO OR-DESCOM,
500.           GO TO END-DESCOM.
501.         IF R = 1 AND C = 2, MOVE 1112 TO OR-DESCOM,
502.           GO TO END-DESCOM.
503.         IF R = 1 AND C = 3, MOVE 1121 TO OR-DESCOM,
504.           GO TO END-DESCOM.
505.         IF R = 1 AND C = 4, MOVE 1122 TO OR-DESCOM,
506.           GO TO END-DESCOM.
507.         IF R = 2 AND C = 1, MOVE 1211 TO OR-DESCOM,
508.           GO TO END-DESCOM.
509.         IF R = 2 AND C = 2, MOVE 1212 TO OR-DESCOM,
510.           GO TO END-DESCOM.
511.         IF R = 2 AND C = 3, MOVE 1221 TO OR-DESCOM,
512.           GO TO END-DESCOM.
513.         IF R = 2 AND C = 4, MOVE 1222 TO OR-DESCOM,
514.           GO TO END-DESCOM.
515.         IF R = 3 AND C = 1, MOVE 1311 TO OR-DESCOM,
516.           GO TO END-DESCOM.
517.         IF R = 3 AND C = 2, MOVE 1312 TO OR-DESCOM,
518.           GO TO END-DESCOM.
519.         IF R = 3 AND C = 3, MOVE 1321 TO OR-DESCOM,
520.           GO TO END-DESCOM.
521.         IF R = 3 AND C = 4, MOVE 1322 TO OR-DESCOM,
522.           GO TO END-DESCOM.
523.         IF R = 4 AND C = 1, MOVE 2111 TO OR-DESCOM,
524.           GO TO END-DESCOM.
525.         IF R = 4 AND C = 2, MOVE 2112 TO OR-DESCOM,
526.           GO TO END-DESCOM.
527.         IF R = 4 AND C = 3, MOVE 2121 TO OR-DESCOM,
528.           GO TO END-DESCOM.
529.         IF R = 4 AND C = 4, MOVE 2122 TO OR-DESCOM,
530.           GO TO END-DESCOM.
531.         IF R = 5 AND C = 1, MOVE 2211 TO OR-DESCOM,
532.           GO TO END-DESCOM.
533.         IF R = 5 AND C = 2, MOVE 2212 TO OR-DESCOM,
534.           GO TO END-DESCOM.
535.         IF R = 5 AND C = 3, MOVE 2221 TO OR-DESCOM,
536.           GO TO END-DESCOM.
537.         IF R = 5 AND C = 4, MOVE 2222 TO OR-DESCOM,
538.           GO TO END-DESCOM.
539.         IF R = 6 AND C = 1, MOVE 2311 TO OR-DESCOM,
540.           GO TO END-DESCOM.
541.         IF R = 6 AND C = 2, MOVE 2312 TO OR-DESCOM,
542.           GO TO END-DESCOM.
543.         IF R = 6 AND C = 3, MOVE 2321 TO OR-DESCOM,
544.           GO TO END-DESCOM.
545.         IF R = 6 AND C = 4, MOVE 2322 TO OR-DESCOM,
546.           GO TO END-DESCOM.
547.         IF R = 7 AND C = 1, MOVE 3111 TO OR-DESCOM,
548.           GO TO END-DESCOM.

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549.         IF R = 7 AND C = 2, MOVE 3112 TO OR-DESCOM,
550.         GO TO END-DESCOM.
551.         IF R = 7 AND C = 3, MOVE 3121 TO OR-DESCOM,
552.         GO TO END-DESCOM.
553.         IF R = 7 AND C = 4, MOVE 3122 TO OR-DESCOM,
554.         GO TO END-DESCOM.
555.         IF R = 8 AND C = 1, MOVE 3211 TO OR-DESCOM,
556.         GO TO END-DESCOM.
557.         IF R = 8 AND C = 2, MOVE 3212 TO OR-DESCOM,
558.         GO TO END-DESCOM.
559.         IF R = 8 AND C = 3, MOVE 3221 TO OR-DESCOM,
560.         GO TO END-DESCOM.
561.         IF R = 8 AND C = 4, MOVE 3222 TO OR-DESCOM,
562.         GO TO END-DESCOM.
563.         IF R = 9 AND C = 1, MOVE 3311 TO OR-DESCOM,
564.         GO TO END-DESCOM.
565.         IF R = 9 AND C = 2, MOVE 3312 TO OR-DESCOM,
566.         GO TO END-DESCOM.
567.         IF R = 9 AND C = 3, MOVE 3321 TO OR-DESCOM,
568.         GO TO END-DESCOM.
569.         IF R = 9 AND C = 4, MOVE 3322 TO OR-DESCOM.
570.     END-DESCOM.
571.
572.     ADT1.
573.         PERFORM ADT2 THRU END-ADT2
574.         VARYING C FROM 1 BY 1 UNTIL C > 4.
575.     END-ADT1.
576.
577.     ADT2.
578.         IF COUN (R, C) = 0 MOVE 1 TO COUN (R, C).
579.         COMPUTE VADT (R, C) ROUNDED = VADT (R, C) / COUN (R, C)
580.         ON SIZE ERROR MOVE 0 TO VADT (R, C).
581.     END-ADT2.
582.
583.     CLOSE-FILES.
584.         DISPLAY 'TOTAL FLEXIBLE LANE MILES = ' TOTLMF.
585.         DISPLAY 'TOTAL RECORDS IN RIFILE = ' COUNRIF.
586.         DISPLAY 'TOTAL RECORDS IN RL1FILE = ' COUNRL1.
587.         CLOSE RI-FILE, RL1-FILE, YEAR-CARD, AGED-LANE-MILES-FILE.
588.     STOP RUN.

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E-34

1. IDENTIFICATION DIVISION.
2. PROGRAM-ID. RAGECOB.
3. *PROGRAM-NO. 06
4. AUTHOR. ALAN W. JARL AND JUAN C. GARCIA.
5. INSTALLATION. TEXAS A&M UNIVERSITY - ICC.
6. DATE-WRITTEN. DEC, 1986.
7. DATE-COMPILED. DEC 8, 1986.
8. REMARKS.
9. THIS PROGRAM PRORATES RIFILE RIGID LANEMILES BY AGE,
10. USING THE RL1 FILES. IT IS PART OF THE RENU3 INPUT
11. AUTOMATION PACKAGE.
12. ENVIRONMENT DIVISION.
13. INPUT-OUTPUT SECTION.
14. FILE-CONTROL.
15. SELECT RI-FILE ASSIGN TO UT-S-RIFILE.
16. SELECT RL1-FILE ASSIGN TO UT-S-RL1FILE.
17. SELECT YEAR-CARD ASSIGN TO UR-S-YEARIN.
18. SELECT AGED-LANE-MILES-FILE ASSIGN TO UR-S-RAGEDIS.
19. DATA DIVISION.
20. FILE SECTION.
21.
22. FD RI-FILE,
23. LABEL RECORDS ARE STANDARD,
24. BLOCK CONTAINS 0 RECORDS,
25. RECORDING MODE IS F,
26. DATA RECORD IS RI-RECORD.
27. 01 RI-RECORD.
28. 02 FILLER PIC X(1).
29. 02 RI-SUBFILE PIC X(1).
30. 02 DISTRICT PIC X(2).
31. 02 RI-DISTRICT REDEFINES DISTRICT PIC 9(2).
32. 02 FILLER PIC X(19).
33. 02 RI-LENGTH PIC X(5).
34. 02 RI-LENGTH-N REDEFINES RI-LENGTH PIC 99V999.
35. 02 LENGTH-N REDEFINES RI-LENGTH PIC 9(5).
36. 02 RI-HWY-SYSTEM PIC X(2).
37. 02 FILLER PIC X(4).
38. 02 RI-HWY-STATUS PIC X(1).
39. 02 FILLER PIC X(3).
40. 02 RI-HWY-DESIGN PIC X(1).
41. 02 FILLER PIC X(8).
42. 02 RI-SURFACE-TYPE PIC X(2).
43. 02 FILLER PIC X(1).
44. 02 RI-NO-LANES PIC X(2).
45. 02 RI-NO-LANES-N REDEFINES RI-NO-LANES PIC 9(2).
46. 02 FILLER PIC X(14).
47. 02 RI-URBRUR PIC X(01).
48. 02 FILLER PIC X(54).
49. 02 ADTSEC PIC X(06).
50. 02 RI-ADTSEC REDEFINES ADTSEC PIC 9(06).
51. 02 FILLER PIC X(129).
52.
53. FD RL1-FILE,
54. LABEL RECORDS ARE STANDARD,
55. BLOCK CONTAINS 0 RECORDS,
56. RECORDING MODE IS F,
57. DATA RECORD IS RL1-RECORD.
58. 01 RL1-RECORD.
59. 02 RL1-DISTRICT PIC X(2).
60. 02 FILLER PIC X(26).

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61.      02  RL1-HWY-SYSTEM      PIC X(2).
62.      02  FILLER              PIC X(8).
63.      02  RL1-YEAR-COMP      PIC X(2).
64.      02  FILLER              PIC X(7).
65.      02  RL1-SURFACE-TYPE   PIC X(2).
66.      02  FILLER              PIC X(30).
67.      02  RL1-MILEAGE-CLASS  PIC X(1).
68.      02  FILLER              PIC X(11).
69.      02  RL1-MILES-REMAINING PIC X(5).
70.      02  RL1-MILES REDEFINES RL1-MILES-REMAINING PIC 99V999.
71.      02  FILLER              PIC X(110).
72.
73.      FD  YEAR-CARD,
74.          LABEL RECORDS ARE OMITTED,
75.          RECORDING MODE IS F,
76.          DATA RECORD IS YEAR-IN.
77.      01  YEAR-IN.
78.          02  YC-YEAR          PIC 9(2).
79.          02  FILLER          PIC X(78).
80.
81.      FD  AGED-LANE-MILES-FILE,
82.          LABEL RECORDS ARE STANDARD,
83.          BLOCK CONTAINS 0 RECORDS,
84.          RECORDING MODE IS F,
85.          DATA RECORD IS AGED-LANE-MILES-RECORD.
86.      01  AGED-LANE-MILES-RECORD PIC X(133).
87.
88.
89.      WORKING-STORAGE SECTION.
90.      77  FILLER              PIC X(9)    VALUE 'BEGIN W-S'.
91.      77  AGE                  PIC 9(2)    VALUE ZEROS.
92.      77  BP                    PIC 9(2)    VALUE ZEROS.
93.      77  I                     PIC 9(1)    VALUE ZEROS.
94.      77  DIFF                  PIC 9(3)V9(4) VALUE ZEROS.
95.      77  DIST-CK              PIC 9(2)    VALUE ZEROS.
96.      77  L                     PIC 9(2)    VALUE ZEROS.
97.      77  LEV                   PIC 9(2)    VALUE ZEROS.
98.      77  LANEMILES            PIC 999V999 VALUE ZEROS.
99.      01  TOTLMF               PIC 9(10)   VALUE ZEROES.
100.     77  LANEMILES-FR         PIC 999V999 VALUE ZEROS.
101.     77  D                     PIC 9(2)    VALUE ZEROS.
102.     77  YEAR-WS              PIC 9(2)    VALUE ZEROS.
103.
104.     01  OUT-RECORD.
105.         02  FILLER          PIC X(01).
106.         02  OR-SECTIO.
107.             03  OR-DISTR1   PIC 9(02).
108.             03  OR-DESCOM   PIC 9(04).
109.         02  OR-TABAGE.
110.             03  OR-AGEDIS   PIC 9(04) OCCURS 30.
111.         02  OR-ADTSEC      PIC 9(06).
112.
113.     *
114.     *  RI-FILE LANE MILES
115.     *
116.     01  TABLE-2.
117.         04  T2-LANE-MILES   PIC 9(6)V9(3).
118.
119.     *
120.     *  AGE MILES
121.     *
121.     01  TABLE-3.

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122.           04 TAB-3-L OCCURS 30 TIMES.
123.           05 T3-AGE-MILES PIC 9(5).
124. *
125. * RL1-FILE LENGTHS
126. *
127. 01 TABLE-4.
128.           04 TAB-4-L OCCURS 30 TIMES.
129.           05 T4-RL1-MILES PIC 9(4)V9(3).
130. *
131. * RL1-TOTAL MILES
132. *
133. 01 TABLE-5.
134.           04 T5-RL1-TOTAL-MILES PIC 9(5)V9(3).
135. *
136. * PERCENT RL1-TOTAL MILES
137. *
138. 01 TABLE-6.
139.           04 TAB-6-L OCCURS 30 TIMES.
140.           05 T6-RL1-PERCENTAGE PIC 9V9(4).
141. 01 VADT PIC 9(10) VALUE ZEROES.
142. 01 COUN PIC 9(08) VALUE ZEROES.
143. 01 T10-TOTPRCNT PIC 9V9(4) VALUE ZEROES.
144. 01 ERROR-1.
145. 02 FILLER PIC X(51) VALUE ' YEAR CARD IS MISSING
146. 'OR IN ERROR. JOB TERMINATED.'.
147. 02 FILLER PIC X(82) VALUE SPACES.
148. 01 ERROR-2.
149. 02 FILLER PIC X(49) VALUE ' RI FILE IS MISSING OR
150. ' IN ERROR. JOB TERMINATED.'.
151. 02 FILLER PIC X(84) VALUE SPACES.
152. 01 ERROR-3.
153. 02 FILLER PIC X(50) VALUE ' RL1 FILE IS MISSING O
154. 'R IN ERROR. JOB TERMINATED.'.
155. 02 FILLER PIC X(77) VALUE SPACES.
156.
157. PROCEDURE DIVISION.
158. OPEN INPUT RI-FILE, RL1-FILE, YEAR-CARD,
159. OUTPUT AGED-LANE-MILES-FILE.
160. PERFORM ZERO-TABLE.
161. MOVE 01 TO DIST-CK.
162. READ YEAR-CARD,
163. AT END,
164. DISPLAY ERROR-1,
165. GO TO CLOSE-FILES.
166. IF YC-YEAR IS NUMERIC,
167. IF YC-YEAR > '80',
168. GO TO INITIAL-RI-FILE-READ.
169. DISPLAY ERROR-1.
170. GO TO CLOSE-FILES.
171. INITIAL-RI-FILE-READ.
172. READ RI-FILE,
173. AT END,
174. DISPLAY ERROR-2,
175. GO TO CLOSE-FILES.
176. IF RI-SUBFILE NOT = '1',
177. DISPLAY ERROR-2,
178. GO TO CLOSE-FILES.
179. READ RL1-FILE,
180. AT END,
181. DISPLAY ERROR-3,
182. GO TO CLOSE-FILES.

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183.      GO TO CK-STATUS.
184. READ-RI-FILE.
185.   READ RI-FILE,
186.     AT END,
187.       GO TO CK-EM.
188.   IF RI-SUBFILE > '1',
189.     GO TO CK-EM.
190. CK-STATUS.
191.   EXAMINE DISTRICT REPLACING ALL ' ' BY '0'.
192.   EXAMINE RI-SURFACE-TYPE REPLACING ALL ' ' BY '0'.
193.   EXAMINE RI-LENGTH REPLACING ALL ' ' BY '0'.
194.   EXAMINE RI-NO-LANES REPLACING ALL ' ' BY '0'.
195.   EXAMINE ADTSEC  REPLACING ALL ' ' BY '0'.
196.   IF RI-HWY-STATUS NOT = '1',
197.     GO TO READ-RI-FILE.
198.   IF RI-HWY-SYSTEM = '00' OR '13',
199.     GO TO READ-RI-FILE.
200. CK-DIST.
201.   IF RI-DISTRICT NOT = DIST-CK,
202.     GO TO CK-EM.
203. BACK-AGAIN.
204. CK-SURF.
205.   IF RI-SURFACE-TYPE = '61',
206.     GO TO ADD-RI-FILE-MILES.
207.   GO TO READ-RI-FILE.
208. ADD-RI-FILE-MILES.
209.   COMPUTE VADT = VADT + RI-ADTSEC * LENGTH-N / RI-NO-LANES-N.
210.   ADD LENGTH-N TO COUN.
211.   COMPUTE LANEMILES = RI-LENGTH-N * RI-NO-LANES-N.
212.   ADD LANEMILES TO T2-LANE-MILES.
213.   MOVE 0 TO LANEMILES-FR.
214.   IF RI-HWY-DESIGN = '5' OR '8',
215.     COMPUTE LANEMILES-FR = RI-LENGTH-N * 2.
216.   IF RI-HWY-DESIGN = '6' OR '9',
217.     COMPUTE LANEMILES-FR = RI-LENGTH-N * 4.
218.   IF RI-DISTRICT = '12'
219.     ADD LANEMILES-FR TO T2-LANE-MILES.
220.   ADD LANEMILES-FR TO T2-LANE-MILES.
221.   GO TO READ-RI-FILE.
222. READ-RL1.
223.   READ RL1-FILE,
224.     AT END,
225.       PERFORM BUILD-PERCENT,
226.       PERFORM TMILE-TABLE THRU EXIT99,
227.       GO TO CLOSE-FILES.
228. CK-EM.
229.   EXAMINE RL1-DISTRICT REPLACING ALL ' ' BY '0'.
230.   EXAMINE RL1-SURFACE-TYPE REPLACING ALL ' ' BY '0'.
231.   EXAMINE RL1-HWY-SYSTEM REPLACING ALL ' ' BY '0'.
232.   EXAMINE RL1-YEAR-COMP REPLACING ALL ' ' BY '0'.
233.   EXAMINE RL1-MILES-REMAINING REPLACING ALL ' ' BY '0'.
234.   IF RL1-MILES-REMAINING IS NOT NUMERIC,
235.     GO TO READ-RL1.
236.   IF RL1-MILES-REMAINING = '00000',
237.     GO TO READ-RL1.
238.   IF RL1-HWY-SYSTEM = '00' OR '13',
239.     GO TO READ-RL1.
240.   IF RL1-MILEAGE-CLASS NOT = '1',
241.     GO TO READ-RL1.
242. DISTRICT-CK.
243.   IF RL1-DISTRICT NOT EQUAL TO DIST-CK,

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244.          PERFORM BUILD-PERCENT.
245.          GO TO TMILE-TABLE.
246.
247.  FIND-AGE.
248.    MOVE RL1-YEAR-COMP TO YEAR-WS.
249.    COMPUTE AGE ROUNDED = (YC-YEAR - YEAR-WS) + 1.
250.    IF AGE > 30.
251.      MOVE 30 TO AGE.
252.  FIND-SURF.
253.    IF RL1-SURFACE-TYPE = '61'.
254.      GO TO ADD-RL1-LENGTH.
255.    GO TO READ-RL1.
256.  ADD-RL1-LENGTH.
257.    MOVE AGE TO LEV.
258.    ADD RL1-MILES TO T4-RL1-MILES (LEV).
259.      T5-RL1-TOTAL-MILES.
260.    GO TO READ-RL1.
261.  BUILD-PERCENT.
262.    PERFORM BP3 THRU END-BP3
263.      VARYING L FROM 1 BY 1 UNTIL L > 30.
264.    PERFORM FP2 THRU END-FP2.
265.  BP3.
266.    IF T5-RL1-TOTAL-MILES = 0.
267.      MOVE 0 TO T6-RL1-PERCENTAGE (L).
268.      GO TO END-BP3.
269.    COMPUTE T6-RL1-PERCENTAGE (L) =
270.      T4-RL1-MILES (L) / T5-RL1-TOTAL-MILES.
271.    ADD T6-RL1-PERCENTAGE (L) TO T10-TOTPRCNT.
272.  END-BP3.
273.  FP2.
274.    IF T10-TOTPRCNT = 1.0.
275.      GO TO END-FP2.
276.    MOVE 1 TO BP.
277.    PERFORM FIND-BIGPRCNT THRU END-FIND-BIGPRCNT
278.      VARYING L FROM 1 BY 1 UNTIL L > 30.
279.    IF T10-TOTPRCNT > 1.0.
280.      COMPUTE DIFF = T10-TOTPRCNT - 1.0.
281.      COMPUTE T6-RL1-PERCENTAGE (BP) =
282.        T6-RL1-PERCENTAGE (BP) - DIFF.
283.      GO TO END-FP2.
284.    COMPUTE DIFF = 1.0 - T10-TOTPRCNT.
285.    COMPUTE T6-RL1-PERCENTAGE (BP) =
286.      T6-RL1-PERCENTAGE (BP) + DIFF.
287.  END-FP2.
288.  FIND-BIGPRCNT.
289.    IF T6-RL1-PERCENTAGE (L) >
290.      T6-RL1-PERCENTAGE (BP).
291.      MOVE L TO BP.
292.  END-FIND-BIGPRCNT.
293.  TMILE-TABLE.
294.    IF COUN = 0 MOVE 1 TO COUN.
295.    COMPUTE VADT ROUNDED = VADT / COUN
296.    ON SIZE ERROR MOVE 0 TO VADT.
297.    MOVE SPACES TO OUT-RECORD.
298.    PERFORM BT3 THRU END-BT3
299.      VARYING L FROM 1 BY 1 UNTIL L > 30.
300.    MOVE VADT TO OR-ADTSEC.
301.    MOVE DIST-CK TO OR-DISTRI.
302.    WRITE AGED-LANE-MILES-RECORD FROM OUT-RECORD.
303.  EXIT99. EXIT.
304.  INCR-DIST-CK.

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305.          ADD 1 TO DIST-CK.
306.          IF DIST-CK = 22,
307.              ADD 1 TO DIST-CK.
308.          MOVE ZEROES TO VADT, COUN.
309.          PERFORM ZERO-TABLE.
310.          GO TO BACK-AGAIN.
311.      BT3.
312.          COMPUTE T3-AGE-MILES (L) ROUNDED =
313.              T6-RL1-PERCENTAGE (L) * T2-LANE-MILES.
314.          MOVE T3-AGE-MILES (L) TO OR-AGEDIS (L).
315.          ADD T3-AGE-MILES (L) TO TOTLMF.
316.      END-BT3.
317.
318.      ZERO-TABLE.
319.          MOVE ZEROS TO TABLE-6, TABLE-2, TABLE-3, TABLE-4, TABLE-5.
320.
321.      CLOSE-FILES.
322.          DISPLAY 'TOTAL RIGID LANE MILES = ' TOTLMF.
323.          CLOSE RI-FILE, RL1-FILE, YEAR-CARD, AGED-LANE-MILES-FILE.
324.          STOP RUN.
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1. C PROGRAM. INPRENU
2. C PROGRAM-NO. 07
3. C
4. C GENERATION OF INPUT FILE FOR RENU PROGRAM
5. C FLEXIBLE PAVEMENTS.
6. C AUTHOR. JUAN C. GARCIA.
7. C TEXAS TRANSPORTATION INSTITUTE
8. C TEXAS A&M UNIVERSITY
9. C DECEMBER, 1986.
10. C
11. DIMENSION ND(36),XN(36),XX(36),IA(36),JY(36),IY(36),
12. - WL(36),PT(36),PI(36),PP(36),WP(36),WG(36),
13. - GVWT(28,10),EMPT(14,10),FSTAW(10),PSTAW(10),
14. - PER(10),PF(36),PFO(36),
15. - SING(11,10),TAND(15,10),AGE(30),PPV(3)
16. REAL INTS(11),INTT(15),NADT(2,3,2),INTG(28),INTE(14)
17. INTEGER OM(36),COM(36),TRUCK(10),ADIST,ACOMB,ADT,TPE,TDIST,
18. - TCOMB,GDIST,GCOMB,GTDIS
19. DATA INTS /3.,7.,8.,12.,16.,18.,19.,20.,22.,24.,26./
20. DATA INTT /6.,12.,18.,24.,30.,32.,33.,34.,36.,38.,40.,42.,
21. - 44.,46.,50./
22. DATA INTG /10.,14.,20.,22.,24.,26.,28.,30.,32.,34.,36.,38.,
23. - 40.,45.,50.,55.,60.,65.,70.,72.,75.,80.,85.,90.,
24. - 95.,100.,105.,110./
25. DATA INTE /10.,14.,20.,22.,24.,26.,28.,30.,32.,34.,36.,38.,
26. - 40.,45./
27. DATA STARS,START,NLS,NLT /3.,6.,11,15/
28. DATA STARG,STARE,NLG,NLE /10.,10.,28,14/
29. DATA IEWS,WLANE,PPV/O,12.,95.,95.,5./
30. DATA XN,XX,ND,JY,IY,WL,PP,WP,WG,IA,PF,PFO,PT,PI,OM /540*O/
31. C
32. C READ BASIC INFORMATION
33. C
34. NADT(1,1,1)=5000.
35. NADT(1,1,2)=10000.
36. NADT(1,2,1)=1000.
37. NADT(1,2,2)=3000.
38. NADT(1,3,1)=3000.
39. NADT(1,3,2)=8000.
40. NADT(2,1,1)=15000.
41. NADT(2,1,2)=20000.
42. NADT(2,2,1)=3000.
43. NADT(2,2,2)=6000.
44. NADT(2,3,1)=6000.
45. NADT(2,3,2)=12000.
46. READ(11,1000) NREG
47. NOLD=0
48. READ(11,1005) NYAP,AGR,RTINT,XHCIO,XHCIM
49. 1005 FORMAT(15,4(F5.0,2X))
50. READ(11,1006) PGVWL,PSAL,PTAL,PTRAL
51. READ(11,1006) FGVWL,FSAL,FTAL,FTRAL
52. READ(11,1007) (TRUCK(I),I=1,10)
53. READ(11,1008) (PSTAW(I),I=1,10)
54. READ(11,1008) (FSTAW(I),I=1,10)
55. READ(11,1000) ISHIFT
56. 1006 FORMAT(4F8.0)
57. 1007 FORMAT(10(6X,12))
58. 1008 FORMAT(10F8.0)
59. NTT=0
60. DO 2 I=1,10

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61.      2 NTT=NTT+TRUCK(I)
62.      C
63.      C   GENERATE INITIAL LINES
64.      C
65.      WRITE(10,1015) NYAP,ISHIFT,AGR,RTINT,XHCIO,XHCIM
66.      1015 FORMAT('RUN PARAMETERS',6X,2I5,4F10.2)
67.      WRITE(10,1020)
68.      1020 FORMAT('SYSTEM TITLE',/, 'PAVEMENT REHABILITATION AND ',
69.      - 'MAINTENANCE COST ESTIMATES (BY DISTRICT)',/, 'TEXAS ',
70.      - 'TRANSPORTATION INSTITUTE',/, 'SAMPLE RUN FOR FLEXIBLE ',
71.      - 'PAVEMENTS')
72.      5 READ(11,1000) NDIST
73.      1000 FORMAT(I2)
74.      N=0
75.      IF (NDIST.EQ.0) GO TO 510
76.      IF ((NDIST-NOLD).EQ.1) GO TO 10
77.      NSKIP=NDIST-NOLD-1
78.      IF (NDIST.GE.23) NSKIP=NSKIP-1
79.      DO 120 NS=1,NSKIP
80.      DO 110 NC=1,36
81.      READ(12,1001) NNDI
82.      READ(8,1000) NNDI
83.      READ(7,1000) NNDI
84.      DO 3 I=1,10
85.      READ(7,1175) X
86.      3 CONTINUE
87.      READ(7,1000) NNDI
88.      DO 4 I=1,10
89.      READ(7,1175) X
90.      4 CONTINUE
91.      READ(9,1000) NNDI
92.      DO 7 J=1,10
93.      READ(9,1175) X
94.      7 CONTINUE
95.      READ(9,1000) NNDI
96.      DO 8 J=1,10
97.      READ(9,1175) X
98.      8 CONTINUE
99.      110 CONTINUE
100.     120 CONTINUE
101.     10 READ(11,1010) I,XN(I),XX(I),ND(I),JY(I),IY(I),WL(I),PP(I),
102.     - WP(I),WG(I),IA(I),PF(I),PFO(I),PT(I),PI(I),OM(I)
103.     IF (I.EQ.0) GO TO 20
104.     1010 FORMAT (I2,1X,F5.0,1X,F5.0,1X,I2,2(1X,I3),1X,F6.0,3(1X,F5.0),
105.     - 1X,I1,4(1X,F5.0),1X,I1)
106.     N=N+1
107.     COM(N)=I
108.     GO TO 10
109.     20 I=COM(1)
110.     IC=2
111.     NDEL=ND(I)
112.     XMNOTK=XN(I)
113.     XMXOTK=XX(I)
114.     IACR=IA(I)
115.     JYR=JY(I)
116.     IF (WL(I).NE.0) WLANE=WL(I)
117.     PTERM=PT(I)
118.     PIOV=PI(I)
119.     PPVDSH=PP(I)
120.     WPSH=WP(I)
121.     WGSN=WG(I)

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122. PPF=PF(I)
123. PPFO=PFO(I)
124. IYR=IY(I)
125. IOMIT=OM(I)
126. C
127. C GENERATE PARTICULAR SETS
128. C
129. DO 500 K=1,36
130. CALL CHECK (K,OM,ISW)
131. IF (ISW.EQ.1) GO TO 75
132. IF (K.EQ.1) CALL ASSIG (1,1,1,1,NIS,NPT,NRU,NLH)
133. IF (K.EQ.2) CALL ASSIG (1,1,1,2,NIS,NPT,NRU,NLH)
134. IF (K.EQ.3) CALL ASSIG (1,1,2,1,NIS,NPT,NRU,NLH)
135. IF (K.EQ.4) CALL ASSIG (1,1,2,2,NIS,NPT,NRU,NLH)
136. IF (K.EQ.5) CALL ASSIG (1,2,1,1,NIS,NPT,NRU,NLH)
137. IF (K.EQ.6) CALL ASSIG (1,2,1,2,NIS,NPT,NRU,NLH)
138. IF (K.EQ.7) CALL ASSIG (1,2,2,1,NIS,NPT,NRU,NLH)
139. IF (K.EQ.8) CALL ASSIG (1,2,2,2,NIS,NPT,NRU,NLH)
140. IF (K.EQ.9) CALL ASSIG (1,3,1,1,NIS,NPT,NRU,NLH)
141. IF (K.EQ.10) CALL ASSIG (1,3,1,2,NIS,NPT,NRU,NLH)
142. IF (K.EQ.11) CALL ASSIG (1,3,2,1,NIS,NPT,NRU,NLH)
143. IF (K.EQ.12) CALL ASSIG (1,3,2,2,NIS,NPT,NRU,NLH)
144. IF (K.EQ.13) CALL ASSIG (2,1,1,1,NIS,NPT,NRU,NLH)
145. IF (K.EQ.14) CALL ASSIG (2,1,1,2,NIS,NPT,NRU,NLH)
146. IF (K.EQ.15) CALL ASSIG (2,1,2,1,NIS,NPT,NRU,NLH)
147. IF (K.EQ.16) CALL ASSIG (2,1,2,2,NIS,NPT,NRU,NLH)
148. IF (K.EQ.17) CALL ASSIG (2,2,1,1,NIS,NPT,NRU,NLH)
149. IF (K.EQ.18) CALL ASSIG (2,2,1,2,NIS,NPT,NRU,NLH)
150. IF (K.EQ.19) CALL ASSIG (2,2,2,1,NIS,NPT,NRU,NLH)
151. IF (K.EQ.20) CALL ASSIG (2,2,2,2,NIS,NPT,NRU,NLH)
152. IF (K.EQ.21) CALL ASSIG (2,3,1,1,NIS,NPT,NRU,NLH)
153. IF (K.EQ.22) CALL ASSIG (2,3,1,2,NIS,NPT,NRU,NLH)
154. IF (K.EQ.23) CALL ASSIG (2,3,2,1,NIS,NPT,NRU,NLH)
155. IF (K.EQ.24) CALL ASSIG (2,3,2,2,NIS,NPT,NRU,NLH)
156. IF (K.EQ.25) CALL ASSIG (3,1,1,1,NIS,NPT,NRU,NLH)
157. IF (K.EQ.26) CALL ASSIG (3,1,1,2,NIS,NPT,NRU,NLH)
158. IF (K.EQ.27) CALL ASSIG (3,1,2,1,NIS,NPT,NRU,NLH)
159. IF (K.EQ.28) CALL ASSIG (3,1,2,2,NIS,NPT,NRU,NLH)
160. IF (K.EQ.29) CALL ASSIG (3,2,1,1,NIS,NPT,NRU,NLH)
161. IF (K.EQ.30) CALL ASSIG (3,2,1,2,NIS,NPT,NRU,NLH)
162. IF (K.EQ.31) CALL ASSIG (3,2,2,1,NIS,NPT,NRU,NLH)
163. IF (K.EQ.32) CALL ASSIG (3,2,2,2,NIS,NPT,NRU,NLH)
164. IF (K.EQ.33) CALL ASSIG (3,3,1,1,NIS,NPT,NRU,NLH)
165. IF (K.EQ.34) CALL ASSIG (3,3,1,2,NIS,NPT,NRU,NLH)
166. IF (K.EQ.35) CALL ASSIG (3,3,2,1,NIS,NPT,NRU,NLH)
167. IF (K.EQ.36) CALL ASSIG (3,3,2,2,NIS,NPT,NRU,NLH)
168. C
169. C READ AGE DISTRIBUTION
170. C
171. 23 READ(12,1025) ADIST,ACOMB,(AGE(J),J=1,30),ADT
172. CALL SUMA (AGE,SAGE)
173. IF (SAGE.EQ.0) GO TO 78
174. 1025 FORMAT(1X,I2,I4,30F4.0,I6)
175. IF (ADIST.NE.NDIST) GO TO 23
176. C
177. C READ TRUCK PERCENTAGES
178. C
179. 24 READ(8,1030) TDIST,TCOMB,(PER(J),J=1,10)
180. IF (TDIST.NE.NDIST) GO TO 24
181. 1030 FORMAT(I2,I4,10F6.2)
182. C

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183. C READ LOAD DISTRIBUTIONS
184. C
185. 28 READ(9,1035) LDIST,LCOMB,LTDIS
186. 1035 FORMAT(12,14,11)
187. IF (LDIST.NE.NDIST) GO TO 28
188. IF (LTDIS.NE.1) GO TO 600
189. DO 30 J=1,10
190. READ(9,1040) (SING(L,J),L=1,NLS)
191. 1040 FORMAT(11F8.0)
192. 30 CONTINUE
193. READ(9,1035) LDIST,LCOMB,LTDIS
194. IF (LDIST.NE.NDIST) GO TO 600
195. IF (LTDIS.NE.2) GO TO 600
196. DO 35 J=1,10
197. READ(9,1045) (TAND(L,J),L=1,NLT)
198. 1045 FORMAT(15F8.0)
199. 35 CONTINUE
200. C
201. C READ GVW AND EMPTY WEIGHT DISTRIBUTIONS
202. C
203. 38 READ(7,1035) GDIST,GCOMB,GTDIS
204. IF (GDIST.NE.NDIST) GO TO 38
205. IF (GTDIS.NE.1) GO TO 600
206. DO 45 J=1,10
207. READ(7,1046) (GVWT(L,J),L=1,NLG)
208. 1046 FORMAT(28F4.0)
209. 45 CONTINUE
210. READ(7,1035) GDIST,GCOMB,GTDIS
211. IF (GDIST.NE.NDIST) GO TO 600
212. IF (GTDIS.NE.2) GO TO 600
213. DO 50 J=1,10
214. READ(7,1047) (EMPT(L,J),L=1,NLE)
215. 1047 FORMAT(14F4.0)
216. 50 CONTINUE
217. C
218. C WRITE PARTICULAR SETS
219. C
220. WRITE(10,1050) WLANE,PPF,PPFO
221. 1050 FORMAT('FLEXIBLE',12X,10X,F10.2,20X,2F10.2)
222. IF (K.EQ.1) WRITE(10,1055)
223. IF (K.EQ.2) WRITE(10,1056)
224. IF (K.EQ.3) WRITE(10,1057)
225. IF (K.EQ.4) WRITE(10,1058)
226. IF (K.EQ.5) WRITE(10,1059)
227. IF (K.EQ.6) WRITE(10,1060)
228. IF (K.EQ.7) WRITE(10,1061)
229. IF (K.EQ.8) WRITE(10,1062)
230. IF (K.EQ.9) WRITE(10,1063)
231. IF (K.EQ.10) WRITE(10,1064)
232. IF (K.EQ.11) WRITE(10,1065)
233. IF (K.EQ.12) WRITE(10,1066)
234. IF (K.EQ.13) WRITE(10,1067)
235. IF (K.EQ.14) WRITE(10,1068)
236. IF (K.EQ.15) WRITE(10,1069)
237. IF (K.EQ.16) WRITE(10,1070)
238. IF (K.EQ.17) WRITE(10,1071)
239. IF (K.EQ.18) WRITE(10,1072)
240. IF (K.EQ.19) WRITE(10,1073)
241. IF (K.EQ.20) WRITE(10,1074)
242. IF (K.EQ.21) WRITE(10,1075)
243. IF (K.EQ.22) WRITE(10,1076)

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244.      IF (K.EQ.23) WRITE(10,1077)
245.      IF (K.EQ.24) WRITE(10,1078)
246.      IF (K.EQ.25) WRITE(10,1079)
247.      IF (K.EQ.26) WRITE(10,1080)
248.      IF (K.EQ.27) WRITE(10,1081)
249.      IF (K.EQ.28) WRITE(10,1082)
250.      IF (K.EQ.29) WRITE(10,1083)
251.      IF (K.EQ.30) WRITE(10,1084)
252.      IF (K.EQ.31) WRITE(10,1085)
253.      IF (K.EQ.32) WRITE(10,1086)
254.      IF (K.EQ.33) WRITE(10,1087)
255.      IF (K.EQ.34) WRITE(10,1088)
256.      IF (K.EQ.35) WRITE(10,1089)
257.      IF (K.EQ.36) WRITE(10,1090)
258.      1055 FORMAT('FLEXIBLE - INTERST - HOTMIX - RURAL - LOW TRAFFIC')
259.      1056 FORMAT('FLEXIBLE - INTERST - HOTMIX - RURAL - HIGH TRAFFIC')
260.      1057 FORMAT('FLEXIBLE - INTERST - HOTMIX - URBAN - LOW TRAFFIC')
261.      1058 FORMAT('FLEXIBLE - INTERST - HOTMIX - URBAN - HIGH TRAFFIC')
262.      1059 FORMAT('FLEXIBLE - INTERST - BLACKB - RURAL - LOW TRAFFIC')
263.      1060 FORMAT('FLEXIBLE - INTERST - BLACKB - RURAL - HIGH TRAFFIC')
264.      1061 FORMAT('FLEXIBLE - INTERST - BLACKB - URBAN - LOW TRAFFIC')
265.      1062 FORMAT('FLEXIBLE - INTERST - BLACKB - URBAN - HIGH TRAFFIC')
266.      1063 FORMAT('FLEXIBLE - INTERST - OVRLAY - RURAL - LOW TRAFFIC')
267.      1064 FORMAT('FLEXIBLE - INTERST - OVRLAY - RURAL - HIGH TRAFFIC')
268.      1065 FORMAT('FLEXIBLE - INTERST - OVRLAY - URBAN - LOW TRAFFIC')
269.      1066 FORMAT('FLEXIBLE - INTERST - OVRLAY - URBAN - HIGH TRAFFIC')
270.      1067 FORMAT('FLEXIBLE - FM - HOTMIX - RURAL - LOW TRAFFIC')
271.      1068 FORMAT('FLEXIBLE - FM - HOTMIX - RURAL - HIGH TRAFFIC')
272.      1069 FORMAT('FLEXIBLE - FM - HOTMIX - URBAN - LOW TRAFFIC')
273.      1070 FORMAT('FLEXIBLE - FM - HOTMIX - URBAN - HIGH TRAFFIC')
274.      1071 FORMAT('FLEXIBLE - FM - BLACKB - RURAL - LOW TRAFFIC')
275.      1072 FORMAT('FLEXIBLE - FM - BLACKB - RURAL - HIGH TRAFFIC')
276.      1073 FORMAT('FLEXIBLE - FM - BLACKB - URBAN - LOW TRAFFIC')
277.      1074 FORMAT('FLEXIBLE - FM - BLACKB - URBAN - HIGH TRAFFIC')
278.      1075 FORMAT('FLEXIBLE - FM - OVRLAY - RURAL - LOW TRAFFIC')
279.      1076 FORMAT('FLEXIBLE - FM - OVRLAY - RURAL - HIGH TRAFFIC')
280.      1077 FORMAT('FLEXIBLE - FM - OVRLAY - URBAN - LOW TRAFFIC')
281.      1078 FORMAT('FLEXIBLE - FM - OVRLAY - URBAN - HIGH TRAFFIC')
282.      1079 FORMAT('FLEXIBLE - US/STAT - HOTMIX - RURAL - LOW TRAFFIC')
283.      1080 FORMAT('FLEXIBLE - US/STAT - HOTMIX - RURAL - HIGH TRAFFIC')
284.      1081 FORMAT('FLEXIBLE - US/STAT - HOTMIX - URBAN - LOW TRAFFIC')
285.      1082 FORMAT('FLEXIBLE - US/STAT - HOTMIX - URBAN - HIGH TRAFFIC')
286.      1083 FORMAT('FLEXIBLE - US/STAT - BLACKB - RURAL - LOW TRAFFIC')
287.      1084 FORMAT('FLEXIBLE - US/STAT - BLACKB - RURAL - HIGH TRAFFIC')
288.      1085 FORMAT('FLEXIBLE - US/STAT - BLACKB - URBAN - LOW TRAFFIC')
289.      1086 FORMAT('FLEXIBLE - US/STAT - BLACKB - URBAN - HIGH TRAFFIC')
290.      1087 FORMAT('FLEXIBLE - US/STAT - OVRLAY - RURAL - LOW TRAFFIC')
291.      1088 FORMAT('FLEXIBLE - US/STAT - OVRLAY - RURAL - HIGH TRAFFIC')
292.      1089 FORMAT('FLEXIBLE - US/STAT - OVRLAY - URBAN - LOW TRAFFIC')
293.      1090 FORMAT('FLEXIBLE - US/STAT - OVRLAY - URBAN - HIGH TRAFFIC')
294.      RADT=ADT
295.      IF (ADT.EQ.0) RADT=NADT(NLH,NIS,NRU)
296.      WRITE(10,1100) NDIST,NIS,NPT,NRU,NLH,NDEL,XMNOTK.
297.      -XMXOTK,IACR,NREG,IYR,JYR,RADT
298.      1100 FORMAT(6I5,2F5.2,4I5,F10.2,///)
299.      WRITE(10,1105)
300.      1105 FORMAT('AGE DISTRIBUTION',4X,' 30')
301.      WRITE(10,1110) (AGE(I),I=1,30)
302.      1110 FORMAT(16F5.0,/,14F5.0)
303.      WRITE(10,1115) NTT
304.      1115 FORMAT('TRUCK TYPE',10X,15./)

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305.      -'2D',8X,'3A',8X,'3-S2',6X,'2-S1-2',4X,'2-S1',6X,'2-S2',6X,
306.      -'3-S1',6X,'3-S3',/,,'3-S1-2',4X,'2-S2-2',/,
307.      -' 2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0',
308.      -' 2 1 0 0 1 2 0 0',/,,'4 1 0 0 4 1 0 0')
309.      DO 40 I=1,10
310.      IF (TRUCK(I).EQ.1) GO TO 40
311.      PER(I)=0
312.      DO 41 J=1,NLS
313.      41 SING(J,I)=0.
314.      DO 42 J=1,NLT
315.      42 TAND(J,I)=0.
316.      DO 43 J=1,NLG
317.      43 GVWT(J,I)=0.
318.      DO 44 J=1,NLE
319.      44 EMPT(J,I)=0.
320.      40 CONTINUE
321.      L=0
322.      WRITE(10,1120) L,(PER(J),J=1,10)
323.      1120 FORMAT(I3,1X,10F6.2)
324.      WRITE(10,1125) IEWS,PGVWL,PSAL,PTAL,PTRAL,
325.      -FGVWL,FSAL,FTAL,FTRAL,(PSTAW(L),L=1,10),
326.      -(FSTAW(L),L=1,10)
327.      1125 FORMAT('LOAD LIMITS',9X,I5,/,4F10.2,/,4F10.2,/,10F8.2,/
328.      -,10F8.2)
329.      WRITE(10,1130) NLS,STARS
330.      1130 FORMAT('SINGLE AXLES',8X,I5,5X,F10.2)
331.      DO 60 L=1,NLS
332.      WRITE(10,1135) INTS(L),(SING(L,J),J=1,10)
333.      1135 FORMAT(F10.0,10F7.0)
334.      60 CONTINUE
335.      WRITE(10,1140) NLT,START
336.      1140 FORMAT('TANDEM AXLES',8X,I5,5X,F10.2)
337.      DO 65 L=1,NLT
338.      WRITE(10,1135) INTT(L),(TAND(L,J),J=1,10)
339.      65 CONTINUE
340.      WRITE(10,1141) NLG,STARG
341.      1141 FORMAT('GVW',17X,I5,5X,F10.2)
342.      DO 55 L=1,NLG
343.      WRITE(10,1135) INTG(L),(GVWT(L,J),J=1,10)
344.      55 CONTINUE
345.      WRITE(10,1142) NLE,STARF
346.      1142 FORMAT('EMPTY',15X,I5,5X,F10.2)
347.      DO 57 L=1,NLE
348.      WRITE(10,1135) INTE(L),(EMPT(L,J),J=1,10)
349.      57 CONTINUE
350.      WRITE(10,1145) PTERM,PIOV
351.      1145 FORMAT('PERFORMANCE',9X,20X,2F10.2)
352.      IF (PPVDSH.EQ.0) PPVDSH=PPV(NIS)
353.      WRITE(10,1150) PPVDSH,WPSH,WGSH
354.      1150 FORMAT('OVERLAY',13X,10X,3F8.2)
355.      WRITE(10,1170)
356.      1170 FORMAT('EXECUTE')
357.      IF ((K+1).NE.COM(IC)) GO TO 500
358.      I=COM(IC)
359.      IF (ND(I).NE.0) NDEL=ND(I)
360.      IF (XN(I).NE.0) XMNOTK=XN(I)
361.      IF (XX(I).NE.0) XMXOTK=XX(I)
362.      IF (IA(I).NE.0) IACR=IA(I)
363.      IF (JY(I).NE.0) JYR=JY(I)
364.      IF (WL(I).NE.0) WLANE=WL(I)
365.      IF (PT(I).NE.0) PTERM=PT(I)

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366.         IF (PI(I).NE.O) PIOV=PI(I)
367.         IF (PP(I).NE.O) PPVDSH=PP(I)
368.         IF (WP(I).NE.O) WPSH=WP(I)
369.         IF (WG(I).NE.O) WGSB=WG(I)
370.         IF (OM(I).NE.O) IOMIT=OM(I)
371.         IF (PF(I).NE.O) PPF=PF(I)
372.         IF (PFO(I).NE.O) PPFO=PFO(I)
373.         IF (IY(I).NE.O) IYR=IY(I)
374.         IC=IC+1
375.         GO TO 500
376. 1001 FORMAT(1X,I2)
377. 1175 FORMAT(F8.0)
378.         75 READ(12,1001) NNDI
379.         78 READ(8,1000) NNDI
380.         READ(9,1000) NNDI
381.         DO 85 J=1,10
382.         READ(9,1175) X
383.         85 CONTINUE
384.         READ(9,1000) NNDI
385.         DO 90 J=1,10
386.         READ(9,1175) X
387.         90 CONTINUE
388.         READ(7,1000)NNDI
389.         DO 87 J=1,10
390.         READ(7,1175) X
391.         87 CONTINUE
392.         READ(7,1000)NNDI
393.         DO 88 J=1,10
394.         READ(7,1175) X
395.         88 CONTINUE
396. 500 CONTINUE
397.         NOLD=NDIST
398.         DO 505 J=1,36
399.         OM(J)=0
400.         COM(J)=0
401.         505 CONTINUE
402.         GO TO 5
403.         510 WRITE(10,1180)
404. 1180 FORMAT('STOP')
405.         STOP
406.         600 WRITE(10,1200)
407. 1200 FORMAT('ERROR IN FILE ORDERING - STOP PROCESS')
408.         STOP
409.         END
410. C
411. C
412.         SUBROUTINE CHECK (K,OM,ISW)
413.         INTEGER OM(36)
414.         ISW=0
415.         DO 10 I=1,36
416.         IF (OM(I).EQ.1) GO TO 5
417.         GO TO 10
418.         5 IF (I.EQ.K) GO TO 20
419.         10 CONTINUE
420.         GO TO 30
421.         20 ISW=1
422.         30 RETURN
423.         END
424. C
425. C
426.         SUBROUTINE ASSIG (N1,N2,N3,N4,NIS,NPT,NRU,NLH)

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427.      NIS=N1
428.      NPT=N2
429.      NRU=N3
430.      NLH=N4
431.      RETURN
432.      END
433.      C
434.      C
435.      SUBROUTINE SUMA (A,B)
436.      DIMENSION A(30)
437.      B=0
438.      DO 10 I=1,30
439.      B=B+A(I)
440.      10 CONTINUE
441.      RETURN
442.      END
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1. C PROGRAM. RINPRENU
2. C PROGRAM-NO. 08
3. C
4. C GENERATION OF INPUT FILE FOR RENU PROGRAM
5. C RIGID PAVEMENTS.
6. C AUTHOR. JUAN C. GARCIA.
7. C TEXAS TRANSPORTATION INSTITUTE
8. C TEXAS A&M UNIVERSITY
9. C DECEMBER, 1986.
10. C
11. DIMENSION GVWT(28,10),EMPT(14,10),FSTAW(10),PSTAW(10),
12. - PER(10),THICK(3),STRIN(3),
13. - SING(11,10),TAND(15,10),AGE(30)
14. REAL INTS(11),INTT(15),NADT(2,3,2),INTG(28),INTE(14)
15. INTEGER TRUCK(10),ADIST,ACOMB,ADT,TDIST,DIN,
16. - TCOMB,GDIST,GCOMB,GDIS
17. CHARACTER*3 TMC1,TMC2,TMC3,MCODE(3)
18. DATA INTS /3.,7.,8.,12.,16.,18.,19.,20.,22.,24.,26./
19. DATA INTT /6.,12.,18.,24.,30.,32.,33.,34.,36.,38.,40.,42.,
20. - 44.,46.,50./
21. DATA INTG /10.,14.,20.,22.,24.,26.,28.,30.,32.,34.,36.,38.,
22. - 40.,45.,50.,55.,60.,65.,70.,72.,75.,80.,85.,90.,
23. - 95.,100.,105.,110./
24. DATA INTE /10.,14.,20.,22.,24.,26.,28.,30.,32.,34.,36.,38.,
25. - 40.,45./
26. DATA STARS,START,NLS,NLT /3.,6.,11,15/
27. DATA STARG,STARE,NLG,NLE /10.,10.,28,14/
28. DATA IEWS,WLANE/0,12./
29. C
30. C READ BASIC INFORMATION
31. C
32. NADT(1,1,1)=5000.
33. NADT(1,1,2)=10000.
34. NADT(1,2,1)=1000.
35. NADT(1,2,2)=3000.
36. NADT(1,3,1)=3000.
37. NADT(1,3,2)=8000.
38. NADT(2,1,1)=15000.
39. NADT(2,1,2)=20000.
40. NADT(2,2,1)=3000.
41. NADT(2,2,2)=6000.
42. NADT(2,3,1)=6000.
43. NADT(2,3,2)=12000.
44. 1000 FORMAT(12)
45. NOLD=0
46. READ(11,1005) NYAP,AGR,RTINT,XHCIO,XHCIM
47. 1005 FORMAT(15,4(F5.0,2X))
48. READ(11,1006) PGVWL,PSAL,PTAL,Ptral
49. READ(11,1006) FGVWL,FSAL,FTAL,FTRal
50. READ(11,1007) (TRUCK(I),I=1,10)
51. READ(11,1008) (PSTAW(I),I=1,10)
52. READ(11,1008) (FSTAW(I),I=1,10)
53. READ(11,1000) ISHIFT
54. READ(11,1009) DISS,DCON,DIN
55. 1009 FORMAT(2F10.0,F5.0)
56. 1006 FORMAT(10F8.0)
57. 1007 FORMAT(10(6X,I2))
58. 1008 FORMAT(10F8.0)
59. NTT=0
60. DO 10 I=1,10

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61.      10 NTT=NTT+TRUCK(I)
62.      C
63.      C      GENERATE INITIAL LINES
64.      C
65.      WRITE(10,1015) NYAP,ISHIFT,AGR,RTINT,XHCIO,XHCIM
66.      1015 FORMAT('RUN PARAMETERS',6X,2I5,4F10.2)
67.      WRITE(10,1020)
68.      1020 FORMAT('SYSTEM TITLE',/, 'PAVEMENT REHABILITATION AND ',
69.      - 'MAINTENANCE COST ESTIMATES (BY DISTRICT)',/, 'TEXAS ',
70.      - 'TRANSPORTATION INSTITUTE',/, 'SAMPLE RUN FOR RIGID ',
71.      - 'PAVEMENTS')
72.      C
73.      C      GENERATE PARTICULAR SETS
74.      C
75.      500 READ(11,1010) NDIST,TXMN,TXMX,INPT,TXK,TAGG,TE,TMC1,TTH1,TST1,
76.      -TMC2,TTH2,TST2
77.      IF (NDIST.EQ.0) GO TO 510
78.      READ(11,1011) TMC3,TTH3,TST3,IIAC,TPF,TPFO,TPTE,TPIO
79.      1010 FORMAT(I2,2(1X,F5.0),1X,I1,1X,F6.0,1X,F5.0,1X,F10.0,1X,
80.      -2(A3,1X,F5.0,1X,F5.0,1X))
81.      1011 FORMAT(A3,1X,F5.0,1X,F5.0,1X,I1,4(1X,F5.0))
82.      IF (TXMN.NE.0) XMNOTK=TXMN
83.      IF (TXMX.NE.0) XMNOTK=TXMX
84.      IF (INPT.NE.0) NPT=INPT
85.      IF (TXK.NE.0) XK=TXK
86.      IF (TAGG.NE.0) AGG=TAGG
87.      IF (TE.NE.0) E=TE
88.      IF (TMC1.NE.' ') MCODE(1)=TMC1
89.      IF (TTH1.NE.0) THICK(1)=TTH1
90.      IF (TST1.NE.0) STRIN(1)=TST1
91.      IF (TMC2.NE.' ') MCODE(2)=TMC2
92.      IF (TTH2.NE.0) THICK(2)=TTH2
93.      IF (TST2.NE.0) STRIN(2)=TST2
94.      IF (TMC3.NE.' ') MCODE(3)=TMC3
95.      IF (TTH3.NE.0) THICK(3)=TTH3
96.      IF (TST3.NE.0) STRIN(3)=TST3
97.      IF (IIAC.NE.0) IACR=IIAC
98.      IF (TPF.NE.0) PF=TPF
99.      IF (TPFO.NE.0) PFO=TPFO
100.     IF (TPTE.NE.0) PTERM=TPTE
101.     IF (TPIO.NE.0) PIOV=TPIO
102.     C
103.     C      READ AGE DISTRIBUTION
104.     C
105.     23 READ(12,1025) ADIST,ACOMB,(AGE(J),J=1,30),ADT
106.     CALL SUMA (AGE,SAGE)
107.     IF (SAGE.EQ.0) GO TO 500
108.     1025 FORMAT(1X,I2,I4,30F4.0,I6)
109.     IF (ADIST.NE.NDIST) GO TO 600
110.     C
111.     C      READ TRUCK PERCENTAGES
112.     C
113.     24 READ(8,1030) TDIST,TCOMB,(PER(J),J=1,10)
114.     IF (TDIST.NE.NDIST) GO TO 24
115.     1030 FORMAT(I2,I4,10F6.2)
116.     C
117.     C      READ LOAD DISTRIBUTIONS
118.     C
119.     28 READ(9,1035) LDIST,LCOMB,LTDIS
120.     1035 FORMAT(I2,I4,I1)
121.     IF (LDIST.NE.NDIST) GO TO 28

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122.         IF (LTDIS.NE.1) GO TO 600
123.         DO 30 J=1,10
124.         READ(9,1040) (SING(L,J),L=1,NLS)
125. 1040 FORMAT(11F8.0)
126.         30 CONTINUE
127.         READ(9,1035) LDIST,LCOMB,LTDIS
128.         IF (LDIST.NE.NDIST) GO TO 600
129.         IF (LTDIS.NE.2) GO TO 600
130.         DO 35 J=1,10
131.         READ(9,1045) (TAND(L,J),L=1,NLT)
132. 1045 FORMAT(15F8.0)
133.         35 CONTINUE
134. C
135. C   READ GVW AND EMPTY WEIGHT DISTRIBUTIONS
136. C
137.         38 READ(7,1035) GDIST,GCOMB,GTDIS
138.         IF (GDIST.NE.NDIST) GO TO 38
139.         IF (GTDIS.NE.1) GO TO 600
140.         DO 45 J=1,10
141.         READ(7,1046) (GVWT(L,J),L=1,NLG)
142. 1046 FORMAT(28F4.0)
143.         45 CONTINUE
144.         READ(7,1035) GDIST,GCOMB,GTDIS
145.         IF (GDIST.NE.NDIST) GO TO 600
146.         IF (GTDIS.NE.2) GO TO 600
147.         DO 50 J=1,10
148.         READ(7,1047) (EMPT(L,J),L=1,NLE)
149. 1047 FORMAT(14F4.0)
150.         50 CONTINUE
151. C
152. C   WRITE PARTICULAR SETS
153. C
154.         DISTR=NDIST
155.         NREG=2
156.         IF ((NDIST.EQ.1).OR.(NDIST.EQ.10).OR.(NDIST.EQ.11).OR.
157.         - (NDIST.EQ.12).OR.(NDIST.EQ.19).OR.(NDIST.EQ.20).OR.
158.         - (NDIST.EQ.4).OR.(NDIST.EQ.5).OR.(NDIST.EQ.25).OR.
159.         - (NDIST.EQ.2).OR.(NDIST.EQ.3).OR.(NDIST.EQ.9).OR.
160.         - (NDIST.EQ.14).OR.(NDIST.EQ.17).OR.(NDIST.EQ.18).OR.
161.         - (NDIST.EQ.23)) NREG=1
162.         WRITE(10,1050) WLANE,XK,AGG,E,DISTR
163. 1050 FORMAT('RIGID',15X,10X,5F10.1)
164.         RADT=ADT
165.         IF (ADT.EQ.0) RADT=NADT(NLH,NIS,NRU)
166.         WRITE(10,1051) RADT,NPI,NREG,IACR,XMNOTK,XXOTK,PF,PFO,DISS,
167.         - DCON,DIN
168. 1051 FORMAT(F10.2,I5,I5,I5,4(F5.2),2F10.2,F5.2)
169.         WRITE(10,1052) NDIST
170. 1052 FORMAT('RIGID PAVEMENTS DISTRICT ',I2)
171.         WRITE(10,1055) (MCODE(I),THICK(I),STRIN(I),I=1,3)
172. 1055 FORMAT(3(A3,2X,2F5.0,1X))
173.         WRITE(10,1105)
174. 1105 FORMAT('AGE DISTRIBUTION',4X,' 30')
175.         WRITE(10,1110) (AGE(I),I=1,30)
176. 1110 FORMAT(16F5.0,/,14F5.0)
177.         WRITE(10,1115) NTT
178. 1115 FORMAT('TRUCK TYPE',10X,I5,/,
179.         - '2D',8X,'3A',8X,'3-S2',6X,'2-S1-2',4X,'2-S1',6X,'2-S2',6X,
180.         - '3-S1',6X,'3-S3',/, '3-S1-2',4X,'2-S2-2',/,
181.         - ' 2 0 0 0 1 1 0 0 1 2 0 0 5 0 0 0 3 0 0 0 2 1 0 0',
182.         - ' 2 1 0 0 1 2 0 0',/, ' 4 1 0 0 4 1 0 0')

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183.      DO 40 I=1,10
184.      IF (TRUCK(I).EQ.1) GO TO 40
185.      PER(I)=0
186.      DO 41 J=1,NLS
187.      41 SING(J,I)=0.
188.      DO 42 J=1,NLT
189.      42 TAND(J,I)=0.
190.      DO 43 J=1,NLG
191.      43 GVWT(J,I)=0.
192.      DO 44 J=1,NLE
193.      44 EMPT(J,I)=0.
194.      40 CONTINUE
195.      L=1
196.      WRITE(10,1120) L,(PER(J),J=1,10)
197.      1120 FORMAT(I3,1X,10F6.2)
198.      WRITE(10,1125) IEWS,PGVWL,PSAL,PTAL,PTRAL,
199.      -FGVWL,FSAL,FTAL,FTRAL,(PSTAW(L),L=1,10),
200.      -(FSTAW(L),L=1,10)
201.      1125 FORMAT('LOAD LIMITS',9X,15,/,4F10.2,/,4F10.2,/,10F8.2,/
202.      -,10F8.2)
203.      WRITE(10,1130) NLS,STARS
204.      1130 FORMAT('SINGLE AXLES',8X,15,5X,F10.2)
205.      DO 60 L=1,NLS
206.      WRITE(10,1135) INTS(L),(SING(L,J),J=1,10)
207.      1135 FORMAT(F10.0,10F7.0)
208.      60 CONTINUE
209.      WRITE(10,1140) NLT,START
210.      1140 FORMAT('TANDEM AXLES',8X,15,5X,F10.2)
211.      DO 65 L=1,NLT
212.      WRITE(10,1135) INTT(L),(TAND(L,J),J=1,10)
213.      65 CONTINUE
214.      WRITE(10,1141) NLG,STARG
215.      1141 FORMAT('GVW',17X,15,5X,F10.2)
216.      DO 55 L=1,NLG
217.      WRITE(10,1135) INTG(L),(GVWT(L,J),J=1,10)
218.      55 CONTINUE
219.      WRITE(10,1142) NLE,STARE
220.      1142 FORMAT('EMPTY',15X,15,5X,F10.2)
221.      DO 57 L=1,NLE
222.      WRITE(10,1135) INTE(L),(EMPT(L,J),J=1,10)
223.      57 CONTINUE
224.      WRITE(10,1145) PTERM,PTOV
225.      1145 FORMAT('PERFORMANCE',9X,20X,2F10.2)
226.      WRITE(10,1150) PPVDSH,WPSH,WGSH
227.      1150 FORMAT('OVERLAY',13X,10X,3F8.2)
228.      WRITE(10,1170)
229.      1170 FORMAT('EXECUTE')
230.      GO TO 500
231.      1001 FORMAT(1X,I2)
232.      1175 FORMAT(F8.0)
233.      510 WRITE(10,1180)
234.      1180 FORMAT('STOP')
235.      STOP
236.      600 WRITE(10,1200)
237.      1200 FORMAT('ERROR IN FILE ORDERING - STOP PROCESS')
238.      STOP
239.      END
240.
241.      C
242.      SUBROUTINE SUMA (A,B)
243.      DIMENSION A(30)
244.      B=0

```

```
244.      DO 10 I=1,30
245.      B=B+A(I)
246. 10 CONTINUE
247.      RETURN
248.      END
```

APPENDIX F:

DESCRIPTION OF PROGRAMS AND FILES FOR AUTOMATED INPUT PROCEDURE

DESCRIPTION OF PROGRAMS

Note: A scenario is a subset of the pavement network which corresponds to a valid combination code (see page B-2). It is defined by road type, type of pavement, traffic level, and rural-urban status within a given district.

1. SORT1

The purpose of this program is to sort the vehicle classification data file, VEHICLE.CLASS.1985, by station number. The sorted file is stored into file CLS1985 which is used by program TRUCKCOB. Because sorting is the only operation in this program, only a SAS macro-command called "SORT" is used.

2. TRUCKCOB

This program generates percentages of each type of truck for a given scenario or representative count station. It consists of the following steps:

1. Read record from file STATIONS to get the representative count station for each scenario. After reaching last record go to Step 5.
2. Go through file CLS1985 and process records corresponding to the station read in Step 1. Process for each record consists of the following steps:
 - a. Find the total number of vehicles.
 - b. Identify the types of trucks considered and find the proportion of each type of truck with respect to the total number of vehicles.

When all the records for a given station have been processed, average values of the percentages for each type of truck are calculated.

3. Average percentages are stored sequentially into a percentage matrix (PERTAB).
4. Go to read another record in file STATIONS (Step 1).

5. Write matrix PERTAB into sequential file TRUCKS. One record for each scenario. Stop.

3. LOADCOB

This program generates the following load distributions for each station in file WIMOUT85, using weighing-in-motion data files:

1. Single axle weight distribution
2. Tandem axle weight distribution
3. Gross vehicle weight distribution
4. Empty vehicle weight distribution.

The program consists of the following steps:

1. Assign number of station in the first record of file WIMOUT85 to control variable "STATION".
2. Go through file WIMOUT85 and process records whose station field matches with STATION. After reaching last record stop. Process for each record consists of the following steps:

- a. Compute number and weight of single and tandem axles
- b. Classify axles found according to the weight. Update single and tandem axle load matrices.
- c. Compute the gross weight; and classify it. Update gross weight matrix.
- d. Establish whether or not the vehicle was weighted empty. Update empty weight matrix.

When all the records matching with STATION have been processed, single and tandem axle load matrices are written sequentially into file LOADDIS; and gross and weight matrices are written sequentially to file GVEMDIS.

3. Update STATION with the next station number in WIMOUT85; go to Step 1.

4. LOADCOB2

(In Figure 2, it is referred to as part of module LOADCOB)

This program assigns the distributions found in LOADCOB to each scenario. Distributions assigned to a particular scenario are those corresponding to the scenario's representative station. The program consists of the following steps:

1. Read record from file STATIONS. After reaching last record, stop.

The purpose of this is to get the representative station for each scenario.

2. Go through file LOADDIS and extract records corresponding to the station found in Step 1. Write this information sequentially into output file LOADS.

3. Go through file GVEMDIS and extract records corresponding to the station found in Step 1. Write this information sequentially into output file GVEMPT.

4. Go to read another station (Step 1).

4. FAGECOB

(In Figure 2, it is referred to as AGECOB, when running flexible pavement data)

This program prorates RIFILE flexible lane-miles by age using the RLIFILE, generating a flexible lane-mile age distribution per district and per scenario. The program consists of the following steps:

1. Make current district equal to 1.

2. Read record from file RIFILE.

3. Go through file RIFILE and process all the records corresponding to the current district. Process for each record consists of the following steps:

- a. Identify surface type, pavement system, traffic level, and rural-urban status. Consider only flexible surfaces.

- b. Compute total lane-miles; store such number into the lane mile

- matrix, in the position corresponding to the data specified by (a).
- c. Compute adt per lane-mile and store it into an adt matrix, in the position corresponding to the data specified by (a).

When all the records for the current district have been processed go to Step 4.

4. Go through file RL1FILE and process all the records corresponding to the current district. Process for each record consists of the steps:

- a. Identify surface type, pavement system, traffic level, and rural-urban status.
- b. Store number of miles into an age lane-mile matrix, in the position corresponding to the data specified by (a), and the age of those miles.

When all the records for the current district have been processed go to Step 5.

5. Prorate lane-miles stored in the lane mile matrix, using the age matrix generated by Step 4. Generate a new matrix called aged lane mile matrix.

6. Write aged lane-mile matrix into sequential output file FAGEDIS. One record for each scenario within the current district. Update current district and go to read another record in file RIFILE (Step 2); when the current district is greater than 25, stop.

5. RAGECOB

(In Figure 2, it is referred to as AGEJOB, when running rigid pavement data) This program prorates RIFILE rigid lane-miles by age using the RL1FILE, generating a rigid lane-mile age distribution per district. The program consists of the following steps:

1. Make current district equal to 1.
2. Read record from file RIFILE.

3. Go through file RIFILE and process all the records corresponding to the current district. Process for each record consists of the steps:

- a. Identify surface type; consider only rigid surfaces.
- b. Compute total lane-miles and adt per lane-mile.

When all the records for the current district have been processed go to Step 4.

4. Go through file RL1FILE and process all the records corresponding to the current district. Process for each record consists of the steps:

- a. Identify surface type.
- b. Store number of miles into an age array, in the position corresponding to the age of those miles.

When all the records for the current district have been processed go to Step 5.

5. Prorate lane-miles computed in Step 3, using the age array generated by Step 4. Generate a new array called aged lane-mile array.

6. Write aged lane-mile array into sequential output file RAGEDIS. One record for each district. Update current district and go to read another record in file RIFILE (Step 2); when the current district is greater than 25, stop.

6. INPRENU

(In Figure 2, it is referred to as INPRENU, when running flexible pavement data)

This program generates the RENU3 input file for flexible pavements in a given region. It consists of the following steps:

1. Read basic run parameters and current district from file FCARDSX.
2. Write initial lines into output file FINPUTX.
3. Go through files FAGEDIS, TRUCKS, GVEMPT, and LOADS, and set current

position to the first record in each file which corresponds to the current district.

4. Read basic data for each scenario in the current district, from file FCARDSX. Read additional information for current scenario from files FAGEDIS, TRUCKS, GVEMPT, and LOADS (order of scenarios within a district is the same for all the files). Write all information for each scenario into the output files FINPUTX.

5. Read next line in file FCARDSX and update current district with the next district in that region. After reaching last record go to Step 7.

6. Go to Step 3.

7. Write last line ("STOP") in output file FINPUTX. Stop.

7. RINPRENU

(In Figure 2, it is referred to as INPRENU when running rigid pavement data) This program generates the RENU3 input file for rigid pavements in the entire state. It consists of the following steps:

1. Read basic run parameters from file RCARDS. Set current district to 1.

2. Write initial lines into output file RINPUT.

3. Go through files FAGEDIS, TRUCKS, GVEMPT, and LOADS, and set current position to the first record in each file which corresponds to the current district.

4. Read basic data for current district from file RCARDS. Read additional information for current district from files FAGEDIS, TRUCKS, GVEMPT, and LOADS. Write all information for current district into the output file RINPUT.

5. Read following line in file RCARDS and update current district with next district. After reaching last record go to Step 7.

6. Go to Step 3.

7. Write last line ("STOP") in output file RINPUT. Stop.

DESCRIPTION OF FILES

Original Data Files:

1. RIFILE

This file contains roadway characteristics and traffic data for the designated, under maintenance State Highway System and the Federal-Aid System. RIFILE is a monthly updated accounting of the physical qualities and system designations of these routes, organized by county, control-section, beginning and ending milepoints.

2. RLIFILE

The Road Life file contains active as well as historical records, pertaining to the R.O.W. and construction costs and miles, or constructing and maintaining all highways on the State maintained system. In general these records contain type and cross section of base and surface, kind of work performance, miles constructed and cost. These records are broken out by County, Control Section, Job Number, Cross Section, Rural and City, etc.

3. WIMOUT85

This file contains weighing-in-motion data collected at specific stations in the state, during year 1985. The records contain information about the station, the type of vehicle weighed, the weight of its axles, spacing between axles, and the gross vehicle weight. Each record contains information about one vehicle weighed at a specific station.

4. VEHICLE.CLASS.1985

This file contains vehicle classification data gathered at specific count

stations in the state, during year 1985. The records contain information about the station, the number and type of vehicles counted at the station during a given time interval (usually, one hour). Each record contains information about what and how many vehicles traveled over a specific station during one hour.

5. STATIONS

This file contains the representative station codes for all the scenarios within every district. There are two types of stations for each scenario: the weighing-in-motion station and the count station. The records are broken out by district, road system, pavement type, traffic level, rural-urban status, and the representative stations.

6. YEARIN

This one-record file contains the reference year for which the age lane mile distributions will be generated.

Files created by the package

1. CLS1985

This file is the sorted version of file VEHICLE.CLASS.1985. Sorting key is the station number.

2. TRUCKS

This file contains the percentages of each type of truck with respect to the total traffic for each scenario within every district. Each record contains the district number, the scenario code (see page B-2), and the percentages for the ten types of trucks considered by the system.

3. LOADDIS

This file contains the single and tandem axle load distributions for every

weighing-in-motion station. There are two types of records in this file. One type corresponds to the identification of the station. The other type corresponds to the values of the distributions; each of these records contains the frequencies of axles for each one of the ten types of trucks, considering a given number of weight intervals. Records in this file are arranged in this way: identification record, twenty distribution records, identification record, twenty distribution records, and so on.

4. LOADS

This file contains the representative single and tandem axle load distributions for each scenario within every district. There are two types of records in this file. One type corresponds to the identification of the distribution; that is, the district number, the scenario code, and the type of distribution (single or tandem). The other type corresponds to the values of the distributions; each of these records contains the frequencies of axles for each one of the ten types of trucks, considering a given number of weight intervals. Records in this file are arranged in this way: identification record, ten distribution records, identification record, ten distribution records, and so on.

5. GVEMDIS

This file contains the gross and empty weight distributions for every weighing-in-motion station. There are two types of records in this file. One type corresponds to the identification of the station. The other type corresponds to the values of the distributions; each of these records contains the frequencies for each one of the ten types of trucks, considering a given number of weight intervals. Records in this file are arranged in this way: identification record, twenty distribution records, identification record,

twenty distribution records, and so on.

6. GVEMPT

This file contains the representative gross and empty weight distributions for each scenario within every district. There are two types of records in this file. One type corresponds to the identification of the distribution; that is, the district number, the scenario code, and the type of distribution (gross or empty). The other type corresponds to the values of the distributions; each of these records contains the frequencies for each one of the ten types of trucks, considering a given number of weight intervals. Records in this file are arranged in this way: identification record, ten distribution records, identification record, ten distribution records, and so on.

7. FAGEDIS

(In Figure 2, it is referred to as AGEDIS, when running flexible pavement data)

This file contains the flexible lane mile age distributions and the average adt for each scenario within every district. These records contain the number of lane miles which are older than one, two, three, ..., thirty and more years. At the end of each record the average adt is stored. The records are broken out by district and scenario code (see page B-2).

8. RAGEDIS

(In Figure 2, it is referred to as AGEDIS, when running rigid pavement data)

This file contains the rigid lane mile age distributions and the average adt for each scenario within every district. These records contain the number of lane miles which are older than one, two, three, ..., thirty and more years. At the end of each record the average adt is stored. The records

are broken out by district and scenario code (see page B-2).

9. FCARDSX

(In Figure 2, it is referred to as INPUT FORMAT, when running flexible pavement data)

Actually this represents one of a set of five files: FCARDS1, FCARDS2, FCARDS3, FCARDS4, and FCARDS5. Each of this file contains the basic run parameters for flexible pavements within the respective region (last digit in the file-name). Configuration of this file is exactly the same as the configuration of Form F-1 (See Table 9).

10. RCARDS

(In Figure 2, it is referred to as INPUT FORMAT, when running rigid pavement data)

This file contains the basic run parameter for rigid pavements in the entire state. Configuration of this file is exactly the same as that one of Form F-2 (See Table 10).

11. FINPUTX

(In Figure 2, it is referred to as DATDXX, when running flexible pavement data)

This file represents one of a set of five files: FINPUT1, FINPUT2, FINPUT3, FINPUT4, and FINPUT5. Each of these file contains the final input data set for program RENU3, when running flexible pavement data within a specific region (last digit in the file-name).

12. RINPUT

(In Figure 2, it is referred to as DATDXX, when running rigid pavement data)

This file contains the final input data set for program RENU3, when running rigid pavement data for the entire state.