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16. Abstract

The Texas Flexible Pavement Database consists of performance information on more than 300 pavement sections located throughout the State of Texas. This report, the User's Manual, describes a microcomputer database management system which provides flexible storage, reporting and modeling of the data. The system was developed to be compatible with the SHRP Long-Term Pavement Performance monitoring system. New monitoring sections can easily be added to the system; therefore, the system provides a long-term means of monitoring experimental pavements.

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TEXAS FLEXIBLE PAVEMENT DATABASE

VOLUME I. USER'S MANUAL

By

Sandra L. Parsons and Tom Scullion

Research Report
456-1F Volume I

on

Research Study Number 2-8-86-456
Texas Flexible Pavement Database

Sponsored By
Texas State Department of Highways & Public Transportation

In Cooperation with
Federal Highway Administration

August 1988

Texas Transportation Institute
Texas A&M University System
College Station, Texas

METRIC (SI*) CONVERSION FACTORS

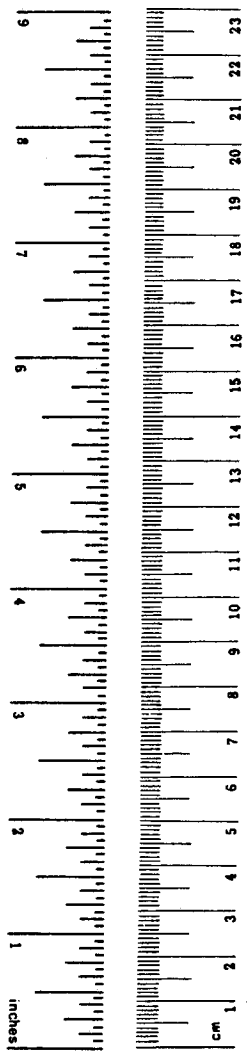
APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
in	inches	2.54	centimetres	cm
ft	feet	0.3048	metres	m
yd	yards	0.914	metres	m
mi	miles	1.61	kilometres	km
AREA				
in^2	square inches	645.2	centimetres squared	cm^2
ft^2	square feet	0.0929	metres squared	m^2
yd^2	square yards	0.836	metres squared	m^2
mi^2	square miles	2.59	kilometres squared	km^2
ac	acres	0.395	hectares	ha
MASS (weight)				
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams	Mg
VOLUME				
fl oz	fluid ounces	29.57	millilitres	mL
gal	gallons	3.785	litres	L
ft^3	cubic feet	0.0328	metres cubed	m^3
yd^3	cubic yards	0.0765	metres cubed	m^3

NOTE: Volumes greater than 1000 L shall be shown in m^3.

TEMPERATURE (exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

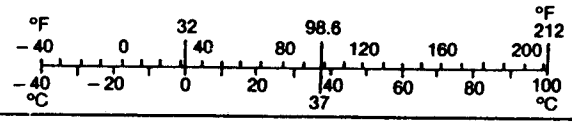


APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
mm	millimetres	0.039	inches	in
m	metres	3.28	feet	ft
m	metres	1.09	yards	yd
km	kilometres	0.621	miles	mi
AREA				
mm^2	millimetres squared	0.0016	square inches	in^2
m^2	metres squared	10.764	square feet	ft^2
km^2	kilometres squared	0.39	square miles	mi^2
ha	hectores (10 000 m^2)	2.53	acres	ac
MASS (weight)				
g	grams	0.0353	ounces	oz
kg	kilograms	2.205	pounds	lb
Mg	megagrams (1 000 kg)	1.103	short tons	T
VOLUME				
mL	millilitres	0.034	fluid ounces	fl oz
L	litres	0.264	gallons	gal
m^3	metres cubed	35.315	cubic feet	ft^3
m^3	metres cubed	1.308	cubic yards	yd^3

TEMPERATURE (exact)

°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



These factors conform to the requirement of FHWA Order 5190.1A.

* SI is the symbol for the International System of Measurements

DISCLAIMER

All information and tables in this report are supplied by the Texas Transportation Institute (TTI) for support of trained users of the Flexible Pavement Database computer software developed by TTI for the Texas State Department of Highways and Public Transportation. No other use of this manual is neither implied nor assumed.

ABSTRACT

The Texas Flexible Pavement Database consists of performance information on more than 300 pavement sections located throughout the State of Texas. This report, the User's Manual, describes a microcomputer database management system which provides flexible storage, reporting and modeling of the data. The system was developed to be compatible with the SHRP Long-Term Pavement Performance monitoring system. New monitoring sections can easily be added to the system; therefore, the system provides a long-term means of monitoring experimental pavements.

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

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APPENDIX A - REPORTS

APPENDIX B - EXHIBITS

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- 2 - Reports
- 3 - Edit & Update
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

I. INTRODUCTION

I. INTRODUCTION

A. The Texas Flexible Pavement Database

Since 1972, the Texas Transportation Institute (TTI) has maintained the TEXAS FLEXIBLE PAVEMENT DATABASE comprising detailed information on 350 sections of pavement that were originally selected as a stratified random sample of the State's pavements, proportional to the total mileage of each class of roadway.

The data collected over the years have provided the predictive capability used in every major pavement funding needs study conducted in the State. The information has been used to make maintenance decisions; in studies to determine damage due to commodity hauls such as oil field, grain, beef, aggregate and timber traffic; evaluating the new load rating and load zoning procedures; and in estimating cost responsibilities of different classes of trucks, sizes and weight studies. Preservation, updating, and improving the data in this database is absolutely essential for the continued improvement of pavement design, overlay design, and pavement management in the State.

The original system was created on the mainframe computer using a database system written in SAS by TTI. Then in 1986, a study was started to use a new system that would preserve the data but restructure it for better ease of access and for capability with currently available database systems utilizing microcomputers. In addition, the database needed to be enlarged to include additional distress and serviceability index data to improve the predictive equations that the database uses. These data are the basis for the survival curves and equations used in programs REHAB, RENU, RENU2, PES, the RAMS optimization programs, and the new FPS program.

An additional incentive to the continuing development of the TEXAS FLEXIBLE PAVEMENT DATABASE is the Long-Term Pavement Performance (LTPP) studies which are part of the National Strategic Highway Research Program (SHRP). While SHRP will focus on thicker pavements, generally in their first performance period, the TEXAS FLEXIBLE PAVEMENT DATABASE has several pavement types which are of specific interest to Texas, such as thin surfaced flexible pavements. Therefore, by combining the information stored in the SHRP program with that already available in the TEXAS FLEXIBLE PAVEMENT DATABASE, the State Department of Highways and Public Transportation (SDHPT) will have performance information on all the pavement types currently used in Texas.

Study 456 was initiated with the objective of "preserving, updating and improving the TEXAS FLEXIBLE PAVEMENT DATABASE." Specifically, the following were to be performed:

1) Monitor sections are to be included in the Department's ongoing Pavement Evaluation System so that annual pavement inspections can be performed. Procedures are to be developed so that the visual inspection, pavement roughness and Falling Weight Deflectometer data can be included into the system.

2) Convert the present mainframe database to a microcomputer-based management system that will make the data accessible to a broader selection of users and be compatible with the Strategic Highway Research program (SHRP) Information Management System (IMS) for

Long-Term Pavement Performance (LTPP). This was the major task of the study and the system developed is described in the remainder of this report.

3) Update the database with the maintenance and rehabilitation activities performed on each roadway section. The last time this was performed was in 1981; therefore, numerous changes have occurred which need to be included in the database.

This report provides a User's Manual to the microcomputer-based storage system developed in this project. This system is shown schematically in Figure 1. The left-hand side of Figure 1 shows the inputs to the system while the right-hand side shows the outputs (reports). The inputs include the PES annual Master File, maintenance and rehabilitation information from the Road Life STrip maps and the District maintenance records, and information on roadway characteristics, particularly traffic levels (AADT) from the Roadway Information File. Twenty years of weather data is also included in the system.

Numerous reports can be obtained, including summary listings where the complete information from any section is included on a single page. Specialized reporting options can provide Inventory, Monitoring, Traffic and Environmental Data by Section Identification Number (SID), District or even County, depending on the option selected. In addition, a Tables section provides descriptive information used in the database, such as widening flags, layer and material type descriptions, functional classifications and a county alphanumeric list.

Modeling capabilities also have been included which allow the user to graph performance against accumulative 18 kip equivalent axles. The performance is measured in terms of alligator cracking, rutting or serviceability index. An exponential decay curve is used to model the deterioration process. The performance equation has the following form

$$g = \exp - (RHO/N)^{BETA}$$

where g is the normalized damage function ranging form 0.0 to 1.0;

g for serviceability index is defined as

$$g = \frac{P_i - P}{P_i - P_f}$$

where P_i, P_f, P are the initial, final and current values of serviceability index;

N is the accumulative 18-kip equivalent single axles since first construction or major rehabilitation;

RHO, BETA are constants which describe the shape of the degradation curve. These are to be determined by analysis of the performance history.

This system will automatically calculate RHO and BETA values and display the resulting line in graphical form. An additional feature of the system is Model Development where RHO and BETA values are automatically calculated. The analysis produces a file which contains for each section the RHO, BETA values and all the available independent variables (layer

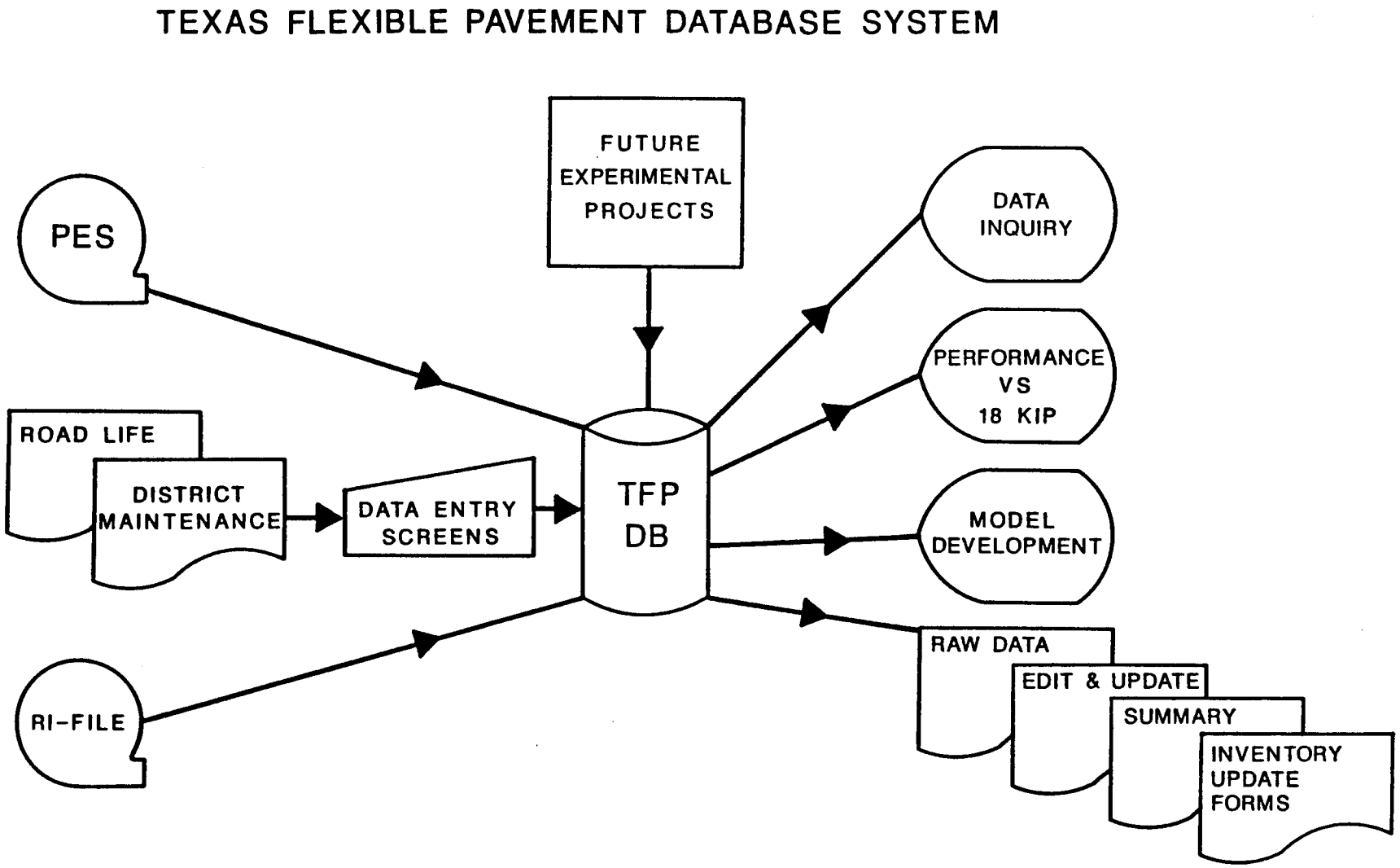

TEXAS FLEXIBLE PAVEMENT DATABASE SYSTEM
FUTURE EXPERIMENTAL PROJECTS
PES
DATA INQUIRY
PERFORMANCE VS 18 KIP
ROAD LIFE
DISTRICT MAINTENANCE
DATA ENTRY SCREENS
TFP DB
MODEL DEVELOPMENT
RAW DATA
EDIT & UPDATE
SUMMARY
INVENTORY UPDATE FORMS
RI-FILE

FIGURE 1

thickness, environmental factors, traffic levels, etc.) needed to develop performance models. The file can then be processed in SAS.

Another important feature of the system is its ability to include Future Experimental Projects into the system. This means that the system can be used to collect long-term pavement performance data or convert research projects.

Data gathering has been improved. Data needs to be collected on an annual basis and this became possible with the advent of the annual pavement rating training schools. Using these people to collect more data on a regular basis provides a more comprehensive picture of the pavement sections. Data collection was enhanced by taking core samples and measuring the layer thickness and mix instead of relying on as-built plan information when the roadways were designed.

Except for the structural inventory information, each of the original data files were converted to a dBASE III PLUS data file on hard disk from raw data stored on magnetic tape. The structural inventory data layer numbering system was changed to agree with the SHRP layer numbering scheme before being added to the database. In addition to the edit and update functions for entering and storing new pavement data, inquiry, reporting and applications functions were added to the system.

The TEXAS FLEXIBLE PAVEMENT DATABASE has been designed to provide the most current information in an easy-to-use, menu-drive format. The user can access any SID roadway segment and review all available information about that particular SID, update or edit the data, perform calculations on 18-KIP, and print hard-copy reports.

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

I. INTRODUCTION

B. How to Use this Manual

The layout of the User's Manual follows the format of the options available to you in the TEXAS FLEXIBLE PAVEMENT DATABASE. Each manual section corresponds to an option listed on the Main Menu. The sections appear in the manual in the following order:

II. **Inquiry** - Permits the user to view all data contained in the system without the ability to change any of the data.

III. **Reports** - Produces hard-copy reports of the data.

IV. **Edit & Update** - Permits the user to correct or add data.

V. **Applications** - Provides information which can be used to develop performance equations.

VI. **Backup** - As it is named, for backing up, or saving, your data.

VII. **Installation** - To change your data and printer paths.

VIII. **Reindex Master Files** - Should you question your data integrity, you can use this feature to rebuild your index files. Depending on the amount of data, this can require considerable time to complete.

Addition information is included in the final section of the Manual, Appendix A, which contains sample reports.

It is recommended that you begin with the Inquiry and Reports sections as they will give you all information contained in the system without altering the data. After you have become familiar with the Texas Flexible Pavement Database, you can proceed to the Edit & Update section. Also, you will need to know Section Identification (SID) numbers when working with the system.

INSTRUCTIONS

Narrative instructions and information will be found on the left-hand pages of the manual, along with an options list in "menu" form which shows you where you are working in the system. The option being discussed will be highlighted in **boldface** type.

Instructions are designed to explain exactly what you are to do, followed by what to expect from the system. Any keys you are to press are bracketed in boldface type. An example appears below:

YOU: Type **<2>** for Reports and press **<ENTER>.**

FLEXPAVE: Brings up the Reports Menu.

Example screens similar to what you see on your monitor appear on the right-hand pages. These screens are not proportional in order to save space in the manual, but contain the correct information.

Certain keys on your computer keyboard will assist you in moving through the data records. **<Page Up>** and **<Page Down>** will move you form one SID Number to another or from one pavement layer to another, depending on where you are in the system.

<ESC> is a valuable key. You can use it to back out of an option without changing any data or simply to make another menu selection. This is especially important in the Reports section because some reports require considerable time to compile and print and you may wish to change your mind about printing them until a more appropriate time.

I. INTRODUCTION

C. Starting the System

Starting the TEXAS FLEXIBLE PAVEMENT DATABASE is very easy. The database is designed to work on an IBM AT 286 or 386 microcomputer with a serial port printer. Your software consists of eight double density diskettes which you will insert in sequence into your floppy disk drive.

Insert Diskette #1 into Drive A and type from the hard disk prompt on your computer, usually **C:>**, and type:

A:INSTALL <ENTER>

The system will "uncrunch" and "unarc" the files into your microcomputer and make its own directories and subdirectories. After Diskette #1 is completely installed, you will see instructions to insert the remaining diskettes in order.

Be sure to allow yourself time to install the software (approximately 30 minutes). **Do not attempt to stop the installation routine at any time.**

When the last diskette is loaded onto your hard disk, the prompt will say:

C:\PAVEDB>

Type the following command and TEXAS FLEXIBLE PAVEMENT DATABASE will be ready to run:

FLEXPAVE <ENTER>

Store your diskettes in a safe place in case something should happen to your computer and you need to reinstall the software.

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

II. INQUIRY

Menu Screen Order

MAIN MENU
>1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

> 1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

II. INQUIRY

A. The Inquiry Functions

After entering the FLEXIBLE PAVEMENT DATABASE, the Main Menu **(Screen II-1)** will appear which lists the available options. All work done in the database begins from this menu screen.

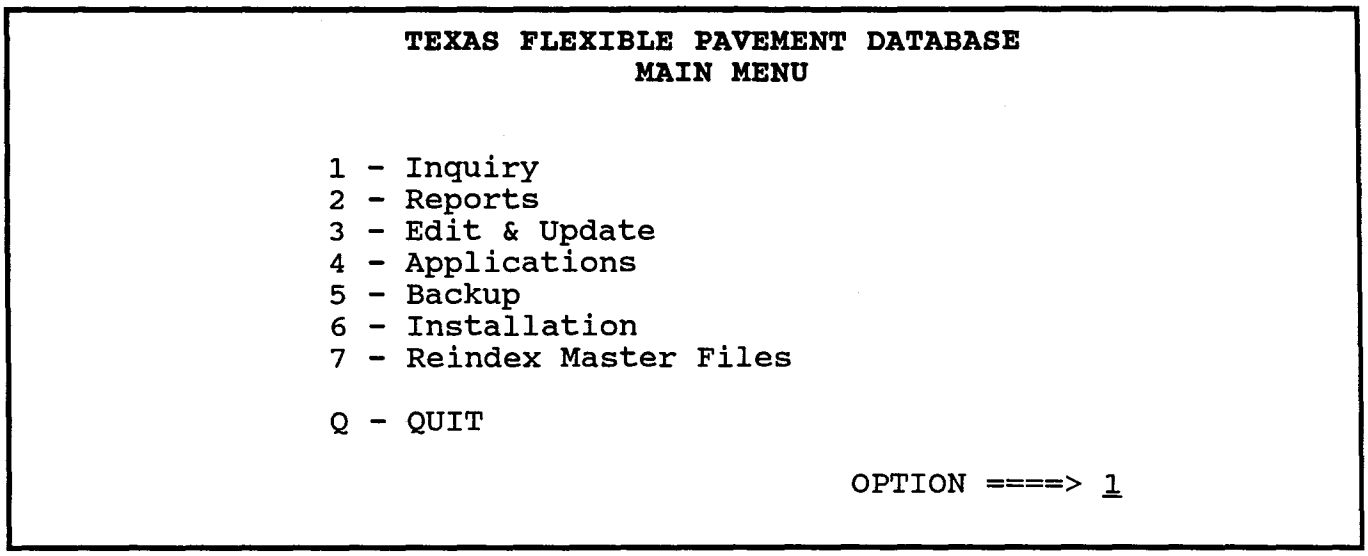
This section of the User's Manual explains how to use the Inquiry functions. The Inquiry option is the nucleus of the database which allows access to the hundreds of roadway pavement records. You will need to know the Section Identificaton Numbers (SID) to identify roadway segments, and county numbers to identify counties; printed lists of both are available through the reporting function.

From the Main Menu...

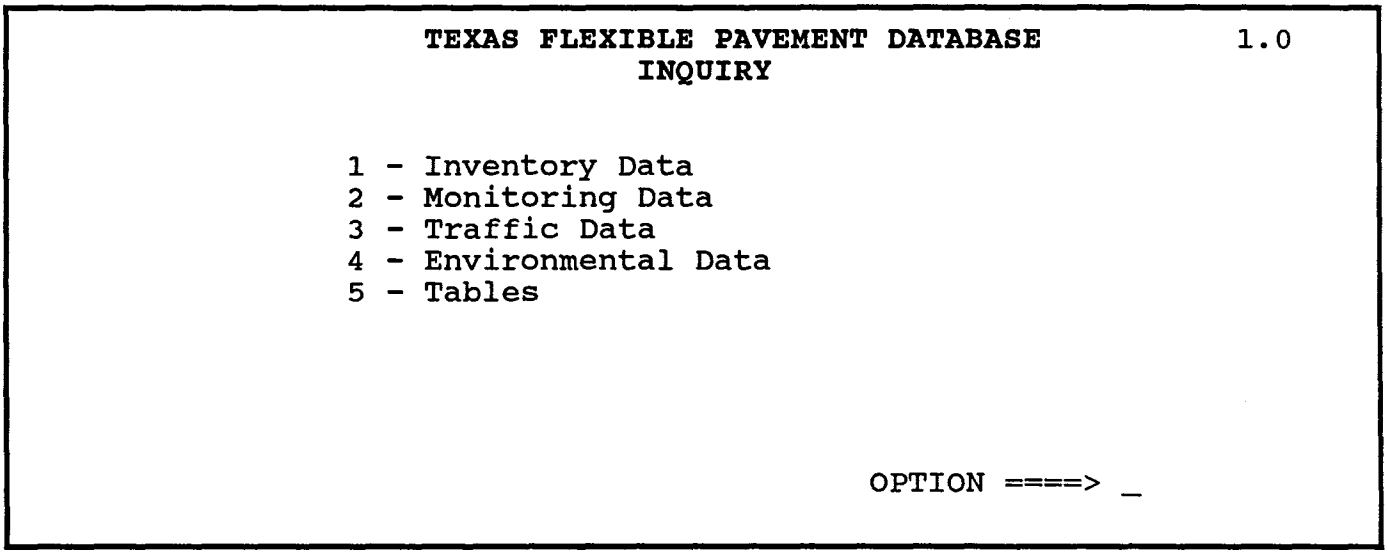
YOU: Type **<1>** for Inquiry and press **<ENTER>.**

FLEXPAVE: Brings up the Inquiry Menu **(Screen II-2)** which lists five available options:

1 - Inventory Data
2 - Monitoring Data
3 - Traffic Data
4 - Environmental Data
5 - Tables



Screen II-1 Main Menu



Screen II-2 Inquiry Menu

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
> 1 - Inventory Data 1.1
> 1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

II. INQUIRY

B. Inventory Data

The Inquiry function has six available options. This section will follow the Inventory Data functions through all six options in order, giving instructions and example screens.

To leave any option, press **<ESC>**. Under certain conditions you will be able to use your **<Page Up>** and **<Page Down>** keys to move between "pages" or screens. For example, after entering Option #2 - Layer ID, you can use these keys to move between pavement layers to a new SID and all its pavement layers.

From the Inquiry Menu **(Screen II-2)...**

YOU: Type **<1>** for Inventory Data and press **<ENTER>.**

FLEXPAVE: Brings up the Inventory Data Menu **(Screen II-3)** which lists your six options:

1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road

Option #1 - Location

To retrieve Location information about a particular SID segment, you select Option #1 from the Inventory Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Inventory Data Menu **(Screen II-3)...**

YOU: Type **<1>** for Location and press **<ENTER>.**
Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Location File record for SID 39 **(Screen II-4).**

You must enter a SID Number for the location you wish to view, otherwise you will see the Location File for the default number, SID 13. After you have gained access to a SID in the Location File, you can move through other SID Location records by using the control keys for **<Page Up>** and **<Page Down>.**

TEXAS FLEXIBLE PAVEMENT DATABASE 1.1
INQUIRY
Inventory Data

1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road

OPTION ====> 1

Enter SID OPTION ====> 13

Screen II-3 Inventory Data Menu

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Inventory Data - Location File

SID Number 39	District 1 County 117
Highway Ident. IH 30	Control Section 9/13
Mile Post 106+00 TO 109+00	Lane Identification R
Mile Point 27.800 TO 29.800	Mile Point Date 11/76
HPMS Sample Number	HPMS Section Subdivision 0
Functional Classification 0	Number of Lanes 2
Active? T Inactive Date 0/ 0	Previous SID 0 Next SID 0
Comment	

Screen II-4 Location File

NOTE: Occasionally a SID Number changes. If so, the previous or next assigned number will appear in the appropriate spaces.

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
> 2 - Layer ID
> 3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #2 - Layer ID

To view the Layer Identification information for a particular SID segment, select Option #2 from the Inventory Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Inventory Data Menu...

YOU: Type **<2>** for Layer ID and press **<ENTER>.**
Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Layer Identification File record for SID 39 **(Screen II-5).**

Use the **<Page Up>** and **<Page Down>** keys to move through the pavement layers for each SID segment. After passing through all the records for SID 39, you will move to the next consecutive SID Number.

Option #3 - Geometric & Shoulder

To view the Geometric and Shoulder information for a particular SID segment, select Option #3 from the Inventory Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Inventory Data Menu...

YOU: Type **<3>** for Geometric & Shoulder and press **<ENTER>.**
Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Geometric and Shoulder File record for SID 39 **(Screen II-6).**

Use the **<Page Up>** and **<Page Down>** keys to move through the SID segments. If a segment has more than one Structure Number, you will pass through those records before moving to the next consectuvie SID Number.

*

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Inventory Data - Layer Identification

SID Number	39
Structure Number	1
Layer Number	1
Layer Description	7
Center Thickness	
Layer Material Classification	44
Job Completed Date (MM/YY)	9/52
Widening Date (MM/YY)	0/0

Screen II-5 Layer Identification File

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Inventory Data - Geometric and Shoulder

SID Number	39
Structure Number	1
Pavement Type	34
Lane Width - one way (ft)	12.0
Outside Shoulder Width (ft)	17.0
Shoulder Surface Type	2
Shoulder Base Type	21
Shoulder Surface Thickness (in.)	0.00
Shoulder Base Thickness (in.)	8.00
Widening Flag	1

Screen II-6 Geometric & Shoulder File

Menu Screen Order

```
MAIN MENU
> 1 - Inquiry
  2 - Reports
  3 - Edit & Update
  4 - Applications
  5 - Backup
  6 - Installation
  7 - Reindex Master Files

  1 - Inquiry 1.0
    1 - Inventory Data 1.1
      1 - Location
      2 - Layer ID
      3 - Geometric & Shoulder
>     4 - Surface
>     5 - Subgrade
      6 - Layer Thickness Across the Road
    2 - Monitoring Data 1.2
      1 - Visual
      2 - Serviceability Index
      3 - Falling Weight
      4 - Dynaflect
      5 - Skid
    3 - Traffic Data 1.3
    4 - Environmental Data 1.4
      1 - Environment
      2 - Weather
    5 - Tables 1.5
      1 - County Name
      2 - Material Type
      3 - Type of Pavement
      4 - District Temperature Constant
      5 - Widening Flag
      6 - Layer Description
      7 - Functional Classification
```

Option #4 - Surface

To view the Surface information for a particular SID segment, select Option #4 from the Inventory Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Inventory Data Menu...

YOU: Type **<4>** for Surface and press **<ENTER>.**
Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Surface File record for SID 39 **(Screen II-7).**

Use the **<Page Up>** and **<Page Down>** keys to move through the surface information for each Structure and Layer Number in the SID segment. After passing through all the layer records for SID 39, you will move to the next consecutive SID Number.

Option #5 - Subgrade

To view Subgrade information for a particular SID segment, select Option #5 from the Inventory Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Inventory Data Menu...

YOU: Type **<5>** for Subgrade and press **<ENTER>.**
Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Subgrade File record for SID 39 **(Screen II-8).**

Use the **<Page Up>** and **<Page Down>** keys to move through the SID segments.

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Inventory Data - Surface

SID Number	39
Structure Number	1
Layer Number	3
Aggregate Application Rate (S.Y./C.Y.)	0
Admixture Types	
Admixture Percent (%)	0.00
Asphalt Application Rate (Gal/S.Y.)	0.00

Screen II-7 Surface File

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Inventory Data - Subgrade

SID Number	39
Structure Number	1
Layer Number	1
Percent Passing No. 200 Sieve (%)	85.7
Plasticity Index	39.1
Liquid Limit	61.3
Texas Triaxial Class	5.6
Permeability Index	0.60

Screen II-8 Subgrade File

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
> **6 - Layer Thickness Across the Road**
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #6 - Layer Thickness Across the Road

To view Layer Thickness for a particular SID segment, select Option #6 from the Inventory Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Inventory Data Menu...

YOU: Type **<6>** for Layer Thickness Across the Road and press **<ENTER>.**
Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Layer Thickness Across the Road File record for SID 39 **(Screen II-9).**

Use the **<Page Up>** and **<Page Down>** keys to move through the Layer Thickness information for each Structure and Layer Number in the SID segment. After passing through all of the records for SID 39, you will move to the next consecutive SID Number.

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Inventory Data - Layer Thickness Across the Road

SID Number	39
Structure Number	1
Layer Number	2
Thickness - 3rd Position From Center (in.)	0.00
Thickness - 2nd Position From Center (in.)	6.00
Thickness - 1st Position From Center (in.)	6.00
Thickness - Center (in.)	6.00
Distance From Center - 3rd Position (ft)	29.0
Distance From Center - 2nd Position (ft)	12.0
Distance From Center - 1st Position (ft)	12.0

Screen II-9 Layer Thickness Across the Roadway File

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
> **2 - Monitoring Data 1.2**
> **1 - Visual**
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

II. INQUIRY

D. Monitoring Data

The second option available through the Inquiry Menu is for Monitoring Data. This section will follow the Monitoring Data Menu and its options in order, giving instructions and example screens.

To leave any option, press **<ESC>**. Under certain conditions you will be able to use your **<Page Up>** and **<Page Down>** keys to move between SID Numbers or screens. For example, after entering Option #1 - Visual, you can use these keys to move between records and then to a new SID and its records. Since Monitoring Data is kept by date, you may find several records for one SID.

From the Inquiry Menu **(Screen II-2)...**

YOU: Type **<2>** for Monitoring Data and press **<ENTER>.**

FLEXPAVE: Brings up the Monitoring Data Menu **(Screen II-10)** which lists your five options:

1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid

Option #1 - Visual

To retrieve the Visual Rating information about a particular SID location, select Option #1 from the Monitoring Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Monitoring Data Menu...

YOU: Type **<1>** for Visual and press **<ENTER>.**
Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>**, it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Visual Rating File record for SID 39 **(Screen II-11).**

You must enter a SID Number for the loction you wish to view; otherwise you will see the Visual Rating File record for SID 13, the default number. After gaining access to the Visual File, you can move through the Visual Rating records by using the control keys for **<Page Up>** and **<Page Down>.**

```
                TEXAS FLEXIBLE PAVEMENT DATABASE                1.2
                            INQUIRY
                        Monitoring Data

            1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
            4 - Dynaflect
            5 - Skid

                                        OPTION =====> 1

                             Enter SID Number =====>   13
```

Screen II-10 Monitoring Data File

```
                TEXAS FLEXIBLE PAVEMENT DATABASE
                            INQUIRY
              Monitoring Data - Visual Rating File

Actual Date of Measurement 10/74  SID Number             39
                                  Structure Number        1
                                  Layer Number            1

Rutting      Block Cr     Alligtr Cr     Longitud Cr      Transv Cr
2S 0M 0SV    0S 0M 0SV    0S  0M  0SV    1S  0M  0SV      0S 2M 0SV

Seal Code    Patching     Failures/Mi        Pavement Rat Scr   76
    3        0G 1F 0P         0          PES Pavement Rat Scr 0.00
                                          Unwght Vis. Rat Scr 0.00
```

Screen II-11 Visual Rating File

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
> **2 - Serviceability Index**
> **3 - Falling Weight**
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #2 - Serviceability Index

To view Serviceability Index information for a particular segment, select Option #2 from the Monitoring Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Monitoring Data Menu...

YOU: Type **<2>** for Serviceability Index and press **<ENTER>.** Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Serviceability Index File record for SID 39 **(Screen II-12).**

Use the **<Page Up>** and **<Page Down>** keys to move through the records in the SID segment. After you have passed through all of the records for SID 39, you will move to the next consecutive SID Number.

Option #3 - Falling Weight

To retrieve Falling Weight Structural Strength Index information for a particular SID location, select Option #3 from the Monitoring Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Monitoring Data Menu...

YOU: Type **<3>** for Falling Weight and press **<ENTER>.** Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Falling Weight SSI File record for SID 39 **(Screen II-13).**

Use the **<Page Up>** and **<Page Down>** keys to move through the Falling Weight File information records in the SID segment. After you have passed through all of the records for SID 39, you will move to the next consecutive SID Number.

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Monitoring Data - Serviceability Index

SID Number	39
Structure Number	1
Layer Number	5
Date	10/26/74

Count of Observation	9
Mean	3.44000
Standard Deviation	0.23000
Low Value	2.9
High Value	3.6

Screen II-12 Serviceability Index File

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Monitoring Data - Falling Weight SSI

Date 0/ 0/ 0 (MM/DD/YY)
SID Number 39
Structure Number 1
Layer Number 5
Average SSI 0.0
Temperature 0

	Reading 1	Reading 2	Reading 3	Reading 4	Reading 5
Geophone 1	0.00	0.00	0.00	0.00	0.00
Geophone 2	0.00	0.00	0.00	0.00	0.00
Geophone 3	0.00	0.00	0.00	0.00	0.00
Geophone 4	0.00	0.00	0.00	0.00	0.00
Geophone 5	0.00	0.00	0.00	0.00	0.00
Geophone 6	0.00	0.00	0.00	0.00	0.00
Geophone 7	0.00	0.00	0.00	0.00	0.00

Screen II-13 Falling Weight File

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
> **4 - Dynaflect**
> **5 - Skid**
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #4 - Dynaflect

To view Dynaflect information for a particular segment, select Option #3 from the Monitoring Data Menu. You must also enter a SID Number; our example uses SID 39.

From the Monitoring Data Menu...

YOU: Type **<4>** for Dynaflect and press **<ENTER>.**
Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Dynaflect File record for SID 39 **(Screen II-14).**

Use the **<Page Up>** and **<Page Down>** keys to move through the Dynaflect records for each Station of your SID Number. After you have passed through all of the records for SID 39, you will move to the next consecutive SID Number.

Option #5 - Skid

To retrieve Skid information about a particular SID location, select Option #5 from the Monitoring Data Menu and enter a SID Number. Our example uses SID 39.

From the Monitoring Data Menu...

YOU: Type **<5>** for Skid and press **<ENTER>.**
Enter SID Number **<39>** and press **<ENTER>.**

When you type a SID Number and strike **<ENTER>,** it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up the Skid Measurement File record for SID 39 **(Screen II-15).**

Use the **<Page Up>** and **<Page Down>** keys to move by date through the Skid Measurement records in the SID segment. After passing through all of the records for SID 39, you will move to the next consecutive SID Number.

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Monitoring Data - Dynaflect Measurement

SID Number	39
Structure Number	1
Layer Number	5
Date	8/ 9/76

STATION	1
Reading for Sensor 1	0.500
Reading for Sensor 2	0.470
Reading for Sensor 3	0.440
Reading for Sensor 4	0.380
Reading for Sensor 5	0.330

Screen II-14 Dynaflect Measurement File

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Monitoring Data - Skid Measurement

SID Number	39
Structure Number	1
Layer Number	5
Date	7/74

Mean	33
High	36
Low	30

Screen II-15 Skid Measurement File

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
> **3 - Traffic Data 1.3**
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

II. INQUIRY

D. Traffic Data

The third option available through the Inquiry menu is for Traffic Data. This section will follow the Traffic Data function, giving instructions and example screens. To leave any option, press **<ESC>.**

From the Inquiry Menu **(Screen II-2)...**

YOU: Type **<3>** for Traffic Data and press **<ENTER>.**

FLEXPAVE: Brings up the first Traffic Data screen **(Screen II-16)** and requests a SID Number.

YOU: Enter SID Number **<39>** and press **<ENTER>.**

FLEXPAVE: Brings up the Traffic Data File record for SID 39 **(Screen II-17).**

Use the **<Page Up>** and **<Page Down>** keys to move through the Traffic Data records year-by-year for the SID segment. After you have passed through all the records for SID 39, you will move to the next consecutive SID Number.

TEXAS FLEXIBLE PAVEMENT DATABASE 1.3
INQUIRY
Traffic Data

Please Enter SID Number: ___0

Screen II-16 Traffic Data File

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Traffic Data

SID Number	39
Year	1954
Annual Average Daily Traffic	1586
Annual Cummulative 18 Keal - one way	171896
Percent Trucks	19.0

Screen II-17 Traffic Data File

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
> **4 - Environmental Data 1.4**
> **1 - Environment**
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

II. INQUIRY

E. Environmental Data

The fourth option available through the Inquiry Menu is for Environmental Data. This section will follow the Environmental Data Menu and its options in order, giving instructions and example screens.

To leave any option, press **<ESC>**. After gaining access to the records you will be able to use your **<Page Up>** and **<Page Down>** keys to move between months and SID Numbers. It is necessary to know the designated County Number in order to use these files. For a list of County Numbers, see **III. Reports.**

From the Inquiry Menu **(Screen II-2)...**

YOU: Type **<4>** for Environmental Data and press **<ENTER>.**

FLEXPAVE: Brings up the Environmental Data Menu **(Screen II-18)** and offers you two choices:

1 - Environment
2 - Weather

Option #1 - Environment

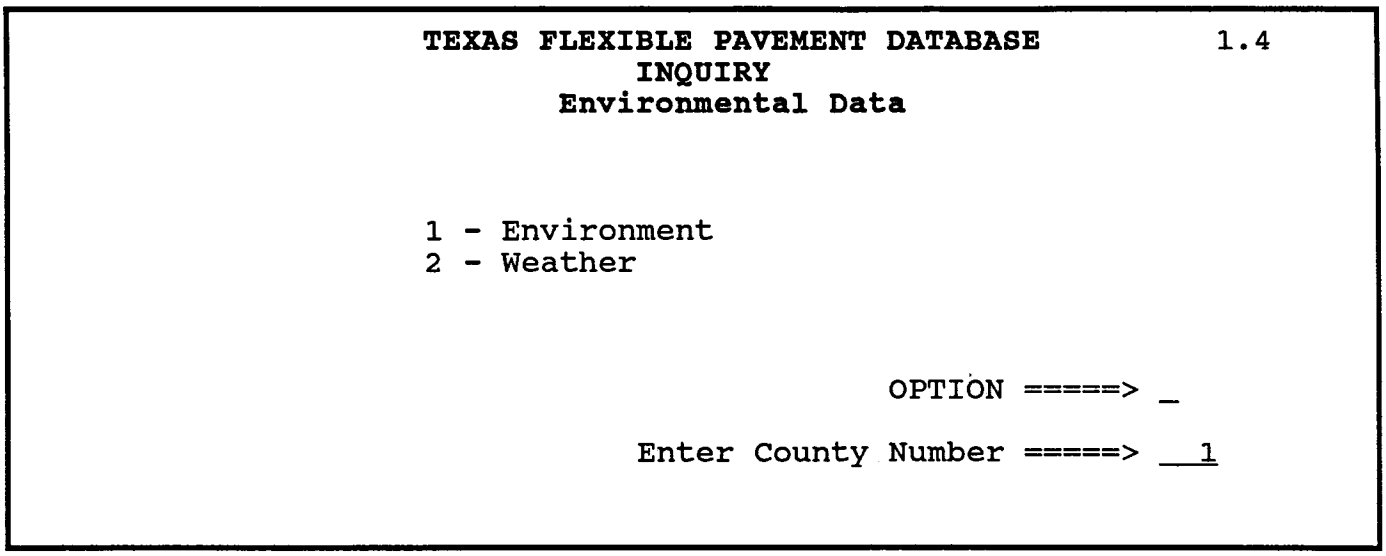
To retrieve the Environment information for a particular County, select Option #1 from the Environmental Data Menu. You must also enter a County Number; our example uses County 153.

From the Environmental Data Menu...

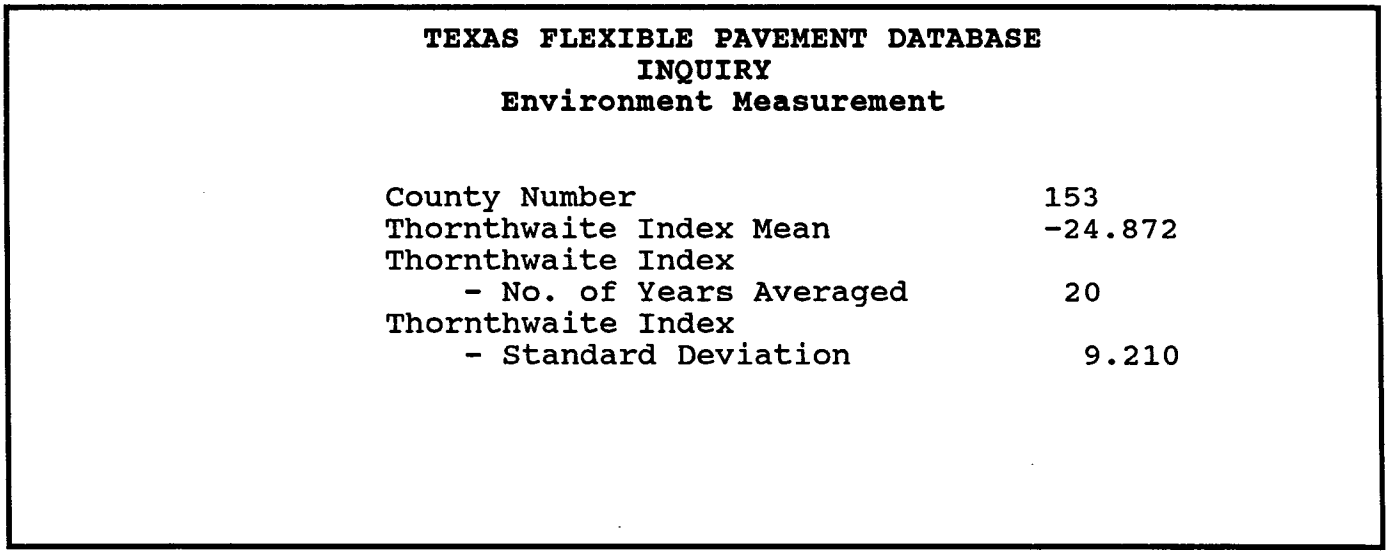
YOU: Type **<1>** for Environment and press **<ENTER>.**
Enter County Number **<153>** and press **<ENTER>.**

FLEXPAVE: Brings up the Environment Measurement File record for County 153 **(Screen II-19).**

Use the **<Page Up>** and **<Page Down>** keys to move from one consecutive County record to another.



Screen II-18 Environmental Data Menu



Screen II-19 Environment Measurement File

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
> **2 - Weather**
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #2 - Weather

To retrieve the Weather information for a particular County, select Option #2 from the Environmental Data Menu. You must also enter a County Number; our example uses County 153.

From the Environmental Data Menu...

YOU: Type **<2>** for Weather and press **<ENTER>.**
Enter County Number **<153>** and press **<ENTER>.**

FLEXPAVE: Brings up the Weather Measurement File record for County 153 **(Screen II-20).**

Use the **<Page Up>** and **<Page Down>** keys to move consecutively from month-to-month within the records for County 153. After passing through the records for all 12 months, the system will move to the next consecutive County Number.

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Weather Measurement

County Number 153
Month 1

	No. of Yrs Avg	Mean	Std. Dev.
Precipitation	20	0.507	0.692
Total Freeze Thaw Cycle	20	19.700	3.827
Wet Freeze Thaw Cycle	20	1.050	1.276
Maximum Temperature	20	54.358	4.388
Averaged Temperature	20	39.650	2.777

Screen II-20 Weather Measurement File

Menu Screen Order

MAIN MENU
> 1 - Inquiry
  2 - Reports
  3 - Edit & Update
  4 - Applications
  5 - Backup
  6 - Installation
  7 - Reindex Master Files

  1 - Inquiry 1.0
    1 - Inventory Data 1.1
      1 - Location
      2- Layer ID
      3 - Geometric & Shoulder
      4 - Surface
      5 - Subgrade
      6 - Layer Thickness Across the Road
    2 - Monitoring Data 1.2
      1 - Visual
      2 - Serviceability Index
      3 - Falling Weight
      4 - Dynaflect
      5 - Skid
    3 - Traffic Data 1.3
    4 - Environmental Data 1.4
      1 - Environment
      2 - Weather
> **5 - Tables 1.5**
>   **1 - County Name**
      2 - Material Type
      3 - Type of Pavement
      4 - District Temperature Constant
      5 - Widening Flag
      6 - Layer Description
      7 - Functional Classification

II. INQUIRY

F. Tables

The last option available through the Inquiry Menu is for Tables. This section will follow the Tables Menu and its options in order, giving instructions and example screens.

To leave any option, press **<ESC>**. After gaining access to a file you will be able to use your **<Page Up>** and **<Page Down>** keys to move between the information screens.

From the Inquiry Menu **(Screen II-2)...**

YOU: Type **<5>** for Tables and press **<ENTER>.**

FLEXPAVE: Brings up the Tables Menu **(Screen II-21)** and offers you seven choices:

1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #1 - County Name

To retrieve the equivalent County Name for a County Number, select Option #1 from the Tables Menu. Our example uses County 153.

From the Tables Mmenu...

YOU: Type **<1>** for County Name and press **<ENTER>.**
Enter County Number **<153>** and press **<ENTER>.**

FLEXPAVE: Brings up the County Name File record for County 153 **(Screen II-22).**

Use the **<Page Up>** and **<Page Down>** keys to move from one consecutive County Name record to another.

TEXAS FLEXIBLE PAVEMENT DATABASE 1.5
INQUIRY
Tables

1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

OPTION =====> __1

Screen II-21 Tables Menu

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
County Table

County Number	153
County Name	LYNN

Screen II-22 County Name Table

Menu Screen Order

MAIN MENU
> **1 - Inquiry**
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
> **2 - Material Type**
> **3 - Type of Pavement**
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #2 - Material Type

By selecting Option #2 from the Tables Menu, you can retrieve more than 40 Material Type Classification Tables and their code numbers.

From the Tables Menu...

YOU: Type **<2>** for Material Type and press **<ENTER>.**

FLEXPAVE: Brings up the first Material Type Classification record **(Screen II-23).**

You can use the **<Page Up>** and **<Page Down>** keys to move between the records in consecutive order.

Option #3 - Type of Pavement

To retrieve Pavement information, select Option #3 from the Tables Menu. More than 35 Pavement Types and their codes are listed.

From the Tables Menu...

YOU: Type **<3>** for Type of Pavement and press **<ENTER>.**

FLEXPAVE: Brings up the first Type of Pavement record **(Screen II-24).**

Use the **<Page Up>** and **<Page Down>** keys to move from one consecutive Pavement Type record to another.

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Material Type Classification Table

Material Code	1
Material Description	HOT MIX - HOT LAID
Material Short Form	HMAC
Layer Description	S

Screen II-23 Material Type Classification Table

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Type of Pavement Table

Pavement Code	1
Type of Base	GRANULAR BASE
Surface Thickness	SURFACE TREATED
Surface Seal	

Screen II-24 Type of Pavement Table

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
> **4 - District Temperature Constant**
> **5 - Widening Flag**
6 - Layer Description
7 - Functional Classification

Option #4 - District Temperature Constant

District Temperature Constant information is available from Option #4 of the Tables Menu. There is a record for each of the 25 SDHPT Districts; our example uses District 21.

From the Tables Menu...

YOU: Type **<4>** for District Temperature Constant and press **<ENTER>.**
Enter SDHPT District **<21>** and press **<ENTER>.**

FLEXPAVE: Brings up the first District Temperature Constant record for District 21 **(Screen II-25).**

You can use the **<Page Up>** and **<Page Down>** keys to move between the Temperature records in consecutive order.

Option #5 - Widening Flag

Widening Flag information is available through Option #5 from the Tables Menu. There are three records in this file.

From the Tables Menu...

YOU: Type **<5>** for Widening Flag and press **<ENTER>.**

FLEXPAVE: Brings up the first Widening Flag record **(Screen II-26).**

Use the **<Page Up>** and **<Page Down>** keys to move from one consecutive record to another.

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
District Temperature Table

District Number	21
Temperature Constant	38

Screen II-25 District Temperature Constant Table

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Widening Table

Code 0
Description No Widening
Comments:
Center Thickness CAN be used

Screen II-26 Widening Table

Menu Screen Order

MAIN MENU
> 1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
1 - Inventory Data 1.1
1 - Location
2- Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
2 - Monitoring Data 1.2
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
3 - Traffic Data 1.3
4 - Environmental Data 1.4
1 - Environment
2 - Weather
5 - Tables 1.5
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
>6 - Layer Description
>7 - Functional Classification

Option #6 - Layer Description

Layer Description information is available from Option #6 of the Tables Menu. There are 14 records in this table.

From the Tables Menu...

YOU: Type **<6>** for Layer Description and press **<ENTER>.**

FLEXPAVE: Brings up the first Layer Description record **(Screen II-27).**

You can use the **<Page Up>** and **<Page Down>** keys to move between the Description records in consecutive order.

Option #7 - Functional Classification

Functional Classification information is available through Option #7 from the Tables Menu. There are seven records in this file.

From the Tables Menu...

YOU: Type **<7>** for Functional Classification and press **<ENTER>.**

FLEXPAVE: Brings up the first Functional Classification record **(Screen II-28).**

Use the **<Page Up>** and **<Page Down>** keys to move from one consecutive Classification record to another.

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Layer Description Table

Code	1
Short Description	OVLY
Description	Overlay

Screen II-27 Layer Description Table

TEXAS FLEXIBLE PAVEMENT DATABASE
INQUIRY
Functional Classification Table

Code	1
Description	Interstate

Screen II-28 Functional Classification Table

NOTES

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- > 2 - Reports
- 3 - Edit & Update
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

1 - Inquiry 1.0
2 - Reports 2.0
- 1 - Summary 2.1
  - 1 - By SID Number
  - 2 - By District
  - 3 - ALL SID Numbers
- 2 - Inventory Update Forms 2.2
  - 1 - By District
  - 2 - By SID Number
  - 3 - ALL SID Numbers
- 3 - Inventory Data 2.3
  - 1 - Location
  - 2 - Location Section
  - 3 - Layer ID
  - 4 - Geometric & Shoulder
  - 5 - Surface
  - 6 - Subgrade
  - 7 - Layer Thickness Across the Road
  - 8 - Double Surface Treatment
- 4 - Monitoring Data 2.4
  - 1 - Visual
  - 2 - Serviceability Index
  - 3 - Falling Weight
  - 4 - Dynaflect
  - 5 - Skid
- 5 - Traffic Data
- 6 - Environmental Data
  - 1 - Environment
  - 2 - Weather
- 7 - Tables
  - 1 - County Name
  - 2 - Material Type
  - 3 - Type of Pavement
  - 4 - District Temperature Constant
  - 5 - Widening Flag
  - 6 - Layer Description
  - 7 - Functional Classification

III. REPORTS

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- > 2 - Reports
- 3 - Edit & Update
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

- 1 - Inquiry 1.0
- > 2 - Reports 2.0
  - 1 - Summary 2.1
    - 1 - By SID Number
    - 2 - By District
    - 3 - ALL SID Numbers
  - 2 - Inventory Update Forms 2.2
    - 1 - By District
    - 2 - By SID Number
    - 3 - ALL SID Numbers
  - 3 - Inventory Data 2.3
    - 1 - Location
    - 2 - Location Section
    - 3 - Layer ID
    - 4 - Geometric & Shoulder
    - 5 - Surface
    - 6 - Subgrade
    - 7 - Layer Thickness Across the Road
    - 8 - Double Surface Treatment
  - 4 - Monitoring Data 2.4
    - 1 - Visual
    - 2 - Serviceability Index
    - 3 - Falling Weight
    - 4 - Dynaflect
    - 5 - Skid
  - 5 - Traffic Data
  - 6 - Environmental Data
    - 1 - Environment
    - 2 - Weather
  - 7 - Tables
    - 1 - County Name
    - 2 - Material Type
    - 3 - Type of Pavement
    - 4 - District Temperature Constant
    - 5 - Widening Flag
    - 6 - Layer Description
    - 7 - Functional Classification

III. REPORTS

A. The Reporting Functions

After entering the FLEXIBLE PAVEMENT DATABASE, the Main Menu will appear which lists seven available options. All work done in the database begins from this menu screen.

This section of the User's Manual explains how to use the Reports functions in order, giving instructions and example screens. The Reports option will permit you to obtain summary "hard" copies (printed) of the information contained in the FLEXIBLE PAVEMENT DATABASE.

From the Main Menu **(Screen III-1)...**

YOU: Type **<2>** for Reports and press **<ENTER>.**

FLEXPAVE: Brings up the Reports Menu **(Screen III-2)** which lists seven available options:

1 - Summary
2 - Inventory Update Forms
3 - Inventory Data
4 - Monitoring Data
5 - Traffic Data
6 - Environmental Data
7 - Tables

TEXAS FLEXIBLE PAVEMENT DATABASE
MAIN MENU

1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

Q - QUIT

OPTION ====> 2

Screen III-1 Main Menu

TEXAS FLEXIBLE PAVEMENT DATABASE 2.0
REPORTS

1 - Summary
2 - Inventory Update Forms
3 - Inventory Data
4 - Monitoring Data
5 - Traffic Data
6 - Environmental Data
7 - Tables

OPTION ====> _

Screen III-2 Reports Menu

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
>   2 - Reports
    3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry 1.0
    2 - Reports 2.0
>       1 - Summary 2.1
>           1 - By SID Number
            2 - By District
            3 - ALL SID Numbers
        2 - Inventory Update Forms 2.2
            1 - By District
            2 - By SID Number
            3 - ALL SID Numbers
        3 - Inventory Data 2.3
            1 - Location
            2 - Location Section
            3 - Layer ID
            4 - Geometric & Shoulder
            5 - Surface
            6 - Subgrade
            7 - Layer Thickness Across the Road
            8 - Double Surface Treatment
        4 - Monitoring Data 2.4
            1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
            4 - Dynaflect
            5 - Skid
        5 - Traffic Data
        6 - Environmental Data
            1 - Environment
            2 - Weather
        7 - Tables
            1 - County Name
            2 - Material Type
            3 - Type of Pavement
            4 - District Temperature Constant
            5 - Widening Flag
            6 - Layer Description
            7 - Functional Classification
```

III. REPORTS

B. Summary

The Summary function will provide summary information on Location, Serviceability Index, Traffic, Structure, Pavement Condition, Environment, Skid, Falling Weight and Dynaflect.

Prior to actually printing a report, you will have an opportunity to **<ESC>** without printing. Please remember, after you instruct the system to print a report, **you cannot interrupt the printing process.**

From the Reports Menu **(Screen III-2)...**

YOU: Type **<1>** for Summary and press **<ENTER>.**

FLEXPAVE: Brings up the Summary Report Menu **(Screen III-3)** which lists three available options:

1 - By SID Number
2 - By District
3 - ALL SID Numbers

Option #1 - By SID Number

To retrieve summary information about a particular SID segment, you select Option #1 from the Summary Menu. You must enter the SID Number; our example uses SID 39.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Summary Menu...

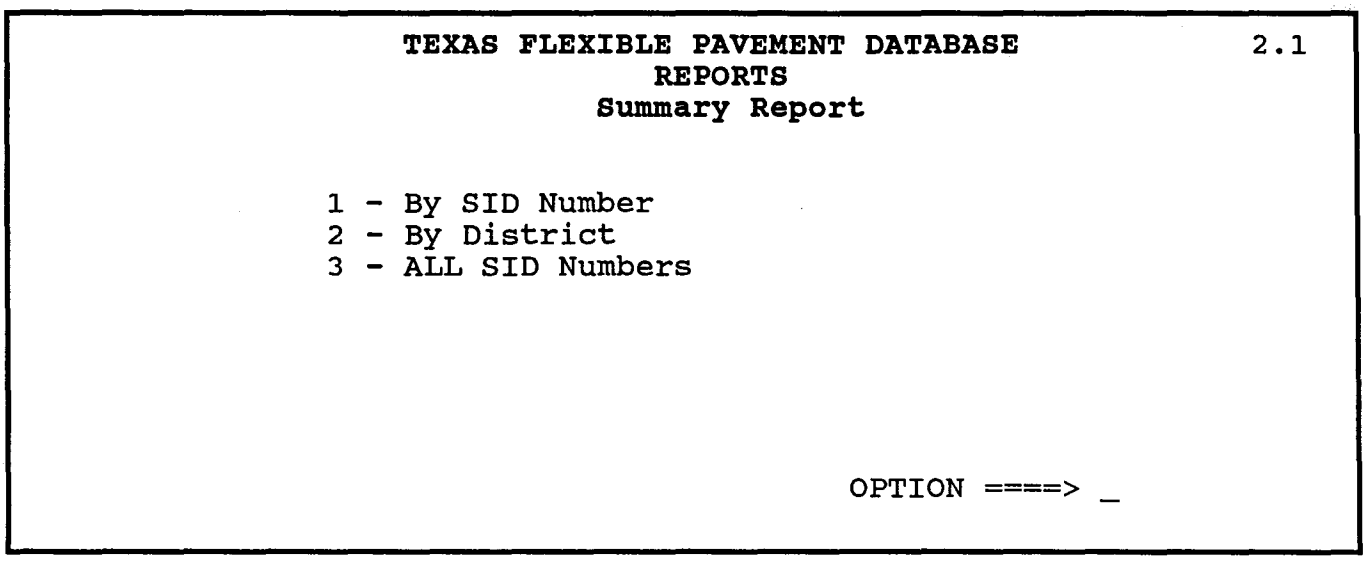
YOU: Type **<1>** for By SID Number and press **<ENTER>.**

FLEXPAVE: Asks you to enter the SID Number.

YOU: Enter SID **<39>** and press **<ENTER>.**

FLEXPAVE: Compiles and prints the report.

See **Appendix A - Reports** for a copy of the report, **A.1 Summary By SID Number.**



Screen III-3 Summary Report Menu

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
>   2 - Reports
    3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry 1.0
    2 - Reports 2.0
        1 - Summary 2.1
            1 - By SID Number
            2 - By District
            3 - ALL SID Numbers
        2 - Inventory Update Forms 2.2
            1 - By District
>           2 - By SID Number
>           3 - ALL SID Numbers
        3 - Inventory Data 2.3
            1 - Location
            2 - Location Section
            3 - Layer ID
            4 - Geometric & Shoulder
            5 - Surface
            6 - Subgrade
            7 - Layer Thickness Across the Road
            8 - Double Surface Treatment
        4 - Monitoring Data 2.4
            1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
            4 - Dynaflect
            5 - Skid
        5 - Traffic Data
        6 - Environmental Data
            1 - Environment
            2 - Weather
        7 - Tables
            1 - County Name
            2 - Material Type
            3 - Type of Pavement
            4 - District Temperature Constant
            5 - Widening Flag
            6 - Layer Description
            7 - Functional Classification
```

Option #2 - By District

To retrieve summary information about all SID segments within a particular SDHPT District, select Option #2 from the Summary Menu. You must enter a District number; our example uses District 21.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Summary Menu...

YOU: Type **<2>** for By District and press **<ENTER>.**

FLEXPAVE: Asks you to enter the District Number.

YOU: Enter District **<21>** and press **<ENTER>.**

FLEXPAVE: Compiles and prints a Summary Report for each SID Number in District 21.

See **Appendix A - Reports** for a copy of the report, **A.2 Summary By District.**

Option #3 - ALL SID Numbers

To retrieve summary information about **all** SID segments, select Option #3 from the Summary Menu. This option will produce a summary report for every SID segment and requires considerable time to complete.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed and your computer will not be available to you until that time.**

From the Summary Menu...

YOU: Type **<3>** for ALL SID Numbers and press **<ENTER>.**

FLEXPAVE: Compiles and prints a Summary Report for every SID segment.

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Menu Screen Order

```
MAIN MENU
    1 - Inquiry
>   2 - Reports
    3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry 1.0
    2 - Reports 2.0
        1 - Summary 2.1
            1 - By SID Number
            2 - By District
            3 - ALL SID Numbers
>       2 - Inventory Update Forms 2.2
>           1 - By District
            2 - By SID Number
            3 - ALL SID Numbers
        3 - Inventory Data 2.3
            1 - Location
            2 - Location Section
            3 - Layer ID
            4 - Geometric & Shoulder
            5 - Surface
            6 - Subgrade
            7 - Layer Thickness Across the Road
            8 - Double Surface Treatment
        4 - Monitoring Data 2.4
            1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
            4 - Dynaflect
            5 - Skid
        5 - Traffic Data
        6 - Environmental Data
            1 - Environment
            2 - Weather
        7 - Tables
            1 - County Name
            2 - Material Type
            3 - Type of Pavement
            4 - District Temperature Constant
            5 - Widening Flag
            6 - Layer Description
            7 - Functional Classification
```

III. REPORTS

C. Inventory Update Forms

To retrieve Location, Structural, Geometric and Shoulder, and Layer Thickness information on an Inventory Update Form, select Option #2 from the Reports Menu. This option is very similar to the Summary option.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Reports Menu **(Screen III-2)...**

YOU: Type **<2>** for Inventory Update Forms and press **<ENTER>.**

FLEXPAVE: Brings up the Inventory Update Forms Menu **(Screen III-4)** which lists three available options:

1 - By District
2 - By SID Number
3 - ALL SID Numbers

Option #1 - By District

To retrieve an Inventory Update Form for all SID segments in a particular SDHPT District, select Option #1 from the Inventory Update Forms Menu. You must enter a District Number; our example uses District 21.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Inventory Update Forms Menu...

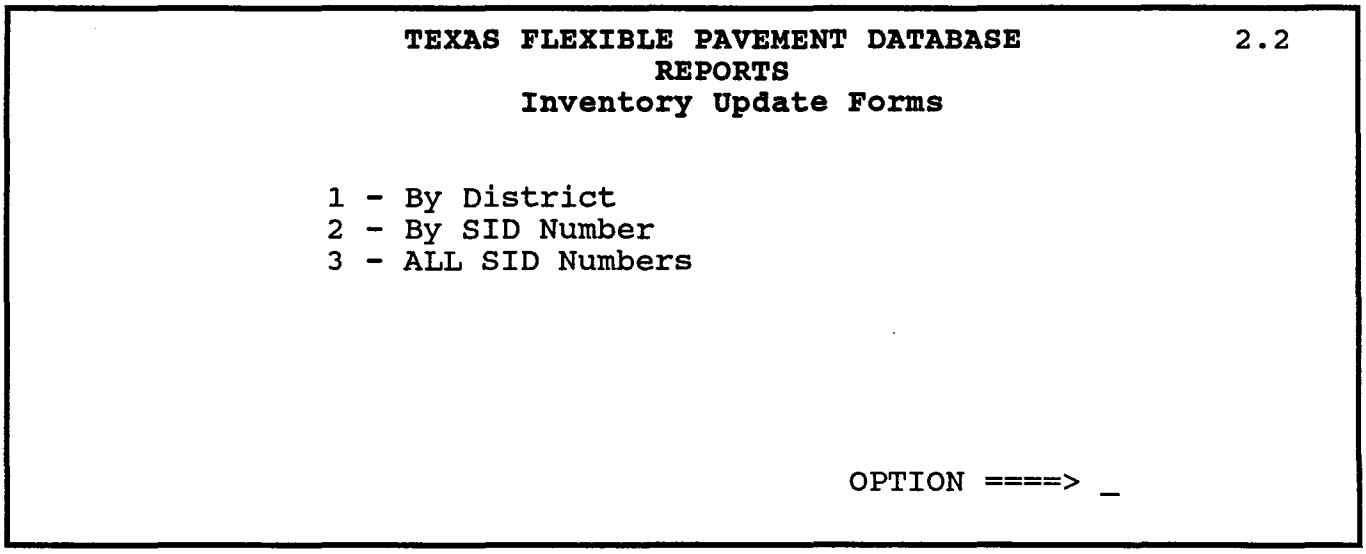
YOU: Type **<1>** for By District and press **<ENTER>.**

FLEXPAVE: Asks you to enter the District Number.

YOU: Enter District **<21>** and press **<ENTER>.**

FLEXPAVE: Compiles and prints an Inventory Update Form for each SID Number in District 21.

See **Appendix A - Reports** for a copy of the report, **A.3 Inventory Update Form By District.**



Screen III-4 Inventory Update Forms Menu

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
>   2 - Reports
    3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry 1.0
    2 - Reports 2.0
        1 - Summary 2.1
            1 - By SID Number
            2 - By District
            3 - ALL SID Numbers
        2 - Inventory Update Forms 2.2
            1 - By District
>           2 - By SID Number
>           3 - ALL SID Numbers
        3 - Inventory Data 2.3
            1 - Location
            2 - Location Section
            3 - Layer ID
            4 - Geometric & Shoulder
            5 - Surface
            6 - Subgrade
            7 - Layer Thickness Across the Road
            8 - Double Surface Treatment
        4 - Monitoring Data 2.4
            1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
            4 - Dynaflect
            5 - Skid
        5 - Traffic Data
        6 - Environmental Data
            1 - Environment
            2 - Weather
        7 - Tables
            1 - County Name
            2 - Material Type
            3 - Type of Pavement
            4 - District Temperature Constant
            5 - Widening Flag
            6 - Layer Description
            7 - Functional Classification
```

Option #2 - By SID Number

To retrieve an Inventory Update Form for a particular SID Number, select Option #2 from the Inventory Update Forms Menu. You must enter a SID Number; our example uses SID 39.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Inventory Update Forms Menu...

YOU: Type **<2>** for By SID Number and press **<ENTER>.**

FLEXPAVE: Asks you to enter the SID Number.

YOU: Enter District **<39>** and press **<ENTER>.**

FLEXPAVE: Compiles and prints an Inventory Update Form for SID 39.

See **Appendix A - Reports** for a copy of the report, **A.4 Inventory Update Form By SID.**

Option #3 - ALL SID Numbers

To retrieve an Inventory Update Form for **every** SID Number, select Option #3 from the Inventory Data Forms Menu. This option will produce an Update Form for all SID roadways and requires considerable time to complete.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed and our computer will not be available to you until that time.**

From the Inventory Update Forms Menu...

YOU: Type **<3>** for ALL SID Numbers and press **<ENTER>.**

FLEXPAVE: Compiles and prints an Update Form for every SID segment.

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Menu Screen Order

```
MAIN MENU
    1 - Inquiry
>   2 - Reports
    3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry 1.0
    2 - Reports 2.0
        1 - Summary 2.1
            1 - By SID Number
            2 - By District
            3 - ALL SID Numbers
        2 - Inventory Update Forms 2.2
            1 - By District
            2 - By SID Number
            3 - ALL SID Numbers
>       3 - Inventory Data 2.3
>           1 - Location
            2 - Location Section
            3 - Layer ID
            4 - Geometric & Shoulder
            5 - Surface
            6 - Subgrade
            7 - Layer Thickness Across the Road
            8 - Double Surface Treatment
        4 - Monitoring Data 2.4
            1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
            4 - Dynaflect
            5 - Skid
        5 - Traffic Data
        6 - Environmental Data
            1 - Environment
            2 - Weather
        7 - Tables
            1 - County Name
            2 - Material Type
            3 - Type of Pavement
            4 - District Temperature Constant
            5 - Widening Flag
            6 - Layer Description
            7 - Functional Classification
```

III. REPORTS

C. Inventory Data

To retrieve Inventory Data information in a report format, select Option #3 from the Reports Menu.

Remember, after you instruct the system to print a report, **you cannot <ESC> to exit.** It is very important to remember that you cannot interrupt the printing process once it has begun.

From the Reports Menu **(Screen III-2)...**

YOU: Type **<3>** for Inventory Data and press **<ENTER>.**

FLEXPAVE: Brings up the Inventory Data Menu **(Screen III-5)** which lists eight available options:

1 - Location
2 - Location Section
3 - Layer ID
4 - Geometric & Shoulder
5 - Surface
6 - Subgrade
7 - Layer Thickness Across the Road
8 - Double Surface Treatment

Option #1 - Location

To retrieve a list of all SID Test Section Locations, select Option #1 from the Inventory Data Menu. The database will produce a list of the SID locations by Highway District, County Number, Highway Number, and Beginning and Ending Mileposts.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Inventory Data Menu...

YOU: Type **<1>** for Location and press **<ENTER>.**

FLEXPAVE: Compiles and prints an Inventory Data Test Section Location List for all SID Numbers.

See **Appendix A - Reports** for a copy of the report, **A.5 Inventory Data Test Section Location List.**

TEXAS FLEXIBLE PAVEMENT DATABASE 2.3
REPORTS
Inventory Data

1 - Location
2 - Location Section
3 - Layer ID
4 - Geometric & Shoulder
5 - Surface
6 - Subgrade
7 - Layer Thickness Across the Road
8 - Double Surface Treatment

OPTION ====> _

Screen III-5 Inventory Data Menu

Menu Screen Order

MAIN MENU
1 - Inquiry
> **2 - Reports**
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
2 - Reports 2.0
1 - Summary 2.1
1 - By SID Number
2 - By District
3 - ALL SID Numbers
2 - Inventory Update Forms 2.2
1 - By District
2 - By SID Number
3 - ALL SID Numbers
3 - Inventory Data 2.3
1 - Location
> **2 - Location Section**
> **3 - Layer ID**
4 - Geometric & Shoulder
5 - Surface
6 - Subgrade
7 - Layer Thickness Across the Road
8 - Double Surface Treatment
4 - Monitoring Data 2.4
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
5 - Traffic Data
6 - Environmental Data
1 - Environment
2 - Weather
7 - Tables
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #2 - Location Section

To retrieve all Location File information for all SID Test Section Locations, select Option #2 from the Inventory Data Menu. This will produce a lengthy report identifying each Location Section by Milepoints, Mileposts, Highway Numbers, Lane Control, Number of Lanes, etc.

Remember, after you instruct the system to print a report, **you cannot <ESC> to exit.**

From the Data Inventory Menu...

YOU: Type **<2>** for Location Section and press **<ENTER>.**

FLEXPAVE: Tells you to set your printer to Condensed Print and then **<HIT ANY KEY>** to begin printing the Inventory Location Section List.

See **Appendix A - Reports** for a copy of the report, **A.6 Inventory Data Location Section List.**

Option #3 - Layer ID

To retrieve the Layer Identification File for all SID segments, select Option #3 from the Inventory Data Menu. The system will produce a multi-paged list by SID Number showing the Structure and Layer Numbers, Layer Description, Layer Center Thickness, Material Type Classification, Date Job Completed and Date Layer Widened.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Inventory Data Menu...

YOU: Type **<3>** for Layer Identification and press **<ENTER>.**

FLEXPAVE: Compiles and prints a Layer Identification File List for all SID Numbers and their pavement layers.

See **Appendix A - Reports** for a copy of the report, **A.7 Inventory Data Layer Identification File List.**

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- > 2 - Reports
- 3 - Edit & Update
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

1 - Inquiry 1.0
2 - Reports 2.0
- 1 - Summary 2.1
  - 1 - By SID Number
  - 2 - By District
  - 3 - ALL SID Numbers
- 2 - Inventory Update Forms 2.2
  - 1 - By District
  - 2 - By SID Number
  - 3 - ALL SID Numbers
- 3 - Inventory Data 2.3
  - 1 - Location
  - 2 - Location Section
  - 3 - Layer ID
- > **4 - Geometric & Shoulder**
- > **5 - Surface**
  - 6 - Subgrade
  - 7 - Layer Thickness Across the Road
  - 8 - Double Surface Treatment
- 4 - Monitoring Data 2.4
  - 1 - Visual
  - 2 - Serviceability Index
  - 3 - Falling Weight
  - 4 - Dynaflect
  - 5 - Skid
- 5 - Traffic Data
- 6 - Environmental Data
  - 1 - Environment
  - 2 - Weather
- 7 - Tables
  - 1 - County Name
  - 2 - Material Type
  - 3 - Type of Pavement
  - 4 - District Temperature Constant
  - 5 - Widening Flag
  - 6 - Layer Description
  - 7 - Functional Classification

Option #4 - Geometric & Shoulder

To retrieve all Geometric and Shoulder Inventory Data, select Option #4 from the Inventory Data Menu. This will produce a multi-paged list identifying Type of Pavement, Lane Width, Shoulder Width, Shoulder Base Type and other data for all SID segments.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Data Inventory Menu...

YOU: Type **<4>** for Geometric & Shoulder and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Geometric & Shoulder Information List for all SID Numbers.

See **Appendix A - Reports** for a copy of the report, **A.8 Geometric and Shoulder Information List.**

Option #5 - Surface

To retrieve the Surface Layer Information for all SID segments, select Option #5 from the Inventory Data Menu. The database will produce a multi-paged list by SID Number showing the Structure and Layer Numbers, Aggregate Application Rate, Admixture Type, Percent Admixture and Asphalt Application Rate for each SID segment.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Inventory Data Menu...

YOU: Type **<5>** for Surface and press **<ENTER>.**

FLEXPAVE: Compiles and prints a Surface File List for all SID Numbers.

See **Appendix A - Reports** for a copy of the report, **A.9 Surface File List.**

Menu Screen Order

MAIN MENU
1 - Inquiry
> 2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
2 - Reports 2.0
1 - Summary 2.1
1 - By SID Number
2 - By District
3 - ALL SID Numbers
2 - Inventory Update Forms 2.2
1 - By District
2 - By SID Number
3 - ALL SID Numbers
3 - Inventory Data 2.3
1 - Location
2 - Location Section
3 - Layer ID
4 - Geometric & Shoulder
5 - Surface
> **6 - Subgrade**
> **7 - Layer Thickness Across the Road**
8 - Double Surface Treatment
4 - Monitoring Data 2.4
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
5 - Traffic Data
6 - Environmental Data
1 - Environment
2 - Weather
7 - Tables
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #6 - Subgrade

To retrieve all Subgrade Inventory Data, select Option #6 from the Inventory Data Menu. This will produce a multi-paged list identifying the Percent Passing No. 200 Sieve, Plasticity Index, Liquid Limit, Texas Triaxial Class and Permeability Index for all SID Numbers.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Data Inventory Menu...

YOU: Type **<6>** for Subgrade and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Subgrade File List for all SID Numbers.

See **Appendix A - Reports** for a copy of the report, **A.10 Subgrade File List.**

Option #7 - Layer Thickness Across the Road

To retrieve Layer Thickness Across the Road information for all SID segments, select Option #7 from the Inventory Data Menu. The system will produce a multi-paged list by SID Number showing Thickness by Position and Distance From the Center of the Roadway data for each SID segment.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Inventory Data Menu...

YOU: Type **<7>** for Thickness Across the Road and press **<ENTER>.**

FLEXPAVE: Compiles and prints a Layer Thickness Across the Road File List for all SID Numbers.

See **Appendix A - Reports** for a copy of the report, **A.11 Layer Thickness Across the Road File List.**

Menu Screen Order

MAIN MENU
1 - Inquiry
> **2 - Reports**
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
2 - Reports 2.0
1 - Summary 2.1
1 - By SID Number
2 - By District
3 - ALL SID Numbers
2 - Inventory Update Forms 2.2
1 - By District
2 - By SID Number
3 - ALL SID Numbers
3 - Inventory Data 2.3
1 - Location
2 - Location Section
3 - Layer ID
4 - Geometric & Shoulder
5 - Surface
6 - Subgrade
7 - Layer Thickness Across the Road
> **8 - Double Surface Treatment**
4 - Monitoring Data 2.4
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
5 - Traffic Data
6 - Environmental Data
1 - Environment
2 - Weather
7 - Tables
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #8 - Double Surface Treatment

To retrieve all Double Surface Inventory Data, select Option #8 from the Inventory Data Menu. This will produce list identifying SIDs with Two-Course Surface Treatments and the date completed.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Data Inventory Menu...

YOU: Type **<8>** for Double Surface Treatment and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Double Surface Treatment List for all SID Numbers.

See **Appendix A - Reports** for a copy of the report, **A.12 Double Surface Treatment List.**

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
>   2 - Reports
    3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry 1.0
    2 - Reports 2.0
        1 - Summary 2.1
            1 - By SID Number
            2 - By District
            3 - ALL SID Numbers
        2 - Inventory Update Forms 2.2
        1 - By District
            2 - By SID Number
            3 - ALL SID Numbers
        3 - Inventory Data 2.3
            1 - Location
            2 - Location Section
            3 - Layer ID
            4 - Geometric & Shoulder
            5 - Surface
            6 - Subgrade
            7 - Layer Thickness Across the Road
            8 - Double Surface Treatment
>       4 - Monitoring Data 2.4
>           1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
            4 - Dynaflect
            5 - Skid
        5 - Traffic Data
        6 - Environmental Data
            1 - Environment
            2 - Weather
        7 - Tables
            1 - County Name
            2 - Material Type
            3 - Type of Pavement
            4 - District Temperature Constant
            5 - Widening Flag
            6 - Layer Description
            7 - Functional Classification
```

III. REPORTS

D. Monitoring Data

To retrieve Monitoring Data in a report format, select Option #4 from the Reports Menu.

After you instruct the system to print a report, **you cannot <ESC> until the report is completed.** Remember, you cannot interrupt the printing process once it has begun.

From the Reports Menu **(Screen III-2)...**

YOU: Type **<4>** for Monitoring Data and press **<ENTER>.**

FLEXPAVE: Brings up the Monitoring Data Menu **(Screen III-6)** which lists five available options.

1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid

Option #1 - Visual

To retrieve Visual Monitoring Data in a report format, select Option #1 from the Reports Menu. This multi-paged report will list Alligator Cracking, Rutting, Crack Sealing, etc., for each SID segment.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Monitoring Data Menu...

YOU: Type **<1>** for Visual and press **<ENTER>.**

FLEXPAVE: Asks you to set the printer to Condensed print and press any key to continue...

YOU: Press a key.

FLEXPAVE: Compiles and prints a Visual Rating File Report for all SID Numbers.

See **Appendix A - Reports** for a copy of the report. **A.13 Visual Rating File List.**

TEXAS FLEXIBLE PAVEMENT DATABASE 2.4
REPORTS
Monitoring Data

1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid

OPTION ====> _

Screen III-6 Monitoring Data Menu

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- > 2 - Reports
- 3 - Edit & Update
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

1 - Inquiry 1.0
2 - Reports 2.0
- 1 - Summary 2.1
  - 1 - By SID Number
  - 2 - By District
  - 3 - ALL SID Numbers
- 2 - Inventory Update Forms 2.2
  - 1 - By District
  - 2 - By SID Number
  - 3 - ALL SID Numbers
- 3 - Inventory Data 2.3
  - 1 - Location
  - 2 - Location Section
  - 3 - Layer ID
  - 4 - Geometric & Shoulder
  - 5 - Surface
  - 6 - Subgrade
  - 7 - Layer Thickness Across the Road
  - 8 - Double Surface Treatment
- 4 - Monitoring Data 2.4
  - 1 - Visual
  - > **2 - Serviceability Index**
  - > **3 - Falling Weight**
  - 4 - Dynaflect
  - 5 - Skid
- 5 - Traffic Data
- 6 - Environmental Data
  - 1 - Environment
  - 2 - Weather
- 7 - Tables
  - 1 - County Name
  - 2 - Material Type
  - 3 - Type of Pavement
  - 4 - District Temperature Constant
  - 5 - Widening Flag
  - 6 - Layer Description
  - 7 - Functional Classification

Option #2 - Serviceability Index

To retrieve all Serviceability Index (SI) Monitoring Data, select Option #2 from the Monitoring Data Menu. This report identifies Counts of Observations, SI Mean, SI Standard Deviation, SI Low and SI High Values by Date for each SID segment.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Monitoring Data Menu...

YOU: Type **<2>** for Serviceability Index and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Serviceability Index File List for all SID Numbers.

See **Appendix A - Reports** for a copy of the report, **A.14 Serviceability Index File List.**

Option #3 - Falling Weight

To retrieve the Falling Weight Monitoring Data, select Option #3 from the Monitoring Data Menu. This two-part report will list the five SSI readings for Geophones one through seven for each SID segment.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Monitoring Data Menu...

YOU: Type **<3>** for Falling Weight and press **<ENTER>.**

FLEXPAVE: Asks you to set the printer to Condensed print and strike a key when ready.

YOU: Strike a key.

FLEXPAVE: Compiles and prints the Falling Weight SSI File List for all SID segments.

See **Appendix A - Reports** for a copy of the report, **A.15 Falling Weight SSI File List.**

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
>   2 - Reports
    3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry 1.0
    2 - Reports 2.0
        1 - Summary 2.1
            1 - By SID Number
            2 - By District
            3 - ALL SID Numbers
        2 - Inventory Update Forms 2.2
            1 - By District
            2 - By SID Number
            3 - ALL SID Numbers
        3 - Inventory Data 2.3
            1 - Location
            2 - Location Section
            3 - Layer ID
            4 - Geometric & Shoulder
            5 - Surface
            6 - Subgrade
            7 - Layer Thickness Across the Road
            8 - Double Surface Treatment
        4 - Monitoring Data 2.4
            1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
>           4 - Dynaflect
>           5 - Skid
        5 - Traffic Data
        6 - Environmental Data
            1 - Environment
            2 - Weather
        7 - Tables
            1 - County Name
            2 - Material Type
            3 - Type of Pavement
            4 - District Temperature Constant
            5 - Widening Flag
            6 - Layer Description
            7 - Functional Classification
```

Option #4 - Dynaflect

To retrieve all Dynaflect Monitoring Data, select Option #4 from the Monitoring Data Menu. This reports Sensor Readings by Date and Station for each SID segment.

Remember, after you instruct the to print a report, **you cannot <ESC> until the report is completed.**

From the Monitoring Data Menu...

YOU: Type **<4>** for Dynaflect and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Dynaflect Measurement File List for all SID Numbers.

See **Appendix A - Reports** for a copy of the report, **A.16 Dynaflect Measurement File List.**

Option #3 - Skid

To retrieve the Skid Monitoring Data, select Option #5 from the Monitoring Data Menu. This report will list the Mean, High and Low Skid Values for each SID segment.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Monitoring Data Menu...

YOU: Type **<5>** for Skid and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Skid Measurement Data List.

See **Appendix A - Reports** for a copy of the report, **A.17 Skid Measurement Data List.**

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- > 2 - Reports
- 3 - Edit & Update
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

- 1 - Inquiry 1.0
- 2 - Reports 2.0
  - 1 - Summary 2.1
    - 1 - By SID Number
    - 2 - By District
    - 3 - ALL SID Numbers
  - 2 - Inventory Update Forms 2.2
    - 1 - By District
    - 2 - By SID Number
    - 3 - ALL SID Numbers
  - 3 - Inventory Data 2.3
    - 1 - Location
    - 2 - Location Section
    - 3 - Layer ID
    - 4 - Geometric & Shoulder
    - 5 - Surface
    - 6 - Subgrade
    - 7 - Layer Thickness Across the Road
    - 8 - Double Surface Treatment
  - 4 - Monitoring Data 2.4
    - 1 - Visual
    - 2 - Serviceability Index
    - 3 - Falling Weight
    - 4 - Dynaflect
    - 5 - Skid
  - > **5 - Traffic Data**
  - 6 - Environmental Data
    - 1 - Environment
    - 2 - Weather
  - 7 - Tables
    - 1 - County Name
    - 2 - Material Type
    - 3 - Type of Pavement
    - 4 - District Temperature Constant
    - 5 - Widening Flag
    - 6 - Layer Description
    - 7 - Functional Classification

III. REPORTS

E. Traffic Data

To retrieve Traffic Data in a report format, select Option #5 from the Reports Menu.

After you instruct the system to print a report, **you cannot <ESC> until the report is completed.** Remember, you cannot interrupt the printing process once it has begun.

From the Reports Menu **(Screen III-2)...**

YOU: Type **<5>** for Traffic Data and press **<ENTER>.**

FLEXPAVE: Tells you that you are about to print the Traffic Report and asks if you want to continue.

YOU: Type **<Y>.**

FLEXPAVE: Compiles and prints a Traffic Data report for all SID Numbers.

See **Appendix A - Reports** for a copy of the report, **A.18 Traffic Data List.**

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Menu Screen Order

MAIN MENU
1 - Inquiry
> 2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
2 - Reports 2.0
1 - Summary 2.1
1 - By SID Number
2 - By District
3 - ALL SID Numbers
2 - Inventory Update Forms 2.2
1 - By District
2 - By SID Number
3 - ALL SID Numbers
3 - Inventory Data 2.3
1 - Location
2 - Location Section
3 - Layer ID
4 - Geometric & Shoulder
5 - Surface
6 - Subgrade
7 - Layer Thickness Across the Road
8 - Double Surface Treatment
4 - Monitoring Data 2.4
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
5 - Traffic Data
> **6 - Environmental Data**
> **1 - Environment**
2 - Weather
7 - Tables
1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

III. REPORTS

F. Environmental Data

To retrieve Environmental Data in a report format, select Option #6 from the Reports Menu.

After you instruct the system to print a report, **you cannot <ESC> until the report is completed.** Remember, you cannot interrupt the printing process once it has begun.

From the Reports Menu **(Screen III-2)...**

YOU: Type **<6>** for Environmental and press **<ENTER>.**

FLEXPAVE: Brings up the Environmental Data Menu **(Screen III-7)** which lists the two available options:

1 - Environment
2 - Weather

Option #1 - Environment

To retrieve Environment information in a report format, select Option #1 from the Environmental Data Menu. The report will list Thornthwaite Index Mean, Standard Deviation and the number of years the data has been collected.

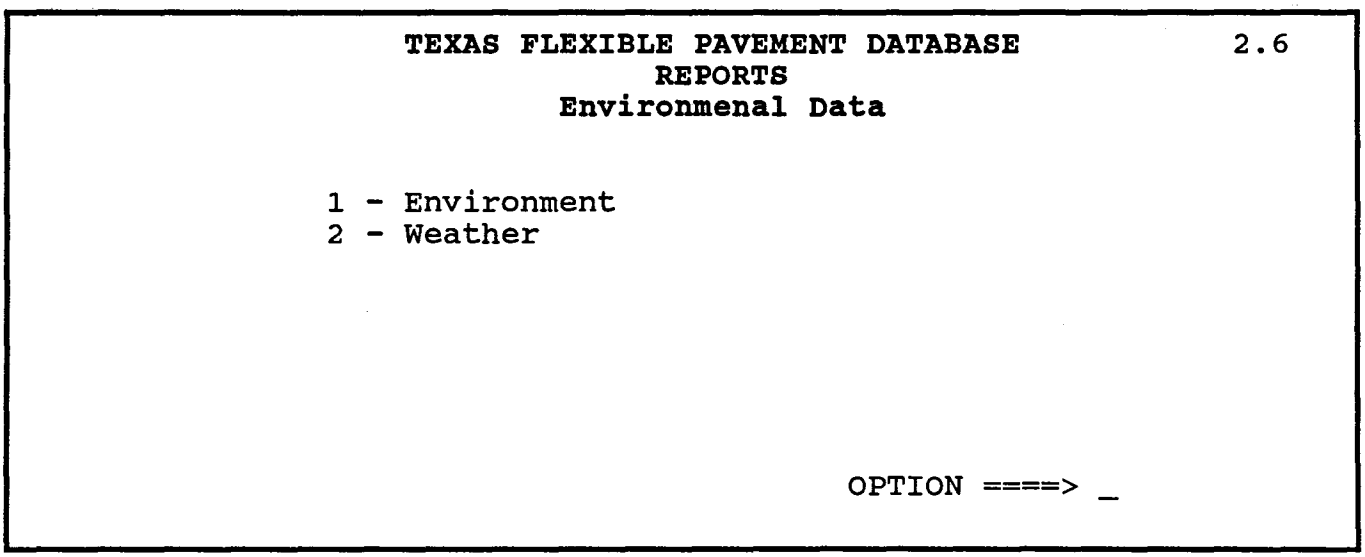
Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Environmental Data Menu...

YOU: Type **<1>** for Environment and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Environment Data Report for each county.

See **Appendix A - Reports** for a copy of the report, **A.19 Environment Data List.**



Screen III-7 Environmental Data Menu

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- > 2 - Reports
- 3 - Edit & Update
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

- 1 - Inquiry 1.0
- 2 - Reports 2.0
  - 1 - Summary 2.1
    - 1 - By SID Number
    - 2 - By District
    - 3 - ALL SID Numbers
  - 2 - Inventory Update Forms 2.2
    - 1 - By District
    - 2 - By SID Number
    - 3 - ALL SID Numbers
  - 3 - Inventory Data 2.3
    - 1 - Location
    - 2 - Location Section
    - 3 - Layer ID
    - 4 - Geometric & Shoulder
    - 5 - Surface
    - 6 - Subgrade
    - 7 - Layer Thickness Across the Road
    - 8 - Double Surface Treatment
  - 4 - Monitoring Data 2.4
    - 1 - Visual
    - 2 - Serviceability Index
    - 3 - Falling Weight
    - 4 - Dynaflect
    - 5 - Skid
  - 5 - Traffic Data
  - 6 - Environmental Data
    - 1 - Environment
    - > **2 - Weather**
  - 7 - Tables
    - 1 - County Name
    - 2 - Material Type
    - 3 - Type of Pavement
    - 4 - District Temperature Constant
    - 5 - Widening Flag
    - 6 - Layer Description
    - 7 - Functional Classification

Option #2 - Weather

To retrieve Weather Monitoring Data, select Option #2 from the Environmental Data Menu. This report lists Precipitation Readings and other weather information by month and year for each county.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Environmental Data Menu...

YOU: Type **<2>** for Weather and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Weather File List by county.

See **Appendix A - Reports** for a copy of the report, **A.20 Weather File List.**

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Menu Screen Order

MAIN MENU
1 - Inquiry
> **2 - Reports**
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry 1.0
2 - Reports 2.0
1 - Summary 2.1
1 - By SID Number
2 - By District
3 - ALL SID Numbers
2 - Inventory Update Forms 2.2
1 - By District
2 - By SID Number
3 - ALL SID Numbers
3 - Inventory Data 2.3
1 - Location
2 - Location Section
3 - Layer ID
4 - Geometric & Shoulder
5 - Surface
6 - Subgrade
7 - Layer Thickness Across the Road
8 - Double Surface Treatment
4 - Monitoring Data 2.4
1 - Visual
2 - Serviceability Index
3 - Falling Weight
4 - Dynaflect
5 - Skid
5 - Traffic Data
6 - Environmental Data
1 - Environment
2 - Weather
> **7 - Tables**
> **1 - County Name**
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

III. REPORTS

G. Tables

To retrieve Tables contained in the database in a report format, select Option #7 from the Reports Menu.

After you instruct the system to print a report, **you cannot <ESC> until the report is completed.** Remember, you cannot interrupt the printing process once it has begun.

From the Reports Menu **(Screen III-2)...**

YOU: Type **<7>** for Tables and press **<ENTER>.**

FLEXPAVE: Brings up the Tables Menu which lists the seven available options:

1 - County Name
2 - Material Type
3 - Type of Pavement
4 - District Temperature Constant
5 - Widening Flag
6 - Layer Description
7 - Functional Classification

Option #1 - County Name

To retrieve a list of County Names, select Option #1 from the Tables Menu. The report will list all Texas Counties in numerical and alphabetical order.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Tables Menu...

YOU: Type **<1>** for County Name and press **<ENTER>.**

FLEXPAVE: Compiles and prints the County Name Report.

See **Appendix A - Reports** for a copy of the report, **A.21 County Name List.**

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
>   2 - Reports
    3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry 1.0
    2 - Reports 2.0
        1 - Summary 2.1
            1 - By SID Number
            2 - By District
            3 - ALL SID Numbers
        2 - Inventory Update Forms 2.2
            1 - By District
            2 - By SID Number
            3 - ALL SID Numbers
        3 - Inventory Data 2.3
            1 - Location
            2 - Location Section
            3 - Layer ID
            4 - Geometric & Shoulder
            5 - Surface
            6 - Subgrade
            7 - Layer Thickness Across the Road
            8 - Double Surface Treatment
        4 - Monitoring Data 2.4
            1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
            4 - Dynaflect
            5 - Skid
        5 - Traffic Data
        6 - Environmental Data
            1 - Environment
            2 - Weather
        7 - Tables
            1 - County Name
>           2 - Material Type
>           3 - Type of Pavement
            4 - District Temperature Constant
            5 - Widening Flag
            6 - Layer Description
            7 - Functional Classification
```

Option #2 - Material Type

To retrieve a list of Material Type Classifications, select Option #2 from the Tables Menu.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Tables Menu...

YOU: Type **<2>** for Material Type and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Material Type Classification List.

See **Appendix A - Reports** for a copy of the report, **A.22 Material Type Classification List.**

Option #3 - Type of Pavement

To retrieve a list of Pavement Types, select Option #3 from the Tables Menu.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Tables Menu...

YOU: Type **<3>** for Type of Pavement and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Type of Pavement Table.

See **Appendix A - Reports** for a copy of the report, **A.23 Type of Pavement Table.**

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
>   2 - Reports
    3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry 1.0
    2 - Reports 2.0
        1 - Summary 2.1
            1 - By SID Number
            2 - By District
            3 - ALL SID Numbers
        2 - Inventory Update Forms 2.2
            1 - By District
            2 - By SID Number
            3 - ALL SID Numbers
        3 - Inventory Data 2.3
            1 - Location
            2 - Location Section
            3 - Layer ID
            4 - Geometric & Shoulder
            5 - Surface
            6 - Subgrade
            7 - Layer Thickness Across the Road
            8 - Double Surface Treatment
        4 - Monitoring Data 2.4
            1 - Visual
            2 - Serviceability Index
            3 - Falling Weight
            4 - Dynaflect
            5 - Skid
        5 - Traffic Data
        6 - Environmental Data
            1 - Environment
            2 - Weather
        7 - Tables
            1 - County Name
            2 - Material Type
            3 - Type of Pavement
>           4 - District Temperature Constant
>           5 - Widening Flag
            6 - Layer Description
            7 - Functional Classification
```

Option #4 - District Temperature Constant

To retrieve a list of Temperature Constants by District, select Option #4 from the Tables Menu.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Tables Menu...

YOU: Type **<4>** for District Temperature Constant and press **<ENTER>.**

FLEXPAVE: Compiles and prints the District Temperature Constant Table.

See **Appendix A - Reports** for a copy of the report, **A.24 District Temperature Constant Table.**

Option #5 - Widening Flag

To retrieve descriptions of Widening Flags, select Option #5 from the Tables Menu.

Remember, after you instruct the system to print a report, **you cannot <ESC> until the report is completed.**

From the Tables Menu...

YOU: Type **<5>** for Widening Flag and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Widening Flag Table.

See **Appendix A - Reports** for a copy of the report, **A.25 Widening Flag Table.**

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- > 2 - Reports
- 3 - Edit & Update
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

1 - Inquiry 1.0
2 - Reports 2.0
- 1 - Summary 2.1
  - 1 - By SID Number
  - 2 - By District
  - 3 - ALL SID Numbers
- 2 - Inventory Update Forms 2.2
  - 1 - By District
  - 2 - By SID Number
  - 3 - ALL SID Numbers
- 3 - Inventory Data 2.3
  - 1 - Location
  - 2 - Location Section
  - 3 - Layer ID
  - 4 - Geometric & Shoulder
  - 5 - Surface
  - 6 - Subgrade
  - 7 - Layer Thickness Across the Road
  - 8 - Double Surface Treatment
- 4 - Monitoring Data 2.4
  - 1 - Visual
  - 2 - Serviceability Index
  - 3 - Falling Weight
  - 4 - Dynaflect
  - 5 - Skid
- 5 - Traffic Data
- 6 - Environmental Data
  - 1 - Environment
  - 2 - Weather
- 7 - Tables
  - 1 - County Name
  - 2 - Material Type
  - 3 - Type of Pavement
  - 4 - District Temperature Constant
  - 5 - Widening Flag
- > **6 - Layer Description**
- > **7 - Functional Classification**

Option #6 - Layer Description

To retrieve a Layer Description Table, select Option #6 from the Tables Menu.

Remember, after you instruct the database to print a report, **you cannot <ESC> until the report is completed.**

From the Tables Menu...

YOU: Type **<6>** for Layer Description and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Layer Description Table.

See **Appendix A - Reports** for a copy of the report, **A.26 Layer Description Table.**

Option #7 - Functional Classification

To retrieve the Functional Classification Table, select Option #75 from the Tables Menu.

Remember, after you instruct the database to print a report, **you cannot <ESC> until the report is completed.**

From the Tables Menu...

YOU: Type **<7>** for Functional Classification and press **<ENTER>.**

FLEXPAVE: Compiles and prints the Functional Classification Table.

See **Appendix A - Reports** for a copy of the report, **A.27 Functional Classification Table.**

NOTES

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- 2 - Reports
- > 3 - Edit & Update
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
- 1 - Pavement Condition Data
- 2 - Inventory Data
  - 1 - Add
    - 1 - Location
    - 2 - Layer ID
    - 3 - Geometric & Shoulder
    - 4 - Surface
    - 5 - Subgrade
    - 6 - Layer Thickness Across the Road
    - K - Check New Data Entered and ADD to Files
    - E - Edit New Data Entered
  - 2 - Change
- 3 - Traffic Data
- 4 - Tables

IV. EDIT & UPDATE

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
> 3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry
2 - Reports
> 3 - Edit & Update
1 - Pavement Condition Data
2 - Inventory Data
1 - Add
1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
K - Check New Data Entered and ADD to Files
2 - Change
3 - Traffic Data
4 - Tables

IV. EDIT & UPDATE

A. The Edit & Update Functions

After entering the TEXAS FLEXIBLE PAVEMENT DATABASE, the Main Menu **(Screen IV-1)** will appear which lists seven available options.

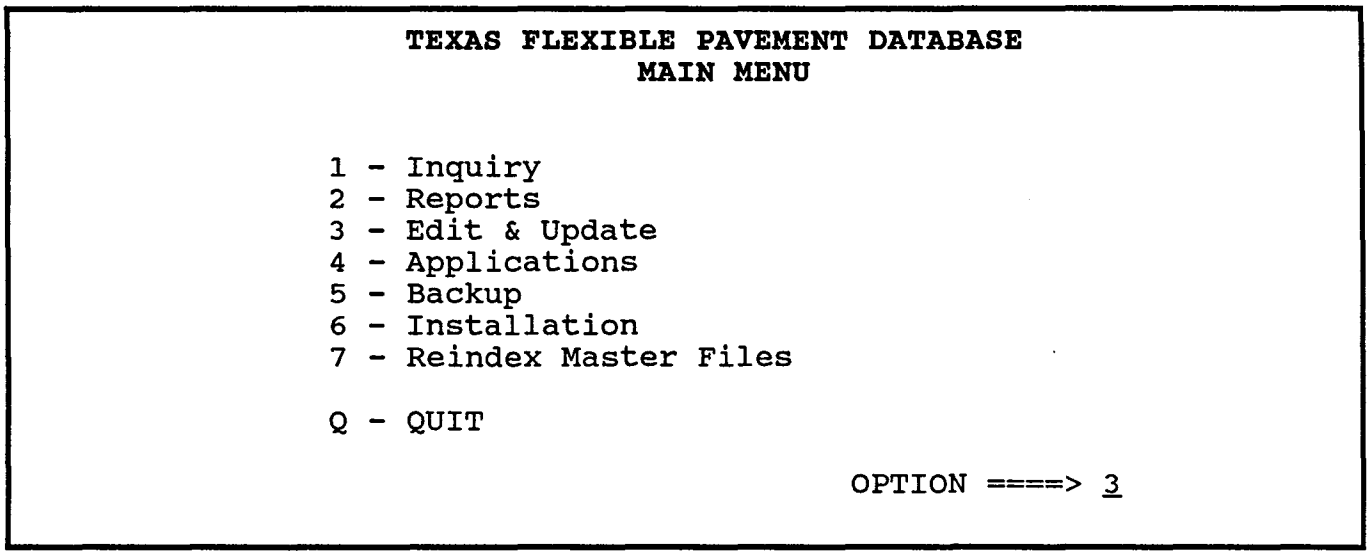
This section of the User's Manual explains how to use the Edit & Update functions in order, giving instructions and example screens. A word of warning: the Tables option is not covered in this manual as these should be edited and updated only by an experienced dBASE programmer because this option uses the dBASE browse command.

From the Main Menu...

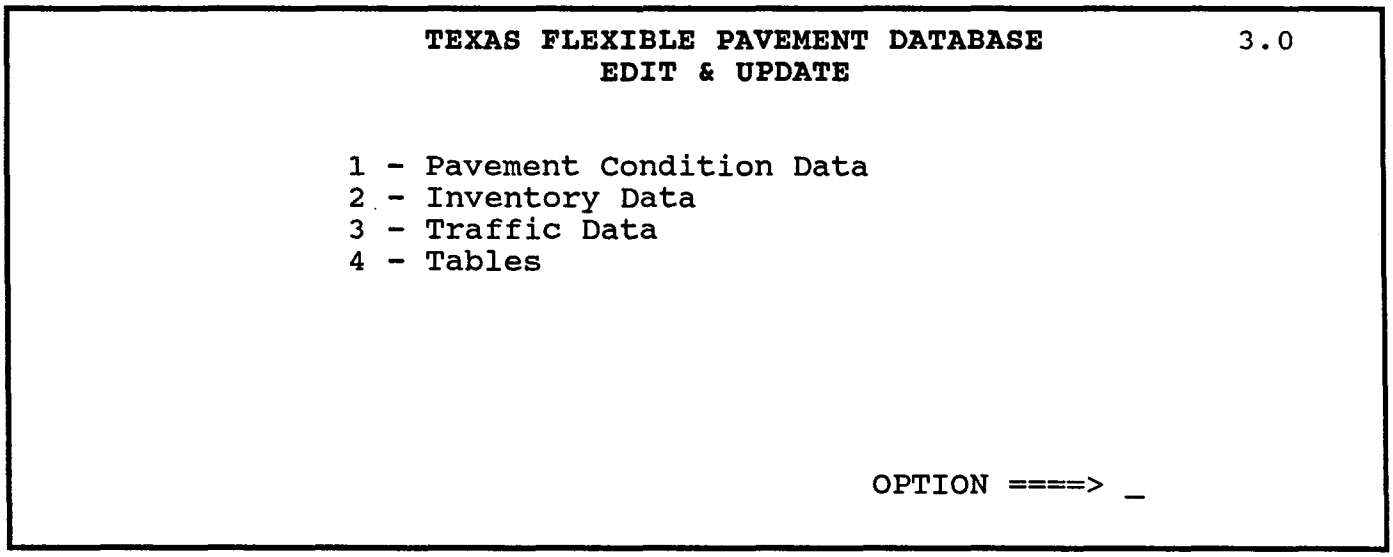
YOU: Type **<3>** for Edit & Update and press **<ENTER>.**

FLEXPAVE: Brings up the Edit & Update Menu **(Screen IV-2)** which lists the four available options:

1 - Pavement Condition Data
2 - Inventory Data
3 - Traffic Data
4 - Tables



Screen IV-1 Main Menu



Screen IV-2 Edit & Update Menu

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
    2 - Reports
>   3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry
    2 - Reports
    3 - Edit & Update
>       1 - Pavement Condition Data
        2 - Inventory Data
            1 - Add
                1 - Location
                2 - Layer ID
                3 - Geometric & Shoulder
                4 - Surface
                5 - Subgrade
                6 - Layer Thickness Across the Road
                K - Check New Data Entered and ADD
                    to Files
                E - Edit New Data Entered
            2 - Change
        3 - Traffic Data
        4 - Tables
```

IV. EDIT & UPDATE

B. Pavement Condition Data

This option is intended to update the monitoring data in the system with the addition of data from the annual Pavement Evaluation System (PES) file, a function which should only be performed annually. **CAUTION: This procedures takes approximately 20 hours to run.**

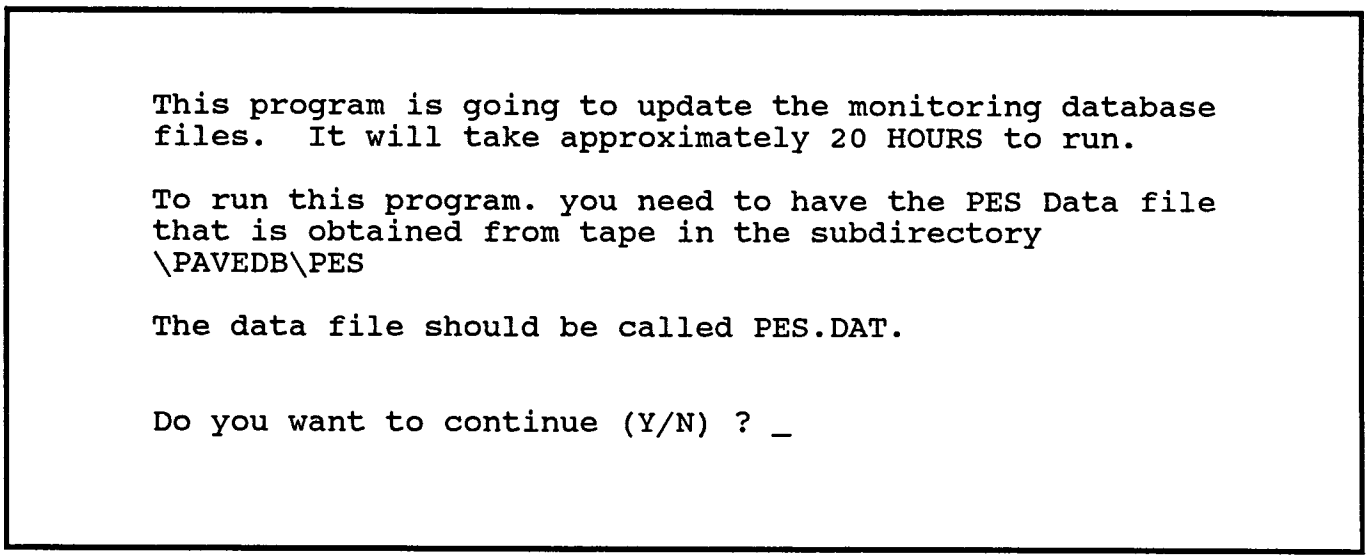
From the Edit & Update Menu...

YOU: Type **<1>** for Pavement Condition Data and press **<ENTER>**.

FLEXPAVE: Brings up a warning/information screen **(Screen IV-3)** which explains how to run this function.

YOU: Press **<Y>** to continue or **<N>** or **<ESC>** to exit.

When the process is completed, the system will print a Missing Data Report as shown in **Appendix B - Exhibits, Missing Data Report.**



Screen IV-3 Pavement Condition Data Message

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
> **3 - Edit & Update**
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
1 - Pavement Condition Data
> **2 - Inventory Data**
> **1 - Add**
1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
K - Check New Data Entered and ADD to Files
E - Edit New Data Entered
2 - Change
3 - Traffic Data
4 - Tables

IV. EDIT & UPDATE

C. Inventory Data

This is one of the most powerful options in the system. This is where you add or change Inventory Data contained in the system.

From the Edit & Update Menu...

YOU: Type **<2>** for Inventory Data and press **<ENTER>.**

FLEXPAVE: Brings up an information screen **(Screen IV-4)** which asks if you want to ADD data or CHANGE data in the inventory files.

YOU: Press **<A>** to ADD data to the Inventory Data Files.

Press **<C>** to CHANGE data in the Inventory Data Files.

Press **<ESC>** to return to the Edit & Update Menu.

ADD Inventory Data

When you wish to ADD data to the Inventory Data Files, select the **<A>**dd option from **Screen IV-4.** This will bring up the ADD Inventory Data Menu **(Screen IV-5)** which is similar to those seen in the Inquiry section. From this menu you can bring up individual screens for entering new Inventory Data.

From the Information screen...

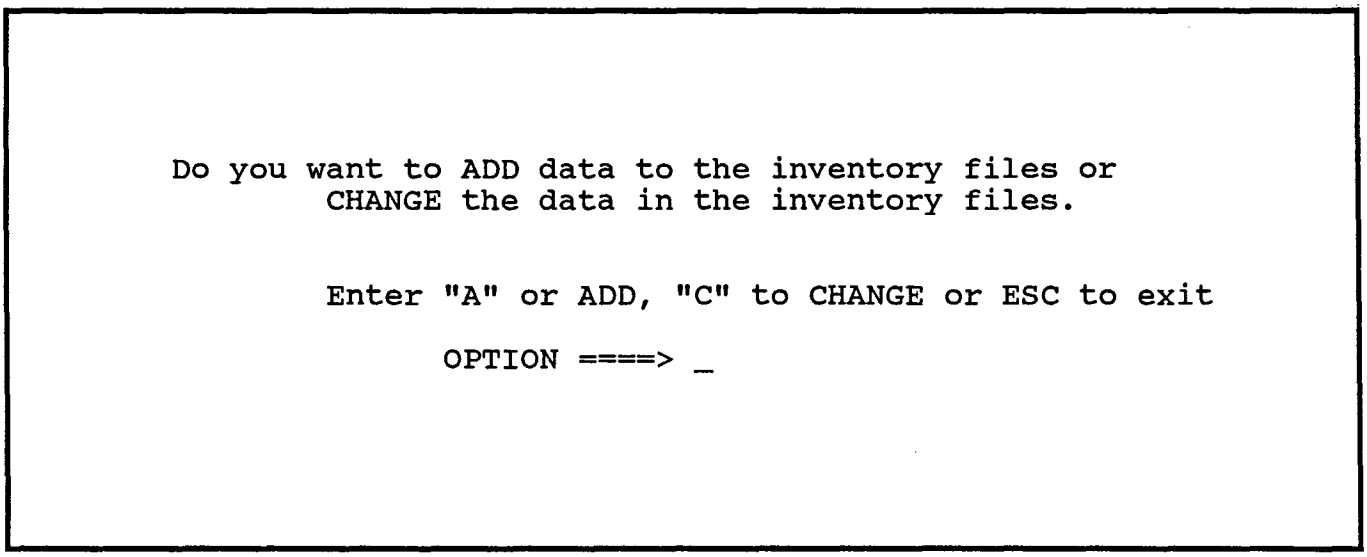
YOU: Type **<A>** to ADD Inventory Data and press **<ENTER>.**

FLEXPAVE: Brings up the ADD Inventory Data Menu **(Screen IV-5)** with the following options:

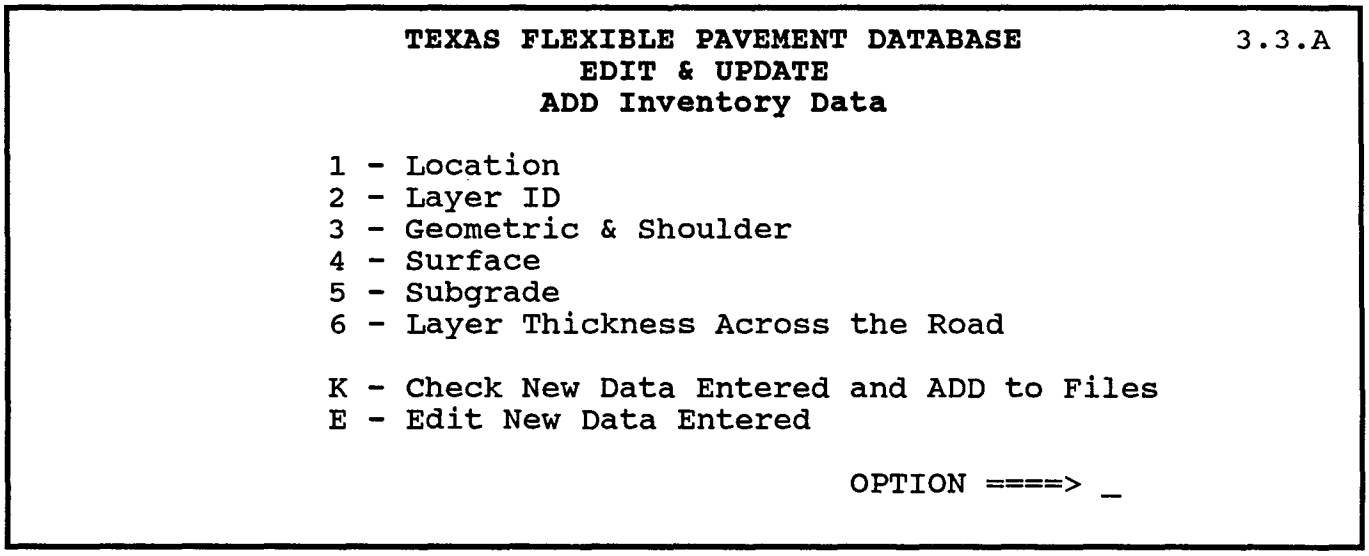
1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
K - Check New Data Entered and ADD to Files
E - Edit New Data Entered

Common Commands for All ADD Options:

When you ADD new information to these files, a temporary file is created until you have verified and corrected all information through options "K" and "E". You **cannot CHANGE** any data which is already contained in the database



Screen IV-4 Inventory Data ADD or CHANGE Information



Screen IV-5 ADD Inventory Data Menu

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
    2 - Reports
>   3 - Edit & Update
    4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry
    2 - Reports
    3 - Edit & Update
        1 - Pavement Condition Data
        2 - Inventory Data
>           1 - Add
>               1 - Location
                2 - Layer ID
                3 - Geometric & Shoulder
                4 - Surface
                5 - Subgrade
                6 - Layer Thickness Across the Road
                K - Check New Data Entered and ADD
                    to Files
                E - Edit New Data Entered
            2 - Change
        3 - Traffic Data
        4 - Tables
```

until you have verified the accuracy of the new data through the use of option "K". When you "Check New Data Entered and ADD to Files," the system will verify the accuracy of the date and innacurate data will be flagged; this procedure requires approximately two hours. The new ADD data must be correct before the system will allow you to enter the CHANGE function. Option "E" is used to correct the newly added data before it is added permanently to the system.

To move through the data entry "boxes" on the screen, use the left and right arrow keys or the **<ENTER>** key.

If you enter data that is out of range, the system will display the acceptable range at the top-right corner of the screen.

There are three ways to save the data and move to another blank screen:

Press **<^END>**
Press **<Page Down>**
Or, if the cursor is located in the last entry box, press **<ENTER>.**

You can use **<ESC>** to exit without saving the (record) screen you are currently working in, but if you have passed from the first record to an additional ADD record, the previous record will be saved.

Option #1 - Location

To ADD new Location File information to the system, use this option to bring up a "blank" record (screen), then fill in the appropriate boxes.

From the ADD Inventory Data Menu...

YOU:	Type **<1>** for Location and press **<ENTER>.**
FLEXPAVE:	Brings up a blank Location File record **(Screen IV-6)** for you to "fill in" with new data.
YOU:	Type the appropriate data, then press **<^END>** or **<Page Down>** to ADD the data.
FLEXPAVE:	Asks if the data is correct.
YOU:	Pres **<Y>** and **<ENTER>** to bring up a new record screen, or press **<N>** and **<ENTER>** to move the cursor back to the first box.

TEXAS FLEXIBLE PAVEMENT DATABASE
EDIT & UPDATE - ADD Inventory
Location File

SID Number ____0 District __0 County __0

Highway Ident. __ ___0 _ Control Section ___0/__0

Mile Post __0 _ __0 TO __0 _ __0 Lane Identification _

Mile Point __0.000 TO __0.000 Mile Point Date __0/__0

HPMS Sample Number _____ HPMS Section Subdivision 0

Functional Classification __0 Number of Lanes __0

Active? T Inactive Date __0/__0 Previous SID __0 Next SID __0

Comment _____

Screen II-6 ADD Location File Data

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- 2 - Reports
- > **3 - Edit & Update**
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
1 - Pavement Condition Data
2 - Inventory Data
1 - Add
1 - Location
> **2 - Layer ID**
> **3 - Geometric & Shoulder**
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
K - Check New Data Entered and ADD to Files
E - Edit New Data Entered
2 - Change
3 - Traffic Data
4 - Tables

Option #2 - Layer ID Data

To ADD new Layer Identification information to the system, use this option to bring up a blank record (screen), then fill in the appropriate boxes. You will need to enter the appropriate SID Number to complete this option.

You can use **<ESC>** to exit without adding any new data to the system.

From the ADD Inventory Data Menu...

YOU: Type **<2>** for Layer Identification and press **<ENTER>.**

FLEXPAVE: Asks you to enter a SID Number.

YOU: Type a number and press **<ENTER>.**

FLEXPAVE: Brings up a blank Layer ID record **(Screen IV-7)** for the selected SID Number for you to "fill in" with new data.

YOU: Type the appropriate data, then press **<^END>** or **<Page Down>** to ADD the data.

FLEXPAVE: Asks if the data is correct.

YOU: Press **<Y>** and **<ENTER>** to bring up a new screen, or press **<N>** and **<ENTER>** to move the cursor to the first item.

Option #3 - Geometric & Shoulder

To ADD new Geometric & Shoulder information to the system, use this option to bring up a blank record (screen), then fill in the appropriate boxes.

You can use **<ESC>** to exit without adding any new data to the system.

From the ADD Inventory Data Menu...

YOU: Type **<3>** for Geometric & Shoulder and press **<ENTER>.**

FLEXPAVE: Brings up a blank Geometric & Shoulder File record **(Screen IV-8)** for you to "fill in" with new data.

YOU: Type the appropriate data, then press **<^END>** or **<Page Down>** to ADD the data.

FLEXPAVE: Asks if the data is correct.

YOU: Press **<Y>** and **<ENTER>** to bring up a new screen, or press **<N>** and **<ENTER>** to move the cursor to the first item.

TEXAS FLEXIBLE PAVEMENT DATABASE
EDIT & UPDATE - ADD Inventory
Layer Identification

SID Number 39

Structure Number	Layr No.	Layer Desc.	Center Thick	Material Type Class.	Date Compltd Job Mnth	Date Compltd Job Year	Widened Mnth	Widened Year
0	0	0	0.0	0	0	0	0	0
0	0	0	0.00	0	0	0	0	0

Screen IV-7 ADD Layer ID File Data

TEXAS FLEXIBLE PAVEMENT DATABASE
EDIT & UPDATE - ADD Inventory
Geometric & Shoulder Information

SID Number 39
Structure Number 0

Type of Pavement (See TTI Codes)	0
Lane Width (Feet)	0
Outside Shoulder Width (Feet)	0
Shoulder Surface Type	0
Shoulder Base Type (See Base Type Code, Table A.6)	0
Shoulder Surface Thickness (Inches)	0.0
Shoulder Base Thickness (Inches)	0.00
Widened Flag (0-2)	0

Screen IV-8 ADD Geometric & Shoulder File Data

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
> **3 - Edit & Update**
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
1 - Pavement Condition Data
2 - Inventory Data
1 - Add
1 - Location
2 - Layer ID
3 - Geometric & Shoulder
> **4 - Surface**
> **5 - Subgrade**
6 - Layer Thickness Across the Road
K - Check New Data Entered and ADD to Files
E - Edit New Data Entered
2 - Change
3 - Traffic Data
4 - Tables

Option #4 - Surface

To ADD new Surface information to the system, use this option to bring up a blank record (screen), then fill in the appropriate boxes. You will need to enter the appropriate SID Number to complete this option.

You can use **<ESC>** to exit without adding any new data to the system.

From the ADD Inventory Data Menu...

YOU: Type **<4>** for Surface and press **<ENTER>.**

FLEXPAVE: Asks you to enter a SID Number.

YOU: Type a number and press **<ENTER>.**

FLEXPAVE: Brings up a blank Surface File record **(Screen IV-9)** for the selected SID Number for you to "fill in" with new data.

YOU: Type the appropriate data, then press **<^END>** or **<Page Down>** to ADD the data.

FLEXPAVE: Asks if the data is correct.

YOU: Press **<Y>** and **<ENTER>** to bring up a new screen, or press **<N>** and **<ENTER>** to move the cursor to the first item.

Option #5 - Subgrade

To ADD new Subgrade information to the system, use this option to bring up a blank record (screen), then fill in the appropriate boxes. You will need to enter the appropriate SID Number to complete this option.

You can use **<ESC>** to exit without adding any new data to the system.

From the ADD Inventory Data Menu...

YOU: Type **<5>** for Subgrade and press **<ENTER>.**

FLEXPAVE: Asks you to enter a SID Number.

YOU: Type a number and press **<ENTER>.**

FLEXPAVE: Brings up a blank Subgrade File record **(Screen IV-10)** for the selected SID Number for you to "fill in" with new data.

YOU: Type the appropriate data, then press **<^END>** or **<Page Down>** to ADD the data.

FLEXPAVE: Asks if the data is correct.

YOU: Press **<Y>** and **<ENTER>** to bring up a new screen, or press **<N>** and **<ENTER>** to move the cursor to the first item.

TEXAS FLEXIBLE PAVEMENT DATABASE
EDIT & UPDATE - Inventory Data
ADD Surface Layer

SID Number 39

Structure Number	Layer Number	Aggregate Application Rate	Type Admixture	Percent Admixture (Mean Asphalt Content)	Asphalt Applica. Rate
0	0	0		0.00	0.00

Screen IV-9 ADD Surface File Data

TEXAS FLEXIBLE PAVEMENT DATABASE
EDIT & UPDATE - ADD Inventory
Subgrade File

SID Number 39

Percent Passing No. 200 Sieve	0.0
Texas Triaxial Class	0.0
Liquid Limit	0.0
Plasticity Index	0.0
Permeability Index	0.00

Screen IV-10 ADD Subgrade File Data

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
> **3 - Edit & Update**
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
1 - Pavement Condition Data
2 - Inventory Data
1 - Add
1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
> **6 - Layer Thickness Across the Road**
> **K - Check New Data Entered and ADD to files**
> **E - Edit New Data Entered**
2 - Change
3 - Traffic Data
4 - Tables

Option #6 - Layer Thickness Across the Road

To ADD new Layer Thickness information to the system, use this option to bring up a blank record (screen), then fill in the appropriate boxes. You will need to enter the appropriate SID Number to complete this option.

You can use **<ESC>** to exit without adding any new data to the system.

From the ADD Inventory Data Menu...

YOU: Type **<6>** for Layer Thickness and press **<ENTER>.**

FLEXPAVE: Asks you to enter a SID Number.

YOU: Type a number and press **<ENTER>.**

FLEXPAVE: Brings up a blank Layer Thickness Across the Road File record **(Screen IV-11)** for the selected SID Number for you to "fill in" with new data.

YOU: Type the appropriate data, then press **<^END>** or **<Page Down>** to ADD the data.

FLEXPAVE: Asks if the data is correct.

YOU: Press **<Y>** and **<ENTER>** to bring up a new screen, or press **<N>** and **<ENTER>** to move the cursor to the first item.

Option K - Check New Data Entered and ADD to Files
Option E - Edit New Data Entered

As you have been adding new data, the system has been storing the new information in a temporary file. Use Option "K" to verify the accuracy of your new data and prepare it to be stored in the permanent memory of the system.

This option will look at new data you have entered, flag the errors for correction, and provide a list of any errors which need to be corrected. **The procedure can require as long as two hours.**

After the list has been produced, use Option "E" to EDIT the new data and make necessary the corrections.

Then run "K" again and if the new data is corrected, it will be added to the system's permanent memory.

TEXAS FLEXIBLE PAVEMENT DATABASE
EDIT & UPDATE - Add Inventory
Layer Thickness Across the Road

SID Number 39

Structure Number	Layer Number	Thickness - From Center				Distance From Center		
		3 Pos	2 Pos	1 Pos	Center	3 Pos	2 Pos	1 Pos
0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Screen IV-11 ADD Layer Thickness Across the Road File Data

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
> **3 - Edit & Update**
4 - Applications
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
1 - Pavement Condition Data
2 - Inventory Data
1 - Add
1 - Location
2 - Layer ID
3 - Geometric & Shoulder
4 - Surface
5 - Subgrade
6 - Layer Thickness Across the Road
K - Check New Data Entered and ADD to Files
> **2 - Change**
3 - Traffic Data
4 - Tables

IV. EDIT & UPDATE

CHANGE Inventory Data

When you need to CHANGE existing data in the master Inventory Data Files, use this option. If you have new data in temporary files, the system will instruct you to delete those files first.

From the Exit & Update Menu...

YOU: Type **<2>** for Inventory Data and press **<ENTER>.**

FLEXPAVE: Asks if you want to ADD data or CHANGE data.

YOU: Type **<A>** for ADD and press **<ENTER>.**

FLEXPAVE: Brings up the ADD Inventory Data Menu **(Screen IV-5).** You then use Option "E" for EDIT to enter the files.

YOU: After entering the EDIT mode, you can either DELETE or CHANGE each record:

DELETE each record by pressing **<^U>** and **<Page Down>**

EDIT each record by using **Option "K"**

If you do not have existing temporary files, use the CHANGE function as you would the EDIT function, bringing up record screens by SID Number to make alterations.

When complete, return to the Inventory Menu and use "K" to verify the data and add it to your master files.

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Menu Screen Order

MAIN MENU
- 1 - Inquiry
- 2 - Reports
- > **3 - Edit & Update**
- 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

- 1 - Inquiry
- 2 - Reports
- 3 - Edit & Update
  - 1 - Pavement Condition Data
  - 2 - Inventory Data
    - 1 - Add
      - 1 - Location
      - 2 - Layer ID
      - 3 - Geometric & Shoulder
      - 4 - Surface
      - 5 - Subgrade
      - 6 - Layer Thickness Across the Road
      - K - Check New Data Entered and ADD to Files
    - 2 - Change
  - > **3 - Traffic Data**
  - 4 - Tables

IV. EDIT & UPDATE

D. Traffic Data

Annually you will need to update the Traffic Data in your system. The Annual Roadway Inventory Tape File must be obtained from SDHPT D-10. This file is copied from tape to the disk file \PAVEDB\FILES\TLOG.DAT. Refer to Volume II of this report, the Programmer's Manual, for additional information.

From the Edit & Update Menu...

YOU: Type **<3>** for Traffic Data and press **<ENTER>.**

FLEXPAVE: Brings up a warning message:

> This process will update the TRAFFIC database by retrieving new data from the RI2-TLOG file. Because of the size of the data file, this process will take a very long time (at least overnight)!!
>
> Do you still want to proceed (Y/N)

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- 2 - Reports
- 3 - Edit & Update
- > **4 - Applications**
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
- 1 - Graph Accumulated 18KIP vs Distress or PSI
  - 1 - 18KIP vs Alligator Cracking
  - 2 - 18KIP vs Rutting
  - 3 - 18KIP vs PSI
- 2 - Build Model File
  - 1 - Build Model File Automatically
  - 2 - Build Model by Individual Data Files
    - 1 - Retrieve Location Data
    - 2 - Retrieve Rho and Beta Values for Alligator Cracking, Rutting and PSI
    - 3 - Retrieve Layer Data
    - 4 - Retrieve Environmental Data
    - 5 - Retrieve Traffic Data
    - 6 - Retrieve Surface Deflecting Data
- 3 - Create Distress File

V. APPLICATIONS

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- 2 - Reports
- 3 - Edit & Update
- > 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

- 1 - Inquiry
- 2 - Reports
- 3 - Edit & Update
- > 4 - Applications
  - 1 - Graph Accumulated 18KIP vs Distress or PSI
    - 1 - 18KIP vs Alligator Cracking
    - 2 - 18KIP vs Rutting
    - 3 - 18KIP vs PSI
  - 2 - Build Model File
    - 1 - Build Model File Automatically
    - 2 - Build Model by Individual Data Files
      - 1 - Retrieve Location Data
      - 2 - Retrieve Rho and Beta Values for Alligator Cracking, Rutting and PSI
      - 3 - Retrieve Layer Data
      - 4 - Retrieve Environmental Data
      - 5 - Retrieve Traffic Data
      - 6 - Retrieve Surface Deflecting Data
  - 3 - Create Distress File

V. APPLICATIONS

A. The Applications Functions

After entering the FLEXIBLE PAVEMENT DATABASE, the Main Menu **(Screen V-1)** will appear which lists the available options. All work done in the database begins from this menu screen. You will need to know SID Numbers to identify roadway segments.

This section of the User's Manual explains how to use the Applications functions. The Applications options will allow you to review on the monitor performance exponential degratation curves for each test section and to create a file which can be used to develop performance models.

You will only need to use the Create Distress File option and the Build Model File option when you want to update the database to be accounted for on the degratation curves and in the file which is used to develop performance models (i.e., the model file). The Create Distress File option completely rebuilds the Distress information used when constructing graphs and **requires approximately 35 hours to complete.**

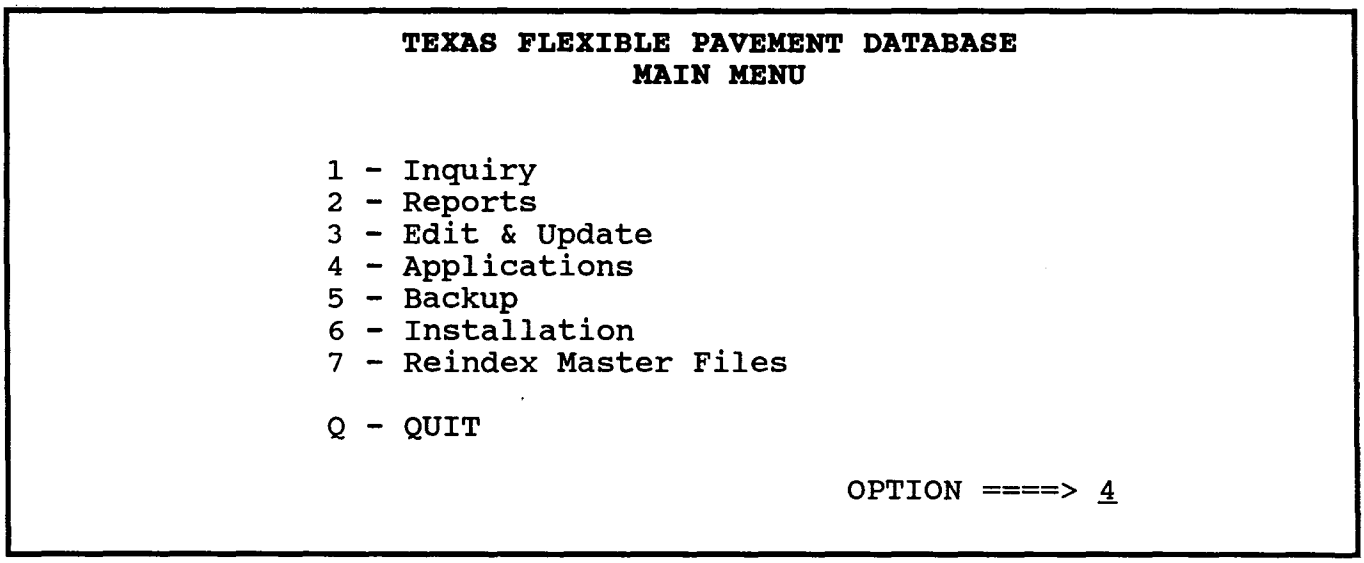
The Build Model File option rebuilds the model file and requires approximately two hours to complete.

From the Main Menu **(Screen V-1)...**

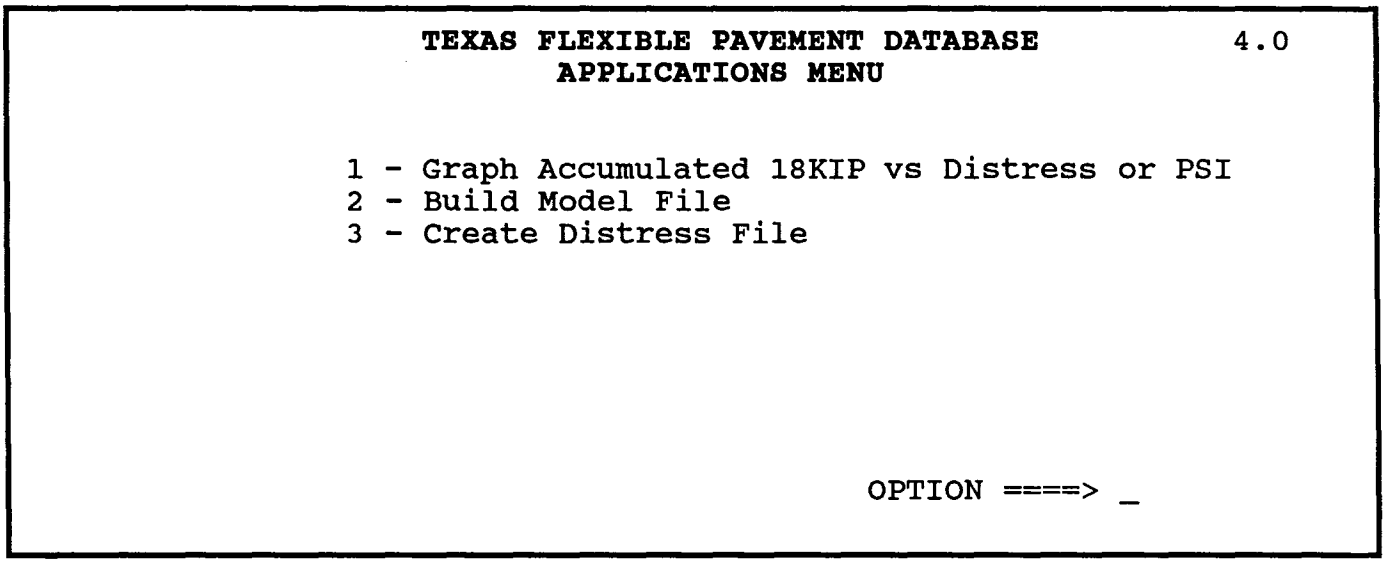
YOU: Type **<4>** for Applications and press **<ENTER>.**

FLEXPAVE: Brings up the Applications Menu **(Screen V-2)** which lists three available options:

1 - Graph Accumulated 18KIP vs Distress or PSI
2 - Build Model File
3 - Create Distress File



Screen V-1 Main Menu



Screen V-2 Applications Menu

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- 2 - Reports
- 3 - Edit & Update
- > **4 - Applications**
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

- 1 - Inquiry
- 2 - Reports
- 3 - Edit & Update
- 4 - Applications
- > **1 - Graph Accumulated 18KIP vs Distress or PSI**
  - **1 - 18KIP vs Alligator Cracking**
  - 2 - 18KIP vs Rutting
  - 3 - 18KIP vs PSI
- 2 - Build Model File
  - 1 - Build Model File Automatically
  - 2 - Build Model by Individual Data Files
    - 1 - Retrieve Location Data
    - 2 - Retrieve Rho and Beta Values for Alligator Cracking, Rutting and PSI
    - 3 - Retrieve Layer Data
    - 4 - Retrieve Environmental Data
    - 5 - Retrieve Traffic Data
    - 6 - Retrieve Surface Deflecting Data
- 3 - Create Distress File

V. APPLICATIONS

B. Graph Accumulated 18KIP vs Distress or PSI

Graph Accumulated 18KIP vs Distress or PSI has three options. This section will follow these options in order, giving instructions and example screens.

To leave any option, press **<ESC>**. You will see messages on certain screens which tell you when a chosen option requires considerable time to complete, as long as 35 hours. You will need to know SID Numbers to identify roadway segments.

From the Applications Menu ...

YOU: Type **<1>** for Graph Accumulated 18KIP vs Distress or PSI and press **<ENTER>**.

FLEXPAVE: Brings up the Performance vs 18KIP Menu **(Screen V-3)** which lists three available options:

1 - 18 KIP vs Alligator Cracking
2 - 18 KIP vs Rutting
3 - 18 KIP vs PSI

Option #1 - 18KIP vs Alligator Cracking

When you select this option, the system will fit a curve to the discrete Alligator Cracking vs Accumulated 18KIP points and display the curve and points on the monitor for a requested SID Number. Our example uses SID 39.

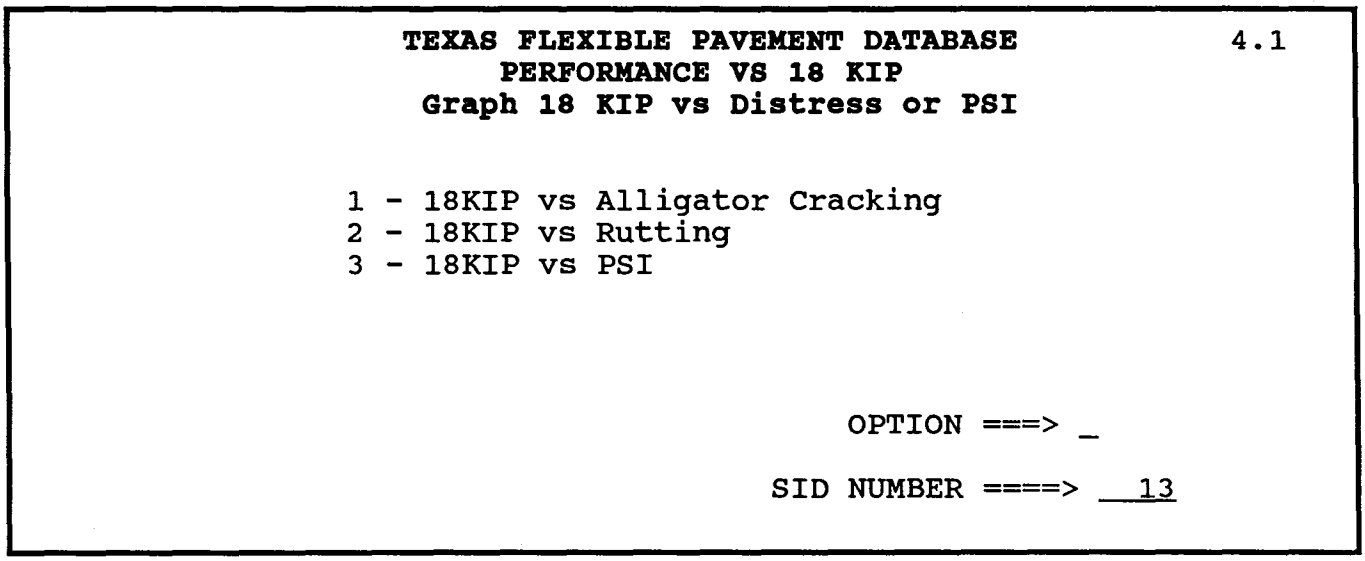
From the Performance vs 18KIP Menu...

YOU: Type **<1>** for 18KIP vs Alligator Cracking and press **<ENTER>**.
Enter SID Number **<39>** and press **<ENTER>**.

When you type a SID Number and strike **<ENTER>**, it will overrride the default number which is displayed, SID 13.

FLEXPAVE: Brings up a graph format for SID 39 and draws the curve. The Percentage of Area Distress appears on the vertical axis and the Accumulated 18KIP on the horizontal axis.

YOU: Press **<ENTER>** to return to the Performance vs 18KIP Menu.



Screen V-3 Performance vs 18 KIP

Menu Screen Order

```
MAIN MENU
    1 - Inquiry
    2 - Reports
    3 - Edit & Update
>   4 - Applications
    5 - Backup
    6 - Installation
    7 - Reindex Master Files

    1 - Inquiry
    2 - Reports
    3 - Edit & Update
    4 - Applications
        1 - Graph Accumulated 18KIP vs
            Distress or PSI
            1 - 18KIP vs Alligator Cracking
>           2 - 18KIP vs Rutting
>           3 - 18KIP vs PSI
        2 - Build Model File
            1 - Build Model File Automatically
            2 - Build Model by Individual Data Files
                1 - Retrieve Location Data
                2 - Retrieve Rho and Beta Values for
                    Alligator Cracking, Rutting and PSI
                3 - Retrieve Layer Data
                4 - Retrieve Environmental Data
                5 - Retrieve Traffic Data
                6 - Retrieve Surface Deflecting Data
        3 - Create Distress File
```

Option #2 - 18KIP vs Rutting

Through this option, the system will fit a curve to the discrete Rutting vs Accumulated 18KIP points and display the curve and points on the monitor for a requested SID Number. Our example uses SID 39.

From the Performance vs 18KIP Menu...

YOU: Type <**2**> for 18KIP vs Rutting and press <**ENTER**>.
Enter SID Number <**39**> and press <**ENTER**>.

When you type a SID Number and strike <**ENTER**>, it will override the default number which is displayed, SID 13.

FLEXPAVE: Brings up a graph format for SID 39 and draws the curve. The Percentage of Area Distress appears on the vertical axis and the Accumulated 18KIP appears on the horizontal axis.

YOU: Press <**ENTER**> to return to the Performance vs 18KIP Menu.

Option #3 - 18 KIP vs PSI

When you select this option, the system will fit a curve to the discrete PSI (Present Serviceability Index) vs Accumulated 18KIP points for a requested SID Number. Our example uses SID 39.

From the Performance 18KIP Menu...

YOU: Type <**3**> for 18KIP vs PSI and press <**ENTER**>.
Enter SID Number <**39**> and press <**ENTER**>.

When you type a SID Number and strike <**ENTER**>, it will overrride the default number which is displayed, SID 13.

FLEXPAVE: Asks the estimated initial PSI value. The default value is equal to 4.5 but you can enter any value between 3.45 and 4.5.

YOU: Press <**ENTER**> or enter a PSI number.

FLEXPAVE: Brings up a graph format for SID 39 and draws the curve. The PSI appears on the vertical axis and the Accumulated 18KIP on the horizontal axis.

YOU: Press <**ENTER**> to return to the Performance vs 18KIP Menu.

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Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
3 - Edit & Update
> **4 - Applications**
5 - Backup
6 - Installation
7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
1 - Graph Accumulated 18KIP vs Distress or PSI
1 - 18KIP vs Alligator Cracking
2 - 18KIP vs Rutting
3 - 18KIP vs PSI
> **2 - Build Model File**
> **1 - Build Model File Automatically**
2 - Build Model by Individual Data Files
1 - Retrieve Location Data
2 - Retrieve Rho and Beta Values for Alligator Cracking, Rutting and PSI
3 - Retrieve Layer Data
4 - Retrieve Environmental Data
5 - Retrieve Traffic Data
6 - Retrieve Surface Deflecting Data
3 - Create Distress File

V. APPLICATIONS

C. Build Model File

As mentioned in the Introduction, this function allows you to create a file which can be used to develop performance models. In addition to the independent variables (e.g., Layer Thickness, Environment, etc.), the RHO and BETA constants which define the shape of the exponential decay curve are also included in the file. The Model File record layout is provided in Appendix B. The file, called **PAVEDB\FILES\MODEL.DBF,** can then be used directly by SAS.

The system will build the model file automatically for you, or you can design your own from the individual data files.

From the Applications Menu...

YOU: Type **<2>** for Build Model File and press **<ENTER>.**

FLEXPAVE: Brings up the Build Model File Menu **(Screen V-4)** which lists the two available options:

1 - Build Model File Automatically
2 - Build Model File by Individual Data Files

Option #1 - Build Model File Automatically

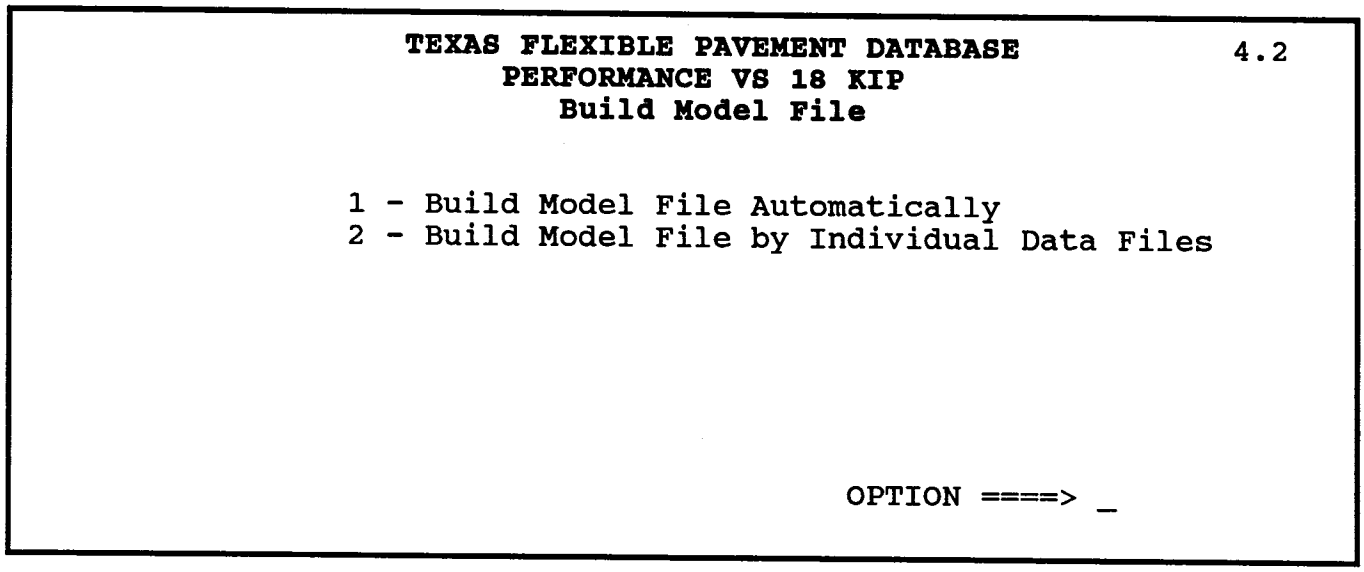
The system will Build the Model File Automatically for all SID Numbers when this option is selected. **CAUTION: This option requires more than two hours to complete.**

From the Build Model File Menu...

YOU: Type **<1>** for Build Model File Automatically and press **<ENTER>.**

FLEXPAVE: Tells you: **This process will take more than 2 hours. Do you still want this option? (Y/N)**

YOU: Press **<Y>** or **<N>.**



Screen V-4 Build Model File Menu

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- 2 - Reports
- 3 - Edit & Update
- > 4 - Applications
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
- 1 - Graph Accumulated 18KIP vs Distress or PSI
  - 1 - 18KIP vs Alligator Cracking
  - 2 - 18KIP vs Rutting
  - 3 - 18KIP vs PSI
- 2 - Build Model File
  - 1 - Build Model File Automatically
  - > **2 - Build Model by Individual Data Files**
    - > **1 - Retrieve Location Data**
    - > **2 - Retrieve Rho and Beta Values for Alligator Cracking, Rutting and PSI**
    - > **3 - Retrieve Layer Data**
    - > **4 - Retrieve Environmental Data**
    - > **5 - Retrieve Traffic Data**
    - > **6 - Retrieve Surface Deflecting Data**
- 3 - Create Distress File

Option #1 - Build Model File by Individual Data Files

You can Build the Model File by Individual Data Files when this option is selected. A Menu will appear that lists the files which you can access for building the Model File.

From the Build Model File Menu...

YOU: Type **<2>** for Build Model File by Individual Data Files and press **<ENTER>.**

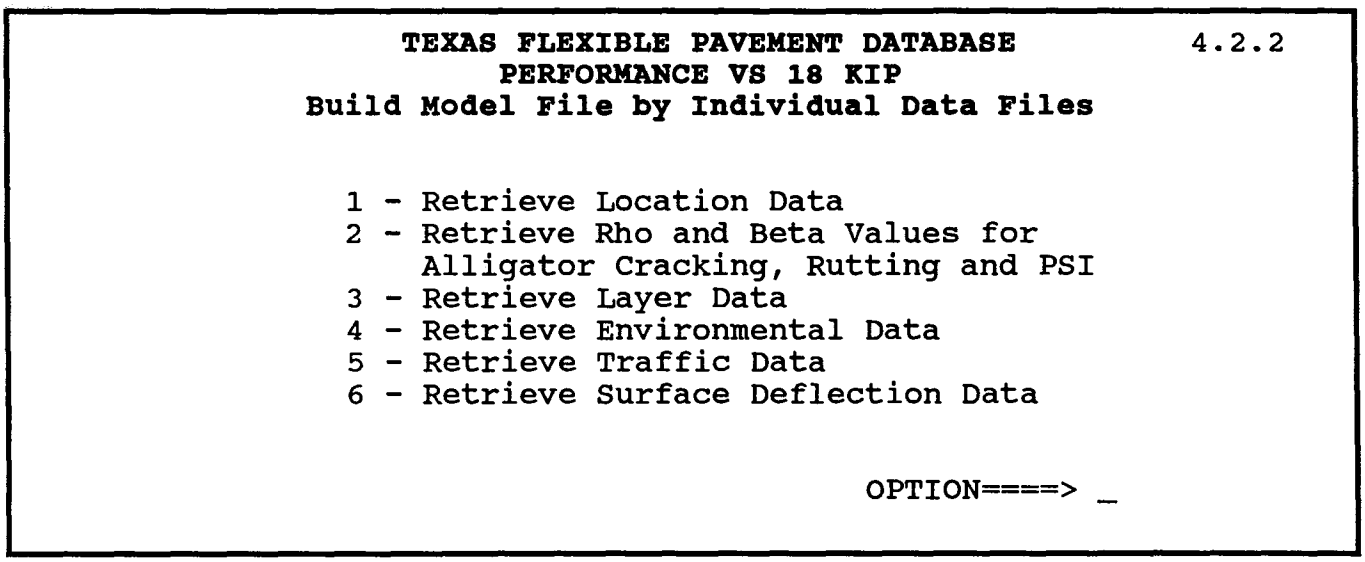
FLEXPAVE: Brings up the Build Model File by Individual Data Files Menu **(Screen V-5)** which lists six available options:

1 - Retrieve Location Data
2 - Retrieve RHO and BETA Values for Alligator Cracking, Rutting and PSI
3 - Retrieve Layer Data
4 - Retrieve Environmental Data
5 - Retrieve Traffic Data
6 - Retrieve Surface Deflection Data

YOU: Select the option you wish and the system will process.

FLEXPAVE: When completed, the system will produce a file called **PAVEDB\FILES\MODEL.DBF** which can be used directly by SAS.

CAUTION: All options must be run before the Model File is used for modeling purposes. This option should be avoided if possible.



Screen V-5 Build Model File by Individual Data Files Menu

Menu Screen Order

MAIN MENU
- 1 - Inquiry
- 2 - Reports
- 3 - Edit & Update
- > **4 - Applications**
- 5 - Backup
- 6 - Installation
- 7 - Reindex Master Files

1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
- 1 - Graph Accumulated 18KIP vs Distress or PSI
  - 1 - 18KIP vs Alligator Cracking
  - 2 - 18KIP vs Rutting
  - 3 - 18KIP vs PSI
- 2 - Build Model File
  - 1 - Build Model File Automatically
  - 2 - Build Model by Individual Data Files
    - 1 - Retrieve Location Data
    - 2 - Retrieve Rho and Beta Values for Alligator Cracking, Rutting and PSI
    - 3 - Retrieve Layer Data
    - 4 - Retrieve Environmental Data
    - 5 - Retrieve Traffic Data
    - 6 - Retrieve Surface Deflecting Data
- > **3 - Create Distress File**

V. APPLICATIONS

D. Create Distress File

This option allows you to Create a Distress File on those rare occasions when you need to recompile the distress data used in the graphs options.

From the Applications Menu...

YOU: Type **<3>** and press **<ENTER>.**

FLEXPAVE: Brings up the statement below:

This program is going to create the Distress Database File. It will take **approximately 35 HOURS to run.**

The DISTRESS file makes use of the monitoring data. If the latest data is required, please run the Pavement Condition Data Program (Option 2 on the Edit & Update Menu) before this program.

Do you want to continue (Y/N)? __

YOU: Press **<Y>** or **<N>** or **<ESC>.**

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
> 5 - Backup
6 - Installation
7 - Reindex Master Files

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
> 5 - Backup
6 - Installation
7 - Reindex Master Files

VI. BACKUP

A. Backing Up the System

You will want to Backup your data onto floppy diskettes for storage and maintaining the integrity of your system.

From the Main Menu...

YOU: Type **<5>** for Backup and press **<ENTER>.**

FLEXPAVE: Calculates file sizes and then tells you how many blank, formatted 360K diskettes you will need to backup the data.

If you are ready to backup the system, simply press a key and you will be prompted to insert the first of the correct number of diskettes.

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
> **6 - Installation**
7 - Reindex Master Files

VII. INSTALLATION

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
> 6 - Installation
7 - Reindex Master Files

VII. INSTALLATION

A. Changing the Defaults

On occasion you will need to change the default paths for printing and backup for your system. The default values are listed in the example given below. You may use **<ESC>** to exit without changing any defaults.

From the Main Menu...

YOU: Type **<6>** for Installation and press **<ENTER>.**

FLEXPAVE: Brings up the Installation Menu which lists four available options as shown below:

Please enter the drive being used (NORMALLY C) C
DO NOT specify drive "A" or drive "B"

Please enter the drive you want to BACK UP files: A
MUST Specify "A" or "B" only

Which port to you want to send the SUMMARY REPORT: LPT2
and other Landscape reports
Specify LPT1, LPT2 or LPT3

Which port do you want to send the INVENTORY DATA REPORT: LPT1
Specify LPT1, LPT2 or LPT3

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
> **7 - Reindex Master Files**

VIII. REINDEX MASTER FILES

Menu Screen Order

MAIN MENU
1 - Inquiry
2 - Reports
3 - Edit & Update
4 - Applications
5 - Backup
6 - Installation
> 7 - Reindex Master Files

VIII. REINDEX MASTER FILES

A. The Reindexing Option

If you are ever in doubt about integrity of your data, use the Reindexing option to check the files. This is especially useful when adding a large amount of new or changed data to the system. Depending on the amount of data in your system, this procedure could take 1-2 hours.

From the Main Menu...

YOU: Type **<7>** for Reindex Master Files and press **<ENTER>.**

FLEXPAVE: The following messages will appear as the system reindexes the files:

REINDEXING Files. Please Wait . . .

Reindexing Layer File . . .
Reindexing Layer Thickness File . . .
Reindexing Geometric & Shoulder File . . .
Reindexing Surface File . . .
Reindexing Subgrade File . . .
Reindexing Serviceability Index File . . .
Reindexing Visual Rating File . . .
Reindexing Skid File . . .
Reindexing Dynaflect File . . .
Reindexing Falling Weight File . . .
Reindexing Environment File . . .
Reindexing Weather File . . .
Reindexing Location File . . .
Reindexing Traffic File . . .

APPENDIX A - REPORTS

Date: 11/07/88

LOCATION

SECTION ID NO:	39
DISTRICT NO:	1
COUNTY NO/NAME:	117/HUNT
CONTROL-SECTION:	9-13
HIGHWAY:	IH 30
MILE POSTS:	106+00 TO 109+00
LANE:	R
PREVIOUS SID:	-
NEXT SID:	-
FUNCTIONAL CLASS:	0
TYPE OF PAVEMENT:	PCC
	2.5 =< HMAC < 5.5 (NO SEALS)
	WIDENING

ENVIRONMENT - 20 YEAR SUMMARY (1955-1974)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
THORNTHWAITE INDEX:	-	-	-	-	-	-	-	-	-	-	-	-	41.6
MEAN TEMPERATURE:	41	45	53	63	71	78	83	82	76	66	53	45	63.1
PRECIPITATION:	2.2	2.7	3.3	5.1	5.2	3.5	3.0	2.2	5.3	4.1	3.0	3.0	42.6
WET F-T CYCLES:	2	1	1	0	0	0	0	0	0	0	0	1	6
TOTAL F-T CYCLES:	13	9	4	0	0	0	0	0	0	0	3	11	40.2
DIST TEMP CONSTANT:	-	-	-	-	-	-	-	-	-	-	-	-	21

TRAFFIC

1986 ADT:	7800
1986 PERCENT TRUCKS:	28.4
1954-1986 VEHICLES:	47966822
1954-1986 18K AXLES:	14603862

SERVICEABILITY INDEX

YR	MEAN	STD DEV	N	CV	LOW	HIGH
87	1.81	.915	15	50.5	0.40	3.60
80	2.66	.320	10	12.0	2.10	3.20
77	3.30	.356	10	10.8	2.70	3.80
76	3.45	.584	10	16.9	2.10	4.00
74	3.44	.230	9	6.7	2.90	3.60

PAVEMENT CONDITION SURVEY

PVMT RATING	87	80	77	76	74
PRS	0	63	69	76	76
RUTT		2MO	2SL	2SL	2SL
BLOCK CR					
ALLG CR					
LONG CR		1SE	1MO	1SL	1SL
TRANS CR		2SE	1MO	2MO	2MO
CRACKS		NS	NS	NS	NS
PATCHING					1F
FAIL/MI	0	0	0	0	0

SKID NUMBER

DATE	AVG	LOW	HIGH
3/75	25	22	29
7/74	33	30	36

DEFLECTION (MEAN VARIABLES)

DATE	D	W1	W2	W3	W4	W5	W6	W7
8/9/76	D	0.56	0.53	0.50	0.44	0.39		
0/0/ 0	F	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STRUCTURAL SECTION

LAYER	STRUCTURE	DESCRIPTION	DATE	MATERIAL TYPE	AGG. RATE	ADMIXTURE TYPE	ADMIXTURE PCNT	APPL RATE	THICK CENT	TTC	LL	PI
5	1	S OS	8/67	HOT MIX - HOT LAID		AC	4.90		1.50			
4	1	S OVLY	8/67	HOT MIX - HOT LAID		AC	4.70		2.50			
3	1	S OS	9/52	PORTLAND CEMENT CONC					10.00			
2	1	SB BSLY	9/52	FLEXIBLE					6.00			
1	1	SG SBGR	9/52	CLAY						5.6	61.3	39.1

Date: 11/07/88

LOCATION

SECTION ID NO:	2086
DISTRICT NO:	21
COUNTY NO/NAME:	66/KENEDY
CONTROL-SECTION:	327-2
HIGHWAY:	US 77
MILE POSTS:	6+00 TO 8+00
LANE:	R
PREVIOUS SID:	-
NEXT SID:	-
FUNCTIONAL CLASS:	0
TYPE OF PAVEMENT:	GRANULAR BASE HMAC >= 5.5 (NO SEALS) NO WIDENING

ENVIRONMENT - 20 YEAR SUMMARY (1955-1974)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
THORNTHWAITE INDEX:	-	-	-	-	-	-	-	-	-	-	-	-	-28
MEAN TEMPERATURE:	57	60	67	74	79	83	85	85	81	74	65	59	72.4
PRECIPITATION:	1.9	1.8	0.5	1.2	3.7	3.4	1.1	2.7	5.4	2.6	1.2	1.2	26.8
WET F-T CYCLES:	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL F-T CYCLES:	2	1	0	0	0	0	0	0	0	0	0	1	4.9
DIST TEMP CONSTANT:	-	-	-	-	-	-	-	-	-	-	-	-	38

TRAFFIC

ADT:	
PERCENT TRUCKS:	
- VEHICLES:	
- 18K AXLES:	

SERVICEABILITY INDEX

YR	MEAN	STD DEV	N	CV	LOW	HIGH
77	3.87	.395	10	10.2	3.00	4.30
76	4.00	.377	10	9.4	3.00	4.30
74	3.58	.252	9	7.0	3.10	3.90
72	3.53	.183	10	5.2	3.30	3.80

PAVEMENT CONDITION SURVEY

PVMT RATING	77	76	74	73
PRS	80	85	90	87
RUTT	2SL	2SL	1SL	
BLOCK CR				
ALLG CR				
LONG CR				1SL
TRANS CR				1SL
CRACKS			NS	
PATCHING	1F			
FAIL/MI	0	0	0	0

SKID NUMBER

DATE	AVG	LOW	HIGH

DEFLECTION (MEAN VARIABLES)

DATE	D	W1	W2	W3	W4	W5	W6	W7

STRUCTURAL SECTION

LAYER	STRUCTURE	DESCRIPTION	DATE	MATERIAL TYPE	AGG. RATE	ADMIXTURE TYPE	ADMIXTURE PCNT	APPL RATE	THICK CENT	TTC	LL	PI
6	3	S SC	11/78	SEAL COAT - REGULAR	120	AC		0.25	0.40			
5	2	S SC	10/74	SEAL COAT - REGULAR	120	AC		0.22	0.24			
4	1	S OS	1/68	HOT MIX - HOT LAID		AC			4.00			
3	1	S HMAC	3/61	HOT MIX - HOT LAID		AC			2.50			
2	1	B BSLY	3/61	FLEXIBLE BASE					11.00			
1	1	SG SBGR	3/61	SAND						0.0	30.7	12.3

Date: 11/07/88

LOCATION

SECTION ID NO:	2099
DISTRICT NO:	21
COUNTY NO/NAME:	67/DUVAL
CONTROL-SECTION:	542-3
HIGHWAY:	US 59
MILE POINTS:	6.500-8.500
LANE:	R
MILE POST:	26+00 TO 28+00
PREVIOUS SID:	-
NEXT SID:	-
FUNCTIONAL CLASS:	0
TYPE OF PAVEMENT:	STABILIZED (CEMENT/LIME)
	HMAC < 2.5"
	(NO SEALS)
	NO WIDENING
INACTIVE SID:	NO
NUMBER OF LANES:	1

GEOMETRIC AND SHOULDER INFORMATION

STRUCTURE NUMBER	TYPE OF PAVEMENT	LANE WIDTH	OUTSIDE SHOULDER WIDTH	SHOULDER SURFACE TYPE	SHOULDER BASE TYPE	SHOULDER SURFACE THICKNESS	SHOULDER BASE THICKNESS	WIDENING FLAG
1	12	12.0	11.0	2	22	0.00	8.00	0
2	13	12.0	11.0	2	22	0.00	8.00	0
3	13	12.0	11.0	5	22	0.30	8.00	0

STRUCTURAL SECTION

STRUCTURE	LAYER	DESCRIPTION	THICK CENT	MATERIAL TYPE	DATE	WIDENING DATE	AGG. RATE	ADMIXTURE TYPE	ADMIXTURE PCNT	APPL RATE	% PASSING 200 SIEVE	TTC	LL	PI	PERM. INDEX
3	8	S SC	0.30	SEAL COAT - REGULAR	9/82		120			0.30					
2	7	S SC	0.30	SEAL COAT - REGULAR	7/77		125			0.30					
1	6	S OS	1.50	HOT MIX - HOT LAID	11/68				5.50						
1	5	S ST	0.24	ONE COURSE SURF TRT	11/68		120			0.40					
1	4	B BSLY	4.00	LIME STABILIZED	11/68										
1	3	B SBLY	4.00	LIME STABILIZED	11/68										
1	2	SB SBLY	12.00	LIME STABIL SUBGRADE	11/68										
1	1	SG SBGR		SAND	11/68						41.3	4.0	35.7	16.7	1.35

Date: 11/07/88

LOCATION

SECTION ID NO:	39
DISTRICT NO:	1
COUNTY NO/NAME:	117/HUNT
CONTROL-SECTION:	9-13
HIGHWAY:	IH 30
MILE POINTS:	27.800-29.800
LANE:	R
MILE POST:	106+00 TO 109+00
PREVIOUS SID:	-
NEXT SID:	-
FUNCTIONAL CLASS:	0
TYPE OF PAVEMENT:	PCC
	2.5 =< HMAC < 5.5
	(NO SEALS)
	WIDENING
INACTIVE SID:	NO
NUMBER OF LANES:	2

GEOMETRIC AND SHOULDER INFORMATION

STRUCTURE NUMBER	TYPE OF PAVEMENT	LANE WIDTH	OUTSIDE SHOULDER WIDTH	SHOULDER SURFACE TYPE	SHOULDER BASE TYPE	SHOULDER SURFACE THICKNESS	SHOULDER BASE THICKNESS	WIDENING FLAG
1	34	12.0	17.0	2	21	0.00	8.00	1

STRUCTURAL SECTION

STRUCTURE	LAYER	DESCRIPTION	THICK CENT	MATERIAL TYPE	DATE	WIDENING DATE	AGG. RATE	====ADMIXTURE==== TYPE	PCNT	APPL RATE	% PASSING 200 SIEVE	TTC	LL	PI	PERM. INDEX
1	5	S OS	1.50	HOT MIX - HOT LAID	8/67				4.90						
1	4	S OVLY	2.50	HOT MIX - HOT LAID	8/67				4.70						
1	3	S OS	10.00	PORTLAND CEMENT CONC	9/52	9/52									
1	2	SB BSLY	6.00	FLEXIBLE	9/52										
1	1	SG SBGR		CLAY	9/52						85.7	5.6	61.3	39.1	0.60

Texas Flexible Pavement Database
Test Section Location

Standard ID Number	Highway District	County Number	Highway Number	Beginning Milepost	Ending Milepost
13	1	92	US 82	22+00	24+00
26	1	92	FM2729	4+00	6+00
39	1	117	IH 30	106+00	109+00
42	1	117	SH 34	28+00	30+00
55	1	117	FM1566	2+00	4+00
68	1	117	FM2736	2-20	2+00
71	1	139	US 271	6+00	8+00
84	1	139	FM 905	14+00	14+16
97	1	139	FM 79	14+00	16+00
102	1	190	US 69	4+11	8+00
115	1	190	FM 779	2+00	4+00
128	2	73	SH 6	8+00	10+00
131	2	73	FM2157	4+00	6+00
144	2	120	US 281	36+00	38+00
157	2	120	FM 206	6+00	4+00
160	2	127	US 67	28+00	30+00
173	2	127	FM 917	2+00	4+00
186	2	220	US 377	0+00	2+00
199	2	220	SH 303S	0+00	2+00
204	2	220	FM1709	2+00	4+00
217	2	127	IH 35W	18+00	20+00
220	3	39	SH 79	4+00	6+00
233	3	39	FM1197	10+00	12+00
246	3	169	SH 59	20+00	22+00
259	3	169	FM 455	6+00	8+00
262	3	224	US 183	34+00	34+20
275	3	224	FM2651	0-01	2+00
288	3	244	US 183	28+00	30+00
291	3	244	FM 91	10+00	10+20
306	4	33	IH 40	104+00	106+00
319	4	33	US 60	26+00	26+18
322	4	33	FM1342	10+00	12+08
335	4	104	US 87	4+00	6+00
348	4	104	FM 998	2+00	4+00
351	4	118	SH 152	6+00	8+00
364	4	118	FM1598	2-18	2+00
377	4	148	SH 305	2+00	4+00
380	4	148	SH 23	28+00	30+01
393	4	180	IH 40	20+00	22+00
408	4	180	US 385	4+00	6+00
411	4	180	SH 214	4+00	4+16
424	4	104	US 54	34+00	36+00
437	5	96	US 87	24+00	26+00

Texas Flexible Pavement Database
Location File

SID No.	Actv Flag	Highway District	County Number	Beg. Mile Post	End Mile Post	Highway Number	Lane ID	Control/ Section	Milepoint Begn to End	Mile Point Date	Prev SID	Next SID	Inactv Date	No. of Lanes	Comments
13	.T.	1	92	22+00	24+00	US 82	R	45/4	22.000 TO 24.000	6/75	0	0	0/ 0	1	
26	.T.	1	92	4+00	6+00	FM 2729	R	2798/3	10.720 TO 12.720	6/75	0	0	0/ 0	1	
39	.T.	1	117	106+00	109+00	IH 30	R	9/13	27.800 TO 29.800	11/76	0	0	0/ 0	2	
42	.T.	1	117	28+00	30+00	SH 34	R	173/6	0.026 TO 1.850	11/76	0	0	0/ 0	1	
55	.T.	1	117	2+00	4+00	FM 1566	L	1495/1	2.000 TO 3.980	6/75	0	0	0/ 0	1	
68	.T.	1	117	2-20	2+00	FM 2736	R	2732/1	0.000 TO 2.010	2/76	0	0	0/ 0	1	
71	.T.	1	139	6+00	8+00	US 271	R	136/8	5.620 TO 7.560	6/75	0	0	0/ 0	2	
84	.F.	1	139	14+00	14+16	FM 905	R	730/3	14.790 TO 16.440	11/76	0	5110	6/81	1	RECONSTRUCTION
97	.T.	1	139	14+00	16+00	FM 79	L	688/2	14.000 TO 16.000	6/75	0	0	0/ 0	1	
102	.T.	1	190	4+11	8+00	US 69	R	203/3	6.140 TO 8.140	6/75	0	0	0/ 0	1	
115	.T.	1	190	2+00	4+00	FM 779	R	2606/1	2.000 TO 4.000	11/76	0	0	0/ 0	1	
128	.T.	2	73	8+00	10+00	SH 6	R	258/1	8.000 TO 10.000	6/75	0	0	0/ 0	1	
131	.T.	2	73	4+00	6+00	FM 2157	R	1990/1	4.000 TO 6.000	6/75	0	0	0/ 0	1	
144	.T.	2	120	36+00	38+00	US 281	L	249/7	41.100 TO 43.100	6/75	0	0	0/ 0	1	
157	.T.	2	120	6+00	4+00	FM 206	L	391/7	4.000 TO 6.000	2/76	0	0	0/ 0	1	
160	.T.	2	127	28+00	30+00	US 67	R	259/4	2.790 TO 4.790	6/75	0	0	0/ 0	1	
173	.F.	2	127	2+00	4+00	FM 917	R	1181/2	2.000 TO 4.000	6/75	0	5089	4/78	1	RECONSTRUCTION
186	.T.	2	220	0+00	2+00	US 377	R	80/7	8.591 TO 10.589	6/77	0	0	0/ 0	1	
199	.T.	2	220	0+00	2+00	SH 303S	L	2208/1	12.144 TO 14.144	6/77	0	0	0/ 0	2	
204	.T.	2	220	2+00	4+00	FM 1709	R	1603/3	2.000 TO 4.000	4/76	0	0	0/ 0	1	
217	.T.	2	127	18+00	20+00	IH 35W	R	14/4	4.680 TO 6.680	2/76	0	0	0/ 0	2	
220	.T.	3	39	4+00	6+00	SH 79	L	282/2	3.940 TO 6.330	2/76	0	0	0/ 0	1	
233	.T.	3	39	10+00	12+00	FM 1197	R	1350/1	9.960 TO 11.940	6/75	0	0	0/ 0	1	
246	.T.	3	169	20+00	22+00	SH 59	L	239/2	16.950 TO 18.950	6/75	0	0	0/ 0	1	
259	.T.	3	169	6+00	8+00	FM 455	R	845/1	4.010 TO 5.970	11/76	0	0	0/ 0	1	
262	.T.	3	224	34+00	34+20	US 183	L	404/1	33.840 TO 35.830	6/75	0	0	0/ 0	1	MISSING INVENTORY FOLDER SINCE 3/87
275	.T.	3	224	0-01	2+00	FM 2651	R	2645/1	6.000 TO 7.750	2/76	0	0	0/ 0	1	
288	.F.	3	244	28+00	30+00	US 183	L	147/1	4.170 TO 5.570	6/75	0	0	1/58	1	WIDENING FLAG = 2

Texas Flexible Database
Layer Identification File

SID Number	Struc No.	Layer Number	Layer Description	Layer Center Thickness	Material Type Class.	Date Job Completed	Date Layer Widened
13	1	1	7	0.00	44	6/31	0/ 0
13	1	2	5	6.00	17	6/31	8/46
13	1	3	4	2.00	1	7/47	0/ 0
13	1	4	3	1.30	1	1/63	0/ 0
13	2	5	2	0.40	11	8/79	0/ 0
26	1	1	7	0.00	44	10/65	0/ 0
26	1	2	5	6.00	21	10/65	0/ 0
26	1	3	5	5.20	21	6/66	0/ 0
26	1	4	10	0.36	6	6/66	0/ 0
26	1	5	3	0.25	6	6/66	0/ 0
39	1	1	7	0.00	44	9/52	0/ 0
39	1	2	5	6.00	31	9/52	0/ 0
39	1	3	3	10.00	17	9/52	9/52
39	1	4	1	2.50	1	8/67	0/ 0
39	1	5	3	1.50	1	8/67	0/ 0
42	1	1	7	0.00	44	6/45	0/ 0
42	1	2	5	6.00	25	6/45	0/ 0
42	1	3	10	0.25	5	6/45	0/ 0
42	1	4	5	4.00	21	12/54	0/ 0
42	1	5	10	0.26	6	12/54	0/ 0
42	1	6	10	0.26	6	12/54	0/ 0
42	1	7	5	4.00	21	7/64	0/ 0
42	1	8	10	0.36	6	7/64	0/ 0
42	1	9	10	0.25	6	7/64	0/ 0
42	1	10	3	0.30	11	9/72	0/ 0
42	2	11	2	0.40	11	7/82	0/ 0
55	1	1	7	0.00	44	9/51	0/ 0
55	1	2	5	4.00	21	9/51	0/ 0
55	1	3	10	0.20	6	9/51	0/ 0
55	1	4	10	0.20	6	9/51	0/ 0
55	1	5	2	0.20	11	7/56	0/ 0
55	1	6	3	0.33	11	6/63	0/ 0
68	1	1	7	0.00	44	9/65	0/ 0
68	1	2	5	6.00	21	9/65	0/ 0
68	1	3	10	0.36	6	9/65	0/ 0
68	1	4	3	0.25	6	9/65	0/ 0
71	1	1	7	0.00	44	4/55	0/ 0
71	1	2	6	6.00	31	4/55	0/ 0
71	1	3	5	9.00	17	4/55	4/55
71	1	4	4	2.00	1	9/71	0/ 0
71	1	5	3	1.50	1	9/71	0/ 0
84	1	1	7	0.00	44	6/71	0/ 0
84	1	2	6	4.00	32	6/71	0/ 0
84	1	3	5	4.00	21	6/71	0/ 0
84	1	4	10	0.36	6	6/71	0/ 0
84	1	5	10	0.25	6	6/71	0/ 0

Texas Flexible Pavement Database
Geometric And Shoulder Information

SID No	Struc No	Type Of Pavmnt	Lane Width	Outside Shouldr Width	Shoulder Surface Type	Shoulder Base Type	Shoulder Surface Thicknss	Shoulder Base Thicknss	Widen Flag
13	1	34	12.0	0.0	1	0	0.00	0.00	1
13	2	35	12.0	0.0	1	0	0.00	0.00	1
26	1	1	10.0	0.0	1	0	0.00	0.00	0
39	1	34	12.0	17.0	2	21	0.00	8.00	1
42	1	1	12.0	10.0	5	21	0.36	8.00	0
42	2	1	12.0	10.0	5	21	0.36	8.00	0
55	1	1	9.0	0.0	1	0	0.00	0.00	0
68	1	1	10.0	0.0	1	0	0.00	0.00	0
71	1	34	12.0	15.0	2	31	0.00	3.70	1
84	1	1	10.0	0.0	1	0	0.00	0.00	0
97	1	1	10.0	0.0	1	0	0.00	0.00	0
102	1	12	12.0	10.0	5	21	0.36	6.00	0
102	2	13	12.0	10.0	5	21	0.36	6.00	0
115	1	21	10.0	0.0	1	0	0.00	0.00	0
128	1	1	11.0	6.0	2	21	0.00	6.00	0
128	2	1	11.0	6.0	5	21	0.30	6.00	0
128	3	1	11.0	6.0	5	21	0.60	6.00	0
131	1	1	10.0	3.0	2	21	0.00	6.00	0
131	2	1	10.0	3.0	2	21	0.00	6.00	0
131	3	1	10.0	3.0	2	21	0.00	6.00	0
144	1	1	12.0	7.0	2	21	0.00	9.00	0
144	2	1	12.0	7.0	2	21	0.00	6.00	0
144	3	2	12.0	7.0	2	21	0.00	6.00	0
157	1	1	8.0	4.0	2	21	0.00	3.00	0
157	2	1	10.0	0.0	1	0	0.00	0.00	0
157	3	1	10.0	0.0	1	0	0.00	0.00	0
160	1	2	12.0	10.0	2	21	0.00	9.00	1
160	2	3	12.0	10.0	2	21	0.00	9.00	1
173	1	1	9.0	7.0	2	21	0.00	4.00	0
173	2	1	9.0	7.0	2	21	0.00	4.00	0
173	3	1	9.0	7.0	2	21	0.00	4.00	0
186	1	1	12.0	8.0	2	21	0.00	6.50	0
186	2	4	12.0	8.0	2	21	0.00	6.50	0
199	1	4	12.0	4.3	2	21	0.00	6.57	0
199	2	4	12.0	4.3	2	21	0.00	6.57	0
199	3	4	12.0	4.3	2	21	0.00	6.57	0
199	4	6	12.0	4.3	2	21	0.00	6.57	0
204	1	1	10.0	0.0	1	0	0.00	0.00	0
204	2	1	10.0	0.0	1	0	0.00	0.00	0
204	3	1	12.0	0.0	1	0	0.00	0.00	0
217	1	5	12.0	13.0	2	21	0.00	8.00	0
217	2	5	12.0	13.0	2	21	0.00	8.00	0
220	1	21	12.0	0.0	1	21	0.00	0.00	0
220	2	21	12.0	0.0	1	21	0.00	0.00	0
233	1	3	9.0	0.0	1	0	0.00	0.00	0
246	1	4	8.0	3.0	3	21	2.60	11.50	0
246	2	5	9.5	5.5	5	21	0.80	6.00	0

Texas Flexible Pavement Database
Surface File

SID Number	Structure Number	Layer Number	Aggregate Application Rate	Admixture Type	Percent Admixture	Asphalt Application Rate
13	1	3	0	AC	5.70	0.00
13	1	4	0	AC	5.40	0.00
13	2	5	75	AC-10	0.00	0.45
26	1	4	80	AC-10	0.00	0.30
26	1	5	120	AC-10	0.00	0.25
39	1	3	0		0.00	0.00
39	1	4	0	AC	4.70	0.00
39	1	5	0	AC	4.90	0.00
42	1	3	120	OA-230	0.00	0.30
42	1	5	110	OA-230	0.00	0.22
42	1	6	110	OA-230	0.00	0.22
42	1	8	80	OA-135	0.00	0.30
42	1	9	120	OA-135	0.00	0.25
42	1	10	95	AC-5	0.00	0.25
42	2	11	90	AC-10	0.00	0.35
55	1	3	140	RC-2	0.00	0.30
55	1	4	145	RC-2	0.00	0.20
55	1	5	0		0.00	0.00
55	1	6	85	OA-135	0.00	0.30
68	1	3	80	OA-135	0.00	0.30
68	1	4	120	OA-135	0.00	0.25
71	1	3	0		0.00	0.00
71	1	4	0	AC	4.97	0.00
71	1	5	0	AC	4.60	0.00
84	1	4	80	AC-5	0.00	0.35
84	1	5	120	AC-5	0.00	0.25
97	1	3	0		0.00	0.00
102	1	4	80	OA-135	0.00	0.30
102	1	5	120	OA-135	0.00	0.25
102	1	6	0		0.00	0.00
102	2	7	75	AC-10	0.00	0.40
115	1	3	120	OA-135	0.00	0.30
115	1	4	140	OA-135	0.00	0.20
128	1	3	90	OA-135	0.00	0.20
128	1	4	180	OA-135	0.00	0.30
128	1	5	180	OA-230	0.00	0.25
128	1	6	100	AC-10	0.00	0.30
128	2	7	110	AC-5	0.00	0.30
128	3	8	110	AC-10	0.00	0.30
131	1	3	110	OA-135	0.00	0.30
131	1	4	110	OA-135	0.00	0.30
131	2	5	120	AC-10	0.00	0.30
131	3	6	120	CRS-2	0.00	0.37
144	1	3	80	OA-135	0.00	0.30
144	1	4	150	OA-135	0.00	0.25
144	1	5	100	AC-10	0.00	0.30

Texas Flexible Pavement Database
Subgrade File

SID Number	Struc Number	Layer Number	Percent Passing No 200 Sieve	Plasticy Index	Liquid Limit	Texas Triaxial Class	Permeability Index
13	1	1	88.8	40.4	64.5	5.3	0.23
26	1	1	63.5	27.5	50.1	5.2	0.36
39	1	1	85.7	39.1	61.3	5.6	0.60
42	1	1	79.3	29.7	48.0	5.1	0.06
55	1	1	81.8	33.8	53.6	5.3	0.06
68	1	1	79.3	29.7	48.0	5.1	0.06
71	1	1	70.9	26.7	36.6	4.2	0.27
84	1	1	85.0	41.8	65.5	0.0	0.06
97	1	1	79.1	29.9	48.0	5.6	0.06
102	1	1	78.0	24.0	48.0	4.8	0.06
115	1	1	92.9	35.0	50.0	0.0	0.16
128	1	1	58.5	21.9	42.6	4.7	0.40
131	1	1	41.7	15.5	31.4	0.0	2.19
144	1	1	90.6	23.9	45.5	4.9	0.21
157	1	1	71.9	20.7	41.0	4.8	1.58
160	1	1	82.5	32.4	55.5	4.8	0.23
173	1	1	66.5	24.6	43.7	0.0	0.75
186	1	1	85.8	34.7	56.5	4.9	0.15
199	1	1	55.6	21.3	43.1	4.1	0.64
204	1	1	69.6	25.9	46.3	4.7	0.29
217	1	1	90.0	46.5	69.0	0.0	0.06
220	1	1	51.7	10.2	28.6	4.1	2.16
233	1	1	87.2	28.7	48.6	4.2	0.15
246	1	1	66.2	0.0	0.0	0.0	0.00
259	1	1	66.2	23.9	40.3	3.8	0.40
275	1	1	85.7	28.6	51.7	4.7	0.33
288	1	1	33.0	8.4	24.9	3.9	3.09
291	1	1	33.0	8.4	24.9	3.9	3.09
306	1	1	87.5	27.5	47.5	4.5	0.11
319	1	1	87.5	27.5	47.5	4.5	0.11
322	1	1	87.5	27.5	47.5	4.5	0.11
335	1	1	51.3	12.8	28.8	3.9	1.30
348	1	1	51.3	12.8	28.8	4.2	1.30
351	1	1	55.4	9.1	26.9	3.8	1.05
364	1	1	80.3	22.2	41.2	4.4	0.57
377	1	1	87.5	27.5	47.5	4.5	0.11
380	1	1	71.4	20.2	37.9	5.0	0.48
393	1	1	87.5	27.5	47.5	4.5	0.11
408	1	1	17.8	6.0	24.0	3.8	6.70
411	1	1	87.5	4.5	47.5	0.0	0.11
424	1	1	51.3	0.0	28.8	1.8	1.30
437	1	1	87.5	27.5	47.5	4.5	0.11
440	1	1	87.5	27.5	47.5	4.5	0.11
453	1	1	87.5	27.5	47.5	4.5	0.11
466	1	1	87.5	27.5	47.5	4.5	0.11
479	1	1	51.3	12.8	28.8	3.6	1.30

Texas Flexible Pavement Database
Layer Thickness Across The Road File

SID No	Struc No	Layr No	Thickness From Center 3rd Pos	2nd Pos	1st Pos	Thick From Centr	Distance From Center 3rd Pos	2nd Pos	1st Pos
13	1	2	10.0	10.0	6.0	6.0	12.0	9.0	5.0
13	1	3	0.0	0.0	2.0	2.0	0.0	0.0	12.0
13	1	4	0.0	0.0	1.3	1.3	0.0	0.0	12.0
13	2	5	0.0	0.0	0.4	0.4	0.0	0.0	12.0
26	1	2	0.0	0.0	6.0	6.0	0.0	0.0	10.0
26	1	3	0.0	0.0	5.2	5.2	0.0	0.0	10.0
26	1	4	0.0	0.0	0.4	0.4	0.0	0.0	10.0
26	1	5	0.0	0.0	0.3	0.3	0.0	0.0	10.0
39	1	2	0.0	6.0	6.0	6.0	29.0	12.0	12.0
39	1	3	0.0	0.0	10.0	10.0	0.0	0.0	12.0
39	1	4	0.0	0.0	2.5	2.5	0.0	0.0	12.0
39	1	5	0.0	0.0	1.5	1.5	0.0	0.0	12.0
42	1	2	0.0	0.0	6.0	6.0	0.0	0.0	13.0
42	1	3	0.0	0.0	0.3	0.3	0.0	0.0	11.0
42	1	4	0.0	0.0	4.0	4.0	0.0	0.0	12.0
42	1	5	0.0	0.0	0.3	0.3	0.0	0.0	12.5
42	1	6	0.0	0.0	0.3	0.3	0.0	0.0	12.0
42	1	7	0.0	0.0	4.0	4.0	0.0	0.0	22.0
42	1	8	0.0	0.0	0.4	0.4	0.0	0.0	22.0
42	1	9	0.0	0.0	0.3	0.3	0.0	0.0	13.0
42	1	10	0.0	0.0	0.3	0.3	0.0	0.0	13.0
42	2	11	0.0	0.0	0.4	0.4	0.0	0.0	13.0
55	1	2	0.0	0.0	4.0	4.0	0.0	0.0	9.5
55	1	3	0.0	0.0	0.2	0.2	0.0	0.0	9.0
55	1	4	0.0	0.0	0.2	0.2	0.0	0.0	9.0
55	1	5	0.0	0.0	0.2	0.2	0.0	0.0	9.0
55	1	6	0.0	0.0	0.3	0.3	0.0	0.0	9.0
68	1	2	0.0	0.0	6.0	6.0	0.0	0.0	10.0
68	1	3	0.0	0.0	0.4	0.4	0.0	0.0	10.0
68	1	4	0.0	0.0	0.3	0.3	0.0	0.0	10.0
71	1	2	0.0	6.0	6.0	6.0	27.0	12.0	12.0
71	1	3	0.0	0.0	9.0	9.0	0.0	0.0	12.0
71	1	4	0.0	0.0	2.0	2.0	0.0	0.0	12.0
71	1	5	0.0	0.0	1.5	1.5	0.0	0.0	12.0
84	1	2	0.0	0.0	4.0	4.0	0.0	0.0	12.5
84	1	3	0.0	0.0	4.0	4.0	0.0	0.0	11.0
84	1	4	0.0	0.0	0.4	0.4	0.0	0.0	11.0
84	1	5	0.0	0.0	0.3	0.3	0.0	0.0	10.0
97	1	2	0.0	0.0	6.0	6.0	0.0	0.0	10.5
97	1	3	0.0	0.0	0.5	0.5	0.0	0.0	10.0
102	1	2	0.0	0.0	6.0	6.0	0.0	0.0	22.0
102	1	3	0.0	0.0	6.0	6.0	0.0	0.0	13.0
102	1	4	0.0	0.0	0.4	0.4	0.0	0.0	22.0
102	1	5	0.0	0.0	0.3	0.3	0.0	0.0	13.0
102	1	6	0.0	0.0	0.8	0.8	0.0	0.0	13.0
102	2	7	0.0	0.0	0.4	0.4	0.0	0.0	13.0
115	1	2	0.0	0.0	5.0	5.0	0.0	0.0	10.5

Texas Flexible Pavement Database

Section Identification Numbers with Two Course Surface Treatment (DST)

Section Identification Number	Date Job Completed (Month/Year)
26	6/66
26	6/66
42	12/54
42	12/54
42	7/64
42	7/64
55	9/51
55	9/51
68	9/65
68	9/65
84	6/71
84	6/71
97	8/55
102	6/66
102	6/66
115	7/62
115	7/62
128	5/40
128	5/40
144	8/53
144	8/53
160	5/41
160	5/41
186	7/47
186	7/47
199	9/60
199	9/60
217	8/66
217	8/66
220	11/41
220	11/41
246	5/42
246	5/42
259	6/49
259	6/49
275	5/63
275	5/63
322	9/54
322	9/54
335	6/34
335	6/34
351	9/59
351	9/59
377	6/47
377	6/47

Texas Flexible Pavement Database
Visual Rating File

SID Num.	Struc No.	Layr Num.	Year	Act. Year	Act. Mnth	Rutt S	Rutt M	Rutt S	Block S	Block M	Block S	Allig Crack S	Allig Crack M	Allig Crack S	Long Crack S	Long Crack M	Long Crack S	Trans Crack S	Trans Crack M	Trans Crack S	Crac Seal Code	Patch G	Patch F	Patch P	Fail Mile	PRS	PES Rating Score	UVU Rating Score
13	1	4	73	73	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	0	97	0.00	0.00
13	1	4	74	74	8	0	0	0	0	0	0	0	0	0	0	0	3	0	0	2	2	1	0	0	0	65	0.00	0.00
13	1	4	75	75	8	0	0	0	0	0	0	0	0	0	0	0	3	0	0	2	2	1	0	0	0	65	0.00	0.00
13	1	4	76	76	7	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	2	0	0	0	0	65	0.00	0.00
13	1	4	77	77	8	1	0	0	0	0	0	0	0	0	0	1	0	0	2	0	2	0	0	0	0	70	0.00	0.00
13	2	5	80	80	9	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	78	0.00	0.00
26	1	5	73	73	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	75	0.00	0.00
26	1	5	74	74	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	88	0.00	0.00
26	1	5	75	75	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	80	0.00	0.00
26	1	5	76	76	7	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	92	0.00	0.00
26	1	5	77	77	8	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	78	0.00	0.00
26	1	5	80	80	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	0.00	0.00
39	1	5	74	74	10	2	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0	1	0	0	76	0.00	0.00
39	1	5	76	76	7	2	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0	0	0	0	76	0.00	0.00
39	1	5	77	77	8	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	0	0	0	69	0.00	0.00
39	1	5	80	80	9	0	2	0	0	0	0	0	0	0	0	0	1	0	0	2	3	0	0	0	0	63	0.00	0.00
42	1	10	73	73	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	0.00	0.00
42	1	10	74	74	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	88	0.00	0.00
42	1	10	75	75	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	80	0.00	0.00
42	1	10	76	76	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	70	0.00	0.00
42	1	10	77	78	3	3	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3	0	0	1	1	36	0.00	0.00
42	1	10	80	80	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	0.00	0.00
55	1	6	73	73	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	95	0.00	0.00
55	1	6	74	74	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	95	0.00	0.00
55	1	6	75	75	8	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3	0	2	0	0	68	0.00	0.00
55	1	6	76	76	7	3	0	0	0	0	0	2	0	0	1	0	0	0	0	0	2	0	2	0	0	67	0.00	0.00
55	1	6	77	77	8	2	0	0	0	0	0	0	2	0	0	0	0	0	1	0	2	0	3	0	0	51	0.00	0.00
55	1	6	80	80	9	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	1	0	0	80	0.00	0.00
68	1	4	73	74	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	3	0	3	0	0	77	0.00	0.00
68	1	4	74	74	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	80	0.00	0.00
68	1	4	75	75	8	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	3	0	56	0.00	0.00
68	1	4	76	76	7	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	73	0.00	0.00
68	1	4	77	77	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93	0.00	0.00
68	1	4	80	80	9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	88	0.00	0.00
71	1	5	73	73	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.00	0.00
71	1	5	74	74	8	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	1	0	0	0	92	0.00	0.00
71	1	5	75	75	8	0	0	0	0	0	0	0	0	0	0	2	0	0	3	0	3	0	0	0	0	70	0.00	0.00
71	1	5	76	76	7	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	3	0	0	0	0	78	0.00	0.00
71	1	5	77	77	8	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3	0	0	0	0	83	0.00	0.00
71	1	5	80	80	9	1	0	0	0	0	0	0	1	0	0	0	2	0	0	2	3	0	0	0	0	55	0.00	0.00
84	1	5	73	74	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	78	0.00	0.00
84	1	5	74	74	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	1	0	0	85	0.00	0.00
84	1	5	75	75	8	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	1	0	0	0	80	0.00	0.00
84	1	5	76	76	7	2	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3	0	2	0	0	63	0.00	0.00
84	1	5	77	77	8	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	2	0	0	61	0.00	0.00
84	1	5	80	80	9	1	0	0	0	0	0	0	2	0	0	1	0	0	0	0	3	0	0	2	0	50	0.00	0.00

Texas Flexible Pavement Database
Serviceability Index File

Section Ident. Number	Struc No	Layr No.	Yr	Actl Mnth	Act Day	Actl Year	Count	Mean	Stand. Deviat.	Low Val	High Val.
13	1	4	73	7	19	73	10	3.35000	0.32400	2.6	3.8
13	1	4	74	8	27	74	10	3.38000	0.26600	3.0	3.8
13	1	4	75	8	24	75	10	3.42000	0.28210	2.9	3.8
13	1	4	76	7	22	76	10	3.36000	0.35650	2.7	3.9
13	1	4	77	8	5	77	10	3.50000	0.29440	3.0	3.8
13	2	5	80	9	16	80	8	3.17500	0.38079	2.5	3.6
26	1	5	73	7	19	73	9	3.74000	0.20700	3.4	4.0
26	1	5	74	8	27	74	4	3.58000	0.26300	3.2	3.8
26	1	5	75	8	24	75	10	3.73000	0.20570	3.3	4.0
26	1	5	76	7	22	76	10	3.95000	0.15810	3.6	4.1
26	1	5	77	8	5	77	10	4.02000	0.12290	3.8	4.2
26	1	5	80	9	16	80	10	2.52999	0.66508	1.4	3.4
26	1	5	87	9	29	87	0	0.00000	0.00000	0.0	0.0
39	1	5	74	10	26	74	9	3.44000	0.23000	2.9	3.6
39	1	5	76	7	22	76	10	3.45000	0.58360	2.1	4.0
39	1	5	77	8	5	77	10	3.30000	0.35590	2.7	3.8
39	1	5	80	9	16	80	10	2.66000	0.32042	2.1	3.2
39	1	5	87	10	5	87	15	1.81333	0.91485	0.4	3.6
42	1	10	73	7	20	73	10	3.83000	0.25800	3.4	4.2
42	1	10	74	10	26	74	10	3.93000	0.46400	3.1	4.4
42	1	10	75	8	28	75	9	3.96670	0.49750	3.1	4.5
42	1	10	76	7	21	76	9	4.13330	0.44160	3.4	4.7
42	1	10	77	3	12	78	9	4.17780	0.26820	3.7	4.5
42	1	10	80	9	16	80	10	3.71000	0.47714	2.7	4.1
55	1	6	73	7	20	73	10	2.18000	0.53700	1.0	2.7
55	1	6	74	10	26	74	9	2.18000	0.42900	1.2	2.6
55	1	6	75	8	28	75	10	1.86000	0.47190	0.8	2.3
55	1	6	76	7	22	76	9	1.72220	0.43900	0.5	2.5
55	1	6	77	8	5	77	10	2.34000	0.45510	1.4	3.0
55	1	6	80	9	16	80	10	1.60000	0.30912	1.1	2.2
55	1	6	87	10	6	87	0	0.00000	0.00000	0.0	0.0
68	1	4	73	1	10	74	10	2.16000	0.56000	1.2	3.1
68	1	4	74	10	26	74	9	2.03000	0.52700	1.4	2.8
68	1	4	75	8	28	75	7	1.77140	0.72960	1.0	2.9
68	1	4	76	7	22	76	8	1.27500	0.70650	0.5	2.5
68	1	4	77	8	5	77	8	2.25000	0.70100	1.5	3.5
68	1	4	80	9	16	80	10	1.74000	0.67856	0.9	2.8
68	1	4	87	10	6	87	10	2.02000	1.02502	1.1	4.0
71	1	5	73	7	19	73	10	3.56000	0.20700	3.4	4.1
71	1	5	74	8	27	74	9	3.58000	0.17600	3.2	3.8
71	1	5	75	8	28	75	9	3.60000	0.25000	3.2	3.9
71	1	5	76	7	22	76	9	3.58890	0.30190	2.9	3.9

Texas Flexible Pavement Database Project
Falling Weight SSI File

SID No.	Str No.	Lyr No.	Date MM/DD/YY	SSI Avg.	SSI Temp	SSI Reading 1 Geophone 1 - 7							SSI Reading 2 Geophone 1 - 7						
26	1	5	0/ 0/ 0	0.0	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
39	1	5	0/ 0/ 0	0.0	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
55	1	6	0/ 0/ 0	0.0	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
68	1	4	0/ 0/ 0	0.0	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
71	1	5	0/ 0/ 0	0.0	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
97	1	3	0/ 0/ 0	0.0	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
102	2	7	0/ 0/ 0	0.0	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
115	1	4	0/ 0/ 0	0.0	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
128	3	8	0/ 0/ 0	0.0	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
144	3	8	0/ 0/ 0	0.0	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
160	2	6	0/ 0/ 0	0.0	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
186	2	11	0/ 0/ 0	0.0	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
199	4	10	0/ 0/ 0	0.0	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
204	3	8	0/ 0/ 0	0.0	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
217	2	9	0/ 0/ 0	0.0	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
220	2	12	0/ 0/ 0	0.0	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
233	1	6	0/ 0/ 0	0.0	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
246	2	11	0/ 0/ 0	0.0	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
259	2	7	0/ 0/ 0	0.0	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
275	1	5	0/ 0/ 0	0.0	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
288	3	5	0/ 0/ 0	0.0	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
291	1	6	0/ 0/ 0	0.0	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
306	3	9	0/ 0/ 0	0.0	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
319	2	5	0/ 0/ 0	0.0	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
322	2	7	0/ 0/ 0	0.0	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
335	2	11	0/ 0/ 0	0.0	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
348	2	6	0/ 0/ 0	0.0	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
351	2	6	0/ 0/ 0	0.0	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
364	2	7	0/ 0/ 0	0.0	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
377	2	7	0/ 0/ 0	0.0	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
380	2	7	0/ 0/ 0	0.0	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
393	2	10	0/ 0/ 0	0.0	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
408	1	3	0/ 0/ 0	0.0	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
411	1	6	0/ 0/ 0	0.0	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
424	1	5	0/ 0/ 0	0.0	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
440	2	7	0/ 0/ 0	0.0	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
453	2	7	0/ 0/ 0	0.0	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
466	1	5	0/ 0/ 0	0.0	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
479	1	6	0/ 0/ 0	0.0	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
482	1	5	0/ 0/ 0	0.0	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
495	1	5	0/ 0/ 0	0.0	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
526	1	6	0/ 0/ 0	0.0	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
539	3	10	0/ 0/ 0	0.0	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
542	1	4	0/ 0/ 0	0.0	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
555	1	7	0/ 0/ 0	0.0	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
568	1	6	0/ 0/ 0	0.0	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

Texas Flexible Pavement Database
Dynaflect Measurement File

SID No.	Struc No.	Layer Numbr	Year	Month	Day	Station	Sensor Readings 1	2	3	4	5
13	1	4	76	8	10	1	0.570	0.540	0.470	0.380	0.320
13	1	4	76	8	10	2	0.620	0.590	0.530	0.430	0.360
13	1	4	76	8	10	3	0.246	0.231	0.189	0.138	0.102
13	1	4	76	8	10	4	0.252	0.228	0.180	0.126	0.090
13	1	4	76	8	10	5	0.560	0.530	0.460	0.370	0.310
13	1	4	76	8	10	6	0.680	0.650	0.560	0.450	0.370
13	1	4	76	8	10	7	0.450	0.430	0.380	0.300	0.240
13	1	4	76	8	10	8	0.470	0.450	0.390	0.320	0.261
13	1	4	76	8	10	9	0.410	0.380	0.320	0.255	0.195
13	1	4	76	8	10	10	0.430	0.400	0.340	0.252	0.192
13	1	4	76	8	10	11	0.360	0.340	0.290	0.222	0.168
13	1	4	76	8	10	12	0.370	0.350	0.300	0.225	0.168
13	1	4	76	8	10	13	0.550	0.530	0.470	0.380	0.300
13	1	4	76	8	10	14	0.680	0.660	0.570	0.440	0.360
26	1	5	76	8	10	1	0.630	0.410	0.210	0.102	0.053
26	1	5	76	8	10	2	0.550	0.400	0.204	0.096	0.053
26	1	5	76	8	10	3	0.470	0.270	0.108	0.046	0.027
26	1	5	76	8	10	4	0.294	0.132	0.033	0.001	0.001
26	1	5	76	8	10	5	0.310	0.126	0.038	0.001	0.001
26	1	5	76	8	10	6	0.270	0.108	0.029	0.001	0.001
26	1	5	76	8	10	7	0.273	0.096	0.028	0.001	0.001
26	1	5	76	8	10	8	0.320	0.165	0.063	0.028	0.001
26	1	5	76	8	10	9	0.650	0.440	0.279	0.183	0.138
26	1	5	76	8	10	10	0.690	0.440	0.249	0.153	0.120
26	1	5	76	8	10	11	0.730	0.450	0.228	0.108	0.050
26	1	5	76	8	10	12	0.660	0.360	0.171	0.078	0.033
26	1	5	76	8	10	13	0.420	0.276	0.126	0.061	0.030
26	1	5	76	8	10	14	0.470	0.297	0.141	0.052	0.026
39	1	5	76	8	9	1	0.500	0.470	0.440	0.380	0.330
39	1	5	76	8	9	2	0.530	0.500	0.470	0.400	0.340
39	1	5	76	8	9	3	0.740	0.700	0.660	0.590	0.530
39	1	5	76	8	9	4	0.790	0.760	0.720	0.660	0.600
39	1	5	76	8	9	5	0.530	0.500	0.470	0.420	0.360
39	1	5	76	8	9	6	0.510	0.480	0.450	0.390	0.350
39	1	5	76	8	9	7	0.600	0.560	0.520	0.460	0.420
39	1	5	76	8	9	8	0.550	0.520	0.470	0.400	0.340
39	1	5	76	8	9	9	0.590	0.560	0.520	0.460	0.420
39	1	5	76	8	9	10	0.560	0.520	0.480	0.430	0.380
39	1	5	76	8	9	11	0.480	0.460	0.420	0.370	0.330
39	1	5	76	8	9	12	0.500	0.480	0.440	0.380	0.340
39	1	5	76	8	9	13	0.500	0.470	0.440	0.380	0.340
39	1	5	76	8	9	14	0.500	0.470	0.440	0.380	0.340
42	1	10	76	8	9	1	1.260	0.980	0.710	0.530	0.420

Texas Flexible Pavement Data Base Project 2456
Monitoring Data
Skid Measurement Data

Section Identification Number	Structure Number	Layer Number	Year	Month	Skid Number MEAN	Skid Number HIGH	Skid Number LOW
13	1	4	71	4	38	42	32
13	1	4	74	7	39	49	27
26	1	5	74	8	33	44	22
39	1	5	74	7	33	36	30
39	1	5	75	3	25	29	22
71	1	5	74	7	35	39	32
84	1	5	75	7	31	39	25
102	1	6	71	4	31	0	0
102	1	6	74	8	28	30	23
115	1	4	75	3	26	34	20
128	1	6	75	2	32	38	27
128	1	6	76	9	23	26	20
131	1	4	76	9	55	65	41
144	2	7	75	1	16	24	8
160	1	5	74	11	36	42	32
160	1	5	76	8	28	31	25
173	3	8	76	8	26	48	12
186	1	8	74	11	33	36	29
186	1	8	76	8	30	44	19
199	1	7	74	11	22	25	17
199	3	9	76	8	15	17	12
217	1	7	68	9	35	0	0
217	1	7	70	12	43	0	0
217	1	7	72	10	38	0	0
217	1	7	74	11	34	38	32
220	1	11	75	7	42	60	25
220	1	11	75	10	43	50	37
233	1	6	75	7	37	57	20
233	1	6	75	12	35	42	28
246	1	10	74	8	16	19	13
259	1	6	75	12	30	42	21
275	1	5	76	4	35	48	21
291	1	6	76	5	33	43	20
319	1	4	76	6	44	54	24
335	2	11	76	8	48	49	46
351	2	6	76	7	40	46	34
393	2	7	76	6	41	43	36
424	1	5	76	8	47	50	45
437	1	6	73	5	28	37	15
437	1	6	76	1	31	48	13
440	1	6	75	4	40	52	24
440	1	6	75	4	39	54	22
453	1	6	76	1	34	51	19
453	1	6	76	1	36	55	18
479	1	6	74	6	25	29	18
479	1	6	74	6	24	33	19

Texas Flexible Pavement Data Base Project 2456

Traffic File

Section Identification Number	Year	Average Annual Daily Traffic (ONE-WAY)	Annual 18KIP Equivalent Axis Loads (ONE-WAY)	Percent Trucks
13	1933	386	54259	17.7
13	1934	486	63188	17.7
13	1935	586	71027	17.7
13	1936	686	78009	17.7
13	1937	702	79091	17.7
13	1938	719	80187	17.7
13	1939	736	81233	17.7
13	1940	792	84689	17.7
13	1941	849	87994	17.7
13	1942	906	91108	17.7
13	1943	912	91457	17.7
13	1944	919	91830	17.7
13	1945	926	92175	17.7
13	1946	986	95269	17.7
13	1947	1046	98217	17.7
13	1948	1106	101031	17.7
13	1949	1206	105453	17.7
13	1950	1306	109576	17.7
13	1951	1406	113436	17.7
13	1952	1494	116656	17.7
13	1953	1582	119692	17.7
13	1954	1670	122594	17.7
13	1955	1660	122274	17.7
13	1956	1650	121951	17.7
13	1957	1640	121627	17.7
13	1958	1536	118107	17.7
13	1959	1430	114364	17.7
13	1960	1326	110368	17.7
13	1961	1349	111286	17.7
13	1962	1372	112171	17.7
13	1963	1396	113061	17.7
13	1964	1502	116939	17.7
13	1965	1609	120593	17.7
13	1966	1716	124016	17.7
13	1967	1806	126773	17.7
13	1968	1896	129387	17.7
13	1969	2058	133805	17.7
13	1970	2050	133595	17.7
13	1971	1974	130646	17.7
13	1972	1979	130773	17.7
13	1973	2111	134271	17.7
13	1974	1953	129654	17.7
13	1975	1859	126969	17.7
13	1976	1840	64875	9.9
13	1977	1823	64686	9.9
13	1978	2074	71301	9.9

Texas Flexible Pavement Data Base Project 2456
Environmental Data
Environment Data

County No	Thornwaite Index Mean	Thornwaite Index Std. Dev.	Thornewaite Index Years
1	12.510	26.102	20
2	-39.322	7.059	20
3	11.692	23.917	20
4	-10.252	18.861	20
5	-16.158	12.329	20
6	-17.534	11.719	20
7	-22.308	16.070	20
8	4.458	23.532	20
9	-21.861	8.537	20
10	-11.434	17.491	20
11	-10.698	18.953	20
12	-18.964	10.214	20
13	-15.863	13.017	20
14	-12.490	16.739	20
15	-15.722	16.517	20
16	-6.667	24.871	20
17	-30.379	7.260	20
18	-10.233	16.502	20
19	49.059	29.631	20
20	38.530	40.910	20
21	4.594	23.644	20
22	-31.617	7.766	20
23	-17.867	12.314	20
24	-28.007	14.497	19
25	-19.138	12.262	20
26	2.098	24.167	20
27	-13.876	15.861	20
28	-6.157	19.694	20
29	1.149	25.127	20
30	-19.656	16.029	20
31	-27.658	11.298	20
32	47.402	42.416	20
33	-18.714	11.884	20
34	49.248	37.978	20
35	-22.058	10.633	20
36	39.103	30.818	20
37	35.322	35.257	20
38	-26.099	11.647	20
39	-0.182	16.905	20
40	-20.445	9.937	20
41	-28.632	8.543	20
42	-16.595	11.536	20
43	16.131	25.030	20
44	-22.757	14.597	20
45	5.619	24.601	20
46	-9.788	16.484	20

Texas Flexible Pavement Data Base Project 2456
Environmental Data
Weather File

CNTY No.	Mth	PREC YRS	PRECMN	PRECSD	TFTC YRS	TFTCMN	TFTCSD	WFTC YRS	WFTCMN	WFTCSD	MTMP YRS	MTMPMN	MTMPSD	ATMP YRS	ATMPMN	ATMPSD
1	1	19	3.179	2.053	18	9.111	3.160	18	1.889	1.183	18	55.611	3.791	18	45.056	3.369
1	2	18	3.042	1.392	18	5.111	3.142	18	1.111	1.278	18	61.056	3.718	18	49.667	3.614
1	3	20	3.254	2.100	20	1.700	1.949	20	0.250	0.550	20	68.100	5.015	20	56.650	4.344
1	4	20	4.640	2.890	20	0.000	0.000	20	0.000	0.000	20	76.900	2.936	20	66.300	2.831
1	5	20	4.638	3.623	20	0.000	0.000	20	0.000	0.000	20	83.750	1.860	20	73.200	1.766
1	6	20	3.976	3.270	20	0.000	0.000	20	0.000	0.000	20	89.850	2.207	20	79.150	1.631
1	7	20	1.808	1.645	20	0.000	0.000	20	0.000	0.000	20	94.600	3.033	20	82.900	2.150
1	8	20	3.309	2.442	20	0.000	0.000	20	0.000	0.000	20	94.450	3.086	20	82.200	2.118
1	9	19	4.066	2.305	19	0.000	0.000	19	0.000	0.000	19	88.000	3.543	19	76.632	2.608
1	10	20	4.098	3.431	20	0.000	0.000	20	0.000	0.000	20	79.900	3.386	20	67.500	2.705
1	11	20	3.249	1.711	20	1.700	2.155	20	0.200	0.410	20	68.100	3.582	20	56.600	3.440
1	12	20	3.568	1.939	20	6.500	3.547	20	1.050	1.820	20	59.850	3.717	20	48.900	3.655
2	1	20	0.484	0.565	20	16.700	4.932	20	0.850	1.137	20	58.300	4.054	20	43.250	3.307
2	2	19	0.449	0.469	20	10.400	4.784	19	0.684	0.885	20	62.550	4.212	20	47.250	3.522
2	3	20	0.550	0.816	20	5.200	3.888	20	0.450	0.826	20	70.900	5.281	20	54.850	4.416
2	4	20	0.677	0.727	20	0.500	1.318	20	0.000	0.000	20	80.300	3.063	20	64.400	2.927
2	5	20	1.390	0.843	20	0.000	0.000	20	0.000	0.000	20	88.250	2.954	20	72.900	2.614
2	6	20	1.388	1.205	20	0.000	0.000	20	0.000	0.000	20	94.100	2.614	20	79.650	2.777
2	7	20	2.564	1.586	20	0.000	0.000	20	0.000	0.000	20	94.900	2.732	20	81.450	2.482
2	8	20	1.935	1.695	20	0.000	0.000	20	0.000	0.000	20	93.150	3.345	20	79.900	2.918
2	9	20	1.965	1.858	20	0.000	0.000	20	0.000	0.000	20	86.900	3.782	20	73.950	2.819
2	10	20	1.589	1.571	20	0.000	0.000	20	0.000	0.000	20	78.550	3.692	20	64.450	2.351
2	11	20	0.335	0.426	20	4.500	3.035	20	0.400	0.681	20	66.300	4.219	20	52.400	3.152
2	12	20	0.307	0.348	20	13.600	4.935	20	0.800	1.642	20	59.700	3.743	20	45.350	2.777
3	1	20	3.619	2.852	20	8.350	3.183	20	1.150	1.089	20	59.000	3.524	20	48.100	3.355
3	2	20	3.145	1.440	20	4.800	3.105	20	0.550	0.887	20	62.900	4.229	20	51.350	4.017
3	3	20	3.110	1.890	20	1.600	1.536	20	0.100	0.308	20	70.850	4.716	20	58.700	4.144
3	4	20	4.567	2.590	20	0.000	0.000	20	0.000	0.000	20	79.100	2.674	20	67.750	2.900
3	5	20	3.807	1.940	20	0.000	0.000	20	0.000	0.000	20	85.450	1.469	20	74.450	1.433
3	6	20	3.744	2.664	20	0.000	0.000	20	0.000	0.000	20	90.500	1.821	20	79.750	1.410
3	7	20	2.652	1.766	20	0.000	0.000	20	0.000	0.000	20	93.950	2.439	20	83.050	1.539
3	8	20	2.721	1.790	20	0.000	0.000	20	0.000	0.000	20	93.700	2.618	20	82.350	1.631
3	9	18	4.398	3.101	19	0.000	0.000	18	0.000	0.000	19	88.579	2.735	19	77.632	2.034
3	10	20	3.378	2.615	20	0.050	0.224	20	0.000	0.000	20	81.050	2.893	20	68.100	2.490
3	11	20	3.785	2.884	20	2.350	2.601	20	0.050	0.224	20	69.800	3.680	20	57.700	3.658
3	12	20	4.318	2.338	20	5.700	2.958	20	0.300	0.571	20	62.350	3.924	20	50.900	3.582
4	1	20	1.973	1.471	20	1.850	1.843	20	0.400	0.883	20	62.400	3.500	20	54.050	3.605
4	2	20	2.246	1.378	20	0.450	0.686	20	0.050	0.224	20	65.900	3.684	20	57.600	3.858
4	3	20	1.216	1.457	20	0.050	0.224	20	0.000	0.000	20	70.950	3.547	20	63.250	3.323
4	4	20	1.904	2.211	20	0.000	0.000	20	0.000	0.000	20	77.550	2.800	20	71.000	2.616
4	5	20	3.684	2.458	20	0.000	0.000	20	0.000	0.000	20	83.200	2.463	20	76.900	1.714
4	6	20	4.888	3.986	20	0.000	0.000	20	0.000	0.000	20	87.650	2.456	20	81.550	1.395
4	7	20	1.635	1.699	20	0.000	0.000	20	0.000	0.000	20	89.950	2.666	20	83.650	1.309
4	8	20	3.869	2.755	20	0.000	0.000	20	0.000	0.000	20	90.450	2.856	20	83.350	1.565
4	9	19	6.765	5.295	19	0.000	0.000	19	0.000	0.000	19	87.789	2.175	19	80.421	1.982
4	10	20	4.278	3.726	20	0.000	0.000	20	0.000	0.000	20	81.550	2.373	20	73.600	2.501

Texas Flexible Pavement Database
County Name Table

County Number	County Name
1	ANDERSON
2	ANDREWS
3	ANGELINA
4	ARANSAS
5	ARCHER
6	ARMSTRONG
7	ATASCOSA
8	AUSTIN
9	BAILEY
10	BANDERA
11	BASTROP
12	BAYLOR
13	BEE
14	BELL
15	BEXAR
16	BLANCO
17	BORDEN
18	BOSQUE
19	BOWIE
20	BRAZORIA
21	BRAZOS
22	BREWSTER
23	BRISCOE
24	BROOKS
25	BROWN
26	BURLESON
27	BURNET
28	CALDWELL
29	CALHOUN
30	CALLAHAN
31	CAMERON
32	CAMP
33	CARSON
34	CASS
35	CASTRO
36	CHAMBERS
37	CHEROKEE
38	CHILDRESS
39	CLAY
40	COCHRAN
41	COKE
42	COLEMAN
43	COLLIN
44	COLLINGSWORTH
45	COLORADO
46	COMAL

Texas Flexible Pavement Database
Material Type Classification Table

Material Classif. Code	Material Code Description	Short Code	Layer Descr
1	HOT MIX - HOT LAID	HMAC	S
2	HOT MIX-COLD LAID	HMCL	S
4	COLD MIX ROCK ASPH	CMRA	S
5	ONE COURSE SURF TRT	ST	S
6	TWO COURSE SURF TRT	DST	S
7	THREE CORSE SURF TRT	TST	S
9	RUBBER ASPH CONCRETE		S
10	OPEN GRADE FRIC COUR	FC	S
11	SEAL COAT - REGULAR	SC	S
16	BLACK BASE	ASB	S
17	PORTLAND CEMENT CONC	PCC	S
18	BLANK		
21	FLEXIBLE BASE	FB	B
22	LIME STABILIZED	LSB	B
23	CEMENT STABILIZED	CSB	B
24	ASPHALT STAB BASE	ASB	B
25	ASPHLT BASE ROAD MIX	ARM	B
27	FABRIC		B
31	FLEXIBLE	FLEX	SB
32	LIME STABIL SUBGRADE	LSS	SB
33	CEMENT STABIL SUBG	CSS	SB
41	GRAVEL		SG
42	SAND		SG
43	SILT		SG
44	CLAY		SG
45	PEAT		SG

Texas Flexible Pavement Database
Type of Pavement Table

Pavement Code	Type of Base	Surface Thickness	Comments
1	GRANULAR BASE	SURFACE TREATED	
2	GRANULAR BASE	HMAC < 2.5"	(NO SEALS)
3	GRANULAR BASE	HMAC < 2.5"	(WITH SEALS)
4	GRANULAR BASE	2.5 =< HMAC < 5.5	(NO SEALS)
5	GRANULAR BASE	2.5 =< HMAC < 5.5	(WITH SEALS)
6	GRANULAR BASE	HMAC >= 5.5	(NO SEALS)
7	GRANULAR BASE	HMAC >= 5.5	(WITH SEALS)
11	STABILIZED (CEMENT/LIME)	SURFACE TREATED	
12	STABILIZED (CEMENT/LIME)	HMAC < 2.5"	(NO SEALS)
13	STABILIZED (CEMENT/LIME)	HMAC < 2.5"	(WITH SEALS)
14	STABILIZED (CEMENT/LIME)	2.5 =< HMAC < 5.5	(NO SEALS)
15	STABILIZED (CEMENT/LIME)	2.5 =< HMAC < 5.5	(WITH SEALS)
16	STABILIZED (CEMENT/LIME)	HMAC >= 5.5	(NO SEALS)
17	STABILIZED (CEMENT/LIME)	HMAC >= 5.5	(WITH SEALS)
21	ASPHALT STABILIZED BASE	SURFACE TREATED	
22	ASPHALT STABILIZED BASE	HMAC < 2.5"	(NO SEALS)
23	ASPHALT STABILIZED BASE	HMAC < 2.5"	(WITH SEALS)
24	ASPHALT STABILIZED BASE	2.5 =< HMAC < 5.5	(NO SEALS)
25	ASPHALT STABILIZED BASE	2.5 =< HMAC < 5.5	(WITH SEALS)
26	ASPHALT STABILIZED BASE	HMAC >= 5.5	(NO SEALS)
27	ASPHALT STABILIZED BASE	HMAC >= 5.5	(WITH SEALS)
31	PCC	SURFACE TREATED	
32	PCC	HMAC < 2.5"	(NO SEALS)
33	PCC	HMAC < 2.5"	(WITH SEALS)
34	PCC	2.5 =< HMAC < 5.5	(NO SEALS)
35	PCC	2.5 =< HMAC < 5.5	(WITH SEALS)
36	PCC	HMAC >= 5.5	(NO SEALS)
37	PCC	HMAC >= 5.5	(WITH SEALS)

Texas Flexible Pavement Database
District Temperature Constant Table

District	Temperature Constant
1	21
2	22
3	22
4	9
5	16
6	23
7	26
8	26
9	28
10	24
11	28
12	33
13	33
14	31
15	31
16	36
17	30
18	26
19	25
20	32
21	38
22	31
23	25
24	24
25	19

Texas Flexible Pavement Database
Widening Flag Table

Code	Widening Description	Comments
0	No Widening	Center Thickness CAN be used
1	Widening Present	Center Thickness CAN be used for Deflection Data
2	Special Widening (Unusual)	Center Thickness CANNOT be used - Mat'l Changed in Mid lane

Texas Flexible Pavement Database
Layer Description Table

Layer Code	Short Code	Layer Description
1	OVLY	Overlay
2	SC	Seal Coat
3	OS	Original Surface
4	HMAC	HMAC Layer
5	BSLY	Base Layer
6	SBLY	Subbase Layer
7	SBGR	Subgrade
8	INTL	Interlayer
9	PRFC	Porous Friction Course
10	ST	Surface Treatment
11	EMBK	Embankment (Fill)
12	RCSF	Recycle Surface
13	PMSF	Partially Milled Surface
14	FABR	Fabric

Texas Flexible Pavement Database
Functional Classification Table

Code	Code Description
1	Interstate
2	Other Urban Freeway and Expressway
3	Rural or Urban Principal Arterials
4	Minor Arterial Road or Street
5	Rural Major or Urban Collector Street
6	Rural Minor Collectors
7	Local Road or Street

APPENDIX B - EXHIBITS

Texas Flexible Pavement Database
PES Modification Program
Missing Data Report

Hwy Dist	Hwy Sec	Cnty Num	Highway	Begin Mile pt	Hwy Des	Laneset	---Missing data---- Vis	MRM	Skd	SSI	Scr
03	08	224	US 0183	034 + 00	1	R-L			X	X	X
03	09	244	FM 0091	010 + 00	1	R-L	X		X	X	X
03	09	244	US 0183	028 + 00	1	R-L			X	X	X
04	13	033	FM 1342	010 + 00	1	R-L	X		X	X	X
04	18	033	IH 0040	104 + 00	9	R-V			X	X	
04	18	033	IH 0040	104 + 00	9	L-P			X	X	
04	18	033	IH 0040	104 + 00	9	A-C			X	X	
04	18	033	IH 0040	104 + 00	9	X-Z			X	X	
04	13	033	US 0060	026 + 00	3	R-V			X	X	
04	13	033	US 0060	026 + 00	3	L-P			X	X	
04	18	091	IH 0040	122 + 00	9	R-V			X	X	
04	18	091	IH 0040	122 + 00	9	L-P			X	X	
04	18	091	IH 0040	122 + 00	9	A-C			X	X	
04	18	091	IH 0040	122 + 00	9	X-Z			X	X	
04	06	104	FM 0998	002 + 00	1	R-L	X		X	X	
04	06	104	US 0054	034 + 00	1	R-L			X	X	X
04	06	104	US 0087	004 + 00	1	R-L			X	X	X
04	03	118	FM 1598	002 - 18	1	R-L	X		X	X	X
04	03	118	SH 0152	006 + 00	1	R-L	X		X	X	X
04	14	148	SH 0023	028 + 00	1	R-L	X		X	X	X
04	14	148	SH 0305	002 + 00	1	R-L	X		X	X	X
04	16	180	IH 0040	020 + 00	9	R-V			X	X	
04	16	180	IH 0040	020 + 00	9	L-P			X	X	
04	16	180	IH 0040	020 + 00	9	A-C			X	X	
04	16	180	IH 0040	020 + 00	9	X-Z			X	X	
04	16	180	SH 0214	004 + 00	1	R-L	X		X	X	X
04	16	180	US 0385	004 + 00	1	R-L	X		X	X	X
04	01	188	IH 0040	058 + 00	9	R-V			X	X	
04	01	188	IH 0040	058 + 00	9	L-P			X	X	
04	01	188	IH 0040	058 + 00	9	A-C			X	X	
04	01	188	IH 0040	058 + 00	9	X-Z			X	X	
04	02	188	IH 0040	066 + 00	9	R-V			X	X	
04	02	188	IH 0040	066 + 00	9	L-P			X	X	
04	02	188	IH 0040	066 + 00	9	A-C			X	X	
04	02	188	IH 0040	066 + 00	9	X-Z			X	X	
04	02	188	IH 0040	068 + 00	9	R-V			X	X	
04	02	188	IH 0040	068 + 00	9	L-P	X		X	X	
04	02	188	IH 0040	068 + 00	9	A-C			X	X	
04	02	188	IH 0040	068 + 00	9	X-Z	X		X	X	
05	11	009	US 0070	004 + 00	3	R-V			X	X	
05	11	009	US 0070	004 + 00	3	L-P			X	X	
05	11	009	US 0084	016 + 00	3	R-V			X	X	
05	11	009	US 0084	016 + 00	3	L-P			X	X	
05	03	035	US 0385	008 + 00	1	R-L			X	X	X
05	15	054	US 0082	012 + 00	3	R-V			X	X	
05	15	054	US 0082	012 + 00	3	L-P			X	X	
05	15	054	US 0082	024 + 00	3	R-V			X	X	
05	15	054	US 0082	024 + 00	3	L-P			X	X	