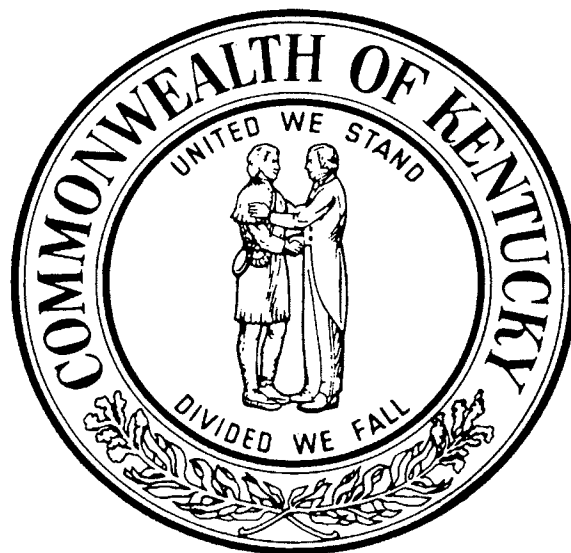


PLANNING WORK PROGRAM

SP 0008 (001)
JUNE 16, 2007 - JUNE 15, 2008



Kentucky
UNBRIDLED SPIRIT™

IN COOPERATION WITH
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION



U.S. Department
of Transportation
**Federal Highway
Administration**

Kentucky Division Office
Jose Sepulveda, Division Administrator

330 West Broadway
Frankfort, KY 40601
PH. (502) 223-6720
FAX (502) 223-6735

RECEIVED

May 25, 2007

MAY 30 2007

Mr. William Nighbert, Secretary
Kentucky Transportation Cabinet
200 Mero Street, Room 613
Frankfort, Kentucky 40622

Dear Mr. Nighbert:

Attention: Daryl Greer, Director of Planning

We have reviewed the May 15, 2007 submittal of the following document:

**Planning Work Program
SP 0008 (001)
June 16, 2007 - June 15, 2007
(2008 SPR Work Program - Subpart A)**

The activities in the 2008 Planning Work Program were found eligible under 23 U.S.C. 134, 135, 505 or 49 U.S.C. 5303-5305, 5313(b) and the provisions of 23 CFR 420 and 23 CFR 450.

The 2008 Planning Work Program is approved. We found that the work program followed 23 CFR 420.103. The work program should be administered in accordance with the provisions of 49 CFR Part 18 and 23 CFR Part 420. Authorization of this work is subject to the availability of funds.

The effective time period for funding is from June 16, 2007 – June 15, 2008.

Prior Approval is required for the following changes to the SPR Work Program:

- Budgetary changes
- Increase in federal funds [49 CFR 18.30(c)(1)(i)].

**MOVING THE
AMERICAN
ECONOMY**



- Cumulative transfer among already approved work program line items of 10% of the total federal funds or \$100,000 [49 CFR 18.30(c)(1)(ii)].
- Programmatic changes
- Change in the scope or objectives of activities (e.g., adding or deleting line items) [49 CFR 18.30(d)(1)].
- Extending the period of performance past the approved work program period. [49 CFR 18.30(d)(2)].
- Transferring substantive programmatic work to a third party (e.g., consultant work not identified in the originals work program) [49 CFR 18.30(d)(4)].
- Capital expenditures including purchase of equipment [OMB Circular A-87].

There are two additional requirements associated with the SPR Work Program, an independent audit and an annual performance and expenditure report.

The Single Audit Act Amendment of 1996 requires that an independent audit be completed of any non-federal entity expending \$500,000 or more in Federal funds from all sources in a fiscal year that ends after December 31, 2003. (49 CFR 18.26, OMB Circular A-133).

An annual performance and expenditure report is required to be submitted within 90 days (3 months) after the end of the report period. The report may be more frequent if deemed necessary by FHWA. [23 CFR 420.117(c)].

We appreciate the work that went into development of this work program and thank you for working with our office to make improvements. When printing is complete please provide our office with 8 hard copies of the document. Thank you once again.

Sincerely yours,



Bernadette Dupont
Planning and Environmental Engineer

c: Ray Polly, KYTC - Administration



**COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF PLANNING**



**WORK PROGRAM AND COST ESTIMATE
FOR
PROJECT SP 0008 (001)
JUNE 16, 2007 THROUGH JUNE 15, 2008**

**PART I
DIVISION OF PLANNING**

**PREPARED IN COOPERATION
WITH
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

INTRODUCTION

The Planning and Research Program Annual Work Program is required under 23 CFR 420.111. Due to the organization of the Cabinet, the Planning and Research portions are submitted as separate documents. This document outlines the transportation planning activities as Planning (Part I) of the work program. To illustrate the Division of Planning, a detailed organization chart (See Exhibit 1) has been inserted in the work program addressing the various functional areas of the Division responsible for planning activities.

In performing the planning activities, the Kentucky Transportation Cabinet has many partners. In this year's work program, those partners are outlined. In each of the work program chapters, there is a denotation of the Highway District Offices. Each Highway District Office has a Planning Branch that performs planning activities for many of the chapters in the work program. We also have agreements with each of the 15 Area Development Districts (ADDs) in the Commonwealth. The ADDs in cooperation with the Highway District Offices Planning Branch perform for the Cabinet much of the Public Involvement in Statewide Transportation Planning (23 CFR 450.200), intermodal and freight activities, and data collection. The Metropolitan Planning Organizations receive money each year to meet the requirements of 23 CFR 450 Subpart C. The consulting industry and the Kentucky Transportation Cabinet are also used at times when additional resources are needed.

Continuing in this year's work program is continued activities related to the upgrade of the Cabinet's Highway Information System (HIS) database to a newer version. As with any upgrade, there are various changes in process and activities that need to be made as well as continued fixes to the database to meet the Cabinet's data requirements. There is also a continued emphasis to install additional loops at high volume locations to obtain traffic volume and class counts in a safe and efficient manner. To align with the HIS upgrade, we also seek to improve the quality of the data that is maintained in the databases. This year we anticipate to continue efforts to collect and update data that is maintained in HIS so that improved reporting and analysis of our transportation network can be achieved.

Because of downsizing efforts within the Cabinet, efforts will be placed toward outsourcing services which may include traffic counts, traffic forecasts, data collection, map products, planning studies, and other needed activities. The Division of Planning is also evaluating our core functions in order to streamline and align our efforts so that required activities are completed. We also anticipate working this upcoming year to implement the planning provisions in SAFETEA-LU for both the Statewide and MPO areas. We will also continue our work to plan for freight, waterways, rail, and other related issues. The Division of Planning will continue to evaluate and assist with air quality conformity issues, and we will assist the Cabinet in identifying operational and performance improvements to maximize the efficiency of the existing transportation network.

Please refer to each chapter contained within this work program for more details.

FOREWORD

This Planning Program SP 0008 (001) for the period June 16, 2007 to June 15, 2008 is submitted in compliance with the provisions of 23 CFR 420 and describes programs and operations for planning activities in the Kentucky Transportation Cabinet (KYTC). These funds will be administered in accordance with the provisions of 49 CFR 18 and 23 CFR 420. This program modifies and updates previous such programs and is specifically intended to reflect the needs of the Kentucky Transportation Cabinet. It is fully expected that products from this program will also have national applications.

The Division of Planning is charged with the responsibility for recommending, advising, and assisting the chief administrators of the KYTC in the development of the overall goals, policies, project priorities, and procedures relating to the total transportation program of the Cabinet. Proposed activities for Fiscal Year 2008 are reported in detail by Chapter in this Work Program.

We expect the majority of activities in this Work Program to be completed by June 15, 2008. Those items that are not complete by June 15 will be identified in the Annual Performance and Expenditure Report. For those items not complete by June 15, an extension of the work program will be requested so that the remainder of the funding commitments can be expended.

The fiscal portions of the Work Program are based on funding availability provided by the Cabinet's Office of Budget and Fiscal Management.

EXHIBIT 1

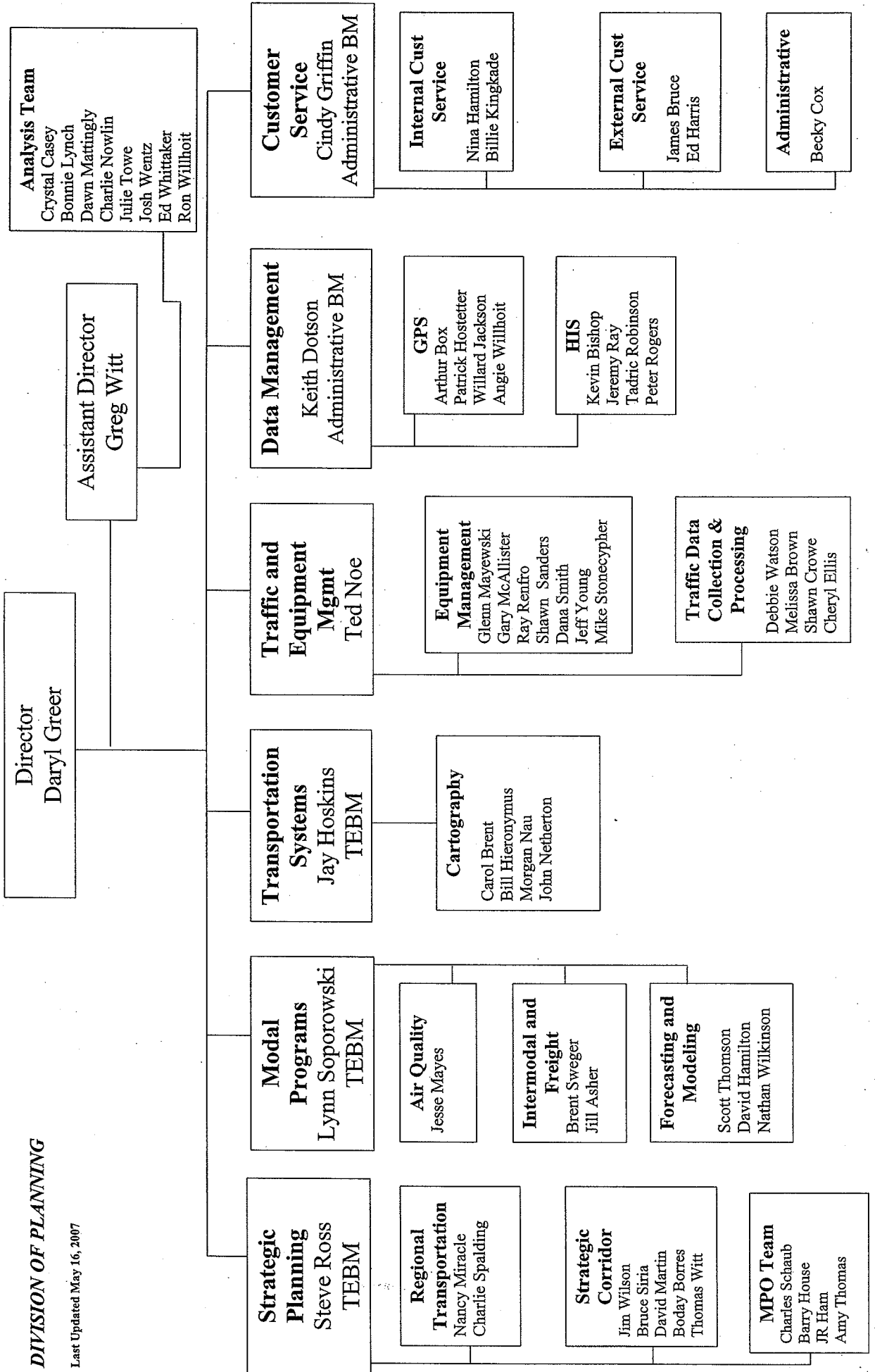


EXHIBIT 3

FHWA FUNDING AVAILABILITY

Status of Funds as of 4/03/2007

FHWA W10A Report

<u>Fund</u>	<u>Code</u>	<u>Unobligated Balance</u>
2% Highway Planning & Research	O810	83,818.02
2% Highway Planning & Research - STEA03	H550	236,572.71
Statewide Planning 2%	L550	10,979,466.07
2% Highway Planning & Research- TEA-21	Q550	1,465,901.20
Total Available SPR		\$12,765,758.00
1% Metropolitan Planning	O850	29,672.75
1Metropolitan Planning 1.25% Takedown	L450	3,466,948.00
1% Metropolitan Planning - TEA21	Q450	29,266.01
Total Available PL		\$3,525,886.76

**KENTUCKY TRANSPORTATION CABINET
OFFICE OF BUDGET AND FISCAL MANAGEMENT
2006-2008 BIENNIAL BUDGET (HB 380)
FY 2007-08**

Project Budget Unit

FH02 - SPR Planning

State Road Fund	2,152,900.00
Federal Funds	9,384,300.00

Total FH02 Funds **\$11,537,200.00**

FH03 - Metropolitan Planning

State Road Funds	242,500.00
Federal Funds	2,328,300.00

Total FH03 Funds **\$2,570,800.00**

FY 2008 Proposed Research Program Summary

FHWA Funding Availability Unobligated funds as of April 3, 2007

Fund	Code	Balance
Mandatory 25% Studies-HPR	O860	\$ 8,362.49
MAND 25%- HPR-STE A 03	H560	\$ 211,755.50
Statewide PLAN Mandatory	L560	\$ 561,160.00
Mand 25% Studies- HPR- TEA 21	Q560	\$ 101,555.41
Total Unobligated Mandatory Studies		\$ 882,833.40

Estimated FY 2008 Apportionment

Fund Source	Federal
Interstate Maintenance	\$ 96,084,379.00
National Highway System	\$ 106,616,149.00
Surface Transportation Program	\$ 103,842,592.00
Bridge Replacement & Rehabilitation	\$ 55,075,971.00
Congestion Mitigation & Air Quality	\$ 9,866,523.00
Equity Bonus	\$ 135,558,880.07
Safety	\$ 18,191,127.00
Total	\$ 525,235,621.07
2% Take Down	\$ 10,504,712.42
Estimated Available 2008 Funds - 25% of Take Down	\$ 2,626,178.11

Research Work Program - Part B Estimated Fiscal Year 2008 Expenditures

Program Identity	Federal	State	Total
SPR-Part II Research (85% Allocated)*	\$ 2,232,251.39	\$ 558,062.85	\$ 2,790,314.24
SPR-Part II Research (15% Contingent)	\$ 393,926.72	\$ 98,481.68	\$ 492,408.39
FY 07 Carryover (obligated/ unspent)	\$ 300,800.00	\$ 75,200.00	\$ 376,000.00
Part III B Research		\$ 220,000.00	\$ 220,000.00
Total	\$ 2,926,978.11	\$ 951,744.53	\$ 3,878,722.63

* Includes \$150,000 for NCHRP dues, \$80,000 for Pooled Fund Studies, and \$20,000 for Superpave Center. These items will be 100% Federally Funded (no state match).

Note: This summary of the Research Portion of the work program is submitted for informational purposes only and is only an estimate of the expenditures. The actual work program for the research program will be submitted under separate cover.

Exhibit 4
PL Funds for MPO Unified Planning Work Programs for FY 2008

MPO AREA	TOTAL FY 2008 PL Funding										TOTAL		FED+ST FUNDING	
	Fed \$	Fed %	State \$	State %	Local \$	Local %	F+S+L=\$	F+S=\$	F+S %	F+S=\$	F+S %	F+S=\$	F+S %	
LOUISVILLE	\$ 945,271	80.00%	\$ 59,079	5.00%	\$ 177,238	15.00%	\$ 1,181,589	\$ 1,004,351	85.00%	\$ 1,004,351	85.00%	\$ 1,004,351	85.00%	
NORTHERN KY	\$ 357,782	80.00%	\$ 22,361	5.00%	\$ 67,084	15.00%	\$ 447,228	\$ 380,143	85.00%	\$ 380,143	85.00%	\$ 380,143	85.00%	
LEXINGTON	\$ 380,873	80.00%	\$ 18,805	3.95%	\$ 76,414	16.05%	\$ 476,091	\$ 399,678	83.95%	\$ 399,678	83.95%	\$ 399,678	83.95%	
HENDERSON	\$ 29,815	80.00%	\$ 1,863	5.00%	\$ 5,590	15.00%	\$ 37,269	\$ 31,678	85.00%	\$ 31,678	85.00%	\$ 31,678	85.00%	
OWENSBORO	\$ 81,112	80.00%	\$ 5,069	5.00%	\$ 15,208	15.00%	\$ 101,390	\$ 86,181	85.00%	\$ 86,181	85.00%	\$ 86,181	85.00%	
ASHLAND	\$ 72,042	80.00%	\$ 4,503	5.00%	\$ 13,508	15.00%	\$ 90,052	\$ 76,545	85.00%	\$ 76,545	85.00%	\$ 76,545	85.00%	
CLARKSVILLE / OAK GROVE	\$ 27,161	80.00%	\$ 1,698	5.00%	\$ 5,093	15.00%	\$ 33,951	\$ 28,858	85.00%	\$ 28,858	85.00%	\$ 28,858	85.00%	
BOWLING GREEN	\$ 65,379	80.00%	\$ 4,086	5.00%	\$ 12,259	15.00%	\$ 81,724	\$ 69,465	85.00%	\$ 69,465	85.00%	\$ 69,465	85.00%	
RADCLIFF-ELIZABETHTOWN	\$ 112,319	80.00%	\$ 4,520	3.22%	\$ 23,560	16.78%	\$ 140,399	\$ 116,839	83.22%	\$ 116,839	83.22%	\$ 116,839	83.22%	
TOTALS	\$ 2,071,753		\$ 121,985	4.71%	\$ 395,954		\$ 2,589,692	\$ 2,193,738		\$ 2,193,738		\$ 2,193,738		
Discretionary for Separate Contract	\$ 120,000	80.00%		0.00%	\$ 30,000	20.00%	\$ 150,000	\$ 120,000	80.00%	\$ 120,000	80.00%	\$ 120,000	80.00%	
PL Base Budget Total	\$ 1,951,753	80.00%	\$ 121,985	5.00%	\$ 365,954	15.00%	\$ 2,439,692	\$ 2,073,738	85.00%	\$ 2,073,738	85.00%	\$ 2,073,738	85.00%	
PL Discretionary Total	\$ 120,000	80.00%		0.00%	\$ 30,000	20.00%	\$ 150,000	\$ 120,000	80.00%	\$ 120,000	80.00%	\$ 120,000	80.00%	

State funds are 5% of formula funds (base budget) only.

Local funds do not flow through the Cabinet.

Discretionary for Separate Contract will be divided into 2 projects in 2 MPO areas.

State does not provide the match for discretionary funds. Match will be provided by the local agencies.

- South Limestone Multimodal Traffic Study

- Glendale Transportation Needs Study

CHAPTER FUNDING SUMMARY

<u>CHAPTER</u>	<u>TITLE</u>	<u>AMOUNT</u>
1	Customer Service	\$99,200
2	Personnel Training	\$410,000
3	Traffic and Equipment Management	\$5,093,200
4	Roadway Systems	\$666,800
5	Cartography	\$813,500
6	Highway Information System	\$1,155,400
7	Highway Network Coordination and Analysis	\$141,900
8	Strategic Corridor Planning	\$517,400
9	Statewide Transportation Planning	\$737,200
10	Metropolitan Planning Organizations	\$564,100
11	Air Quality Conformity Analysis	\$173,600
12	Multimodal Planning and Technical Assistance	\$395,500
13	Congestion, Mobility, and Access Management	\$183,200
14	Traffic Data Forecasting	\$440,000
15	Bicycle and Pedestrian Program	\$146,200
	TOTAL	\$11,537,200

CHAPTER 1

Customer Service

RESPONSIBLE UNIT

Division of Planning
Customer Service Branch

PURPOSE AND SCOPE

The Customer Service Branch in the Division of Planning is responsible for administrative activities directly attributable to the SPR Planning Work Program chapters and to oversee and manage requests from external sources for maps and other information.

PROPOSED ACTIVITIES FOR 2007-2008

- Prepare daily correspondence, reports, agreements, etc. for Division activities related to the SPR Planning Work Program.
- Prepare daily time and attendance and maintain records for Division of Planning employees.
- Prepare all travel requests and travel reimbursements.
- Prepare all registrations for various training to accomplish the goals of the SPR Planning Work Program and maintain training records.
- Prepare contracts, letter agreements, purchase requests, etc. for the Division related to the SPR Planning Work Program.
- Process payments against contracts awarded by the Division related to the SPR Planning Work Program.
- Coordinate and prepare the annual SPR Planning Work Program and the annual SPR Planning Work Program and Expenditures Report.
- Track budgets and annual SPR Planning Work Program Expenditures.

PRODUCTS

The Customer Team will coordinate and prepare the annual SPR Planning Work Program and the annual SPR Planning Work Program and Expenditures Report. This team will also prepare all contracts, letter agreements, and purchase requests relating to the SPR Work Program. They will process all payments against contracts awarded by the Division related to the SPR Work Program. The Customer Service Team will also focus on customers external to the Division for cartographic products, statistical reports, and responses to various data requests including responding to requests from the Division's web page. This team is responsible for providing maps upon request to other divisions within the Cabinet, other state government agencies, or to the general public. In addition, they will also assist in creating and updating digital county, city and district maps for generating other special application maps displaying HIS information.

CHAPTER 1

Customer Service (continued)

RESPONSIBLE UNIT

Division of Planning
Customer Service Branch

DISTRIBUTION OF ESTIMATED COST FOR 2007-2008

PERSONNEL	\$90,200
OTHER	\$9,000
TOTAL	\$99,200

CHAPTER 2**Personnel Training****RESPONSIBLE UNIT**

Division of Planning

PURPOSE AND SCOPE

The training of personnel is essential to the transportation program in order to keep pace with changing techniques and evaluate new procedures and developments. This is particularly essential to the Cabinet's multimodal/intermodal programs as more efficient and detailed technical analyses and assistance are required.

PROPOSED ACTIVITIES FOR 2007-2008

An effort will be made to continue a level of staff training which will maintain the integrity of professional career development and improvement of technological skills. Training will include, but not be limited to, conference/workshops or like training. This will not include registration fees to attend annual meetings or conferences except fees for portions of such conferences that do provide eligible training. We will also provide annual in-state Traffic Data Recorder Training for District personnel. Training for Highway District Office Planning personnel, ADD personnel, and MPO personnel in procedures, regulations, technical issues, etc., may also be included as necessary to provide for improved coordination and efficiency within and between the Statewide and Metropolitan planning efforts.

PRODUCTS

Personnel with career development opportunities, improved technological skills, broadened knowledge, enhanced capabilities, and more efficient operation.

DISTRIBUTION OF ESTIMATED COST FOR 2007-2008

PERSONNEL	\$100,000
OTHER	\$310,000
TOTAL	\$410,000

CHAPTER 3

Traffic and Equipment Management

RESPONSIBLE UNIT

Division of Planning
Traffic and Equipment Management Branch

PURPOSE AND SCOPE

The Equipment Management Team focuses on the identification, purchase, repair/maintenance, placement, and operation of various pieces of traffic data collection equipment statewide with the Districts and within the Division.

The Traffic Data Collection and Processing Team, working with our Highway District Offices, assign, process, analyze, and provide access to traffic volume and vehicle classification data for highway planning, design, reporting to FHWA, transportation decisions, and various other purposes. This involves making a significant number of short duration (usually 48 hours) portable machine counts on the State Highway System and state-maintained local roads. An adequate program of continuous traffic counting stations (ATRs) provides the basis for factoring short-term counts. Vehicle classification data will be assigned, processed, and made available to Cabinet staff for analytical and forecasting purposes.

PROPOSED ACTIVITIES FOR 2007-2008

- Maintain, update, analyze, provide quality control and assurance of data, and make available data from more than 13,500 traffic count stations.
- Work with the Highway District Offices to perform approximately 6,500 regularly scheduled short-duration portable machine counts yearly which are one-third of all short-duration traffic count stations.
- In accordance with the Traffic Monitoring Guide, collect and process vehicle classification data for approximately 1,500 stations, which is 25-30% of all traffic count stations statewide.
- Review, assign, process, analyze, and distribute data for approximately 400 special count stations that have been requested by outside divisions.
- Collect volume and classification data on 200 interstate stations.
- Collect, process, analyze, and submit quarterly one week of weigh-in-motion (WIM) data at 28 permanent WIM stations and submit 48 hours of WIM data at ten portable WIM stations. Periodically calibrate and assess equipment for adjustments in order to obtain quality data.
- Download, process, repair, maintain, and analyze data from 80+ permanent ATR stations. Review proper operation, locations, and coverage for possible new ATR station installations. Install additional stations as necessary.
- Update axle and monthly factors used in adjusting short counts, such as weekly, monthly, and axle correction factors from data collected at ATR and vehicle classification stations.
- Investigate and purchase new technologies, sensors, data recorders, and communication devices developed for the traffic-counting industry to provide for safer, more efficient and more accurate methods of collection.
- Certify, repair, and maintain approximately 600 traffic data recorders.
- Install, inspect, repair, and maintain 400 permanent vehicle sensor locations.

CHAPTER 3**Traffic and Equipment Management (continued)****RESPONSIBLE UNIT**

Division of Planning
 Traffic and Equipment Management Branch

- Track emerging highway projects and produce plans and specifications for new and replacement traffic sensor installations for submittal into construction and pavement rehabilitation contracts.
- Update in-house databases to include any new stations or roadway alignment changes. Correct beginning and ending milepoints to better represent traffic generators.
- Detect, analyze, and adjust volume counts while combining and creating additional stations where necessary.
- Work with the FHWA to document the entire TMS process.
- Provide oversight of consultants/contractors to assist the Division TMS field data collection. Process and provide quality control and assurance of those counts. Provide storage and analysis of those counts.
- Review, analyze, and update data summaries for vehicle weights and calculating Equivalent Single Axle Loads (ESALs).
- Investigate, evaluate and purchase new software to move mainframe vehicle classification and potentially volume data to a pc-based software with much more capabilities for display, trend analysis, and viewing that also works with the upgrade of HIS. Begin the process of converting the existing vehicle classification file from a mainframe to a PC environment.

PRODUCTS

- Short-duration portable machine volume and classification counts
- Perform and Process data for special counts
- Install, maintain and process data from permanent Automatic Traffic Recorders (ATRs)
- Updated axle, monthly factors, and correction factors
- Updated and maintained databases of count data, count stations, or other associated data
- Weigh-in-motion data
- Install, maintain and process volume and classification data from permanent vehicle sensor locations at high volume and other locations where it is infeasible to conduct portable counts

DISTRIBUTION OF ESTIMATED COST FOR 2007-2008

PERSONNEL	\$4,093,200
OTHER	\$1,000,000
TOTAL	\$5,093,200

CHAPTER 3

Traffic and Equipment Management (continued)

RESPONSIBLE UNIT

Division of Planning
Traffic and Equipment Management Branch

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

- \$500,000 for outsourced Loop and Piezo Repairs.
- \$1,950,000 contract for outsourced traffic counts and sensor installations.
- \$120,000 for Weigh-In-Motion (WIM) Research.
- \$400,000 for Traffic Management System Software.
- \$150,000 for purchase of new Automatic Traffic Data Recorders.

CHAPTER 4

Roadway Systems

RESPONSIBLE UNIT

Division of Planning

PURPOSE AND SCOPE

The Systems Team maintains the official Department of Highways records for the following: State Primary Road System (SPRS); National Highway System (NHS); Functional Classification System; Designated National Truck Network (NN); Coal Haul Highway System; and Forest Highway System. They work with Highway District Office Planning and Central Office Data Management staffs to accomplish systems changes and prepare official documents for approval. The team also gathers and compiles source data annually for the Coal Haul Highway System on the transportation of coal by truck in the Commonwealth of Kentucky.

PROPOSED ACTIVITIES FOR 2007-2008

- Ensure the SRPS reflects roadways of significance, matches the functional classification system, and the electronic base map coverage.
- Generate official documentation recommending appropriate SPRS revisions to the Commissioner of Highways for approval.
- Review SPRS revisions for any necessary modifications to other systems such as functional classification, National Highway System, National Truck Network, etc.
- Compile data to provide ton-mile statistics to the Governor's Office for Local Development for coal transported on Kentucky Highways.
- Publish Kentucky's Official Coal Haul System Report.
- Provide the Division of Maintenance information for updating the "Extended Weight Coal Haul Road System".

PRODUCTS

- Transportation Official Orders
- Functional Classification Reports
- Coal Haul System Report
- National Truck Network (NN) modifications as needed

CHAPTER 4

Roadway Systems (continued)

RESPONSIBLE UNIT

Division of Planning

DISTRIBUTION OF ESTIMATED COST FOR 2007-2008

PERSONNEL	\$611,800
OTHER	\$55,000
TOTAL	\$666,800

CHAPTER 5

Cartography

RESPONSIBLE UNIT

Division of Planning
Transportation Systems Branch

PURPOSE AND SCOPE

The Cartography and GIS Teams meet the needs of the Division, Cabinet, other state agencies, and entities outside state government for general and special purpose maps. These teams create, update, and distribute a wide variety of standard cartographic products in electronic and/or paper format. When needed they create digital and/or printed presentations depicting various analyses of highway transportation data. They also work to develop procedural and technique standards for digital mapping.

PROPOSED ACTIVITIES FOR 2007-2008

- Provide electronic mapping for all city, county, district, state, and special-purpose cartographic products.
- Maintain and publish electronic formats of cartographic products for display on the Internet.
- Update the Official State Highway Map and have necessary printing accomplished.
- Create reports and exhibits for various Division projects and studies to assist transportation decision-makers in their roles.
- Work with Central Office Data Management staff to incorporate construction project alignments into the electronic base map coverage.
- Provide mapping and graphic assistance to other Divisions and Departments on request.

PRODUCTS

- State Primary Road System Maps
- Functional Classification Maps
- Other Highway Data Maps (i.e., NHS, NN, etc. maps)
- Cabinet and Planning Project Exhibit Maps/Displays
- Official Highway Map
- GIS Analysis of Census, socioeconomic, environmental, land use, and other data

DISTRIBUTION OF ESTIMATED COST FOR 2007-2008

PERSONNEL	\$713,000
OTHER	\$100,500
TOTAL	\$813,500

CHAPTER 5

Cartography

RESPONSIBLE UNIT

Division of Planning
Transportation Systems Branch

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

- \$150,000 for Technical Assistance program with UK (Interns).
- \$100,000 for outsourced map production assistance.
- \$50,000 for Official Highway Map Publication.

CHAPTER 6

Highway Information System

RESPONSIBLE UNIT

Division of Planning
Data Management Branch

PURPOSE AND SCOPE

The Data Management Branch responsibilities include assistance and support for maintenance of the Transportation Cabinet's Highway Information System (HIS) which includes storage of all roadway characteristic information, transportation systems information, and the Cabinet's roadway centerline Geographic Information System (GIS). They also coordinate and perform data collection update activities for the statewide Geographic Information System (GIS) transportation layer and roadway characteristics in cooperation with the Area Development Districts (ADDs) and internal staff members. From this information the Branch uses the Highway Performance Monitoring System (HPMS) to establish a baseline for measuring highway system performance and produce the highway data submittal required annually by the Federal Highway Administration (FHWA). They provide information to the Transportation Cabinet, other governmental agencies, consultants, and private organizations via requests or by posting data to the Division's web site.

PROPOSED ACTIVITIES FOR 2007-2008

- Work with the Commonwealth Office of Technology (COT) to upgrade the HIS database to the next release of "Highways by EXOR" and deploy to other data owners within the cabinet
- Develop processes and procedures to review, edit, and update Cabinet's base map and HIS database.
- Assist with testing, training, report migration, and enhancements with the HIS.
- Assist in the development and maintenance of a Cabinet GIS and maintain database network for Kentucky's public highway system.
- Update newly acquired road centerline data collected from ADD or central office staff using GPS collection methods or CAD design file extraction to the existing highway network. Update and verify roadway mileage, highway systems data, and use in maintaining and generating data driven maps.
- Improve and update roadway characteristic attributes and asset items through ADD data collection project.
- Perform office reviews to verify data meets the required standards and confidence levels established by this Division.
- Provide up-to-date route network, DMI, roadway characteristics and system information through various programs.
- Process and submit annual HPMS submittal.
- Utilize HPMS to update Rating Indices, Capacity, and Volume/Service Flow ratio in the HIS database.
- Use HIS to measure highway system performance and assist with analyses of the Unscheduled Projects List.
- Maintain currency of HPMS software and perform changes required by federal legislation, regulations, policies, and/or guidelines, as needed to the HPMS.

CHAPTER 6**Highway Information System (continued)****RESPONSIBLE UNIT**

Division of Planning
Data Management Branch

PROPOSED ACTIVITIES FOR 2007-2008 (continued)

- Investigate results of HPMS each year and analyze changes in processes to improve output of report.
- Assist in processing and reporting of the FHWA 534 and 536 reports.

PRODUCTS

- Routines to extract better road information from the GPS files (i.e. vertical grade, horizontal curve)
- Queries and routines for quality control of the database concerning asset items and road information
- Database and GIS application troubleshooting when errors take place
- Database and GIS upgrades
- Other agency information loaded to HIS database
- New roadway centerlines obtained through GPS technology and CAD design files and updates to both the GIS layers and HIS database
- New roadway inventory either through field collection or extracted from CAD design files to update the GIS layers and HIS database
- HPMS 534 and 536 Reports
- HPMS submittal
- Reports created concerning information about transportation network stored in HIS database

DISTRIBUTION OF ESTIMATED COST FOR 2007-2008

PERSONNEL	\$978,300
OTHER	\$177,100
TOTAL	\$1,155,400

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

- \$75,000 to outsource for GPS maintenance
- \$100,000 for EXOR eCredits
- \$28,000 to outsource FHWA 536 report
- \$200,000 to outsource for Roadway Attribute Data Collection.

