STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLANNING & RESEARCH DIVISION

FY2003

State Planning and Research (SPR) Program

Part 1 - Planning

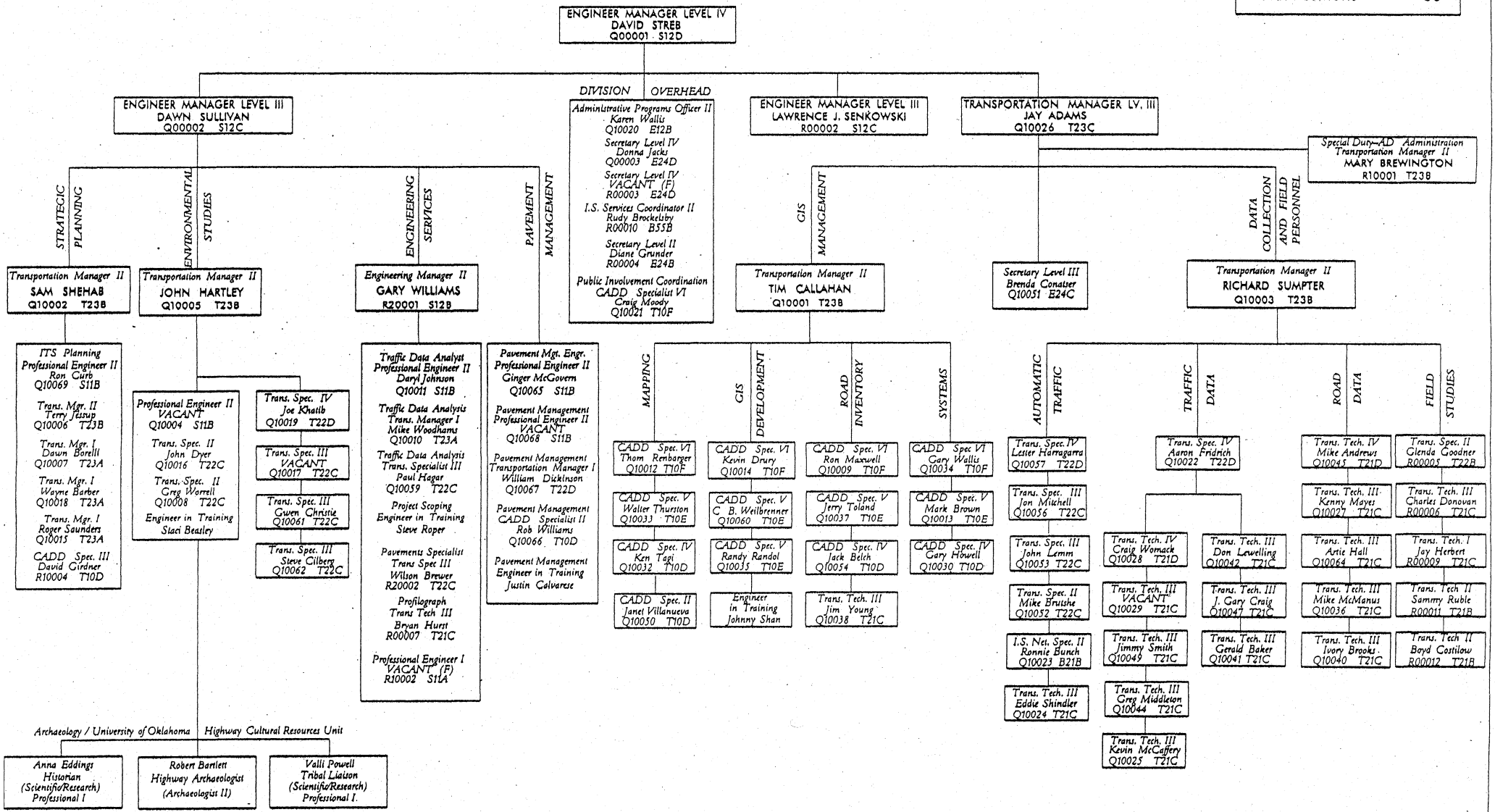
Part 2 - Research

In Cooperation with the
United States Department of Transportation
Federal Highway Administration

October 1, 2002

Planning and Research Division
Table of Organization
October 2002

Positions Filled	55
Supervisors	18
Positions Vacant	6
Engineers /Training	4
OU. Resources Unit	3
Total Positions	86



DEPARTMENT OF TRANSPORTATION
Financial Summary Sheet

Work Program Number SPRY 0010(26) PL
Fiscal Year 2002

Program Period October 1, 2002 through September 30, 2003

A. Total Estimated Costs

SPR-Part 1 Planning	$6,594,101.00
Metropolitan Planning (PL)	1,793,562.00
TOTAL ESTIMATED COSTS	$8,387,663.00

B. Available Federal Funds

Source	SPR Unobligated Balance	PL Unobligated Balance
TOTAL AVAILABLE FEDERAL FUNDS	$6,594,101.00	$1,793,562.00

C. Proposed Financing

Type	Federal	Ratio	State	Local	Total
SPR	$6,594,101.00	80%	$0.00	$0.00	$6,594,101.00
PL	$1,793,562.00	80%	$0.00	$410,890.00	$2,204,452.00
TOTAL PROPOSED FINANCING					$8,798,553.00

Work Program Number SPRY 0010(34) RS
Fiscal Year 2003

A. Total Estimated Costs

SPR-Part 2 Research	$1,687,401.00

B. Available Federal Funds

Source	SPR Unobligated Balance
TOTAL AVAILABLE FEDERAL FUNDS	$1,687,401.00

C. Proposed Financing

Type	Federal	Ratio	State	Local	Total
SPR	$1,687,401.00	80%	$0.00	$0.00	$1,687,401.00
TOTAL PROPOSED FINANCING					$1,687,401.00

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SPR Part 1

SPR Part 2

FEDERAL FISCAL YEAR 2003
OKLAHOMA PROJECT SPRY - 10(26) PL
Part 1

	PROGRAM	SPR	STATE	PL	LOCAL	TOTAL
ROAD INVENTORY						
1101	Continuing Inventory Data Studies	$522,000.00	$0.00			$522,000.00
1102	Highway Performance Monitoring System	75,501.00	$0.00			75,501.00
1103	Geographical Information System for Transportation	854,000.00	$0.00			854,000.00
	Total Road Inventory	***$1,451,501.00***	***$0.00***			***$1,451,501.00***
MAPPING						
1201	County, General Highway Transportation, Incorporated City and other Planning Maps	$220,000.00	$0.00			220,000.00
	Total Mapping	***$220,000.00***	***$0.00***			***$220,000.00***
TRAFFIC						
1301	Coverage Count Program	317,000.00	0.00			317,000.00
1302	Permanent Traffic Count	209,000.00	0.00			209,000.00
1304	Purchase of Traffic Counting Equipment	220,000.00	0.00			220,000.00
1305	Vehicle Classification Counting Program	367,000.00	0.00			367,000.00
1306	Truck Weight Study	775,000.00	0.00			775,000.00
1307	LTPP Specific Pavement Study	75,000.00	0.00			75,000.00
1308	Traffic Monitoring System	120,000.00	0.00			120,000.00
1309	Traffic Analysis and Projections	120,000.00	0.00			120,000.00
1310	Skid Studies Program	129,000.00	0.00			129,000.00
	Total Traffic	***$2,332,000.00***	***$0.00***			***$2,332,000.00***
1402	Design and Survey Standards	$0.00	$0.00			$0.00
	Total Standards	***$0.00***	***$0.00***			***$0.00***
ECONOMIC AND FISCAL						
1510	Justification Studies	5,000.00	0.00			5,000.00
1511	Scoping	70,000.00	0.00			70,000.00
	Total Economic and Fiscal	***$75,000.00***	***$0.00***			***$75,000.00***

FEDERAL FISCAL YEAR 2003
OKLAHOMA PROJECT SPRY - 10(26) PL
Part 1

	PROGRAM	SPR	STATE	PL	LOCAL	TOTAL
SYSTEMS AND PROGRAMMING						
1601	Federal Aid Systems Coordination	175,000.00	0.00			175,000.00
1603	Highway Needs Study	165,000.00	0.00			165,000.00
1604	Pavement Management	715,000.00	0.00			715,000.00
	Total Systems and Programming	***$1,055,000.00***	***$0.00***			***$1,055,000.00***
URBAN TRANSPORTATION						
1700	General Urban Planning Activities	50,000.00	0.00			50,000.00
1701	OCARTS	25,000.00	0.00	815,917.00	203,979.00	1,044,896.00
1702	Tulsa MATS	15,000.00	0.00	689,645.00	172,411.00	877,056.00
1703	Lawton MPO	15,000.00	0.00	120,000.00	30,000.00	165,000.00
1709	Fort Smith Area Study	2,500.00	0.00	18,000.00	4,500.00	25,000.00
1719	STIP	65,000.00	0.00	0.00	0.00	65,000.00
	Total Urban Transportation	***$172,500.00***	***$0.00***	***$1,643,562.00***	***$410,890.00***	***$2,226,952.00***
LONG RANGE PLANNING/ENVIRONMENTAL STUDIES						
1901	NPDES	0.00	0.00			0.00
1902	Long Range Planning Activities	10,000.00	0.00			$10,000.00
1903	ITS	140,100.00	0.00			140,100.00
1904	Air Quality Transportation Planning	25,000.00	0.00	150,000.00		175,000.00
1979	Environmental Studies	1,113,000.00	0.00			$1,113,000.00
	Total Long Range Planning/Environmental Studies	***$1,288,100.00***	***$0.00***	***$150,000.00***	***$0.00***	***$1,438,100.00***
PROJECT TOTALS		***$6,594,101.00***	***$0.00***	***$1,793,562.00***	***$410,890.00***	***$8,798,553.00***
CONTINGENCY		***$0.00***	***$0.00***			***$0.00***
GRAND TOTALS SPR -10(26)		***$6,594,101.00***	***$0.00***	***$1,793,562.00***	***$410,890.00***	***$8,798,553.00***

1101 ..... Continuing Inventory Data Studies

PURPOSE AND SCOPE: To collect, record, and compile data on the physical characteristics of all public roads and streets implementing established road inventory procedures. Maintain current Electronic Data Processing (EDP) files of inventory data and update the Department's Central Data file. Write EDP program definitions necessary to extract needed summary data from the files. Produce and publish various mileage summary tables for the state, federal and public needs. Maintain necessary information for the National Network of Defense Routes. Maintain and develop the Control Section and other unique identification systems for all public roads. Established AVMT to be used to calculate Annual Accident and Fatality Rates.

ACCOMPLISHMENTS DURING FY 2002: The County Road inventory procedures were continued with nine county inventories completed; (Alfalfa, Choctaw, Creek, Nowata, Caddo, Garfield, Jefferson, Pittsburg, and Murray) and three (Lincoln, Pawnee and Craig) in progress. Nine counties were reassessed and coded; (Caddo, Dewey, Grady, Jackson, Jefferson, Latimer, Love, Muskogee, Roger Mills) and two (Adair and Nowata) in progress. All County Action Reports were verified and processed accordingly. The Department's Highway and Open to Traffic database were revised and processed through Agenda Items, Project Reports, Needs Study revisions, and special requests. The inventory for Rural Functional Classified (RFC) Roadway was continued with four counties completed; (Dewey, Grady, Roger Mills, and Washington). The following annual publications and reports were completed; the biannual 2002-2003 Control Section Map Book, 2002 Oklahoma Total Road Mileage Book, 2002 Certification of County Road Mileage and 2002 HPMS Mileage and Travel Summary Tables.

PROPOSED ACTIVITIES FOR FY 2003 Continue coding and updating the Department's Central Database files. To implement GPS technology into our field inventory data collection. To improve procedures for the rural county inventory methods for both the aerial and ground inventory operations. Six counties are scheduled to be inventoried;(Rogers. Okmulgee, Okfuskee, Mayes, Pushmataha, and Comanche). The (2000 Census) urban functionally classified street inventory is scheduled to begin for forth-seven small urban areas and five urbanized areas. Six counties are scheduled to be reassessed and coded; (Alfalfa, Creek, Garfield, Murray, Pittsburg, and Washington). Compile and publish various state and federal reports including the biannual 2003 Statewide Mileage Table Book. Continue collecting HPMS data items. Complete the 2003 Oklahoma Total Road Mileage Book, 2003 Certification of County Road Mileage and 2003 HPMS Mileage and Travel Summary Tables. Keep abreast of the latest technological advances through attendance of seminars, conferences and workshops.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 500,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 500,000 (SPR) -0- (STATE
Estimated Cost for FY 2003	$ 522,000 (SPR) -0- (STATE)

1102 ..... **Highway Performance Monitoring System**

PURPOSE AND SCOPE: To collect, process and compile data and information as needed to prepare and submit an accurate and timely HPMS submission to the Federal Highway Administration (FHWA) according to the reporting requirements established in the HPMS Field manual and by the utilization of the FHWA HPMS software.

ACCOMPLISHMENTS DURING 2002: Data was collected from many disparate databases residing in multiple ODOT divisions. HPMS data was validated and inserted into a relational database schema. An ODOT developed visual basic program was used to convert raw data into the standard HPMS format as defined by the HPMS field manual. The HPMS data was loaded into the FHWA supported HPMS Version 5.0 software. The FHWA HPMS software was used to produce the HPMS 2002 submittal. The HPMS 2002 submittal was completed and submitted to FHWA on May 30, 2002. The State of Oklahoma was the second state in the nation to submit 2002 HPMS data. Good cooperation and coordination among the various data sources and the Planning and Research Division was a key factor to the successful submission of Oklahoma's 2002 HPMS data. HPMS data quality was improved by incorporating more up-to-date speed limit, IRI and PSR data. HPMS data access was greatly improved by publishing all HPMS 2001 universe and sample data through a map based internet browser application known as Geographical Resource Intranet Portal (GRIP). HPMS 2001 data is now easily accessible to anyone with access to the OKDOT computer network. ODOT HPMS personnel received formal hands-on training from FHWA staff emphasizing the methods and procedures required to create a submittal with the HPMS version five software. ODOT personnel conducted an initial review of the new HPMS computer based training program provided by FHWA. The HPMS / GIS database model was re-engineered and migrated from Informix to the Oracle object database model. The visual basic program used to convert raw data to the required HPMS standard format was re-engineered and new Oracle stored procedures and functions were developed.

PROPOSED ACTIVITIES FOR 2003: HPMS data collection needs will be addressed by improving the coordination of all current and future data collection efforts within ODOT. Data collection needs will also be addressed by improved communication and data sharing between ODOT and other external entities such as city and county governments, metropolitan planning organizations and the Oklahoma Turnpike Authority. HPMS 2002 data will be made available to anyone having access to the ODOT computer network by publishing all HPMS 2002 universe and sample data through the Geographical Resource Intranet Portal (GRIP). The GIS Management Branch of the Planning and Research Division will conduct HPMS computer based training as provided by the FHWA. ODOT will complete the development, testing and implementation of a new Oracle HPMS package that will convert the raw HPMS data to the standard HPMS format. ODOT will also design, develop and implement an HPMS Manager software product that will be used by HPMS personnel to manage, direct and report on all aspects of the HPMS submittal process. The linear referencing system (LRS) component of HPMS will be greatly improved by providing the FHWA with GIS geometry data reflecting the most current road network in a standard ArcView shape file format. The HPMS 2003 submittal will be delivered to FHWA no later than June 15, 2003. ODOT will keep abreast of the latest technological advances through attendance of seminars, conferences and workshops.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 150,000 (SPR) - 0 - (STATE)
Estimated Cost for FY 2002	$ 150,000 (SPR) - 0 - (STATE)
Estimated Cost for FY 2003	$ 75,001 (SPR) - 0 - (STATE)

1103 ..... Geographical Information System for Transportation

PURPOSE AND SCOPE: To design, develop and implement a Geographical Information System for Transportation (GIS-T). The GIS-T will also provide enterprise-wide intranet access to thematic map displays, aerial photography, reports, analysis tools and attribute data for multiple for multiple business layers. Business data will include road inventory, needs study, programs and projects, crashes and traffic engineering related data, bridges, pavement management information, highway performance monitoring system (HPMS) and at-grade rail crossing information. The system will support map creation by multiple display areas to include counties, State Senate districts, State House districts, US Congress districts, ODOT and FHWA transportation planners, engineers and administrators.

ACCOMPLISHMENTS DURING FY 2002: We have completed the second year of the Geographical Resource Intranet Portal (GRIP) project. ODOT provided two key personnel (Project Manager and GIS Administrator) along with critical GIS products and services supporting the GRIP project. Some key accomplishments include the following:

- Transition from the MGE environment to the Oracle Spatial/LRSx/GeoMedia Professional environment.
- Development of a road inventory data entry and maintenance system
- Migration of the HPMS submittal process from visual basis to an Oracle HPMS package
- Numerous enhancements/additions to the GRIP browser application (Version 2)
    - 15 new thermatic map displays
    - Road mileage summary reports
    - Street labeling functionality
    - Bridge inspection reports
    - Code descriptions for al business layers
    - Significant graphical user interface improvements
    - Map creation by State Senate, State House and US Congress districts display area

We also re-engineered the mileage tabulator (OKMILE) software this is used by over 200 customers throughout Oklahoma. This software allows users to select a 'from' city and a 'to' city. The official mileage is displayed between the cities and a map is drawn to show the customer the spatial location of the cities. We have also collected over 600 lane-miles of global positioning system (GPS) coordinate data and incorporated the data into ODOT base map products. We also developed additional functionality in the Oklahoma Collision Analysis Tool Set (OCATS) software. The new functionality enabled compatibility with the Oklahoma Department of Public Safety ArcIMS intranet GIS collision/citation mapping & analysis application. We developed software (Friction Analyzer) to perform friction factor tests on approximately 35% of the total highway lane-miles in the State of Oklahoma. The software determines areas where sucessive unacceptable friction values were obtained. These areas are displayed on a map that engineers use to determine roadway segments that are in need of maintenance or reconstruction due to insufficient surface course friction values. We also produced over 50 map products depicting the difference in the 1990 and 2000 urban areas.

PROPOSED ACTIVITIES FOR FY 2003: We will continue working with the GRIP consulting team to develop and implement the third year requirements of the GRIP project. Some of the third year requirements will include but are not limited to the following:

- Oversize and Overweight Routing Application
- Maintenance Reporting System
- Land Use and Environmental Planning Applications
- Airport Runway Locations
- Land tie and benchmark survey information
- Wide Area Network (WAN) locations for ODOT Information System Plan
- Map interface for the road inventory data entry and maintenance application
- HPMS Manager application to manage, guide, direct and report on the HPMS submittal process
- Network Linear Feature Maker application to support the Linear Reference System maintenance
- Incorporate Geographic Data Technologies (GDT) data for local road information

ESTIMATED TOTAL COST	CONTINUING
Programmed Amount for FY 2002	$ 900,000 (SPR) - 0 - (STATE)
Estimated Cost for FY 2002	$ 900,000 (SPR) - 0 - (STATE)
Estimated Cost for FY 2003	$ 854,000 (SPR) -0- (STATE)

1301 ..... Coverage Count Program

PURPOSE AND SCOPE: To collect traffic data on state highways, interstates and the National Functional Classified System for establishing average daily traffic volumes. Approximately 3,300 locations are counted on the highway systems and 8,500 on the secondary system that includes the county road coverage and urban city street coverage in cities over 5,000 population. State highway and interstate locations are counted on a two-year cycle along with the county and city system coverage.

Counts collected on the highway system are incorporated into an Annual Average Daily Traffic (AADT) map printed annually for distribution. Counts collected on the county and city system are recorded and retained for office use. Highway traffic maps are published for public distribution.

ACCOMPLISHMENTS DURING FY 2002: All state, county and city systems were counted in the 38 counties scheduled for the 2002 count cycle.

PROPOSED ACTIVITIES FOR FY 2003: Continue to analyze all road systems for areas where coverage is deficient, establish new count stations as needed and delete locations that are no longer of value. Count all state, county and city systems in the 39 counties scheduled for the 2003 count cycle. Attend seminars, conferences and workshops to keep abreast of the latest technological advances.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 400,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 381,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 317,000 (SPR) -0- (STATE)

1302 ..... **Permanent Traffic Count Program**

PURPOSE AND SCOPE: To collect hourly traffic data by lane for traffic monitoring design needs. There are 36 Automatic Traffic Recorder (ATR) locations and 21 Automatic Vehicle Classification (AVC) locations in Oklahoma. The traffic data obtained are the basis for seasonal and axle factor variation as recommended for traffic monitoring in FHWA's Traffic Monitoring Guide. A biennial traffic characteristic report is generated from these sites.

ACCOMPLISHMENTS DURING FY 2002: Continued installation of microwave radar detectors was completed at selected ATR and AVC sites. Additionally, ADR-1000 counters were purchased to replace the older model 241 counters. Addtional switch closure ADR-1000 counters were purchased to equipment the solar powered radar sites.

PROPOSED ACTIVITIES FOR FY 2003: Expansion of urban traffic data collection is planned for the Oklahoma City and Tulsa Metro areas. Initial study indicates that installation of radar detectors at selected sites along metro area interstates and expressways will provide a much needed enhancement of analysis capability of current urban traffic flow.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 282,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 201,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 209,000 (SPR) -0- (STATE)

1304 ..... **Purchase of Traffic Counting Equipment**

PURPOSE AND SCOPE: To improve the efficiency of our traffic counting operation by systematic replacement of older out-dated equipment and to replace stolen or damaged equipment.

ACCOMPLISHMENTS DURING FY 2002: Several types of equipment were purchased during FY 2002. Purchases included, 65 PEEK ADR 1000 counter/classifiers, 100 Diamond Traffic Tally 4 counters, 30 batteries for solar powered sites, 4 Load Controllers for new radar sites, cell phones for field personnel, and road tubes for traffic counters.

PROPOSED ACTIVITIES FOR FY 2003: To upgrade existing equipment used in all data collection programs. Additional counter/classifiers, sensors and other accessories will be purchased.

ESTIMATED TOTAL COST	**`CONTINUING**
Programmed Amount for FY 2002	$ 400,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 131,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 220,000 (SPR) -0- (STATE)

1305 ..... Vehicle Classification Counting Program

PURPOSE AND SCOPE: To gather vehicle classification data and develop estimates of the composition of traffic on the various Functional Classifications of roadways in the state and to collect complex traffic data required for planning, traffic and design studies. Data gathered and used to facilitate these studies includes machine counts, vehicle classification counts and turning movement studies with pedestrian counts.

ACCOMPLISHMENTS DURING FY 2002: Data gathered will be incorporated into the "2002 Oklahoma Traffic Characteristics Report". All 2-lane highway classification sites and 2-lane ATR (Automatic Traffic Recorder) locations were classified for 24 hours using Peek ADR-1000 machines.
A contract for vehicle classification by lane was completed with Progressive Engineering Technologies (PET) Corporation. The PET contractor classified most of the HPMS segments in urban areas and several design sites plus NBIS bridges and four-lane rural classification sites statewide. All classification data was submitted to FHWA in June 2002 using FHWA supplied VTRIS software. Data for numerous special studies were collected as follows:

(A) For the Data Collection Branch
- 3 - Turning movements with pedestrian counts
- 21 - (24 hour) Hourly Machine Counts
- 6 - (24 hour) Cumulative Machine Counts
- 236 - (24 hour) Vehicle Classification Counts

(B) For Engineering Services Branch
- 8 - Turning movements with pedestrian counts
- 294 - (24 hour) Hourly Machine Counts
- 72 - (24 hour) Cumulative Machine Counts
- 8 - (24 hour) Vehicle classification counts

(C) For the Traffic Engineering Division
- 60 - Turning movements with pedestrian counts
- 229 - (24 hour) Hourly Machine Counts
- 11 - (24 hour) Cumulative Machine Counts
- 0 - (24 hour) Vehicle classification counts

(D) For other Divisions
- 4 - Turning movements with pedestrian counts
- 18 - (24 hour) Hourly machine counts
- 0 - (24 hour) Cumulative machine counts
- 0 - (24 hour) Vehicle classification counts

PROPOSED ACTIVITIES FOR FY 2003: Vehicle classification data will continue to be collected by machine from either state forces or by contract. We are on our second year of the 3 year renewable agreement with PET Corporation beginning in July 2000. AVC (Automatic Vehicle Classification) and WIM (Weigh-in-Motion) sites will continue to be polled and statewide axle factors computed for traffic monitoring and pavement design needs and special studies data will be collected as requested. Attend seminars, conferences, workshops and set up demonstrations to keep abreast of the latest technological advances. The 2002 Traffic Characteristics Report will be published.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 350,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 351,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 367,000 (SPR) -0- (STATE)

1306 ..... Weigh- in -Motion Program

PURPOSE AND SCOPE: To collect and conduct preliminary analysis of data describing vehicle characteristics and vehicle weight trends. The Department uses this data as an intricate part of the traffic monitoring system. These data collection systems provide axle and weight factors used in design and pavement management studies and to fulfill FHWA requirements for the Strategic Highway Research Program (SHRP) and the Long Term Pavement Performance (LTPP) program . The Department operates 17 permanent weigh-in-motion (WIM) data collection sites located throughout the state.

ACCOMPLISHMENTS DURING FY 2002: The Department initated a Weigh-in-Motion Maintenance Contract which was awarded, in the 3rd quarter, to International Road Dynamics of Saskatoon Canada. The contract was for one year ending June 30, 2002 with provision for renewal for two addtional years. Site renovations began in February, followed by construction of new sites beginning in April. As worked progressed and time allowed, new site construction for two sites (1-WIM and 1 - AVC) was moved ahead from next year's program to provide for an earlier than anticipated activation. The scope of the work completed during the first year of the contract encompassed:

1) Construction of seven (7) new sites (4 WIM and 3 AVC)
2) Renovation of thirteen (13) existing sites (13 WIM and 6 AVC)
3) Routine scheduled maintenance for 17 WIM sites
4) Calibration of 17 WIM sites
5) Provision of hardware and software

PROPOSED ACTIVITIES FOR FY 2003: Authorization to proceed with work on the second year contract was approved in August 2002. The renewal contract period ends on June 30th , 2003. The scope of work to be accomplished in FY 2003 is as follows:

1) Construction of three (3) new sites (2 WIM and 1 AVC)
2) Renovation of seven (7) existing AVC sites
3) Routine scheduled maintenance for 19 WIM sites
4) On-call repair/services for 19 WIM sites
5) Calibration of 19 WIM sites
6) Data validation and reporting for 19 WIM sites
7) Provision of hardware and software

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 700,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 897,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 775,000 (SPR) -0- (STATE)

1307 ..... LTPP Specific Pavement Study

PURPOSE AND SCOPE: To initiate a pooled-fund study entitled "Long Term Pavement Performance (LTPP) Specific Pavement Study (SPS) Traffic Data Collection". The goal of this study is to improve the quality and quantity of monitored traffic data (volumes, classification and weights) on the LTPP SPS 1, 2, 5, 6 and 8 projects. A core objective of the SPS studies is to understand and quantify the relationship between pavement performance, truck volumes and axle loadings. The proposed pooled-fund study offers a unique opportunity for the States to participate in an effort to significantly advance the state of the practice of traffic data collection and advance understanding in pavement performance.

ACCOMPLISHMENTS DURING FY 2002: Submitted LTPP Pooled-Fund Study commitment forms.

PROPOSED ACTIVITIES FOR FY 2003: Install LTPP sites on I-35 North of Blackwell, OK and on US 62 near Cache, OK.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ -0- (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ -0- (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 75,000 (SPR) -0- (STATE)

1308 ..... Traffic Monitoring System

Purpose and Scope: The Traffic Monitoring System (TMS) is a comprehensive statewide traffic data gathering, editing and reporting system created to fulfill requirements of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and TEA21. The purpose of TMS is to computerize traffic estimation and reporting, including data from public and private non-state government entities.

Accomplishments During FY 2002: Annual processing was completed for traffic year 2001 and the data was checked for accuracy. The annual publication of the AADT map was completed. The implementation of the non-highway count program was completed. The complete NHS and non- highway count program was competed. The complete NHS and non-highway count site location maps were updated and stored in digital format in preparation to be used with a GIS based system.

Proposed Activities for FY 2003: Revision and restructure of existing traffic count programs. The conversion of the AADT computation process from a functional class based to a route or geographic based system. Revise and streamline process of recording and compiling short term counts. Cross training of additional personnel in daily, monthly and annual data processing. Streamline and simplify the process of editing and reporting data for HPMS and the Traffic Characteristics Report. Continue gathering data and production of the Annual Average Daily Traffic Map.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 110,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 110,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 120,000 (SPR) -0- (STATE)

1309 ..... Traffic Analysis and Projections

Purpose and Scope: Traffic forecasts provide the basis for geometric and structural design of new highways and improvement of existing highways. The existing or assigned traffic volumes are projected twenty (20) years into the future for design purposes. Also, the factors for determining Design Hourly Volume (DHV) of the ADT, percent of trucks of the DHV, and the percent of heavy trucks are prepared for each request of design traffic information.

Accomplishments During FY 2002: Design traffic information was furnished to city and county governments and various divisions within ODOT. Information prepared for the larger population areas was based on the comprehensive area and regional transportation studies conduced in those cities. Information for rural communities and small cities was prepared utilizing historical data, such as traffic volumes, vehicle use, population trends, special traffic counts and other related traffic information gathered through special studies. Approximately 64 requests for design traffic were completed. Several consultant traffic studies were overseen and edited.

Proposed Activities for FY 2003: Design traffic data will continue to be furnished for cities, counties and to ODOT divisions upon approved requests. Traffic analysis and projections will be completed, as requested for all programmed construction projects. Project Planning Reports and other required special studies will be developed. Keep informed of technological advances through attendance of seminars, conferences and workshops.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 110,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 110,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 120,000 (SPR) -0- (STATE)

1310 ..... Skid Studies Program

PURPOSE AND SCOPE: To ensure adequate skid resistance for pavement surfaces of Oklahoma's highway system in accordance with the guidelines of the Highway Safety Improvement Program and ASTM standards. The scope of the program includes: scheduled testing of all roadways comprising the National Highway System in a three-year test cycle, annual testing of all interstate highways and Strategic Highway Research Program (SHRP) sites, and special testing conducted as required.

ACCOMPLISHMENTS DURING FY 2002: The Department conducted pavement friction (skid) testing of 10,924 miles of highway and identified approximately 1180 miles of pavement with inadequate skid resistance. Skid data was collected for all state and federal highways in Divsions 5,6, and 7 as well as all Interstate highways statewide.

PROPOSED ACTIVITIES FOR FY 2003: Approximately 7,100 miles of highway is planned for testing in Divisions 4 and 8. System calibration at the Texas Transportation Institute will be scheduled in the 3rd quarter.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 196,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 129,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 129,000 (SPR) -0- (STATE)

1402 ..... Design & Survey Standards

PURPOSE AND SCOPE: The migration to MicroStation Version 8.0 and InRoads V. 8.3 introduces changes to the software and current workflows that are pervasive and major. Because of these changes, the next evolution of the ODOT CADD system will require re-training technical support personnel in most aspects of product operation and product configuration, a complete revision of support documents and re-training of personnel in the use of the new software and workflows. In addition, reduced staffing has caused a critical need in automating more processes within the workflows, and more stringent guidelines and standards for these processes. This project is to be put into place to accomplish this.

ACCOMPLISHMENTS DURING 2002: New Project

PROPOSED ACTIVITIES FOR 2003: Modify existing drafting resources to the new version of software and to include more comprehensive standards for CADD files. These resources will include Cell Libraries, Level Symbology, Font Resources, Level Tables, Settings Files, MDL Applications, Basic Macros, User Commands and the creation of Digital Leveling Standards. These will be assembled into a comprehensive CADD drafting standards manual. Create full design standardization and techniques to increase productivity and provide improved workflows within the applications, to create consistent engineering data and develop custom training to teach these methods. This will include the areas of Preference Manager, Feature Style Manager, Symbology Manager, DTM Surface Properties, Standard Typical Sections , Storm and Sanitary Applications, Plotting Applications and Visualization Applications. Investigate the current CADD procedures in place, evaluate their effectiveness and document, in manual form, the step-by-step processes for use across the Division. Individual workflows to be examined are Environment Variables, Project Creation, Existing Data Alignments, Corridor Modeling , Plan & Profile Development, Hydraulic Design, Structural Design, Cross Sections, Plotting, and Archiving. Create an Administrator's guide to MicroStation V 8 and InRoads V 8.3. to provide detailed step-by-step descriptions of the processes required to install, configure and support MicroStation and InRoads. Customized training for both the end users and the Administrators. Customized Software Development to facilitate design tasks, by automating the processes in the CADD environment, and providing technical assistance, specialized expertise while both the CADD support unit and the Design division users are gaining experience.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ - 0 - (SPR) - 0 - (STATE)
Estimated Cost for FY 2002	- 0 - (SPR) - 0 - (STATE)
Estimated Cost for FY 2003	- 0 - (SPR) - 0 - (STATE)

1510 ..... Justification Studies

Purpose and Scope: To study the economic, environmental and other effects of design features such as interchanges, grade separations, bypasses, utility structures, pedestrian structures, etc., for the purpose of determining the economic and engineering feasibility of such proposals.

Accomplishments During FY 2002: Review of consultant studies completed.

Proposed Activities for FY 2003: The Guthrie Bypass Study is on hold. Approved studies will be scheduled and conducted upon request. Consultant studies will be overseen as needed. Keep informed of technological advances through attendance of seminars, conferences and workshops.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 10,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 3,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 5,000 (SPR) -0- (STATE)

1511 ..... Scoping

PURPOSE AND SCOPE: To implement the new scoping process developed by the ODOT Process Improvement Team (PIT). This includes implementation of ODOT policy for scoping projects to recommend improvements type, including cost estimates, prior to Commission approval.

ACCOMPLISHMENTS DURING FY 2001: Implemented the new ODOT policy for scoping as developed by the Process Improvement Team. Began scoping process on several new projects, including I-44 from the Arkansas River to Yale in Tulsa County. Identified and visited projects in the Five Year Construction Program that had not already been scoped.

Summary of Scoping Activity:	Field Meetings Complete	45
	Final Scoping Reports complete	10

PROPOSED ACTIVITIES FOR FY 2002: Continue updating the current list of projects with Letting Dates indentified in FY 2006 and FY 2007, that require scoping and complete scoping activities on this list of projects. Use the new scoping process on projects, without letting dates identified, assigned through Senior Staff. Keep informed of technological advances and professional practices through attendance of seminars , conferences, and workshops.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed amount for FY 2001	$ 100,000 (SPR) -0- (STATE)
Estimated Cost for FY 2001	$ 55,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 70,000 (SPR) -0- (STATE)

1601 ..... Federal-aid Systems Coordination

PURPOSE AND SCOPE: To establish and maintain the functional classification system and Federal-aid eligibility for the Oklahoma highway system. To maintain all records, correspondence and documentation associated with the functional classification and Federal-aid eligibility of roads under local jurisdictions. To provide coordination between local jurisdictions and the Federal Hightway Administration (FHWA). To assist cities with a population of 5,000 or greater in establishing and official urban area boundary by coordinating efforts between the local jurisdiction and the FHWA. To act as a liaison between the ODOT and FHWA in determining the Federal-aid eligibility of roads under state jurisdiction. To prepare and submit agenda items and supporting documents pertaining to state highway revisions to the State Transportation Commission. To coordinate any revisions to the United States route numbered system with American Association of State Highway and Transportation Officials (AASHTO). To organize, maintain and secure all historical documents and maps pertaining to the history of the State Highway and functional classification systems.

ACCOMPLISHMENTS DURING FY 2002: We conducted field meetings with local county officials including the directors of the Association of Regional Councils (OARC) to discuss ODOT policies and procedures for rural Functional Classification revisions under Senate Bill No. 1056. Processed local government Functional classification revisions and submitted to FHWA. Published and distributed an atlas of county maps depicting the County Collector Systems and Rural Functional Classification. Coordinated U.S. route revisions with AASHTO. Revised and updated control sections and highway log. Prepared mapping to comply with Federal requirements (TEA21) pertaining to the establishment of metropolitan area boundaries. Continued transfer of Systems maps and documents to the Intergraph work stations and worked to incorporate all systems data into the GIS systems. Complied with OAC 730:10-9-8 effective Jan. 1, 2000 to maintain the State Highway Infrastructure Bank. Develop a Memorial Bridge and Highway map. Maintained and updated files and records of the State Highway System. Continued providing assistance in the development of Branch policies and procedures for the Intergraph system.

PROPOSED ACTIVITIES FOR FY 2002: Continue transfer of Systems maps and documents to the Intergraph work stations. Prepare agenda items pertaining to the State Highway System and submit to the State Transportation Commission. Prepare maps and documents pertaining to the National Highway System to be submitted to FHWA. Hold meetings for local government officials pertaining to Rural County Collector revisions under Senate Bill No. 1056 and Urban Functional changes. Revise control sections for the State Highway System as needed. Continue to develop and maintain a Memorial Bridge and Highway map. Begin mapping depicting HPMS sample sections in urban and urbanized area. Process any functional revisions requested by local government jurisdictions. Continue coordination to incorporate systems data into the GIS systems. Continue to maintain the State Highway Infrastructure Bank. Keep abreast of the latest technological advances through coordination with FHWA, seminars, conferences and workshops. Additional training for new systems will be needed.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for 2001	$ 100,000 (SPR) -0- (STATE)
Estimated Cost for FY 2001	$ 163,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 175,000 (SPR) -0- (STATE)

1603 ..... Highway Needs Study

PURPOSE AND SCOPE: To maintain up-to-date software and techniques to estimate current and future needs of the State Highway System. To publish a Needs Study & Sufficiency Report biennially showing the physical and financial needs of the State Highway System over a twenty-year period for construction, maintenance and administration. To identify the Top 25 Priority List of critical projects by Commission District. To maintain a geometric deficiency file of the State Highway System. To maintain a maintenance and construction log of highway projects. To develop, maintain and recommend a list of highway segments for removal from the State Highway System and its associated cost.

ACCOMPLISHMENTS DURING 2002: Updated the Sufficiency and Maintenance Manuals. Updated the State Highway: subsection, inventory and improvement data for the Sufficiency File prior to field collection of pertinent data. Developed a procedure to evaluate and prioritize urban interchanges for inclusion in the 2003 Study. Updated geometric data contained in the Deficiency File. Complete field revision of the Needs Study and Sufficiency Report. Began revision of the Needs Study Report, Volumes 1&2. Began revising highway standards used for planning purposes. Maintained a tracking procedure for the Transportation Improvement Corridors. Reviewed and revised the State Highway Removal Report.

PROPOSED ACTIVITIES FOR FY 2003: Finalize update of highway: subsection, systems, and inventory for the 2002 Sufficiency File. Compile and validate field data collected for the 2003 Highway Needs Study and Sufficiency Rating Report. Determine construction and maintenance cost estimates for the 2003 program. Update factors for statewide traffic, accidents, surface replacement and surface obsolescence in various programs. Update proposed Highway File for future routes. Assemble top 25 Priority List of critical highways by Transportation Commission District. Publish and distribute the 2003 Needs Study and Sufficiency Rating and the Top 25 Priority List of critical highways by Commission Districts. Finalize and publish the Proposed Highway Removals Report. Implement Needs Study Modernization Contract to upgrade all Needs Study Systems.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 80,600 (SPR) $ -0- (State)
Estimated Cost for FY 2002	$ 95,000 (SPR) $ -0- (State)
Estimated Cost for FY 2003	$ 165,000 (SPR) $ -0- (State)

PURPOSE AND SCOPE: To develop, test, and implement the Department's Pavement Management System (PMS). Maintain a computer database of pavement distress and other roadway characteristics used for the analysis of pavement condition and performance and as an aid to pavement design. Maintain application software necessary to analyze roadway information for pavement management and supply data for inclusion in the Highway Performance Monitoring System (HPMS).

ACCOMPLISHMENTS DURING FY 2003: Selected and began development of new customized PMS software. Began collection of distress data on the following:

- All NHS System
- non-NHS and non-highway HPMS sample sections in Divisions 4 and 8

PROPOSED ACTIVITIES FOR FY 2003: Develop and implement new PMS software. Finish collection of distress data as described above. Produce report on condition of NHS. Produce report on Ride Quality of Interstates. Keep informed of the latest technological advances and practices through seminars, conferences, and workshops.

ESTIMATED TOTAL COST	**CONTINUING**	
Programmed Amount for FY 2002	$ 850,000	(SPR)
	-0-	(STATE)
Estimated Cost for FY 2002	$ 842,000	(SPR)
	-0-	(STATE)
Estimated Cost for FY 2003	$ 715,000	(SPR)
	-0-	(STATE)

1700 ..... General Urban Transportation Planning Activities

PURPOSE AND SCOPE: This item includes managing the Strategic Planning Branch and the conduct of those general urban transportation planning activities which are valid planning functions but cannot be ascribed to specific transportation studies contained in the unified planning work programs. These activities include; a) coordination with appropriate ODOT staff members and Field Divisions, b) coordination with and among local, state, and federal officials, c) dissemination of social and economic data and traffic counts to the public and private sector as requested, d) providing technical assistance to urban areas at request, and e) keeping abreast with the latest technological advances in transportation planning through seminars, workshops and reading materials.

ACCOMPLISHMENTS DURING FY 2002: Coordination work was continued with appropriate ODOT staff members and Field Divisions. Socioeconomic data and traffic counts were provided, at request, to local and state officials and to citizens. Staff attended various seminars and workshops related to transportation planning and policies in order to maintain, upgrade and develop, as needed, multi modal planning expertise as required by the 3-C planning process. Assistance related to transportation planning activities was provided to urban areas. Coordination with and among local, state and federal officials was continued.

PROPOSED ACTIVITIES FOR FY 2003: Coordination with appropriate ODOT staff members, Field Divisions and local, state and federal officials will be continued. Dissemination of pertinent planning data and information will be accomplished on request. Technical assistance concerning transportation planning and the re-authorization of TEA-21 will be provided upon request. Professional enrichment of branch members will be pursued through attendance at workshops, seminars and conferences.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Cost for FY 2002	$ 50,000 (SPR) -0- (State)
Estimated Cost for FY 2002	$ 135,000 (SPR) -0- (State)
Estimated Cost for FY 2003	$ 50,000 (SPR) -0- (State)

PURPOSE AND SCOPE: To maintain up-to-date socioeconomic and land use data and a viable Long Range Transportation Plan in compliance with the provisions of TEA-21.

ACCOMPLISHMENTS DURING FY 2002: Updated TIGER File using Year 2000 geography . The Year 2000 ES 202 employment file was disaggregated into county level files. The regional traffic count database was updated on a monthly basis. Conducted travel time runs using Global Positioning system (GPS) on each of the reeurring congestion corridors. Disseminated Census 2000 data/maps to local members of the State Data Center Affiliate Program. The 2002 ACOG GIS Survey of users in the OCARTS Area was completed. The 2025 OCARTS Plan report and Technical Supplement were published and distributed. An OCARTS Boundary Extension Study was completed and approved. The MPO served on Advisory Committee for ODOT's FFY 2003 -2004 Statewide Enhancement program. Continued coordination concerning distribution, programming and monitoring of Surface Transportation Program Urbanized Area (STP-UZA) funds. COTPA continued to coordinate the Metro Transit program. Metro Link services, as well as, the Oklahoma Spirit Trolley Routes which serve downtown and the I-40/Meridian areas were continued. COTPA's Rideshare Program provided computerized matching of applicants based on geographical locations of residence and work. Monitored and evaluated 14 congestion corridors. ACOG moved toward developing the ITS Architecture. Continued development of regional Incident Management system. The Southwest Outer Loop Corridor MIS is continuing. MPO staff were involved in the ongoing Commercial Vehicle Information Systems and Networks (CVISN) planning process. Continued to work with ODEQ on monitoring CO and Ozone levels. The Clean Air Committee promoted an extensive public education campaign "Let's Clear the Air". Continued coordinating services with COTPA for transportation of the Elderly and Disabled. Updated the 2001-2003 OCARTS Area Transportation Improvement Program (TIP). The FFY 2003-2005 TIP and the FY 2003 UPWP were prepared and approved by FHWA & FTA.. The FY 2003 Agreement was executed. Received notification regarding the on-site triennial recertification review of the OCARTS planning process by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA).

PROPOSED ACTIVITIES FOR FY2003. Areas of special emphasis in FY 2003 are: Monitoring of demographic and socioeconomic data, Transportation Planning Data Management; Geographic Information System Improvements and Transportation Planning Assistance. Continue Long Range Transportation Planning, Short Range Transportation Planning, Congestion Management, Elderly and Disabled Transportation Planning and Air Quality Planning. Continue Citizen Participation and Public Information. Continue Program Coordination and Local Technical Assistance. Maintain staff training and dissemination of planning documents. Continue management of the planning process.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 20,000 (SPR) $ -0- (State) $ 786,134 (PL) $ 196,534 (Local)
Estimated Cost for FY 2002	$ 25,000 (SPR) $ -0- (State) $ 660,000 (PL) $ 165,000 (Local)
Estimated Cost for FY 2003	$ 25,000 (SPR) $ -0- (State) $ 815,917 (PL) $ 203,979 (Local)

1702 ..... Tulsa Metropolitan Area Transportation Study

PURPOSE AND SCOPE: To maintain up-to-date socioeconomic and land use data and a viable Long Range Transportation Plan (LRTP) in compliance with provisions of TEA-21 and all applicable transportation planning regulations for urbanized areas.

ACCOMPLISHMENTS DURING FY 2002: Elements of the *2025Mobility Plan*, LRTP, were continued as described in the FY 2002 UPWP. A Joint Certification Statement between ODOT and the Indian Nations Council of Governments (INCOG) was signed. Preparation and finalization of the FY 2003 UPWP was completed. The FY 2003 Agreement was executed and authorization to expend federal funds effective July 1, 2002 through June 30, 2003 was granted by the FHWA. Public involvement activities was continued. Technical support was provided to Oklahoma Department of Environmental Quality (DEQ) and the Tulsa City-County Health Department to maintain compliance with Federal Clean Air Act provisions and new National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter. Continued support of Ozone Alert and MERIT programs. Conducted broad based pubic involvement activities in support of the planning process, air quality and transit programs. The INCOG area FY 2003 - 2005 TIP was prepared and approved. The draft of the 2025 Mobility Plan was finalizes, published and distributed.

PROPOSED ACTIVITIES DURING FY 2003: Implementation of the FY 2003 UPWP: traffic counts collection; accident data analysis; truck and travel estimates; gathering material to support the Incident and Congestion (including incidents) Management Systems; complete the ITS study and initiate deployment; continue monitoring of O3 and CO emissions; initiate air quality inventory and modeling; improve the private sector participation opportunities in providing transit services; continue the ride share and car pool assistance programs and providing technical support to the Oklahoma DEQ and Tulsa City-County Health Department; continue implementation of the Ozone Alert days and MERIT programs; a public information/education program on air quality will be maintained and supported especially the 8-hour ozone standards and the new NAAQS standards for particulate matter. The FY 2004 UPWP will be prepared in full compliance with the re-authorized TEA-21. Administration of the urbanized STP funds project selection process will be maintained. The FY 2003 Joint Certification Statement and the FY 2004 Agreement will be prepared and executed. Continue staff training, education and attendance at workshops and seminars.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 15,000 (SPR) -0- (State) $ 615,113 (PL) $ 153,778 (Local)
Estimated Cost for FY 2002	$ 10,000 (SPR) -0- (State) $ 496,675 (PL) $ 124,169 (Local)
Estimated Cost for FY 2003	$ 15,000 (SPR) -0- (State) $ 689,645 (PL) $ 172,411 (Local)

1703 ..... **Lawton Metropolitan Area Transportation Study**

PURPOSE AND SCOPE: To maintain an up-to-date socioeconomic and land use data and a viable Long Range Transportation Plan in compliance with the provisions of TEA-21.

ACCOMPLISHMENTS DURING FY 2002: Transportation Planning for the Lawton Metropolitan Area was carried out as described in the Unified Planning Work Program (UPWP) FY 2002. This consisted of monitoring and updating the socioeconomic, land use, and traffic data and Geographic Base File/DIME File and the TIGER file. General administrative functions between the local, state, and federal agencies were continued as well as staff education and training. A public transit service was initiated in FY 2002. A 2002 Joint Certification Statement between ODOT and LMAPC was signed and the FY 2003 UPWP was completed in accordance with TEA-21. The FY 2003 Agreement was executed and authorization to expend federal funds was granted by the FHWA. The public participation plan was updated, circulated to the public and state and federal agencies, and adopted. The FY 2003 - 2005 Transportation Improvement Program (TIP) was compiled, circulated, and approved.

PROPOSED ACTIVITIES FOR FY 2003: Continue to ensure that the basic socioeconomic and other data needed to continue the transportation planning process is update utilizing the most current available data. Continue to work with the City of Lawton in maintaining recently instituted transit services. Implement short-range transportation activities derived from the long-range transportation plan. Continue staff education and training. Prepare the FY 2004 UPWP, execute the FY 2004 Agreement, and ensure a FY 2003 Joint Certification Statement.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002:	$ 10,000 (SPR)
	$ -0- (State)
	$ 192,019 (PL)
	$ 48,005 (Local)
Estimated Cost for FY 2002:	$ 15,000 (SPR)
	$ -0- (State)
	$ 125,698 (PL)
	$ 31,425 (Local)
Estimated Cost for FY 2003:	$ 15,000 (SPR)
	$ -0- (State)
	$ 120,000 (PL)
	$ 30,000 (Local)

1709 ..... Fort Smith Area Transportation Study

PURPOSE AND SCOPE: To maintain up-to-date socioeconomic and land use data and a viable Long Range Transportation Plan in compliance with the provisions of TEA-21 and all applicable transportation planning regulations for urbanized area.

ACCOMPLISHMENTS DURING FY 2002: The tasks listed in the FY 2002 Unified Planning Work Program (UPWP) were completed. Continued analysis of the transportation and socioeconomic elements of the Long Range Transportation Plan were continued. Staff continued to collect data on proposed corridors for a controlled-access facility in the Oklahoma portion of the Ft. Smith metropolitan planning area. General administrative functions and coordination among the local, state, and federal agencies was continued. The FY 2003 Agreement was prepared and executed. The FY 2003 UPWP was prepared and approved. The FY 2003 -2005 Transportation Improvement Program (TIP) was developed and approved.

PROPOSED ACTIVITIES FOR FY 2003: The Oklahoma Department of Transportation will continue coordination with the Arkhoma Regional Planning Commission and the Arkansas DOT in maintaining the 3-C planning process in the Fort Smith metropolitan area. Preparation of the FY 2004 UPWP and Agreement will be accomplished. Continued staff education, training, and attendance at workshops and seminars.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002:	$ 1,000 (SPR) $ -0- (State) $ 8,000 (PL) $ 2,000 (Local)
Estimated Cost for FY 2002:	$ 2,500 (SPR) $ -0- (State) $ 5,890 (PL) $ -0- (Local)
Estimated Cost for FY 2003:	$ 2,500 (SPR) $ -0- (State) $ 18,000 (PL) $ 4,500 (Local)

1719 ..... Statewide Transportation Improvement Program (STIP)

PURPOSE AND SCOPE: To develop, maintain and amend a financially-constrained three year federally funded transportation construction program for the State of Oklahoma in compliance with TEA-21 and in cooperation with the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), three Metropolitan Planning Organizations (MPO): ACOG - Association of Central Oklahoma Governments, INCOG - Indian Nations Council of Governments and LMAPC - Lawton Metropolitan Area Planning Commission, Bureau of Indian Affairs (BIA) and Tribes.

ACCOMPLISHMENTS DURING FY 2002: Developed the FFY 2003 - 2005 Statewide Transportation Improvement Program for implementation. Maintained the FFY 2001 - 2003 Statewide Transportation Improvement Program through the following amendment process:
All Amendments of the FFY 2001 - 2003 Statewide Transportation Improvement Program (STIP) and TIPs have been completed in accordance with the Approved Procedures for Developing and Amending the STIP and TIP. The Process includes publication of proposed amendment for a minimum of 14 days for review and comment. The public involvement process was completed in accordance with TEA 21 Section 1203 and 1204, regarding publication of project amendments.

The FFY 2003 - 2005 STIP contains an Executive Introduction of Transportation Commission with Table of Organization; Definition and Explanation of the STIP; Projected Revenues and Expenditures Summary; FFY 2003,2004 and 2005 Construction Programs; Construction Project Map for FFY 2003-2005; Introduction and Explanation of MPOs with listing; ACOG TIP; INCOG TIP; LMAPC TIP; Indian Reservation Roads Transportation Improvement Program (TIP); Explanation of the STIP process; STIP and TIP Development and Amendment Procedures; Joint Memorandum between FHWA and FTA; Certification.

FFY 2003-2005 STIP was developed in accordance with the Procedures for Developing and Amending the STIP and TIP approved by the Department of Transportation, Federal Highway Administration, Federal Transit Administration, ACOG, INCOG and LMAPC.

PROPOSED ACTIVITIES FOR FY2003. Areas of special emphasis in FY 2003 are: Maintaining the FFY 2003 portion of the current STIP through the approved STIP/TIP Amendment Procedures. Develop a more accurate FFY 2003-2005 STIP, in its entirety, through the Approved Procedures for Developing and Amending the STIP and TIP.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 60,000 (SPR) $ -0- (State)
Estimated Cost for FY 2002	$ 58,000 (SPR) $ -0- (State)
Estimated Cost for FY 2003	$ 65,000 (SPR) $ -0- (State)

1901 ..... National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permits

PURPOSE AND SCOPE: The United States Environmental Protection Agency (EPA) has promulgated regulations in 40 CFR 122 requiring municipalities with a population over 250,000 to obtain a National Pollutant Discharge Elimination System (NPDES) permit for their separate stormwater sewer systems. ODOT is required under this regulation to obtain a permit for its stormwater runoff system within the cities of Oklahoma City (OKC) and Tulsa city limits. ODOT selected the option to be a CO-permittee with the City of Oklahoma City and Tulsa in obtaining an NPDES permit. ODOT, OKC, Tulsa and the EPA selected one of the test outfalls located in each city to represent highway runoff. ODOT does not have the expertise or staff available to perform the storm sewer outfall water testing required under this permit. ODOT has a Memorandum of Understanding with OKC and Tulsa for performing the testing and report writing necessary to monitor the outfall selected to be representative of highway runoff.

ACCOMPLISHMENTS DURING FY 2002: Completed annual reports for Oklahoma City and Tulsa for submission to EPA. Completed required stormwater runoff testing.

PROPOSED ACTIVITIES FOR FY 2003: Conduct required stormwater runoff testing and monitoring, prepare ODOT section for, and review, annual OKC and Tulsa NPDES MS4 reports prior to submission to EPA.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 160,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 152,000 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ -0- (SPR) -0- (STATE)

1902 ..... Statewide Long Range Transportation Planning

PURPOSE AND SCOPE: To update and maintain current data associated with the Statewide Intermodal Transportation Plan (SITP) in accordance with the provisions of TEA-21. To conduct and/or participate in the project development of the Transportation Improvement Corridors (TIC) in compliance with the policies in the SITP and other corridors as needed.

ACCOMPLISHMENTS DURING FY 2001: The Planning Division's Strategic Planning Branch continued with utilization and working with the Needs Study (Item number 603). A TIC study on US-59 in Delaware and Ottawa Counties was completed. The 2000-2025 Statewide Intermodal Transportation Plan was completed by finishing a second round of public involvement meetings, a report from an Intermodal Advisory Committee, and a series of consultant reports on transportation economic analysis, freight movements and intermodal analysis. The 2000-2025 Plan was approved by the Transportation Commission, published, and distributed. Staff attended seminars and meetings relating to air quality issues and draft regulations implementing the Statewide planning regulations of TEA-21, ITS and streamlining the Environmental process. Grant applications for the National corridor Planning and Development program were completed for the I-35 High Priority Corridor in the Oklahoma City Transportation Management Area and the US-412 High Priority Corridor in the Tulsa Transportation Management Area.

PROPOSED ACTIVITIES FOR FY 2002: Monitor transportation trends relative to the 2000-2025 Statewide Intermodal Transportation Plan. Initiate/participate and complete corridor studies on Transportation Improvement Corridors and other important corridors in the State. Oversee the SH-3 Corridor Study in southeast Oklahoma conducted by Carter Burgess. Implement and update if necessary the freight forecasting model. Continue to attend conferences and training courses related to Statewide and Corridor planning. Continue staff training and education regarding TEA-21 and air quality issues relating to Statewide and Corridor planning.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2001	$ 150,000 (SPR) -0- (STATE)
Estimated Cost for FY 2001	$ 45,000 (SPR) -0- (STATE)
Estimated Cost for FY 2002	$ 10,000 (SPR) -0- (STATE)

1903 ..... Intelligent Transportation Systems Planning Activities

PURPOSE AND SCOPE: Incorporate Intelligent Transportation Systems (ITS) into the transportation planning process in compliance with the provisions of TEA-21. Use an ITS Integration Strategy by defining roles, responsibilities and shared operational strategies to address key policy and operational issues creating a conceptual design for ITS in the Planning area. Ensure the interoperability and institutional/technical integration of ITS efforts through compliance with an ITS Statewide and Regional Architectures and related ITS Standards.

ACCOMPLISHMENTS DURING FY 2002: Assisted Oklahoma City Metropolitan Planning Organization (MPO) by serving on ITS committees for Incident Management, Quick Clearance Policy and Technology/Operations. Assisted Oklahoma City MPO in the development of a regional ITS architecture. Secured ITS Integration funding to update Oklahoma City ITS Architecture, continued development of a Statewide ITS Architecture and Strategic Plan, continued development of a Tulsa Area Initial ITS Deployment Study, and developed a business plan and top-level design for Oklahoma's participation in the Commercial Vehicle Information Systems and Networks (CVISN) program.

PROPOSED ACTIVITIES FOR FY 2003: In coordination with MPOs and other state and local agencies, maintain the Oklahoma City ITS Architecture, complete and maintain a Statewide ITS Architecture and Strategic Plan, complete an Integration Demonstration project, complete and maintain a Tulsa Area ITS Architecture, assist Oklahoma City and Tulsa areas with development of Incident Management procedures and training, and develop project level architectures for Oklahoma's CVISN and ITS programs.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 80,000 (SPR) $ -0- (State)
Estimated Cost for FY 2002	$ 90,000 (SPR) $ -0- (State)
Estimated Cost for FY 2003	$ 150,000 (SPR) $ -0- (State)

PURPOSE AND SCOPE: To monitor and participate in air quality transportation planning developments relating to requirements of the Clean Air Act Amendments and TEA-21. To represent the Department in air quality nonattainment and transportation conformity developments and actions, if necessary. To analyze and comment on air quality nonattainment and transportation regulations and law. To maintain information flow to and from decision-makers regarding air quality/transportation issues, developments, regulations and laws. To develop staff personnel to participate in air quality/transportation planning. To enable the Department to be a progressive participant in reducing the impacts of transportation-related pollution.

ACCOMPLISHMENTS DURING FY 2002: The following actions occurred during FY 2002: participation in the air quality/transportation planning activities of the Lawton, Oklahoma City, and Tulsa Metropolitan Planning Organizations; research and development of resource materials on air quality/transportation issues; and review and comment on MPO air quality education programs. Coordinate the planning process for air quality modeling funding and actions between the State's MPOs, ODOT, and the Oklahoma Department of Environmental Quality (ODEQ); monitoring air quality court decisions on new ozone and particulate matter regulations and regulatory agency (Environmental Protection Agency - EPA) actions toward implementing new National Ambient Air Quality Standards (NAAQS) for these pollutants.

PROPOSED ACTIVITIES FOR FY 2003: Maintain research and participation in air quality/transportation issues, developments, regulations and laws. Participate in Memorandum of Agreement and other requirements (transportation conformity) of nonattainment status if any area of the State becomes nonattainment. Provide data for air quality modeling efforts. Continue to develop education materials and courses for Department personnel regarding air quality and transportation. Participate in MPO and Oklahoma Department of Environmental air quality/transportation initiatives, educational programs, and efforts to reduce pollution. Continue staff education through FHWA, EPA, NHI, NTI and other agency courses, seminars, and conferences.

Provide partial funding for ODEQ air quality modeling efforts for a statewide model for ozone pollution. The Tulsa Metropolitan Area will likely become a nonattainment area for ozone in 2003 and ODEQ models are needed to determine sources, budgets, and control measures for a Statewide Implementation Plan (SIP) for ozone. Partial funding for ODEQ modeling will aid in assessing transportation (mobile) source budgets, any mobile source control measures, and in required transportation conformity determinations.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002:	$ 30,000 (SPR) $ -0- (State)
Estimated Cost for FY 2002:	$ 19,000 (SPR) $ -0- (State)
Estimated Cost for FY 2003:	$ 25,000 (SPR) $ -0- (State) $ 75,000 (PL - INCOG) $ 75,000 (PL - ACOG)

PURPOSE AND SCOPE: This item includes all tasks required to provide an accurate assessment of the environmental impacts of proposed transportation facilities. Major environmental issues include historic and archaeological resources, endangered species and other wildlife concerns, wetlands, social and economic impacts, including disproportionate impacts to minorities and low income communities, noise, air quality, water quality, and hazardous materials. Studies by in-house or contracted interdisciplinary specialists are conducted and form the basis of the subsequent assessment conducted in cooperation with FHWA. Based upon the nature of the proposed undertaking and likely magnitude of impacts, a decision is made regarding the appropriate level of NEPA review (Categorical Exclusion - CE, Environmental Assessment - EA, or Environmental Impact Assessment - EIS) required to adequately evaluate and document the environmental impacts of proposed projects. The input of appropriate state and federal agencies, Native American tribes, and other appropriate entities is solicited and a plan for public involvement is formulated and executed when necessary. The preparation of the necessary NEPA review documents is performed in-house or by consultants retained through contracts with four on-call environmental firms. Environmental oversight is also provided for state CIP projects, ranging from reviews of NEPA work undertaken by CIP consultants to in-house studies and documents. All draft documents are reviewed jointly by in-house coordinators and FHWA and finalized for presentation to the public and other review entities. Following all comments, the final documents are provided to FHWA for execution of appropriate concurrences, FONSI's or ROD's. Also included in this item is the processing of Section 404 and FEMA permits for state and local transportation projects, and the review of proposed right-of-way releases for consistency with environmental clearances.

ACCOMPLISHMENTS DURING FY2002: The NEPA review process was completed for a total of 170 state and local transportation projects, including 167 projects processed as categorical exclusions and 3 as environmental assessments. Public involvement, including formal meetings and hearings as well as informal citizen/stakeholder meetings, was an important component of 10 completed projects. NEPA review is underway on another 30 projects. A major focus has been expedited review of undertakings proposed for funding with GARVEE bonds. 5 of the clearances above were of GARVEE projects. A total of 115 Phase I cultural resources studies were completed in-house, including consultation with SHPO and appropriate Tribal officials. Additional NRHP evaluation and mitigation work was completed or is in progress for 8 projects. Studies resulted in the identification and assessment of 64 historic structures and 20 archaeological sites. HABS/HAER Documentation was completed for 3 NRHP bridges , 2 of which will be relocated to new sites. 172 Projects were reviewed for biological/wetlands impacts, including 73 wetland assessments, 98 informal consultations for endangered species, and 1 formal consultation. 171 Section 404 and 34 FEMA permits were processed. Initial site assessments and LUST reviews were completed for 116 projects. Preliminary Site Investigations for hazardous wastes were completed for 6 projects. 12 TMN noise studies were undertaken. Significant effort was devoted to expedited reviews and agency coordination for the I-40/Arkansas River bridge collapse. Work continues on updating the Statewide archaeological inventory and reviewing utility permits on Department R/W for archaeological involvements. Our Interagency Agreement with the University of Oklahoma for biological studies was expanded to provide for a full-time highway biologist position at the Oklahoma Biological Survey. Contracts are underway with four consulting firms to provide on-call environmental (NEPA) services, and work orders have been for services on 6 EA-level projects and several specialist reviews.

PROPOSED ACTIVITIES FOR FY2003: Continue routine NEPA and environmental impact review of federal, state and local transportation projects, including oversight of CIP Phase II projects. Continue work with SHPO and National Park Service on project to develop documentation and management plan for original Route 66 roadbed sections in Oklahoma. Continue to improve and expedite tribal consultation processes and help implement MOU with Seminole nation for protection of traditional plant resources. Continue to explore opportunities for establishment of wetland banks. Continue to improve coordination and consultation with USFWS regarding E/T species and development of creative consultation and mitigation measures. Execute programmatic agreement with FHWA for Section 106 consultation and develop program to assume Section 106/NEPA responsibilities for all FHWA-funded activities in Oklahoma. Improve mechanisms for early coordination with FHWA and other federal land owning agencies in Oklahoma to streamline NEPA process and document preparation. Participate in workshops, conferences, and meetings to keep abreast of best practices and regulatory changes; where appropriate, assume leadership roles in work-related professional organizations and committees.

ESTIMATED TOTAL COST	CONTINUING
Programmed Amount for FY2002	$ 1,300,000 (SPR) -0- (State)
Estimated Cost for FY 2002	$ 1,182,000 (SPR) -0- (State)
Estimated Cost for FY 2003	$ 1,113,000 (SPR) -0- (State)

FEDERAL FISCAL YEAR 2003
OKLAHOMA PROJECT SPRY - 10(34) RS
Part 2

	PROGRAM	SPR	STATE	FHWA	TOTAL
2100	Transportation Research Board	$98,000.00	$0.00		98,000.00
2102	Research Library Services	50,000.00	0.00		50,000.00
2112	Technology Transfer Support Program - OU	0.00	0.00		0.00
2115	Long Term Pavement Proformance	25,000.00	0.00		25,000.00
2120	Technical Assistance - Special Studies	293,000.00	0.00		293,000.00
2700	Experimental Product & Evaluation Program	25,000.00	0.00		25,000.00
	Total General Activities	***$491,000.00***	***$0.00***	***$0.00***	***$491,000.00***
2146	Development if Intelligent Soil Compaction Technology	$50,000.00	$0.00		$50,000.00
2156	Roadside Vegetation Management	120,000.00	0.00		120,000.00
2157	Herbicide Research Program	100,000.00	0.00		100,000.00
2158	Resilient Modulus Testing and Density Gradient Analysis - Asphalt	51,522.00	0.00		51,522.00
2160	Oklahoma Transportation Center	400,000.00	0.00		400,000.00
2166	Development of Traffic Validation Software	0.00	0.00		0.00
2167	Effect of Suction & Moisture on Resilient Modulus Of Subgrade Soils	0.00	0.00		0.00
2168	Scale Effects in Oedometer - Based Predictions of Fill Settlement	0.00	0.00		0.00
2170	Evaluation of Erosion Control Products	0.00	0.00		0.00
2172	Oklahoma's Percent Defective Quality Assurance / Quality Control	87,000.00	0.00		87,000.00
2173	Field Performance of Silica Fume Modified PCC Bridge Deck	379.00	0.00		379.00
2440	LTAP	145,000.00	0.00	125,000.00	270,000.00
	Total Projects	***$953,901.00***	***$0.00***	***$125,000.00***	***$1,078,901.00***
	Total SPRY Projects and Studies 10(34) RS	***$1,444,901.00***	***$0.00***	***$125,000.00***	***$1,569,901.00***
	Total Pooled Fund Studies	***$242,500.00***	***$0.00***	***$242,500.00***	***$242,500.00***
	Grand Total	***$1,687,401.00***	***$0.00***	***$367,500.00***	***$1,812,401.00***

FEDERAL FISCAL YEAR 2003
OKLAHOMA PROJECT SPRY - 10(34) RS
Part 2

POOLED FUND PROJECTS

Project Number		Estimated ODOT Total Cost to Project	Estimated Duration of Project (Months)	Budget FY 2003	Federal Funds	State Funds
SPR-3(085)	Accelerated Loading Pavement Study (NCAT Track)	$600,000	24	$212,500.00	$212,500.00	$0
SPR-4(201)	NCHRP - FY 03	.....	.....	$0.00	$0.00	$0
TPF-5(017)	WASHTO-X Videoconferencing Program	$20,000	24	$10,000.00	$10,000.00	$0
	Improving the Quality of Profiler Measurements	$0	0	$0.00	$0.00	$0
	AASHTO Snow and Ice Cooperative Program (SICOP)	$0	0	$0.00	$0.00	$0
TPF-5(051)	Construction of Crack - Free Bridge Decks	$0	0	$0.00	$0.00	$0
	AASHTO - LT Maintenance of Load & Resistance Factor Design Spec.	$20,000	0	$20,000.00	$20,000.00	$0
	Total Pooled Fund Studies			***$242,500.00***	***$242,500.00***	***$0***

2100 ..... Subscription to TRB

PURPOSE AND SCOPE: This project covers the annual subscription to the transportation Research Board to pay the cost of the Transportation Information Retrieval Service (TRIS) in providing ODOT with current reports and data from research studies in the highway and transportation field as gathered from federal, state, university or other sources.

ACCOMPLISHMENTS DURING FY 2002:

PROPOSED ACTIVITIES FOR FY 2003: Continue accessing TRIS database for information, receiving reports on studies conducted by the TRB, and utilizing other TRB services.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 97,145 (SPR) -0- (STATE)
Estimated cost for FY 2002	$ 97,145 (SPR) -0- (STATE)
Estimated Cost for FY 2003	$ 98,000 (SPR) -0- (STATE)

2102 ..... Research Library Services

PURPOSE AND SCOPE: Provide the Oklahoma Department of Transportation, other DOTs and customers with an information clearinghouse. The primary goals of this Technology Transfer Office are to provide a sound, progressive, flexible library available to ODOT personnel statewide and to keep them informed of recent innovations in transportation technology, methodologies and programs as soon as information becomes available. Aligning with this is the goal of providing proficient systematic searches of all resources when needed and knowing where to reference for the sought after information. Additional services are aimed at providing ODOT with competent editing and publishing capabilities to assist Planning & Research in generating and distributing quality reports and publications.

ACCOMPLISHMENTS DURING 2002: Successfully moved and paired down the library to a more concise inventory. Integrated high-tech scanning pen into the data gathering process for more efficiency and continued accuracy. Refined Paradox software to run smoother and more efficiently with access and interaction by employees. Provided publications and miscellaneous information in response to numerous requests. Performed numerous information searches for various divisions and personnel within ODOT.

PROPOSED ACTIVITIES FOR FY 2003: Continue to provide information services as before and expand services to include contract and survey administration. Continue to develop software to enhance accessibility to Library by ODOT personnel.

ESTIMATED TOTAL COST	**CONTINUING**
Programmed Amount for FY 2002	$ 45,000 (SPR) $ -0- (State)
Estimated Cost for FY 2002	$ 40,000 (SPR) $ -0- (State)
Estimated Cost for FY 2003	$ 50,000 (SPR) $ -0- (State)

2112 .....Technology Transfer Support Program, University of Oklahoma

PURPOSE AND SCOPE: The purpose of this project is to provide ongoing technical support to the Department when a full-scale project is not warranted, or when a "quick turnaround" is required.

ACCOMPLISHMENTS DURING FY 2002:

PROPOSED ACTIVITIES FOR FY 2003: Provide technical support as required..

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 15,000. (SPR) $ -0- (STATE)
Estimated cost for FY 2002	$ 15,000 (SPR) $ -0- (STATE)
Estimated Cost for FY 2003	$ -0- (SPR) $ -0- (STATE)

2115 ..... LTPP/SHRP Long Term Pavement Performance

PURPOSE AND SCOPE: To maintain LTPP test sites and markings and current status, report maintenance activity to Southern Region Contract Office (SCRO), assist SCRO with data gathering as necessary, act as general liaison between SCRO and the Department. Maintain working knowledge related to SHRP produce implementation, act as general liaison between FHWA and the Department for product implementation activities.

ACCOMPLISHMENTS DURING FY 2002: Reported to SCRO about overlay at the Chickasha site, provided traffic control for SCRO at time of tour for fathering data, assisted SCRO in setting up Seasonal site at Ringwood.

PROPOSED ACTIVITIES FOR FY 2003: Continue monitoring of active sites in Oklahoma, maintain signing and markings for all active sites, report to SCRO other activities about maintenance of sites.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 20,000 (SPR) $ - 0 - (STATE)
Estimated Cost for FY 2002	$ 25,000 (SPR) $ - 0 - (STATE)
Estimated Cost for FY 2003	$ 25,000 (SPR) $ - 0 - (STATE)

2120 ..... Technical Assistance - Special Studies

PURPOSE AND SCOPE: This project provides technical support to the Department for special investigations. In-house technical assistance is provided by Planning & Research Staff and work plans are generally not required. An agreement is made between the Division Engineer and the appropriate division covering the scope and reporting requirements.

ACCOMPLISHMENTS DURING FY 2002:

2120-02-01 Underdrain inspection, Project NHY-17N(20), Atoka County. Determined the cause of non-functioning underdrain systems using ProScout Video system for Antlers Residency.
2120-02-02 Bridge Deck De-icing System. Collected data on system that tracks deicer solution across bridges (as opposed to systems which spray it).
2120-02-03 Crash Data on S.H. 66. Acquired requested crash data from GRIP system and Traffic Engineering Division for Chief Engineer.
2120-02-04 Inspection of area under bridge box with ProScout Video System. Inspected area under bridge box which had rotated and cracked for Anadarko Residency.
2120-02-05 Inspection of cross Drain Pipe with Cyclops video system. Inspected (approximately) 400 - long cross drain pipe, suspected of having breaks and leaks, leading to "caving", for Anadarko Residency.

This year's budget includes supplies and equipment to be used in special investigations and one month salary for each of five technicians who are assigned to traffic count the remainder of the year.

PROPOSED ACTIVITIES FOR FY 2003: Continue conducting specials studies and special investigations as requested by other ODOT People or Divisions.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 15,000 (SPR) $ -0- (STATE)
Estimated cost for FY 2002	$ 15,000 (SPR) $ -0- (STATE)
Estimated Cost for FY 2003	$ 293,000 (SPR) $ -0- (STATE)

2146 ..... The Development of Intelligent Soil Compaction

PURPOSE AND SCOPE: The purpose of this project is to develop and implement intelligence into vibratory soil compaction by establishing communication between the compactor and the material being compacted.

ACCOMPLISHMENTS DURING FY 2002: Experimental work and data collection has been completed. Analysis of data has begun and preliminary work on the Final Report has begun.

PROPOSED ACTIVITIES FOR FY 2003:

ESTIMATED TOTAL COST:	$ 294,141.
Programmed Amount for FY 2002	$ 75,000 (SPR) $ -0- (STATE)
Estimated cost for FY 2002	$ 75,000 (SPR) $ -0- (STATE)
Estimated Cost for FY 2003	$ 50,000 (SPR) $ -0- (STATE)

2156 ..... Roadside Vegetation Management

PURPOSE AND SCOPE: The purpose of this project is to provide ODOT with certified training related to Roadside Vegetation Management (RVM), consultation to ODOT field divisions, and development of manuals of practice for ODOT.

ACCOMPLISHMENTS DURING FY 2002: Conducted annual certified pesticide applicator training for all ODOT field divisions. Maintained pesticide applicator training records for ODOT applicators. Provided consultation to ODOT field as requested, produced annual consultation report. Reviewed and surveyed each ODOT field division's herbicide program and equipment, and produced an annual equipment report. Surveyed new RVM equipment and technologies, provided applicable information to ODOT field personnel, and produced annual report. Provided as-needed updates to ODOT personnel regarding herbicide/pesticide legislation and new products. Conducted annual RVM implementation tour.

PROPOSED ACTIVITIES FOR FY 2003: Continue training, field surveys and consultations as described above. Produce annual Equipment, Consultation and Herbicide Reports..

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 120,000 (SPR) $ -0- (STATE)
Estimated cost for FY 2002	$ 120,000 (SPR) $ -0- (STATE)
Estimated Cost for FY 2003	$ 120,000 (SPR) $ -0- (STATE)

2157 ..... Herbicide Research Program

PURPOSE AND SCOPE: The purpose of this project is to conduct field investigations which evaluate herbicide products, applications and equipment.

ACCOMPLISHMENTS DURING FY 2002: Evaluated experimental herbicides for control of annual rye grass on various different plots at three separate locations. Evaluated experimental herbicides for control of Johnson grass on test plots at three different locations. Evaluated experimental herbicides for control of Sericea Lespedeza on plots at three separate locations. Tested premix herbicides for control of broadleaf weeds at test plots in three separate locations. Demonstrated results of the above experiments during a van tour for ODOT maintenance personnel in June 2002.

PROPOSED ACTIVITIES FOR FY 2003: Continue testing herbicides for the applications listed above. Report on all herbicide applications during annual panel meeting in February 2003. Produce written reports on herbicide applications (one report per application category), with conclusions and recommendations.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 110,000 (SPR) $ -0- (STATE)
Estimated cost for FY 2002	$ 110,000 (SPR) $ -0- (STATE)
Estimated Cost for FY 2003	$ 100,000 (SPR) $ -0- (STATE)

2158 ..... Resilient Modulus Testing and Density Gradient Analysis of Selected Asphalt Mixes

PURPOSE AND SCOPE: The purpose of this project is to: 1) Explore the relationship(s) between resilient modulus and rutting as measured by the Asphalt Pavement Analyzer (APA), and (2) Examine the density distribution in Hot Mix Asphalt (HMA) specimens, prepared using the Superpave Gyratory Compactor (SGC).

ACCOMPLISHMENTS DURING FY 2002: Acquired the Dynamic Shear Rheometer (DSR). Project was delayed due to difficulty in fitting the DSR into the lab building, the vendor eventually switched it for one which fit. Began preliminary resilient modulus testing and data analysis

PROPOSED ACTIVITIES FOR FY 2003: Continue resilient modulus testing and data analysis. Begin rut testing and data analysis. Correlate rut to resilient modulus and other factors. Density Gradient testing and data analysis. Preparation of Final Report.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 101,522 (SPR) $ -0- (STATE)
Estimated cost for FY 2002	$ 50,000 (SPR) $ -0- (STATE)
Estimated Cost for FY 2003	$ 51,522 (SPR) $ -0- (STATE)

2160 ..... Oklahoma Transportation Center

PURPOSE AND SCOPE: The Oklahoma Transportation Center (OTC) is a research organization made up of researchers employed by The University of Oklahoma (OU) and Oklahoma State University (OSU). Research personnel in this organization have expertise and research covering a wide range of transportation - related topics. The purpose of this project is to Provide ODOT with a means of contracting research work covering a wide range transportation research projects.

ACCOMPLISHMENTS DURING FY 2002: Contracted with the OTC for the following projects (titles shortened): Permanent metal Bridge Decking, Impacts of Highway Construction, Timber Pile Repair, Analysis of Basic Pavement Behavior, 24/7 Monitoring of Work Zones, Subsurface Imaging for detecting cavities, A Prioritising Method for Scour-Critical Culverts, An Alternative Method for Determining Asphalt Content, Development of a Freight Movement Model, Evaluation of the PCC Additive "Ipanex", Evaluation of Stainless Steel-Clad Reinforcing Steel, Surface Free Energy of Hot Mix Asphalt Mixes.

PROPOSED ACTIVITIES FOR FY 2003: ODOT expects to contract with the OTC for research projects totalling approximately the same amount as those done in FY 2002. At the time of this report, proposals have not been received (From the OTC) for most of the work expected to be contracted.

ESTIMATED TOTAL COST:	**$ 800,000.**
Programmed Amount for FY 2002	$ 400,000 (SPR) $ -0- (STATE)
Estimated cost for FY 2002	$ 400,000 (SPR) $ -0- (STATE)
Estimated Cost for FY 2003	$ 400,000 (SPR) $ -0- (STATE)

2166 ..... Development of Traffic Validation Software

PURPOSE AND SCOPE: The purpose of this project is to have software developed to validate traffic data which is collected daily. The ODOT Planning & Research Division's Data Collection Branch collects vehicle count and classification data on a 24-hour-a-day basis via permanent traffic monitoring sites located throughout Oklahoma. Data must be reviewed each morning as a manual process of identifying any inconsistencies in vehicle count and classification values as a relative comparison to historical averages. The development of Traffic validation software is needed to provide a more efficient process through the use of automation.

ACCOMPLISHMENTS DURING FY 2002: NA

PROPOSED ACTIVITIES FOR FY 2003: Develop traffic data validation software. The software will have the following capabilities. Perform a complete and comprehensive of the data values recorded daily, evaluate hourly and daily traffic count / classification totals individually and simultaneously group these values for functional / historical comparisons to determine inconsistencies, perform calculations and analysis following specified parameters referenced to built-in windows of tolerance, flag values outside the windows of tolerance, continuously calculate AADT, include a process for import and export of data, and provide a display of data in desired report format.

ESTIMATED TOTAL COST:	**$ 30,000.**
Programmed Amount for FY 2002	$ NA
Estimated cost for FY 2002	$ NA
Estimated Cost for FY 2003	$ - 0 -

2167 ..... Effect of Suction and Moisture on Resilient Modulus of Subgrade Soils in Oklahoma

PURPOSE AND SCOPE: The purpose of this project is to generate data and recommendations which will benefit ODOT in design of pavements on unsaturated subgrades. Subgrade moisture plays an important role in the in-service performance of a pavement. Resilient Modulus (Mr) is an important parameter in pavement design under AASHTO guidelines, which ODOT has implemented.

ACCOMPLISHMENTS DURING FY 2002: NA

PROPOSED ACTIVITIES FOR FY 2003:
Task 1: Selection of subgrade soils and sample collection.
Task 2: Laboratory testing to determine common soils properties.
Task 3: Data analysis and identification of correlation.
Task 4: Write Final Report.

ESTIMATED TOTAL COST:	**$ 105,242.**
Programmed Amount for FY 2002	$ NA
Estimated cost for FY 2002	$ NA
Estimated Cost for FY 2003	$ - 0 -

2168 ..... Scale Effects in Oedometer-Based Predictions of Fill Settlement

PURPOSE AND SCOPE: This project will use both the large and small oedometer test procedures to predict settlement behaviour of compacted Oklahoma soils in embankments. The project activities will also include examining scale effects associated with using oedometer samples and examine fabric-induced scale effects in the field. Recommendations regarding laboratory and settlement analysis of compacted fills will be included.

ACCOMPLISHMENTS DURING FY 2002: NA

PROPOSED ACTIVITIES FOR FY 2003: The following tasks will be completed during FY2003.

I. Literature review (of existing research) and initial planning.
II. Develop and test large oedometer sampling method.
III. Collect field oedometer samples.
IV. Conduct soil characterization tests.
V. Conduct suction tests.

ESTIMATED TOTAL COST:	**$ 120,000.**
Programmed Amount for FY 2002	$ NA
Estimated cost for FY 2002	$ NA
Estimated Cost for FY 2003	$ - 0 -

2170 ..... Evaluation of Erosion Control Products

PURPOSE AND SCOPE: The purpose of this study is to evaluate the performance of selected commercially-available erosion control products. The study will also determine which of the products are capable of meeting the requirements of stormwater pollution prevention requirements and plans.

ACCOMPLISHMENTS DURING FY 2002: NA

PROPOSED ACTIVITIES FOR FY 2003: Evaluate performance of temporary spray-on materials, rolled erosion control blankets, flexible temporary channel liners, and "turf reinforcement mats". Evaluate the surface protection characteristics ofhe products, including "tenting", sediment holding properties, vegetation establishment properties, longevity,dessication rates, and cost effectiveness.

ESTIMATED TOTAL COST:	**$ 100,000.**
Programmed Amount for FY 2002	$ NA
Estimated cost for FY 2002	$ NA
Estimated Cost for FY 2003	$ - 0 -

2172 ..... **Oklahoma's Percent Defective Quality Assurance/ Quality Control Specifications**

PURPOSE AND SCOPE:

ACCOMPLISHMENTS DURING FY 2002: NA

PROPOSED ACTIVITIES FOR FY 2003:

ESTIMATED TOTAL COST:	$ 87,000.
Programmed Amount for FY 2002	$ NA
Estimated cost for FY 2002	$ NA
Estimated Cost for FY 2003	$ 87,000.

2173 ..... **Field Performance of Silica Fume Modified PCC Bridge Deck**

PURPOSE AND SCOPE: The purpose of this project is to continue observation of the two silica modified bridge deck overlays in Carter County. The overlays were placed under the FHWA's "Innovative Bridge Program", with a three-year evaluation period. The three-year period has expired and a Final Report has been written and is under review. However, one of the recommendations was that observation of the two decks continue, since cracking has shown a slight increase during the evaluation period, but is still such a small amount that it does not support projections of performance with acceptable accuracy.

ACCOMPLISHMENTS DURING FY 2002: NA

PROPOSED ACTIVITIES FOR FY 2003: Write a work plan which will include performing a general condition and crack survey on each bridge twice a year and perform the first of thesemi-annual surveys.

ESTIMATED TOTAL COST:	**$ 30,000.**
Programmed Amount for FY 2002	$ NA
Estimated cost for FY 2002	$ NA
Estimated Cost for FY 2003	$ 379.00

2440 ..... Local Technical Assistance Program

PURPOSE AND SCOPE: The Local Technical Assistance Program (LTAP) is a training program contracted by Oklahoma State University's Center for Local Government Technology to provide technical maintenance training and assistance to Oklahoma's county personnel in the areas of road and bridge construction, repair and maintenance and other transportation-related issues. This is accomplished by 1) conducting workshops, seminars and other training opportunities, 2) providing on-site technical assistance, 3) maintaining a lending library for publications, videotapes and other technology resource documents, 4) providing information on new and existing technology, 5) coordinating with faculty and staff at OSU and ODOT to provide technical expertise and support, 6) publishing a quarterly newsletter and 7) maintaining a database of rural, local and state transportation officials and other resources in Oklahoma and nationwide.

ACCOMPLISHMENTS DURING FY 2002: The LTAP Program established a positive relationship with Circuit Engineering District #7 (part of the Association of County Commissioners of Oklahoma) resulting in increased participation of county personnel from the western part of the state in the Roads Scholar Program. Nine Roads Scholar classes and three County Welding Training classes were conducted with 215 county personnel attending. The first Oklahoma LTAP Web Site has been developed and expected to be posted in August, 2002. LTAP office continues to serve as the American Public Works Association State Chapter office and assisted with the April 2002 regional meeting. Newsletters were published and various literature and video tapes of new ideas and procedures were distributed.

PROPOSED ACTIVITIES FOR FY 2003: Conduct at least 10 training sessions statewide to including at least one each of the nine Roads Scholar Program issues. Continue to publish various newsletters and papers and provide literature and video through the LTAP Library and coordinate with ODOT's Technical Library. Establish through the ODOT Materials Division, a certification program for Welders who conduct work on state funded projects. Develop and conduct new training courses as requested by the LTAP Advisory Board.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 32,169 (State)* $ 70,000 (FHWA) $ 17,500 (Counties) $ 20,331 (OSU)
Estimated Cost for FY 2002	$ 32,169 (State)* $ 70,000 (FHAW) $ 17,500 (Counties) $ 20,331 (OSU)
Estimated Cost for FY 2003	$145,000.00 (SPR) $125,000.00 (FHWA)

* State Construction & Maintenance Fund

2700 ..... Experimental Product and Evaluation Program

PURPOSE AND SCOPE: This project was established to provide ODOT with a mechanism that provides for the use, monitoring and implementation of highway and bridge construction and maintenance products that do not meet current ODOT standards or specifications.

ACCOMPLISHMENTS DURING FY 2002: Maintained database of new products where manufacturer provided literature or made a presentation during the last five years. Met with company representatives presenting new products. Provided information on products to applicable ODOT Divisions. Evaluated new products as required.

PROPOSED ACTIVITIES FOR FY 2003: Continue maintaining database on products submitted to ODOT. Meet with vendors representatives, circulate product literature and conduct product evaluations as required.

ESTIMATED TOTAL COST:	**CONTINUING**
Programmed Amount for FY 2002	$ 50,000.
Estimated cost for FY 2002	$ 50,000.
Estimated Cost for FY 2003	$ 25,000.