

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



**ANNUAL PERFORMANCE AND
EXPENDITURE REPORT
FOR
FISCAL YEAR 2014 ANNUAL WORK PROGRAM
PROJECT SP 0014 (001)
JUNE 16, 2013 THROUGH JUNE 15, 2014**

SEPTEMBER 2014

Introduction

The Annual Performance and Expenditure Report is required under 23 CFR 420.117. This document outlines the transportation planning activities conducted by the Kentucky Transportation Cabinet (KYTC) under Planning (Part I) of the SPR work program for the period of June 16, 2013 through June 15, 2014 (Fiscal Year 2014).

Many issues faced the Division of Planning during the period of this work program. Many analyses, studies, and traffic forecasts were initiated during the past year to support the KYTC lettings. The Division continued to work to increase our utilization of our roadway data management software, Highways by EXOR. Improvements to the quality of the data were made through collection efforts with our Area Development District (ADD) partners, and efficiencies in this program resulted in our ability to collect updated data quicker than was previously expected. Planning continued work with our ADD partners to maintain the digital base map of roadways and utilize that information to create visual representations of the state highway systems for use by KYTC, other agencies, and the general public. The Division continued efforts at intermodal planning and completed an update of the Statewide Transportation Plan. The Division made great efforts to aid the Cabinet and our MPO partners in making sure our required documents and processes were compliant with SAFETEA-LU and the associated revised regulations promulgated in 23 CFR 450. We worked closely with the Office of Special Programs in getting CMAQ, TE, and Safe Routes to School projects into the MPO Transportation Improvement Programs so funding could be authorized. The Division made great strides in the implementation of the Data Needs Analysis (DNA) scoping study process for the Six Year Plan Projects. The Division developed and implemented the District Transportation Plan (DTP) process resulting in the first DTP.

All these activities occurred while the Division of Planning continued to collect necessary data, manage and report the data as required, respond for requests for data both within and outside the Cabinet, forecast future transportation demands, plan for the transportation needs within the Commonwealth, coordinate with our rural and metropolitan planning partners, address air quality concerns, support project selection for the Six-Year Highway Plan and Statewide Transportation Improvement Program, and address other State and Federal requirements.

Attached are accomplishments for each chapter of the FY 2014 Work Program. Expenditures are summarized in the document showing the initial budget, expenditures, and percentages of expenditures.

FY 2014
SPR CHAPTER FUNDING SUMMARY

<u>CHAPTER AND TITLE</u>	<u>BUDGETED</u>	<u>EXPENDED</u>
1 SPR Work Program	\$30,700	\$1,776.89
2 Personnel Training	\$350,200	\$51,317.20
3 Traffic and Equipment Management	\$2,865,300	\$1,839,111.24
4 Roadway Systems	\$672,800	\$503,185.08
5 Cartography	\$403,000	\$298,242.48
6 Highway Information System	\$1,776,700	\$1,171,683.56
7 Strategic Corridor Planning	\$2,233,144	\$1,487,941.59
8 Statewide Transportation Planning	\$1,233,700	\$1,154,944.68
9 Metropolitan Planning Organizations	\$643,200	\$301,306.83
10 Performance Measures and Congestion/Mobility Analysis	\$299,700	\$78,410.03
11 Air Quality	\$111,500	\$89,311.05
12 Multimodal Transportation	\$286,700	\$240,136.08
13 Traffic Data Forecasting	\$568,600	\$447,936.59
14 Bicycle and Pedestrian Program	<u>\$118,400</u>	<u>\$111,671.95</u>
Planning Total	\$11,593,644	\$7,776,975.25
Percent Expended		67%
15 Highway Safety Improvement Program	\$500,000.00	\$360,880.24
16 Value Engineering and Quality Assurance	<u>\$500,000.00</u>	<u>\$281,077.81</u>
Other Items Total	\$1,000,000.00	\$641,958.05
Percent Expended		64%
 TOTAL	 \$12,593,644.00	 \$8,418,933.30
Percent Expended		67%

CHAPTER 1

SPR Work Program

RESPONSIBLE UNIT

Division of Planning
Customer Service Branch

PURPOSE AND SCOPE

The Customer Service Branch in the Division of Planning is responsible for administrative, budgetary, and expenditure tracking activities directly attributable to the completion of the SPR Planning Work Program chapters.

PROPOSED ACTIVITIES FOR 2013-2014

- Coordinate with all other branches in the Division of Planning in order to prepare the annual SPR Planning Work Program.
The Customer Service Branch created well over 400 pieces of correspondence in the form of memos and letters. Almost all of which were related to processing contracts, MOAs, letter agreements and other activities related to the SPR Work Program. 100% Complete
- Prepare monthly expenditure reports for each chapter of the SPR Planning Work Program.
Ran 12 expenditure reports, one per month. 100% Complete
- Update accomplishments of the SPR Planning Work Program quarterly.
Ran 12 expenditure reports, one per month. Communicated the results of those reports to branch managers and District Office Planning Supervisors quarterly to assist them in reporting quarterly accomplishments. 100% Complete
- Coordinate and prepare the annual SPR Planning Work Program and Accomplishments and Expenditures Report.
Ran final expenditure reports and reported total expenditures as well as percentage of budgeted amounts. Prepared FY 2014 Work Program. 100% Complete

PRODUCTS

The Internal Customer Service Section will coordinate and prepare the annual SPR Planning Work Program and the annual SPR Planning Work Program Accomplishments and Expenditures Report. This Section will also prepare and distribute to other Branches monthly expenditure reports for all chapters in the SPR Planning Work Program. The Internal Customer Service Branch will update accomplishments to the SPR Planning Work Program quarterly and distribute these updates to other Branches.

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$30,700	\$1,776.89	5.8%
OTHER			
TOTAL	\$30,700	\$1,776.89	5.8%

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 as well as to help better develop the abilities of employees as they assume the vacated duties brought on through mass retirements, promotions, and transfers. This is particularly essential to the Cabinet's programs as more efficient and detailed technical analyses and assistance are required.

PROPOSED ACTIVITIES FOR 2013-2014

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. Such training will include, but not be limited to the following workshops, classes, and conference 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 Count Technician 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.

PEEK Training (Chapter 3 – Traffic and Equipment Management)

TMG Training (Chapter 3 – Traffic and Equipment Management)

TRADAS (Chapter 3–Traffic and Equipment Management) Due to the dissolution of Chaparral, no TRADAS training was held during this period.

GIS Conference (Chapter 4 – Roadway Systems, Chapter 5 – Cartography, Chapter 6 – Highway Information System, Chapter 10 – Performance Measures, Chapter 14-Bike Ped, Chapter 7 – Strategic Corridor Planning - Attended, Chapter 8 - Statewide Planning, Chapter 12- Multimodal Freight Transportation)

Adobe Illustrator (Chapter 5 – Cartography)

KAMP (Ky Assoc of Mapping Professionals) Annual Meeting (Chapter 4 – Roadway Systems, Chapter 5 – Cartography, Chapter 12- Multimodal Freight Transportation, Chapter 14-Bike Ped)

GIS-T (GIS for Transportation) Annual Meeting (Chapter 4 – Roadway Systems, Chapter 5 – Cartography, Chapter 6 – Highway Information System)

COGNA Annual Meeting (Chapter 5 – Cartography)

Microstation (Chapter 4 – Roadway Systems, Chapter 5 – Cartography, Chapter 6 – Highway Information System, Chapter 7 – Strategic Corridor Planning)

Highway Performance Monitoring System (HPMS) (Chapter 6 – Highway Information System)

Highway Information System Conference (HIS) (Chapter 3–Traffic and Equipment Management, Chapter 6 – Highway Information System)

Asset Management Conference (Chapter 6 – Highway Information System)

Bentley Training conference (Upgrade of HIS) (Chapter 6 – Highway Information System) Did Not Attend

HIDAC Training (Chapter 6 – Highway Information System) Did Not Attend

CHAPTER 2

Personnel Training

RESPONSIBLE UNIT

Division of Planning

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

Business Objects Training (Chapter 6 – Highway Information System, Chapter 8 - Statewide Planning, Chapter 12- Multimodal Freight Transportation, Chapter 13 – Traffic Data Forecasting)
Standard Query Language (SQL) (Chapter 6 – Highway Information System) **Did Not Attend**
Visual Basic (Chapter 6 – Highway Information System) **Did Not Attend**

Bentley InRoads (Chapter 7 – Strategic Corridor Planning)

Public Involvement in the Transportation Decision Making Process (Chapter 7 – Strategic Corridor Planning, Chapter 8, Statewide Transportation Planning and Chapter 9 – Metropolitan Planning Organization)

Effective Communications in Public Involvement (Chapter 7 – Strategic Corridor Planning, Chapter 8, Statewide Transportation Planning and Chapter 9 – Metropolitan Planning Organization)

Fundamentals of Title VI/Environmental Justice (Chapter 7 – Strategic Corridor Planning, Chapter 8, Statewide Transportation Planning and Chapter 9 – Metropolitan Planning Organization)

Practical Conflict Management Skills for Environmental Issues (Chapter 7 – Strategic Corridor Planning and Chapter 8, Statewide Transportation Planning)

Highway Capacity 2010 manual/software (Chapter 7 – Strategic Corridor Planning, Chapter 13 - Traffic Forecasting and Modeling)

KYTC Traffic Engineering Design (Chapter 7 – Strategic Corridor Planning)

Public Involvement (Chapter 7 –Strategic Corridor Planning, Chapter 8–Statewide Transportation Planning, and Chapter 9 – Metropolitan Planning Organization, Chapter 12 – Multimodal Transportation)

Road Safety Audit Training (Chapter 7 –Strategic Corridor Planning)

Highway Safety Manual Training (Chapter 7 –Strategic Corridor Planning)

2013 Partnering Conference (Chapter 7 –Strategic Corridor Planning, Chapter 10- Performance Measures and Congestion/Mobility Analysis, Chapter 12 – Multimodal Transportation, Chapter 13 - Traffic Forecasting and Modeling, Chapter 14-Bike Ped)

Purpose and Needs Statements Training (Chapter 7 –Strategic Corridor Planning, Chapter 8– Statewide Transportation Planning Chapter 9 – Metropolitan Planning Organization)

NEPA(Chapter 7 –Strategic Corridor Planning, Chapter 8–Statewide Transportation Planning, and Chapter 9 – Metropolitan Planning Organization)

GIS (Chapter 7 –Strategic Corridor Planning, Chapter 8–Statewide Transportation Planning, Chapter 12 – Multimodal Transportation, Chapter 13 - Traffic Forecasting and Modeling, Chapter 14-Bike Ped)

Microsimulation (Chapter 7 –Strategic Corridor Planning)

Administration of FHWA Planning and Research Grants Chapter 9 – Metropolitan Planning Organization, Chapter 10- Performance Measures and Congestion/Mobility Analysis, Chapter 12 – Multimodal Transportation, Chapter 13 - Traffic Forecasting and Modeling)

Transportation Research Board annual meeting (Chapter 7 – Strategic Corridor Planning, Chapter 8–Statewide Transportation Planning, Chapter 9 – Metropolitan Planning Organization)

Planning for Operations (Chapter 9 – Metropolitan Planning Organization)

TRB Small and Medium Communities Conference (Chapter 9 – Metropolitan Planning Organization, Chapter 10- Performance Measures and Congestion/Mobility Analysis)

Congestion Management and Reliability (Chapter 9 – Metropolitan Planning Organization)

CHAPTER 2

Personnel Training

RESPONSIBLE UNIT

Division of Planning

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

Transportation and Land Use (Chapter 9 – Metropolitan Planning Organization, Chapter 13 - Traffic Forecasting and Modeling)

Climate Change (Chapter 9 – Metropolitan Planning Organization, Chapter 11 – Air Quality Conformity Analysis)

STAQS (Chapter 11 – Air Quality Conformity Analysis)

MOVES (Chapter 11 – Air Quality Conformity Analysis)

National Freight Conference (Chapter 7 –Strategic Corridor Planning, Chapter 12 – Multimodal Transportation)

Modeling Conferences and Training (Chapter 9 – Metropolitan Planning Organization, Chapter 13 – Traffic Data Forecasting)

TransCAD Training (Chapter 13 – Traffic Data Forecasting, Chapter 9 – Metropolitan Planning Organization)

Census Training (Chapter 5 – Cartography, Chapter 7 –Strategic Corridor Planning, Chapter 8 – Statewide Transportation Planning, Chapter 9 – Metropolitan Planning Organization, Chapter 11 – Air Quality Conformity Analysis, Chapter 13 – Traffic Data Forecasting)

Bike/Ped Conferences (Chapter 9 – Metropolitan Planning Organization, Chapter 14 – Bicycle and Pedestrian Program)

Bicycle and Pedestrian Facilities Conference (Chapter 9 – Metropolitan Planning Organization, Chapter 14 – Bicycle and Pedestrian Program)

Training for State Bicycle and Pedestrian Coordinator (Chapter 14 – Bicycle and Pedestrian Program)

Partnering Conference (Chapter 3 – Traffic and Equipment Management, Chapter 4 – Roadway Systems, Chapter 5 – Cartography, Chapter 6 – Highway Information System, Chapter 7 – Strategic Corridor Planning, Chapter 8 – Statewide Transportation Planning, Chapter 9 – Metropolitan Planning Organization, Chapter 10- Performance Measures and Congestion/Mobility Analysis, Chapter 12 – Multimodal Transportation, Chapter 13 – Traffic Data Forecasting, and Chapter 14 – Bicycle and Pedestrian Program)

Additional Training

West Virginia Planning Conference (Chapter 9 – Metropolitan Planning Organization Team)

Lifesavers Conference (Chapter 7 –Strategic Corridor Planning)

Prep ME/Pave ME Training (Chapter 12 – Multimodal Transportation, Chapter 14 – Bicycle and Pedestrian Program)

Sharepoint Content Management (Chapter 14 – Bicycle and Pedestrian Program)

Regional Freight Conferences ITTS, MAFC (Chapter 12 – Multimodal Transportation)

Geoprocessing with Python Scripting with Model Builder (Chapter 5 – Cartography)

CHAPTER 2

Personnel Training

RESPONSIBLE UNIT

Division of Planning

PRODUCTS

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

	2013-2014	Expended	Percent Expended
PERSONNEL	\$315,200	\$34,911.45	11.1%
OTHER	\$35,000	\$16,405.75	46.9%
TOTAL	\$350,200	\$51,317.20	14.7%

Other

- Other Operational Cost \$35,000
For items such as travel, mileage, equipment and other cost directly associated to the completion of this work chapter.

CHAPTER 3

Traffic and Equipment Management

RESPONSIBLE UNIT

Division of Planning
Traffic and Equipment Management Branch

PURPOSE AND SCOPE

The primary functions of the Traffic and Equipment Management Branch are to collect, process, and store traffic data. Traffic data is used in virtually every decision made in transportation engineering. Applications of this information include, but are not limited to: project/program planning, project selection, pavement design, safety analysis, capacity analysis, air quality assessment, and federal funding.

The Branch is comprised of two Sections: the Equipment Section and the Data Section.

The Equipment Section is responsible for the acquisition, distribution, operation, maintenance, and repair of all equipment used at traffic data acquisition stations. The Equipment Section performs site design, installations, construction inspections, and maintenance at traffic data acquisition stations throughout the state. Additional duties of Equipment Section personnel include providing technical expertise and training to District personnel and performing traffic counts as necessary.

The Data Section performs quality control for, and processes and maintains data collected from data acquisition stations located statewide. The Data Section generates several different reports from said data throughout the year. These reports are prepared for the Federal Highway Administration (FHWA), Kentucky Transportation Cabinet (KYTC), Kentucky Transportation Center (KTC), various planning agencies, and other governmental agencies. Data is also made available for public consumption.

PROPOSED ACTIVITIES FOR 2013-2014

- Maintain, update, analyze, provide quality assurance, and make available data from approximately 15,000 traffic count stations including coverage, interstate, automatic traffic recorder (ATR), weigh in motion (WIM), and ramp sites. **All traffic count station data were checked for quality control and assurance of data upon entering into database. Data was updated as it was received. Data was continuously maintained and made available via regularly updated information on the Division of Planning website and by request from the TEMAC Branch. 100% complete.**
- Download, process, and analyze data for every day of the year from approximately 100 permanent ATR stations. **Available ATR data was downloaded daily. All ATR data was checked for quality control and assurance of data upon entering into database. Reports were generated and sent to FHWA monthly. 100% complete.**
- With the KYTC District Offices, collect and process vehicle volume data from approximately 5,400 short-duration, portable-machine, coverage and ramp counts. **Received approximately 4,750 counts of approximately 5,100 assigned (93.0% complete) from District Offices for short-duration counts in calendar year 2013. Assigned approximately 5,400 short-duration counts to Districts in calendar year 2014.**
- With KYTC District Offices, collect and process vehicle volume data from approximately 500 short-duration, portable-machine, local-road, bridge counts. **Approximately 100 short duration local road bridge counts were performed (7% of triennial program) in calendar year 2013.**

CHAPTER 3

Traffic and Equipment Management

RESPONSIBLE UNIT

Division of Planning
Traffic and Equipment Management Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- With KYTC District Offices, review, assign, collect, process, analyze, and distribute data from special count stations that are requested by the highway districts and other divisions. The number of special counts can vary significantly from year to year with the average being approximately 100 total, each of which typically includes multiple volume and turning movement counts. **Approximately 115 special counts (100% of those received) were reviewed, assigned, processed, analyzed and distributed in calendar year 2013.**
 - Concurrent with coverage, interstate, ATR, WIM, and ramp counts, collect and process vehicle classification data from approximately 1,600 stations, which is 30% of all traffic count stations statewide to comply with the FHWA, *Traffic Monitoring Guide* recommendation of 25%-30%. **Vehicle classification data was collected and processed from approximately 1015 stations (~21%) in calendar year 2013.**
 - Submit monthly reports to FHWA of hourly ATR records. **Automatic Traffic Recorder (ATR) data was submitted to FHWA monthly 100% complete.**
 - Provide traffic data for annual FHWA required Highway Performance Monitoring System (HPMS) report. **All data required of the Data Team for the annual FHWA HPMS report was provided. 100% complete.**
 - Update axle and monthly factors used in adjusting short term counts from data collected at ATR and vehicle classification stations. **Updated seasonal, axle and design hour factors at the end of calendar year 2013. 100% complete.**
 - Review and analyze functionally classified local road data to validate formula used to calculate local road Daily Vehicle-Miles of Travel (DVMT). **Current local road data was analyzed and a new formula was calculated. The new formula was very close to, and validated, the original equation. 100% complete.**
 - Update in-house databases to include any new stations or roadway alignment changes. Correct beginning and ending mile points to better represent traffic generators. **All in-house databases were updated in a timely manner as needed. 100% complete.**
 - Continue to grow and maintain the WIM data program to collect, process, analyze, and submit monthly, one-week, WIM data at permanent WIM stations to FHWA. Periodically calibrate WIM data collection equipment in order to assure quality data. **WIM data is collected daily from approximately 35 traffic data collection stations and is processed and analyzed weekly. 100% complete. File format issues (FHWA switched from the 2001 Traffic Monitoring Guide (TMG) format to the 2013 TMG format this fiscal year) have hindered complete quality assurance capabilities. We are working with our database software maintenance contractor to rectify this situation. Once the quality assurance issue is rectified, continuous data (in lieu of monthly, one-week data) will be submitted to FHWA. This includes past data and all future data. WIM data collection sites are monitored daily and maintained by Equipment Team personnel, when possible. Maintenance activities beyond the capabilities of in-house personnel are assigned to private electrical consultants through a maintenance contract.**
- Review proper operation and coverage of ATR sites. Install additional stations as necessary. **Review of functional classifications and geographic locations of ATR sites was performed – 100% complete.**

CHAPTER 3

Traffic and Equipment Management

RESPONSIBLE UNIT

Division of Planning
Traffic and Equipment Management Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Investigate and purchase new traffic data collection equipment to provide for safer, more efficient and more accurate methods of collection. Investigated new technologies including but not limited to new automatic data recorder (ADR) hardware, laser detectors, GPS units, and data retrieval software. Purchased modems and antennae, miscellaneous portable count materials, and protective clothing. 100% complete.
- Certify, repair, and maintain approximately 800 traffic data recorders. The TEMAC Equipment Team certified approximately 800 automatic data recorders (ADRs). ADRs were maintained and repaired throughout the year, as required. 100% complete.
Inspect, repair, and maintain, where possible, approximately 550 ATR and semi-permanent vehicle sensor locations. Permanent vehicle sensor locations were inspected concurrent with annual short term traffic data collection. Sites requiring maintenance were noted and, where feasible, repaired by Equipment Team personnel. Maintenance activities beyond the capabilities of in-house personnel are assigned to private electrical consultants through a maintenance contract. 100% complete.
- Administer contract and provide oversight of Contractor(s) for the repair and maintenance of ATR and semi-permanent vehicle sensor locations. Major maintenance activities (at a minimum, the replacement of in-pavement sensors) for 12 ATR stations totaling in excess of \$200,000 were assigned to the electrical contractors.
- Track upcoming highway projects and produce plans and specifications for new and replacement traffic sensor installations for submittal into construction and pavement rehabilitation contracts. Approximately 46 sets (100% of requested) of plans and specifications including approximately 72 ATR and semi-permanent count station sites were produced and submitted by the Equipment Team for construction and pavement rehabilitation contracts.
- Provide construction oversight, when required, and perform final inspections of new and replacement traffic sensor installations. Performed final inspections on approximately 35 newly installed traffic sensor stations. Provided construction oversight for six stations installed on I-75 in Kenton County. 100% complete.
- Update the traffic management system (TMS) as needed. The TMS process documentation was updated throughout the year as needed. 100% complete.
- Provide contract management and oversight of consultants assisting with field data collection and other tasks. Process and provide quality assurance of the provided counts. Assigned and provided oversight for three assignments totaling approximately 115 individual traffic counts. Processed and provided quality assurance of all submitted counts.
- Provide traffic count technician training and support. Individual traffic count technician training and support was provided throughout the year as requested. No formal group training was conducted.

CHAPTER 3

Traffic and Equipment Management

RESPONSIBLE UNIT

Division of Planning
Traffic and Equipment Management Branch

PRODUCTS

- Volume and classification data from ATRs Data was retrieved for a minimum of six months from 64 ATR stations. Automatic Traffic Recorder (ATR) data was downloaded and processed daily and a report of hourly records was submitted to FHWA monthly. Data was analyzed to ensure proper operation of ATRs. Maintenance issues were referred to the Equipment Team and repaired where feasible. As funding permits, sites that require in-pavement sensor maintenance will be repaired by electrical contractors through the new maintenance agreements or by future projects let by the Division of Planning.
- Volume, classification, and weight data from WIM sites. Continued collecting WIM data via ip addressable modems from approximately 35 sites. Continued developing methodologies and software to perform Quality Control, process, and analyze data. Data has not been submitted to FHWA - plan on submitting data quarterly after QC program is complete and data is deemed reliable. 80% complete.
- Volume and classification data from short-duration machine counts. Received approximately 4,750 counts of approximately 5,100 assigned (93.0%) from District Offices for short-duration counts in calendar year 2013. Assigned approximately 5400 short-duration counts (including counts not completed in calendar year 2012) to Districts in calendar year 2013. Of 208 interstate sites, completed data collection from approximately 157 (75%); were unable to collect data from remaining stations due to construction in the vicinity and/or malfunctioning sensors. Approximately 100 short duration local road bridge counts were performed (7% of triennial program).
- Volume and classification data from special counts Approximately 115 special counts (100% of those received) were reviewed, assigned, processed, analyzed and distributed.
- Axle and monthly factors Updated seasonal, axle and design hour factors at the end of calendar year 2013.
- Databases containing count station and count data information Database information for count station and count data was updated as needed. Began working with Information Technology personnel to develop a new, more robust, user-friendly database for count station information.
- Accurate local DVMT data for FHWA reporting through HPMS. Accurate local DVMT data for FHWA was reported through HPMS.

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$2,410,300	\$1,404,990.96	58.3%
OTHER	\$455,000	\$434,120.28	95.4%
TOTAL	\$2,865,300	\$1,839,111.24	64.2%

CHAPTER 3

Traffic and Equipment Management

RESPONSIBLE UNIT

Division of Planning
Traffic and Equipment Management Branch

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Outsourcing

- \$150,000 contract for outsourced traffic counts to be performed by consultant under Statewide Traffic Counting contract.
- \$250,000 for count station maintenance through district maintenance contracts.
- \$150,000 WIM Installation Maintenance, Calibration, and Collection.
- \$150,000 Research and Studies
- \$290,000 Interstate and Arterial Loop and Piezo Install

Other

- \$250,000 for purchase of new Traffic Data Collection Equipment
- \$100,000 for Piezos, Road Tube, and counting supplies
- \$75,000 Other Operational Cost
For items such as travel, mileage, equipment and other cost directly associated to the completion of this work chapter.

CHAPTER 4

Roadway Systems

RESPONSIBLE UNIT

Division of Planning
Transportation Systems Branch

PROPOSED ACTIVITIES FOR 2013-2014

- Track roadway construction or maintenance projects to identify changes in roadways and their effect on roadway system designations. *Daily activity including contact and email with District Offices for project status updates. Posting notification for Data Management when open to traffic dates are changed as well as updating the Project Tracker Database with current information. 100% Complete*
- Adapt project design plans and use GIS software to generate maps for resolving issues of roadway system and ownership designations and for use by other branches. *Utilizing ArcMap and/or MicroStation DGN files to create question maps from imported project design plan sheets and/or shapefiles for all upcoming projects for comments from the Systems group and District Offices regarding ownership and system designations. Subsequently question maps were converted into an Official Order Map. 100% Complete*
- Coordinate the two-way flow of information between the Highway District planning staffs and Central Office Transportation Systems and Data Management branch staffs regarding roadway construction and ownership status. *Communicate almost daily with Data Management personnel on activities regarding updating and/or revising H.I.S. based on District Planning recommendations. Phone calls, emails, regular meeting with Data Management Staff, and sometime visits are made to the respective Highway District Office to check on project status. 100% Complete*
- Generate official documentation recommending appropriate SPRS revisions to the Commissioner of the Department of Highways for approval. (KRS 177.020 and 603 KAR 3:030 *Currently Official orders are required for all changes to the SPRS. Also backup documentation is kept on file. 100% Complete*
- Ensure the SPRS reflects roadways of significance, and correlates with the functional classification system and the electronic base map coverage. *Reviewed SPRS and functional class for all new road alignments along with recommendations and input from the Districts to make classification changes. Evaluate as projects were opened and official orders were generated. 100% Complete*
- Review the Functional Classification of roadways and consult with Data Management branch and others as appropriate to ensure the system reflects roadways of significance and correlates with the SPRS and the electronic base map coverage. *Met with Data Management staff on each road project prior to it being put into H.I. S. and reviewed as each respective project opened and the official orders were completed. Also, reviewed whenever a request by the Districts for a classification change becomes necessary. 100% Complete*
- Prepare quarterly reports for publication on the internet of SPRS mileage and of the designated routes and mileage of roads in the NHS and NN systems. *Reports every quarter and made sure they were published on the website – Reports generated from H.I.S. /EXOR and posted as needed, typically quarterly. 100% Complete*
- Review revisions to the SPRS to discover any modifications made necessary to other systems such as functional classification, NHS, or NN classifications. *None required. Typically new alignment reviews check to see if any surrounding roads needed classification changes due to the new alignment. Changes to NHS and NN require a separate official order. This is a part of the process of doing an Official Order. 100% Complete*

CHAPTER 4

Roadway Systems

RESPONSIBLE UNIT

Division of Planning
Transportation Systems Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- As requested by local public agencies or Highway Districts, review requests for revisions of functional classification, NHS and NN. As appropriate, prepare request from Cabinet to FHWA for system revision. **Did a couple request to FHWA over the last year. These were follow-ups to some that had been overlooked in the past year. 100% Complete**
- As necessary or appropriate, review interstate frontage roads. Coordinate documentation by Highway District offices of suitability for transfer to local government and prepare request from Cabinet to FHWA for permission to complete transfer of property to local government. **Completed a few frontage roads. These require that the District (for KYTC) address certain criteria from the Federal-Aid Policy Guide 23 CFR 620B. Mailed letters to Districts waiting for HDO response and/or waiting for FHWA approval. Pending (2 Request) – Complete in FY 2015**
- As necessary or appropriate, prepare and submit request for approval by AASHTO Standing Committee on Highways, U.S. Route Numbering Special Committee, for any significant change to routing of a U.S. numbered highway. **Submittals are made to the Special Committee twice a year as necessary – completed one in Fall 2013 for US 62 in Harrison County (addressed the Cynthia Bypass). Also coordinated with the Multimodal Branch to send their US Bicycle route designation submittal in for the Spring 2014 meeting of the Special Committee. 100% Complete**
- Provide all system revision information to the Data Management branch and others as appropriate. **Daily contact with Data Management to ensure that all Systems data is accurate in HIS. 100% Complete**
Compile data to provide ton-mile statistics to the Governor's Office for Local Development for coal transported on Kentucky Highways as required by KRS 177.977 and KRS 42.455. **Reports are drawn in Exor forms from data entered for the previous calendar year. "Ton-Miles Table" to Department of Local Government (DLG) on August 15, 2013. 100% Complete**
- Publish Kentucky's Official Coal Haul Highway System Report as required by KRS 177.977 and KRS 42.455. **The Coal Haul Report and supporting maps were published to the website in late August 2013. Website updated for Coal Haul. 100% Complete**
- Provide the Division of Maintenance coal haul route information for their review of bridge weight limits. Develop the update of the Extended Weight Coal and Coal By-Products Haul Road System for replacement of the current system in the Highway Information System database. Prepare the Official Order for approval of the updated Extended Weight system. **Bridge information for review by Maintenance was sent on August 1, 2013. The Extended Weight data was updated in HIS at the end of October 2013. Official Order updates for the Secretary's signature and it was distributed by early November 2013. 100% Complete**

CHAPTER 4

Roadway Systems

RESPONSIBLE UNIT

Division of Planning
Transportation Systems Branch

PRODUCTS

- Official Order Changes to the State Primary Road System
40 Official Orders were completed, including transfers. Discovered and processed changes resulting from roadway data collection and roadway system data reviews. 100% Complete
- State Primary Road System Official Order Listings and Functional Classification Reports
Update State Primary Road listings for each official order completed. Revise mileage totals and update revisions page to reflect current changes. Revised SPRS listing to the Planning webpage. 100% Complete
- Quarterly Reports on internet: State Primary Road System Mileage, National Highway System routes and mileage, Designated National Truck Network routes and mileage
Updated NHS and NTN reports on web at beginning of each quarter. Put SPRS mileage report back out on the web upon Districts requests. 100% Complete
- GIS map files incorporating project design files for decision-making and use by other Branches
Maps prepared for each Official Order. Incorporated project design files into GIS map documents to create decision-making maps for Official Orders. Communicated with Data Management Branch on information obtained for input into HIS for HPMS reporting. 100% Complete
- Coal Haul System Report with associated maps and separate datasets to Department of Local Governments, KYTC Budgets and KYTC Bridge Maintenance.
Compiled Coal Haul reports and shapefiles. Created maps of producing counties as well as a statewide map. Mailed out 667 Coal Haul forms in December 2013 and 643 Coal Haul forms in June 2014. Made several Coal Haul Updates. 100% Complete
- Inform FHWA of modification of functional classification
Data Management Branch reviewed and submitted four Functional Classification changes to FHWA. 100% Complete
- Request to FHWA for modification of National Truck Network (NN) or Official Order Change to State Designated National Truck Network None Required
- Request to FHWA for modification of National Highway System None Required – a couple had been sent previously to FHWA – follow up request
- Request to FHWA for permission to relinquish interstate frontage road to local government
None Required – follow up to previously FHWA request.

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$647,800	\$501,510.78	77.4%
OTHER	\$25,000	\$1,674.30	6.7%
TOTAL	\$672,800	\$503,185.08	74.8%

CHAPTER 5

Cartography

RESPONSIBLE UNIT

Division of Planning
Transportation Systems Branch

PROPOSED ACTIVITIES FOR 2013-2014

- Provide electronic mapping for all city, county, district, state, and special-purpose cartographic products. Over 101 County Maps, SPRS, and Functional Classification Maps were updated and exported on the internet. About 74 City Maps, SPRS, and Functional Classification Maps were updated and exported on the internet. District Maps for SPRS and Functional Class were exported and updated to the internet. 7 District maps. 100% Complete
- Maintain and publish electronic formats of cartographic products for display on the Internet. Over 336 Web items, 122 Web pages are updated regularly. Just recently restored over 50 broken links. Maps are updated regularly. 100% Complete
- Update the Official State Highway Map electronic files and accomplish necessary publication. Monitor inventory at 17 locations and coordinate additional deliveries as needed. Reviewed updated highway information from Districts and Systems Team to ensure routes are correct on Official Highway Map. Obtained printing exception from Finance, processed form for contract and updated RFP document for contract. Revised coloration of map to match KY Tourism materials and updated roads on statewide map and 15 inset maps as required. Prepared for publication and press-checked printing of 800,000 maps. Continue to monitor inventory and shipping of product to 17 locations. Created alternate format digital versions of the map for publication on the web page and for usage in GIS software. 100% Complete
- Create reports and exhibits for various Division projects and studies to assist transportation decision-makers in their roles. Complied over 508 coal haul reports and 1,200 Route segments as well as a statewide map. Produced a Hazardous Cargo Routes Map of the state with insets for Louisville and Northern Kentucky for the Department of Vehicle Regulation. Created several maps for each District for use in developing District/Regional Transportation Plans, such as Priority Routes and the Top 30 Unscheduled Project List. Created numerous exhibits and posters for KYTC's Your Turn Project. Finished preliminary FHWA Urban Area boundaries 55 maps for Data Management to review. 100% Complete.
- Provide mapping and graphic assistance to other Divisions and Departments as requested. Create bicycle maps for adventure tourism and the bicycle and pedestrian program and a bicycle route map of Dawkins Trail and a wall map for Adventure Tourism. Created 96 different bike ride/routes for a total of 768 individual route segments. Provided KREDA map to the Economic Development Cabinet. Updated Legislator maps. Created several "You are Here" maps for a welcome centers, rest areas, and for the KACB. Prepared Rest Area Location Map along Interstates. Updated the National Highway Map and created a new Functional Classification Code Map with surrounding states systems for Keith Dotson. There were several maps prepared for Multimodal Freight Transportation. Highway District Maps for John Valentine, Service Area Maps for Public Transportation and Human Service Transportation Delivery, a variety of maps for Emergency Response and etc. 100% Complete.
Develop and provide to outside entities digital maps as requested. Responded to map reviews of 121 maps for evidence of populated places for USGS. Provided highway updates to Rand McNally and AAA. Created special Kentucky map for Kentucky Arts Council with event locations. Fulfilled 1,907 maps sales request and mailed out nearly 21,535 free official Highway Maps. Map Sales generated nearly \$1,000.00. 100% Complete.

CHAPTER 5

Cartography

RESPONSIBLE UNIT

Division of Planning
Transportation Systems Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Develop and provide geographic information systems (GIS) files locating non-roadway modes of transportation. Reviewed and edited populated place symbols from GIS data resulting in +400 changes to populated place symbols in the state for COT GNIS layer improvements. 100% Complete

PRODUCTS

- Official Highway Map
Contract obtained for 2014 map, graphic files generated, roadway updates made to statewide map and 15 inset maps, printing QC'd and 800,000 copies printed and distributed as needed. 100% Complete
- State Primary Road System Maps
Updated county maps at least 101 times. Updated city maps 74 times. 100% Complete
- Functional Classification Maps
Same as for State Primary Road Systems. Also 74+ counties were updated because of special functional changes to NHS updates 100% Complete
- Other Highway Data Maps (i.e., traffic counts, NHS, NN, etc. maps) 100% Complete
Hazardous Cargo Routes maps of the state, Louisville, and N. Ky.
Economic Development KREDA State Map
National Highway System (NHS)
Kentucky Rail
FHWA Urbanized Areas
- Cabinet and Planning Project Exhibit Maps/Displays 100% Complete
Special large 2014 Highway Map You Are Here with enlarged
Legislator maps, then updated for new elections and leadership
New Rest Area Station Maps
Provide highway updates to Rand McNally, AAA
Special Kentucky map for Kentucky Arts Council w/ event locations
Special counties focused Highway map for Finance Cabinet Ron Harris
Dawkins Trail bicycle route maps
Wall Map for Adventure Tourism
Public Service areas for Public Transportation
Populated Areas by County
Functional Classification surrounding States
- GIS Analyses of various data for transportation decision-making
As requested – See Comments above 100% Complete
- General and special purpose maps as requested by other agencies
As requested – See Comments above 100% Complete
- Geographic information systems (GIS) electronic files
400+ maps of suspect populated places for COT GNIS layer improvements. 100% Complete

CHAPTER 5

Cartography

RESPONSIBLE UNIT

Division of Planning
Transportation Systems Branch

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$298,000	\$238,642.13	80.1%
OTHER	\$105,000	\$59,600.35	56.8%
TOTAL	\$403,000	\$298,242.48	74.0%

CHAPTER 6

Highway Information System

RESPONSIBLE UNIT

Division of Planning
Data Management Branch

PURPOSE AND SCOPE

The Data Management Branch responsibilities include maintenance of the Transportation Cabinet's Highway Information System (HIS). This database serves as the Cabinet's storage unit for Geographic Information System (GIS) road centerlines and information about roadway characteristics, transportation systems, and roadway analysis. The branch contributes to the KYTC Asset Management program by providing an up-to-date route network of asset locations for other divisions and also providing asset extraction capabilities for updates to the network. The branch uses HIS information to produce the Highway Performance Monitoring System (HPMS) data submittal required annually by the Federal Highway Administration (FHWA). The HPMS submittal is also used within the Cabinet to assist with the analysis and measurement of highway system performance. The branch regularly reviews Functional Classification with the Highway District Offices, Metropolitan Planning Organizations (MPOs), and local officials. It also coordinates all Functional Classification changes associated with road changes or external entity requests. The branch provides roadway information to many areas within the Cabinet, other governmental agencies, consultants, and the public via the Division's website, the Cabinet's Transportation Enterprise Database (TED), or direct requests. In order to support all of these functions with accurate and timely data, the branch routinely analyzes data collected by the Cabinet's Photo Vans and performs on-site data collection activities.

PROPOSED ACTIVITIES FOR 2013-2014

- Work with the Office of Information Technology (OIT) to upgrade the HIS database to the next release of "Highways by EXOR" and deploy to other data owners within the cabinet. **Tested HIS database upgrades and fixes to confirm product reliability and functionality prior to installation; Upgraded to NM 4500 and SM 4.7 – 100% complete**
- Work with OIT to assist with database upgrades that include links, functionality, and data exchange with other division databases. **Worked with TED and GIS Branches in OIT for reporting, mapping, and sharing of HIS data; Ongoing development of a link between HIS/TED and the Division of Maintenance's OMS/PMS databases (Bentley Systems contract) – 60% complete**
- Assist with implementation of new Traffic System database including links, functionality, and data exchange between HIS and the new database. **Completed 2013 HPMS submittal using traffic data stored in new TRADAS database; Continued to assist with functionality improvements – 90% complete**
- Assist with implementation of the Photo Van imaging system for data collection purposes. This will include providing up to date route network for photo location accuracy and data extraction oversight. **Accurately located Photo Van data to HIS up to date route network – 100% complete**
- Assist with Cabinet-wide asset management data collection and data dissemination. **Coordinated with Divisions of Maintenance, Traffic Operations, Highway Design, and Program Management to ensure efficient data collection and dissemination across multiple offices – 100% complete**
- Coordinate with other divisions concerning asset management needs of HIS and TED and HIS needs of other divisions data. **Created new metadata in HIS to communicate information about data collection and usage to other divisions; Coordinated with Public Affairs to improve the management of Adopt-a-Highway data – 90% complete**

CHAPTER 6

Highway Information System

RESPONSIBLE UNIT

Division of Planning
Data Management Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Continue to develop processes and procedures to review, edit, and update Cabinet's base map and HIS database. Performed thorough review of HIS data types and implemented new database rules and checks to improve data accuracy during data loading and maintenance; New data types added to HIS to contain information about recreational bike rides and bike/pedestrian facilities to meet changing Cabinet needs – 100% complete
- Assist with testing, training, report migration, and enhancements with the HIS. Participated in bi-weekly conference calls with Bentley Systems to discuss HIS database enhancements; Tested and trained users on newly applied database enhancements – 100% complete
- Assist in the development and maintenance of a Cabinet GIS and maintain database network for Kentucky's public highway system. Processed 4,794 local road centerline location and attribute changes in 94 counties – 100% complete
- Update newly acquired road centerline data collected from Division of Maintenance Photo Van 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, for use in maintaining and generating data driven maps. Used CAD design files to update new state road centerlines, mileages, and inventory on pace with project openings for over 80 projects; Used GPS collection methods to field-verify information obtained with CAD design files; Used Photo Van data and images to improve accuracy of road centerlines and inventory – 100% complete
- Improve and update roadway characteristic, HPMS, Performance Measure, and analysis data through Division of Maintenance Photo Van data collection project. HIS regularly updated with more complete and accurate Photo Van road data that drives these processes; Performed major review and update of % Passing, Widening Obstacles, and Widening Potential – 100% complete
- Perform office reviews to verify data meets the required standards and confidence levels established by this Division and FHWA. Reviewed weekly reports and quality control checks to ensure proper data maintenance; Utilized HPMS Field Manual to verify data quality and completeness; Performed checks to ensure local road changes met standards – 100% complete
- Provide up-to-date route network, DMI, roadway characteristics and system information through various programs. Provided up-to-date information to customers inside and outside the Cabinet using CAD design files, Photo Van data, field collection, GIS tools, and aerial imagery – 100% complete
- Complete a statewide urban boundary review in cooperation with Highway Districts, MPO's and Local Officials. Hosted two webinars for Highway Districts, MPO's, and Local Officials to provide information and answer questions about the review; Received and analyzed their suggested adjustments; Began compiling final adjustment recommendations for FHWA approval; Plan to complete in 2014-2015 – 75% complete
- Process and submit annual HPMS submittal. HPMS (1,780 sample sections) submitted on June 13; Certified Public Mileage (79,598 miles) submitted on May 30; Gathered and processed data from other areas of the Cabinet – 100% complete
- Regularly review Functional Classification in cooperation with Highway Districts and MPO's. Ongoing in conjunction with statewide urban boundary review; Plan to implement changes in 2014-2015 pending final FHWA approval of adjustment recommendations– 25% complete
- Review Functional Classification change requests from Highway Districts and other external entities. Reviewed and processed four Classification change requests – 100% complete

CHAPTER 6

Highway Information System

RESPONSIBLE UNIT

Division of Planning
Data Management Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Coordinate changes to the NHS and Strategic Highway Network following proper procedure for approval from FHWA and DOD. Performed a statewide comparison of KYTC and FHWA NHS data; Plan to rectify discrepancies in 2014-2015 – 50% complete
- Utilize HPMS to update Rating Indices, Capacity, and Volume/Service Flow ratio in the HIS database. Initiated contract with Kentucky Transportation Center (KTC) to re-develop these processes using the 2010 Capacity Manual – 30% complete
- Use HIS to measure highway system performance and assist with analyses of the Unscheduled Projects List. Initiated project with OIT to link location of Unscheduled Projects to HIS route locations to assist with development of the Cabinet's Highway Plan – 25% complete
- Maintain currency of HPMS software and perform changes required by federal legislation, regulations, policies, and/or guidelines, as needed to the HPMS. Used web-based HPMS 8.0 (maintained by FHWA) and followed software validations and requirements; Used the latest edition of the HPMS Field Manual; Updated data storage model to reflect HPMS guidelines – 100% complete
- Investigate results of HPMS each year and analyze changes in processes to improve output of report. Sample panel updated to ensure sample adequacy; Team meeting following submittal to plan improvements for 2014; Initiated contract with Bentley Systems to modernize data extraction process for HPMS using Transportation Intelligence Gateway (TIG) – 25% complete
- Assist in processing and reporting of the FHWA 534 and 536 reports. SPR funds no longer used for 534 report; Future Work Programs will be updated to reflect this change; 536 report not required in 2013-2014 – 100% complete

PRODUCTS

- Routines to extract better road information from the GPS files (i.e. vertical grade, horizontal curve) Worked with Division of Maintenance to transfer vertical grade and horizontal curve information from Photo Van data collection to HIS – 25% complete
- Queries and routines for quality control of the database concerning asset items and road information Reviewed Quality Assurance report weekly and parameter-based inquiry (PBI) results monthly; Created new queries in TIG to check additional validations – 100% complete
- Database and GIS application troubleshooting when errors take place Participated in monthly conference calls with Bentley Systems to discuss HIS database issues and errors; Hired new staff member to troubleshoot HIS database errors – 100% complete
- Database and GIS upgrades Participated in bi-weekly conference calls with Bentley Systems to discuss HIS database upgrades; Tested HIS database upgrades to confirm product reliability and functionality prior to installation; Upgraded to NM 4500 and SM 4.7– 100% complete
- Other agency information loaded or linked to HIS database Processed Department of Fish and Wildlife road centerline updates into HIS for roads within its jurisdiction; Ongoing development of a link between HIS/TED and the Division of Maintenance's OMS/PMS databases (Bentley Systems contract) – 60% complete
- New roadway centerlines obtained through GPS technology and CAD design files and updates to both the GIS layers and HIS database Updated new state road centerlines for over 80 projects; Processed 4,794 local road centerline changes – 100% complete

CHAPTER 6

Highway Information System

RESPONSIBLE UNIT

Division of Planning
Data Management Branch

PRODUCTS (continued)

- New roadway inventory either through field collection or extracted from CAD design files to update the GIS layers and HIS database **Updated new state and local road inventory for over 80 projects – 100% complete**
- New roadway inventory extracted through Photo Van software **Extracted new % Passing, Widening Obstacles, and Widening Potential inventory from Photo Van software and added to HIS – 100% complete**
- Existing roadway characteristic inventory QC checks from Photo Van pictures **Compared existing inventory to current Photo Van pictures and updated HIS as needed; Hired new staff member to perform additional Photo Van QC checks – 100% complete**
- Transportation Enterprise Database (TED) updates for Cabinet-wide consumption of data **HIS data extracted weekly and provided to TED for Cabinet-wide consumption – 100% complete**
- Cabinet-wide Asset Management updates and route locations to update other Divisions **Route locations updated weekly and on pace with opening of new roadway projects – 100% complete**
- HPMS 534 and 536 Reports **SPR funds no longer used for 534 report; Future Work Programs will be updated to reflect this change; 536 report not required in 2013-2014 – 100% complete**
- HPMS submittal due by June 15 **HPMS (1,780 sample sections) submitted on June 13 – 100% complete**
- Reports created concerning information about transportation network stored in HIS database **Numerous customer requests for reports processed efficiently and timely – 100% complete**
- Provide Certification of Public Road Mileage by June 1 **Certified Public Mileage (79,598 miles) submitted on May 30 – 100% complete**

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$1,421,700	\$1,167,538.56	82.1%
OTHER	\$355,000	\$4,145.00	1.2%
TOTAL	\$1,776,700	\$1,171,683.56	65.9%

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Outsourcing

- \$35,000 for Special GPS Maintenance
- \$150,000 for Asset Management & Support through IT
- \$150,000 for Local Road Centerline Collection with all of the 15 Area Development Districts, with contracts less than \$100,000 for each
- \$150,000 for Roadway Information Data Collection
- \$200,000 Asset Management Data Collection and Analysis

CHAPTER 6

Highway Information System

RESPONSIBLE UNIT

Division of Planning
Data Management Branch

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES (continued)

Other

- \$100,000 for database enhancements
- \$50,000 for Asset Management Data Collection
- \$75,000 for Other Operational Costs (items such as travel, mileage, equipment and other costs directly associated to the completion of this work chapter)
- \$10,000 TAM Pooled Fund Led by Iowa
- \$100,000 for computer software maintenance for upgrading HPMS

CHAPTER 7

Strategic Corridor Planning

RESPONSIBLE UNIT

Division of Planning
Strategic Planning Branch
Strategic Corridor Planning Team

PURPOSE AND SCOPE

The Strategic Corridor Planning Team evaluates system and corridor needs for the state maintained roadways. It enhances and continues to update an evaluation process for prioritizing projects for consideration for inclusion in the Six-Year Highway Plan, the District Transportation Plan (Consisting of the Unscheduled Projects List) and the Unscheduled Needs List. It also conducts technical project studies consisting of large studies to Data Needs Analysis (DNA) Studies in order to perform the necessary levels of planning to develop a conceptual and draft purpose and need statement, identifies major environmental issues including environmental justice, initiates consultation with local officials, initiates agency coordination and conducts appropriate levels of public involvement. It identifies and evaluates alternatives, generates project cost estimates and recommends phasing priorities where appropriate. The team oversees outsourced activities and works with the Highway District Offices (HDOs), Metropolitan Planning Organizations (MPOs), and Area Development Districts (ADDs) as needed to complete necessary tasks. Through analysis of data, sustainable and fundable projects will be identified.

PROPOSED ACTIVITIES FOR 2013-2014

- Continue to develop and update policy and procedures for evaluating corridor level needs. **This task is on-going. We continue to evaluate the policy and procedures for each study, placing emphasis on practical solutions.**
- Conduct corridor, scoping, programming, small urban area studies, data needs analyses, and other studies. **For a list of active studies please see the PRODUCTS below or view the attached spreadsheet.**
- Respond to inquiries about corridor planning issues. **All inquiries to planning studies are responded to in a timely manner. Recently completed studies are available online for the public to view and posted on ProjectWise.**
- Identify, evaluate and prioritize corridor, system, and small urban area needs through data analysis and public involvement. **Corridor and Small Urban Area Studies involve the identification, evaluation, and prioritization of recommended roadway improvements through data analysis and involvement from the public, and/or local officials/stakeholders advisory committees.**
- Oversee outsourced activities. **Several of our studies are done by consultants with someone from the district and from the Division of Planning acting as co-Project Managers who oversee the study. At the end of the FY 2014 fourth quarter, KYTC had twenty active planning studies that were outsourced to a consultant.**
- Evaluate identified needs statewide to assist in prioritizing projects for programming in the Highway Plan. **PIFs are made for long-term needs identified through our corridor and Small Urban Area studies. Our studies also provide cost estimates to be used in programming future projects. This process is on- going. Every two years District Transportation Plans are developed to assist in prioritizing projects for the Highway Plan.**

CHAPTER 7

Strategic Corridor Planning

RESPONSIBLE UNIT

Division of Planning
Strategic Planning Branch
Strategic Corridor Planning Team

PRODUCTS

Such Studies will include, but not be limited to the following:

• Programming Studies					<u>% Complete</u>
Jefferson	I-265	Programming Study	N/A		57%
• Interchange Justification Studies					<u>% Complete</u>
Christian	KY 107 / I-24	IJS		2-8702.00	99%
• Scoping Studies					<u>% Complete</u>
Henderson, Daviess, Ohio, Butler, Warren Jefferson Knox, Laurel Christian, Hopkins	I-69, I-66/ I-65 Spurs KY 1931 KY 3041 Pennyrile Parkway	Scoping Study Scoping Study Scoping Study Scoping Study		2-85.00 5-480.00 11-190.00 N/A	84% 93% 84% 67%
Owsley, Breathitt Warren	KY 30 US 231	Scoping Study Scoping Study		N/A 3-8702.00	75% 55%
Metcalf, Green Franklin Pike	US 68 US 60 KY 194 / KY 632	Scoping Study Scoping Study Scoping Study		3-203.00 5-275.00 N/A	36% 55% 67%
Powell, Estill, Madison	KY 82 / KY 89/ KY 499/ KY 52	Scoping Study		N/A	30%
Ohio	Bluegrass Crossings	Scoping Study		N/A	35%
• Small Urban Area Studies					<u>% Complete</u>
Boyle	Danville	Small Urban Area Study			85%
Caldwell	Princeton	Small Urban Area Study			72%
Marion	Lebanon	Small Urban Area Study			5%

Seven studies were completed during the period of July 1, 2013 to June 30, 2014. One was completed in-house and six were completed by consultants. The studies completed are as follows:

- Hopkinsville Small Urban Area Study, Christian Co. – N/A – September 2013 (SPR)
- I-75/Mall Road IMR, Boone Co. – 6-409.00 – November 2013 (SPR)
- KY 38 Programming Study, Harlan Co. – N/A – December 2013 (SPR)
- KY 109 Bike Feasibility Study, Christian & Hopkins Co.'s – N/A – January 2014
- US 60 Bridge Scoping Study, Livingston Co. – 1-1142.00 – February 2014

CHAPTER 7

Strategic Corridor Planning

RESPONSIBLE UNIT

Division of Planning
Strategic Planning Branch
Strategic Corridor Planning Team

PRODUCTS (continued)

- I-69 Feasibility Study, Henderson Co.’s – 2-69.02 – March 2014
- KY 49 Scoping Study, Marion Co. – 4-8707.00 – March 2014

Many of the current studies are large-scale efforts that have included or will include agency coordination and significant public involvement activities. All of the studies have required or will require coordination with the Highway District Offices and Area Development District Offices to assemble the project team, provide input on study issues, assist with scheduling meetings, and review reports. The Area Development District Offices will also develop Environmental Justice reports for many of the studies.

Those projects listed above followed by (SPR) were funded with SPR Work Program funds. In addition, some SPR funding was used for management, oversight, and review of strategic corridor planning activities.

Summarizing, 25 projects have been worked on during the past fiscal year, with 7 being completed, and 18 others in various stages of completion. With the start of the new fiscal year, additional projects will soon begin. Please refer to the table at the end of this document to see percentages of projects complete and percentage of FY 14 project goals that were met.

- Data Needs Analysis (DNA) PreDesign Scoping Studies
A DNA for Six-Year Plan and Unscheduled Projects.
15 80 DNA studies have been completed by District and Central Office Planners since the beginning of the fiscal year. These studies include projects identified by Item #2-8703, #2-1078, #2-1080, #2-229, #2-231, #6-8500, #6-8710, #8-1053, #8-1057, #8-1058, #11-187, #11-1067, #11-8712, #11-8713, #12-8703.
- Priorities for Highway Plan Programming which are sustainable and fundable.

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$2,213,144	\$1,479,693.53	66.9%
OTHER	\$20,000	\$8,248.06	41.2%
TOTAL	\$2,233,144	\$1,487,941.59	66.6%

CHAPTER 7

Strategic Corridor Planning

RESPONSIBLE UNIT

Division of Planning
Strategic Planning Branch
Strategic Corridor Planning Team

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Outsourcing

- \$1,200,000 to outsource for Planning Studies. FHWA will be notified when planning studies utilizing SPR funds are initiated.

Other

- \$20,000 Other Operational Cost
For items such as travel, mileage, equipment and other cost directly associated to the completion of this work chapter.

PLEASE SEE ATTACHED PAGE FOR LIST OF STUDIES!

PROJECT I.D.	ITEM NO.	COUNTY(S)	CONTRACT NO.	TYPE OF WORK	District Project Manager	Central Office Co-Project Manager	Consultant	NTP Date	Contract/L.A. Amount	Funds Expended in FY 2014 ¹	Total Funds Expended ¹	Overrun?	Schedule met?	Approximate % Complete (via billing)	Were needs for this corridor/SUA identified, evaluated, and prioritized?	FY 14 SPR Work Program Funds	Were there contract revisions?
LEBANON	N/A	MARION	In-House	SMALL URBAN AREA STUDY	TBD	Spalding	In-House	N/A	-	-	-	-	-	5%	On Hold	N/A	N/A
SHELBYVILLE	N/A	SHELBY	In-House	SMALL URBAN AREA STUDY	TBD	Pelfrey	In-House	N/A	-	-	-	-	-	10%	On Hold	No	N/A
I-66 / I-65 & I-69 SPURS	2-85.00	HENDERSON, DAVIESS, OHIO, BUTLER, WARREN	Agree. No. 201210	CORRIDOR STUDY	N. Hall	Pelfrey	Palmer	9/21/2011	\$305,376.00	\$16,142.89	\$256,813.69	No	No	84%	Yes - report complete, final invoice to be received	No	Yes
KY 1931	5-480.00	JEFFERSON	LA No. 1, Agree. No. 201254	SCOPING STUDY	Downs	Pelfrey	CDM Smith	9/25/2012	\$172,734.00	\$52,269.31	\$160,228.06	No	No	93%	In progress	No	No
KY 305	1-8702.00	McCRACKEN	Agree. No. 201344	SCOPING STUDY	Herring	Higdon	Stantec	2/21/2013	\$225,111.00	\$156,488.01	\$224,103.28	No	Yes	99%	Yes - report complete, final invoice to be received	No	No
KY 1286 / KY 998	1-153.00	McCRACKEN	LA No. 2, Agree. No. 201254	SCOPING STUDY	Herring	Higdon	CDM Smith	1/4/2013	\$170,560.00	\$116,628.93	\$167,148.80	No	No	98%	Yes - report complete, final invoice to be received	No	No
KY 3041	11-190.00	KNOX, LAUREL	Agree. No. 201334	SCOPING STUDY	Chappell	Higdon	Stantec	1/31/2013	\$323,161.00	\$155,000.00	\$272,393.42	No	No	84%	On Hold	No	No
I-71	99-394.00	JEFFERSON, OLDHAM, HENRY, TRIMBLE, CARROLL, GALLATIN, BOONE	Agree. No. 201348	SCOPING STUDY	Yeager	Pelfrey	Qk4	3/5/2013	\$405,809.00	\$289,146.37	\$405,461.87	No	Yes	99%	Yes - report complete, final invoice to be received	No	No
DANVILLE EB 9004 PENNYRILE PARKWAY	N/A	BOYLE	LA No. 3, Agree. No. 201247	SMALL URBAN AREA STUDY	Blair	Gutti	Parsons Brinckerhoff	6/27/2013	\$115,020.44	\$97,764.55	\$97,764.55	No	Yes	85%	Yes - report complete, final invoice to be received	Yes	No
KY 30	N/A	CHRISTIAN, HOPKINS	LA No. 4, Agree. No. 201248	CORRIDOR STUDY	N. Hall	McKenzie	Qk4	6/10/2013	\$145,011.00	\$96,897.00	\$96,897.00	No	Yes	67%	In progress	Yes	Yes
KY 107 / I-24	2-8702.00	OWSLEY, BREATHITT	LA No. 4, Agree. No. 201254	SCOPING STUDY	Blackburn	Gutti	CDM Smith	7/16/2013	\$184,258.00	\$138,193.50	\$138,193.50	No	No	75%	In progress	Yes	No
I-265	N/A	CHRISTIAN	LA No. 5, Agree. No. 201248	INTERCHANGE JUSTIFICATION STUDY	N. Hall	McKenzie	Qk4	7/11/2013	\$125,189.00	\$123,937.11	\$123,937.11	No	Yes	99%	Yes - report complete, next step TBD	No	No
US 231	3-8702.00	JEFFERSON	LA No. 4, Agree. No. 201247	PROGRAMMING STUDY	T. Hall	Pelfrey	Parsons Brinckerhoff	8/16/2013	\$249,941.30	\$142,476.94	\$142,476.94	No	Yes	57%	In progress	Yes	No
US 68	3-203.00	WARREN	Agree. No. 201421	SCOPING STUDY	Henderson	McKenzie	CDM Smith	10/18/2013	\$203,858.00	\$112,121.90	\$112,121.90	No	No	55%	In progress	No	No
US 60	5-275.00	METCALFE, GREEN	Agree. No. 201419	SCOPING STUDY	Jeff Moore/C. Allen	Gutti	Stantec	10/9/2013	\$380,555.00	\$137,586.38	\$137,586.38	No	Yes	36%	In progress	No	No
PRINCETON	N/A	FRANKLIN	LA No. 6, Agree. No. 201247	SCOPING STUDY	T. Hall	Pelfrey	Parsons Brinckerhoff	12/2/2013	\$173,784.42	\$95,581.42	\$95,581.42	No	Yes	55%	In progress	No	No
KY 194 / KY 632	N/A	CALDWELL	LA No. 6, Agree. No. 201254	SMALL URBAN AREA STUDY	N. Hall	McKenzie	CDM Smith	12/9/2013	\$114,278.00	\$82,280.16	\$82,280.16	No	Yes	72%	In progress	Yes	No
KY 82 / KY 89 / KY 499 / KY 52	N/A	PIKE	LA No. 6, Agree. No. 201248	SCOPING STUDY	Westfall	Pelfrey	Qk4	1/15/2014	\$233,176.00	\$155,149.71	\$155,149.71	No	Yes	67%	In progress	Yes	No
BLUEGRASS CROSSINGS ACCESS ROAD	N/A	POWELL, ESTILL, MADISON	LA No. 7, Agree. No. 201247	CORRIDOR STUDY	Blackburn / Turner	Gutti	Parsons Brinckerhoff	1/27/2014	\$218,207.45	\$65,462.23	\$65,462.23	No	Yes	30%	In progress	Yes	No
	N/A	OHIO	LA No. 7, Agree. No. 201254	CORRIDOR STUDY	N. Hall	McKenzie	CDM Smith	4/10/2014	\$51,956.00	\$18,137.84	\$18,137.84	No	Yes	35%	In progress	Yes	No

¹In-house studies using SPR funds do not have have a tracking mechanism for funding that identifies charges to individual studies.

CHAPTER 8

Statewide Transportation Planning

RESPONSIBLE UNIT

Division of Planning
Strategic Planning Branch

PURPOSE AND SCOPE

The Statewide Planning Team conducts a comprehensive statewide transportation planning process with the Area Development Districts (ADDs), Metropolitan Planning Organizations (MPOs), and the Highway District Offices (HDOs). This process includes consideration of all modes and development of a policy driven and data-based approach to identification, analysis and prioritization of needs. The team also updates a Statewide Transportation Plan (STP) as needed and ensures that the STP and STP Program are MAP-21 compliant. Through these processes and partnerships, this team provides meaningful input to the Highway Plan through the Unscheduled Needs List (UNL) and District Transportation Plan (DTP).

PROPOSED ACTIVITIES FOR 2013-2014

- Review and update the STP document as needed. 100% complete with ongoing review and development of LRSTP draft
- Develop and implement processes as needed to ensure MAP-21 compliance. 100% complete with ongoing review and development. Goals have been updated in accordance with MAP-21 guidance. Prioritization schedule has been revised and released, with ongoing development of procedures.
- Coordinate with other transportation modes, land use, environmental, and other resource agencies. Coordinated with Office for Civil Rights & Small Business Development to ensure compliance with Title VI requirements via site visits and training at Statewide Transportation Planning meetings. Sought and received input on LRSTP from multiple and various agencies, local officials and stakeholders 100% Complete
- Enhance the statewide transportation planning process by including data collection and analysis, public involvement, and coordination. Sponsored training conducted by State Data Center on census data acquisition and analysis. Facilitated collection of bicycle/pedestrian data through ADDs for the purpose of identifying sidewalk and bike lane opportunities earlier in the project development process. Held STP meetings with presentations on Environmental Justice and various transportation planning topics. 100% Complete
- Identify, evaluate, and prioritize transportation projects through data analysis and public involvement. Coordinated between ADD's and HDO's on Prioritization process and schedule for 2014 revision cycle. Continue to analyze and proof complete PIF listing for quality. Working to develop Performance Based Planning and Programming for Biennial Highway Plan recommendation. 100% complete
- Recommend sustainable and fundable projects. Working to develop Performance Based Planning and Programming for Biennial Highway Plan recommendation. 100% complete
- Maintain and oversee further development of the Project Identification Form/Unscheduled Needs, the District Transportation Plan containing the Unscheduled Projects List (UPL) List and an online database for use as a tool in project prioritization and analysis. Managed addition and removal of projects as directed by ADD and HDO coordination. Proposed upgrade of PIF application to strengthen the link between PIF and HIS further reduce the necessity for manual revision. Worked with developers to remedy error as needed. 100% Complete

CHAPTER 8

Statewide Transportation Planning

RESPONSIBLE UNIT

Division of Planning
Strategic Planning Branch

PROPOSED ACTIVITIES FOR 2013-2014

- Coordinate with other Divisions, Districts, and Agencies and incorporate applicable plans as necessary to ensure compliance with new authorization or MAP-21 extension compliance. Working cooperatively with ADD, MPO, and HDO planners to identify transportation related issues on both a local and regional scale in an effort to better determine quality data driven needs. Sought and received input on LRSTP from multiple and various agencies, local officials and stakeholders. 100% complete
- Coordinate and oversee the ADD Regional Transportation Program. Coordinate and assist the Highway District Offices as they develop the District Regional Transportation Plan. Revised and forwarded new contracts for signatures. Provided guidance on deliverables, addressed Regional Transportation Committees, attended Regional Transportation Committees both as an observer and presenter, processed invoices, and facilitated ADD Planner Assessments. Coordinated between ADD's and HDO's on development and presentation of District Regional Plans. 100% complete

PRODUCTS

- Statewide Transportation Plan updates as needed. Administered public comment survey for the Long Range Statewide Transportation Plan as a component of the update cycle. Presented to Stakeholder, Vision, ADD and KAPA audiences among others to garner wide ranging input for use in Long Range Plan revision. 100% complete
- Unscheduled Needs List database Managed data entry, verification, and refinement of existing PIF's into web application, and reviewed for quality and consistency. Reviewed proposed PIF's and assigned control numbers. Worked with Data Management to develop PIF and mapping products for use with District Transportation Plan and Prioritization processes. Consulted with developers on approving an upgrade to further increase efficiency. 100% complete
- Annual Work Programs and Contracts for 15 Area Development Districts Completed revisions for FY14 work program and forwarded for signatures. Clarified deliverables and their due dates. Reviewed deliverables for completeness. 100% complete
- Statewide Transportation Planning Meetings Held STP, ADD, District Planner or equivalent meetings. 100% complete
- Individual ADD Planner Assessments Tracking deliverables and attending/presenting at meetings as necessary for use in evaluation. Released checklist to ADD planners for verification, and solicited feedback from HDO planners for potential use in said assessments. 100% complete.
- District Regional Transportation Plan containing the Unscheduled Projects List. District Transportation Plan/prioritization revision schedule has been completed and distributed to ADD/MPO/HDO planners for coordination. 100%.

CHAPTER 8

Statewide Transportation Planning

RESPONSIBLE UNIT

Division of Planning
Strategic Planning Branch

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$1,183,700	\$1,106,425.82	93.5%
OTHER	\$50,000	\$48,518.86	97.0%
TOTAL	\$1,233,700	\$1,154,944.68	93.6%

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Outsourcing

- \$150,000 to outsource for studies and assistance related to the Statewide Planning SPR Work Program

Other

- \$15,000 LRP/Visioning Brochures and Promotional Items
- \$25,000 Other Operational Cost
For items such as travel, mileage, equipment and other cost directly associated to the completion of this work chapter

CHAPTER 9

Metropolitan Planning Organizations
(Areas over 50,000 Population)

RESPONSIBLE UNIT

Division of Planning
Strategic Planning Branch
MPO Team

PURPOSE AND SCOPE

The MPO Team provides technical assistance to and coordination with the Metropolitan Planning Organizations (MPOs) for developing and maintaining a continuing, cooperative, and comprehensive (3C) transportation planning process. This process ensures that KYTC and local transportation projects remain eligible to receive federal funding. The scope of work is in accordance with the Unified Planning Work Program (UPWP), which describes all anticipated urban transportation and transportation-related planning activities to be performed.

PROPOSED ACTIVITIES FOR 2013-2014

- Review and implement changes to the MPO planning process as a result of Moving Ahead for Progress in the 21st Century Act (MAP-21), the new federal transportation bill. **45% complete.** MPO Team members participated in webinars and reviewed available publications to learn about the new transportation bill and how the planning process will be affected. Draft performance measures have been discussed at several MPOs. Waiting for performance measures to be finalized.
- Provide technical assistance and oversight review of MPO activities, programs, documents, models and/or tools. **100% complete.** The MPO Team monitored, reviewed, and recommended improvements to MPO activities.
- Attend technical, policy, and other committee meetings to represent the Cabinet. **100% complete.** The MPO Team attended various committee meetings throughout the year.
- Conduct contract management and oversight for federal funds. **100% complete.** FY14 contracts were administered throughout the year and FY15 contracts were prepared.
- Ensure consistency between local and state plans and programs. **100% complete.** Coordination was provided to encourage consistency across the state while providing flexibility for local and regional variances.
- Coordinate with other transportation modes to obtain input on multimodal issues for various metropolitan planning process issues. **100% complete.** Coordination with Office of Transportation Delivery for transit and the Division of Planning's Modal Branch on bicycle, pedestrian, freight, and other modes occurred throughout the year.
- Work with the MPOs and Highway District Offices (HDOs) on Project Identification Forms (PIFs), data collection, project evaluation and ranking, and training. **100% complete.** All expected deliverables were met.
- Conduct regular statewide meetings including a focus on metropolitan planning organization issues. **100% complete.** The MPO Team participated in each STP meeting during the year.
- Coordinate with the Transportation Management Areas (TMAs) on the programming and tracking of dedicated Federal Statewide Transportation Program (STP) and Transportation Alternative (TA) funded projects and the development of compliant Congestion Management Processes (CMPs). **100% complete.** Coordination was provided to ensure federal transportation requirements were being met by TMAs. A new spreadsheet was developed to help TMAs track their dedicated-STP and dedicated-TAP funds.

CHAPTER 9

Metropolitan Planning Organizations
(Areas over 50,000 Population)

RESPONSIBLE UNIT

Division of Planning
Strategic Planning Branch
MPO Team

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Coordinate with MPOs on air quality issues, analysis, and conformity. 100% complete. Coordination was provided to educate and cooperatively work with MPOs to address air quality

PRODUCTS

- Analysis of SAFETEA-LU to MAP-21 gaps in the metropolitan planning process. 25% complete. The analysis will continue as Federal guidance on MAP-21 requirements is released.
- Assistance to MPOs in preparing compliant Transportation Improvement Programs (TIPs), MTPs, Participation Plans (PPs), CMP's and UPWP's. 100% complete. Assistance was provided to MPOs in preparing compliant documents.
- Review TIP actions and request STIP modifications to incorporate changes. 100% complete. The MPO Team reviewed TIP actions and requested STIP modifications as needed.
- MPO UPWP contracts and administration. 100% complete. The MPO Team administered FY14 UPWP contracts with each of the MPOs and prepared FY15 UPWP contracts.
- MPO dedicated STP fund contracts and administration. 100% complete The MPO Team administered several dedicated STP-funded contracts and prepared new contracts and a contract amendment for work to be performed during FY15.
- Statewide Transportation Planning Meetings. 100% complete. The MPO Team participated in all STP meetings during the year.
- Special Studies. 100% complete. The MPO Team monitored and provided assistance with special studies.

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$618,200	\$295,566.63	47.8%
OTHER	\$25,000	\$5,740.20	23.0%
TOTAL	\$643,200	\$301,306.83	46.8%

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Outsourcing

- \$50,000 Various studies (CTPP participation, etc.), as needed.

Other

- \$25,000 Other Operational Cost
For items such as travel, mileage, equipment and other cost directly associated to the completion of this work chapter.

CHAPTER 10

Performance Measures and Congestion/Mobility Analysis

RESPONSIBLE UNIT

Division of Planning

PURPOSE AND SCOPE

The federal transportation legislation Moving Ahead for Progress in the 21st Century (MAP-21) requires the United States Department of Transportation (U.S. DOT) to identify national-level performance measures for various performance management areas related to safety, pavements, bridges, freight, emissions, performance, and congestion.

The Division of Planning is tasked with the determining performance measures for the following:

Freight

- Annual Hours of Truck Delay (AHTD) - Travel time above a KYTC-defined, congestion threshold in units of vehicle-hours of delay for Trucks on the Interstate Highway System.
- Truck Reliability Index (RI₈₀) - The ratio of the 80th percentile truck travel time to the KYTC-determined threshold travel time for trucks on the Interstate Highway System.

System Performance

- Annual Hours of Delay (AHD) - Travel time above a KYTC-defined, congestion threshold in units of vehicle -hours of delay on all National Highway System (NHS) corridors.
- Reliability Index (RI₈₀) - The ratio of the 80th percentile travel time to the KYTC-determined threshold travel time for all vehicles on NHS corridors.

Congestion Mitigation and Air Quality (CMAQ)

- Criteria Pollutant Emissions - Daily kilograms of on-road, mobile source criteria air pollutants (VOC, NO_x, PM, CO) reduced by the latest annual program of CMAQ projects.
- Annual Hours of Delay (AHD) - Travel time above a KYTC-defined, congestion threshold in units of vehicle-hours of delay reduced by the latest annual program of CMAQ projects.

In addition, congestion mitigation is important for continuing safe, efficient operation on Kentucky's roadways. Traffic congestion is considered when selecting and prioritizing long-range planning projects. The Congestion and Mobility Management Team will work to improve the planning methods, strategies, and policies used by KYTC and local planning organizations that lead to a more efficiently planned, multimodal transportation system for Kentucky.

PROPOSED ACTIVITIES FOR 2013-2014

- Continue efforts to analyze current, non-factored speed data for NHS statewide. **Analysis of 2012 NavteQ data is underway (50% complete).**
- Acquire, conflate, evaluate, and conduct a GIS audit of 2013 non-factored speed data for NHS statewide. **Acquiring monthly NPMRDS travel time data (100% complete)**
- Analyze resulting speed data and develop travel time index for all segments and all years. **Creation of indices awaiting 2012 data conflation (0% complete)**
- Choose, based on the real data, representative periods to determine free-flow speeds. **6:00AM to 8:00PM chosen as representative period for estimating free-flow speeds (100% complete)**

CHAPTER 10

Performance Measures and Congestion/Mobility Analysis

RESPONSIBLE UNIT

Division of Planning

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Determine source(s) of and obtain travel time and vehicle miles traveled data for all roads on the NHS. **NPMRDS will be source of travel time, volumes from HIS for NHS roads 100% Complete**
- Define corridor segments for all roads on the NHS. **Segments defined as TMCs from NPMRDS and matched to HIS 100% complete**
- Begin to establish Daily, AM Peak, PM Peak, and Off-peak threshold speeds for each segment - **100% Complete**
- Begin to develop methodologies for calculating segment and statewide AHTD, Freight RI_{80} , AHD, and System RI_{80} **100% Complete**
- Begin to establish annual targets for AHTD, Freight RI_{80} , AHD, and System RI_{80} **80% Complete**
- Begin evaluating how to provide MOVES and transportation model output to assist the office of Local Programs to establish annual targets for CMAQ On-road Mobile Source Emissions and Traffic Congestion for TMAs with populations of over 1 million that are non-attainment or maintenance areas **Awaiting FHWA rule making. Models are ready. 30% Complete**
- Begin evaluating how to provide MOVES and transportation model output to assist the office of Local Programs to develop a report detailing CMAQ program traffic congestion reductions for TMAs with populations of over 1 million that are non-attainment or maintenance areas **Awaiting FHWA rule making. Models are ready. 30% Complete**
- Assist TMAs to develop and implement performance measures into their congestion management process **100% Complete**
- Refine the mobility component of the Adequacy Rating System using new performance measures. Assist planners and designers in using mobility measures in studies and projects. - **Awaiting FHWA rule making. Models are ready. 30% Complete**
- Fund participation in the Texas Transportation Institute's (TTI) pooled-funded Urban Mobility Study. There are several elements of research that affect measuring mobility. **100% Complete**

PRODUCTS

- Maps and database of mobility measures on freeways and arterials **Proof of Concept 100% Complete**
- Preliminary MAP-21 Performance Measures for: **Awaiting 12 months of NPMRDS data to compile Freight specific parameters 80% Complete**
 - AHTD on each interstate corridor segment **80% Complete**
 - Statewide AHTD across all interstate corridors **80% Complete**
 - Freight RI_{80} for each interstate corridor segment **80% Complete**
 - Statewide Average Freight RI_{80} across interstate corridors where the $RI > 1.0$ **80% Complete**
 - AHD on each NHS Corridor segment **80% Complete**
 - Statewide AHD across all NHS corridors **80% Complete**
 - RI_{80} for each NHS corridor segment **80% Complete**
 - Statewide Average RI_{80} across NHS corridors where the $RI > 1.0$ **80% Complete**
- Preliminary MOVES and transportation model output to report CMAQ program traffic congestion reductions for TMAs with populations of over 1 million that are non-attainment or maintenance areas **Awaiting FHWA rule making. Models are ready to provide speed & VMT inputs 30% Complete**

CHAPTER 10

Performance Measures and Congestion/Mobility Analysis

RESPONSIBLE UNIT

Division of Planning

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$284,700	\$77,644.79	27.3%
OTHER	\$15,000	\$765.24	5.1%
TOTAL	\$299,700	\$78,410.03	26.2%

- \$100,000 Purchase and analysis of speed (mobility)
- \$ contract with KTC
- \$150,000 Research or Studies

Other

- \$5,000 Other Operational Costs
- \$10,000 TTI Urban Mobility Study (pooled-fund study)

CHAPTER 11

Air Quality

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch
Air Quality Team

PURPOSE AND SCOPE

The Air Quality Team will coordinate and perform analyses necessary to determine regional air quality conformity. They will also assist in the development of regulations, guidance, and best practices in order to ensure compliance and deliver transportation projects within designated non-attainment and maintenance areas.

PROPOSED ACTIVITIES FOR 2013-2014

- Perform Regional Air Quality (AQ) Conformity Analysis for several metropolitan and rural areas. **Worked with KIPDA, OKI, and other areas as needed to help with conformity analysis 100% complete.**
- Develop desk procedures for Regional Conformity Analysis. **Have finished desk procedures and received manager's approval 100% complete.**
- Monitor AQ data submissions to other agencies – State, Federal, Local, Research, and Educational. Provide VMT, speeds, and vehicle registration age/type distribution to DAQ for their development of the State Implementation Plans SIPs for non-attainment and maintenance areas as well as for other projects. Review, comment, and participate during the preparation of mobile budgets for the development of the attainment demonstration and maintenance SIPs, SIP amendments, and budget adjustments. **Reviewed any AQ conformity analysis reports that came out from State, Federal, and Local agencies. Also, watched data closely to make sure that it is the best available data at the time of submittal. Waiting to receive more information about an upcoming DAQ request that will require a MOVES run of the whole state. Recently reviewed regionally significant projects for the STIP update 100% complete.**
- Work with KYTC IT to develop Kentucky vehicle registration age/type distribution for use with MOVES. **Worked with KYTC IT to finish quality assuring the 2011 VIN/Fleet data for the areas in the state that needed the information. Waiting to get 2013 VIN/Fleet data 100% complete. 2012 VIN/Fleet data was overlooked and will be captured and processed in FY 2015.**
- Prepare Cabinet responses for Citizen/Agency inquires. Preparing letters of response for the Governor/Secretary/Director. **Have prepared six letters on behalf of the director regarding amendments to the TIP or MTP for the Ashland, Louisville, and NKY areas 100% complete.**
- Monitor changes and maintain a clearinghouse of knowledge for the Division/Cabinet concerning AQ regulations. This includes maintaining a working knowledge of the guidelines for the 8-hour Ozone and PM_{2.5} standards, EPA's current emissions model, air quality regulations, and implementation guidance. Inform KYTC staff, KYTC management, public officials, and the general public about air quality, conformity analysis, and federal guidelines and on new developments with greenhouse gas/climate change requirements. Disseminate information about the 8-hour Ozone and PM_{2.5} standards and designation process and on new developments with greenhouse gas requirements.

CHAPTER 11

Air Quality

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch
Air Quality Team

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

EPA has released what they believe the new 2012 PM_{2.5} standard should be and will finalize sometime in December, 2014. EPA plans to release their opinion on what the new ozone NAAQS should be by December, 2014. EPA still plans on releasing a major model update MOVES_2014 sometime next month July 2014. Kept manager and the Director apprised of any situation changes or stuff coming down from EPA or FHWA 100% complete.

- Attend necessary meetings and conferences to stay abreast of air quality issues. Attended the 2014 AQ Conference hosted by KYTC/FHWA back in March. Participated in webinars and other meetings as needed 100% complete.
- AQ Website development. Maintain appropriate active web-links. Made changes to the AQ website and received manager's edits/approval on the new documentation and updated information 100% complete.
- Develop and maintain a KYTC AQ Email distribution list for AQ information. Recently updated list 100% complete.
- Participate and facilitate monthly AQ conference calls and quarterly meetings. This includes participating in interagency consultation calls regarding transportation conformity for updates and amendments to MTP plans, SIPs, TIPS, and STIPs. Participated in conference calls regarding amendment changes or conformity issues for KIPDA, OKI, other areas, and FHWA when needed. KY AQ meeting is coming up next month July 2014 100% complete.
- Assisting with new programs as required by MAP-21, CAAA, and authorization. Some material has come out regarding CMAQ, but still waiting on more to be released 100% complete.
- Develop and maintain KY rideshare and park-n-ride database of locations. On hold, but still updating the websites as needed 100% complete.
- Maintain Literacy in MOVES_2010a or current AQ models. This includes running the current emissions model for Ozone and PM_{2.5} regional air quality conformity analyses for the Louisville, NKY, Ashland, and Christian County areas as well as other newly designated areas. Have clearinghouse knowledge on how to run MOVES_2010b and post-processing of the data in MySQL. EPA plans to release a major update soon that will be a whole new model. Have heard a little bit more information regarding the DAQ upcoming request about a possible model run for the whole state. The analysis years may be known now. Gathering and giving DAQ that information when available to help assist with the model run 100% complete.
- Coordinate special AQ/MOVES training when needed. Awaiting EPA's major update to MOVES that will require training. In the meantime, have followed webinars or other meetings that would help with training 100% complete.
- Provide support to the Office of Local Government for Congestion Management and Air Quality CMAQ related issues, as needed. Assist District Offices with the preparation of CMAQ applications including emission calculations and documentation. With MAP-21, Modal Branch will play just a small role when dealing with CMAQ performance measures, but still waiting to hear more information from FHWA on what those will be. No districts have asked for assistance. However, manager has suggested that the need to help people out in the districts in the coming months might arise concerning PM_{2.5} data for CMAQ applications 100% complete.

CHAPTER 11

Air Quality

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch
Air Quality Team

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Maintain a working knowledge of emerging issues and best practices, such as diesel emissions reduction strategies and Cabinet Green Initiatives. Work with the freight team to address pertinent air quality issues including diesel retrofits on locomotives and emission reduction best practices at rail yards and ports. EPA and the White House still plan to move forward with their guidelines for MPG fuel standards by 2025. Staying up-to-date on issues that involve diesel retrofitting or greenhouse gases. Freight team and AQ coordinate regularly to share information that might be helpful for emission reductions and diesel retrofitting 100% complete.
- Other duties and special projects as assigned. Working on Traffic Forecasts and recently started experimenting with the Ashland Trans-CAD Model when time allows 100% complete.

PRODUCTS

- Ozone and PM_{2.5} Regional Conformity Analysis for required all nonattainment and maintenance areas. Worked with DAQ and other state agencies to look at all regional AQ conformity analysis for nonattainment and maintenance areas within the state 100% complete.
- Conforming statewide and MPO planning documents. Have participated in and assisted with plan documents concerning AQ conformity 100% complete.
- Data to Division of Air Quality as requested. When DAQ has asked, the data has been supplied to them 100% complete.
- Emission calculations for CMAQ, GHG/CC as needed. No one has asked for these calculations as of date 0% complete.
- VIN Calculations for MOVES Input. Worked with KYTC IT to develop the VIN data for MOVES inputs for model runs 100% complete.

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$106,500	\$89,157.34	83.7%
OTHER	\$5,000	\$153.71	3.1%
TOTAL	\$111,500	\$89,311.05	80.1%

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Outsourcing

- None

Other

- \$5,000 Other Operational Cost
For items such as travel, mileage, equipment and other cost directly associated to the completion of this work chapter
- \$1000 Staff training for the MOVES2014 Model provided by EPA/FHWA.

CHAPTER 12

Multimodal Freight Transportation

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch

PURPOSE AND SCOPE

The Modal Team will collect data, plan, promote, and assist in the development of a multimodal and intermodal transportation system in Kentucky. The programs addressed in this chapter are public riverports, railroads, freight, and ferryboats. The team will administer and have oversight/support of KSRA and other federal or state contracts as well as serve as staff support for the Water Transportation Advisory Board.

PROPOSED ACTIVITIES FOR 2013-2014

Public Riverports

- Maintain Kentucky's guidelines for public riverport applications. Review any public riverport applications received for grants. **KYTC's guidelines for public riverport applications were improved based on lessons learned from FY 13. Fourteen applications were submitted and twelve were approved. 100% Complete**
- Provide staff support for the Water Transportation Advisory Board. KYTC provided staff support for WTAB at the July, September, and December meetings. KYTC processed applications approved by the Board. **100% Complete**
- Plan and host Riverport Meeting as needed. **The public riverports were present for riverport discussions during the meeting of the Water Transportation Advisory Board. KYTC conducted site visits to open public riverports. A separate riverport meeting was unnecessary 100% Complete**
- Interface with the public riverports in the state by responding to information requests, and serving as a member of the Kentucky Association of Riverports. **KYTC attended 3 Kentucky Association of Riverports meetings/conference calls 100% Complete**
- Actively participate as a member on the AASHTO Standing Committee on Water Transportation SCOWT. KYTC attended SCOWT conference calls and a meeting in Louisville. **100% Complete**
Conduct annual on-site visits of active public riverports in the state. **Site visits were conducted at all active public riverports. 100% Complete**

Railroads

- Administer Kentucky Shortline Railroad Assistance program including advertising fund availability, receiving and disseminating applications, contact administration, and project inspection. **KYTC staff continues to administer the grant including advertising fund availability, processing applications, administering contracts, approving invoices, and construction inspection. 100% Complete**
- Assist with development and maintaining the statewide railroad GIS mapping and data set using RR GIS, RR maps, and aerial photographs. Rail maps may be used by KYTC for roadway planning and project development. **Worked with all active railroads within the state to obtain GIS layers of all railroad track owned within Kentucky. Compiled GIS layers into statewide mainline layer. A statewide layer of all rail type centerlines is now available on KY GIS webpage. 100% Complete.**

CHAPTER 12

Multimodal Freight Transportation

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Update the 2002 Kentucky Statewide Rail Plan to meet current requirements From the Passenger Rail Investment and Improvement Act PRIIA of 2008. **The final draft is out for a 45-day public and agency review/comment period. 80% Complete**
- Participate in various rail studies and research with KYTC involvement. KYTC reached out to other states via ITTS and MAFC to determine what information is asked for by other states in their annual reports from railroads. KYTC is working with the University of Kentucky to develop rail crossing reconstruction guidelines. **100% Complete**
- Collect railroad annual reports and rail accident/incident reports as directed in 603 KAR 7:090. **KYTC staff sent letters to all operating railroads within Kentucky requesting annual reports. Reports were received from all Kentucky railroads and trackage statistics compiled for use in the Rail Plan. Rail accident/incident reports are submitted to KYTC by the railroads and they are distributed to the Division of Right of Way and Utilities as necessary 100% Complete**
- Actively participate as a member on the AASHTO Standing Committee on Rail Transportation SCORT, American Railway Engineering and Maintenance-of-Way Association AREMA, American Short Line & Regional Railroad Association ASLRRRA, and Kentucky Operation Lifesaver. KYTC was unable **to attend the annual SCORT, AREMA, and ASLRRRA meetings**, however, KYTC participated in conference calls and webinars whenever available. KYTC attended meetings of Kentucky Operation Lifesaver whenever invited. KYTC **contracted with KY Operation Lifesaver so they could print educational materials. 100% Complete**
- Monitor, track, and distribute information about railroad line abandonments in Kentucky. KYTC received a rail abandonment notice in the fall of 2013 and distributed it to the appropriate agencies. **100% Complete**
- Respond to public inquiries on passenger and freight rail issues. KYTC staff has responded to **10-15** letters and emails for information about rail issues. **100% Complete**

Freight

- Provide technical assistance and disseminate information to MPOs, ADDs, HDOs, and project teams regarding freight movement, planning, and safety. **KYTC regularly reviews industry publications and news articles and forwards relevant information to the MPOs and ADDs. KYTC staff attends and presents at Statewide Transportation Planning meetings. 100% Complete**
- Evaluate, receive, and update freight data from MPOs, ADDs, and HDOs as needed. **There were no complete updates to the Major Freight Generators or Major Traffic Generators scheduled for FY 2014 but some MPOs, ADDs, and HDOs submitted revision information. 100% Complete**
- Participate in regional freight planning efforts. KYTC was invited to **and attended a freight planning meeting at Tennessee DOT. KYTC reached out to other states regarding freight rail reporting measures. 100% Complete**

CHAPTER 12

Multimodal Freight Transportation

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Continue involvement with Mid-America Freight Coalition MAFC, Institute for Trade and Transportation Studies ITTS, and National Cooperative Freight Research Program NCFRP. KYTC staff serves as member of Institute for Trade and Transportation Studies ITTS and the Mid America Freight Coalition MAFC. KYTC receives NCFRP publications and consults them for freight planning reference. KYTC attended annual and semi-annual networking and informational meetings for ITTS and MAFC and has participated in several webinars and 1-day training sessions with them. 100% Complete
- Visit intermodal sites and communicate with rail, water, and road modes to identify freight-related needs and concerns involving highways. KYTC staff conducted site visit trips that included railroads, riverports, intermodal facilities, and ferry operations. 100% Complete
- Continue developing relationships with Economic Development to identify and promote intermodal freight needs. KYTC hosted Economic Development staff at meetings of the Water Transportation Advisory board. KYTC welcomed Economic Development staff on a site visit to TTI Railroad. KYTC continues to seek input from Economic Development for the Freight and Rail and base data for freight generating locations. 100% Complete
- Research, prepare, and populate information for FHWA Intermodal Connector Assessment Tool ICAT. Some research has been accomplished but no data has been completed. Part of Rail Plan comment period included request for public input regarding Intermodal Connectors 25% Complete/Ongoing

Ferryboats

- Coordinate the Kentucky Ferryboat program. KYTC staff provides ongoing oversight on the operation of seven state funded ferries and is responsible for all of the contracting and invoicing of these ferries. 100% Complete
- Share information concerning Ferryboat Formula Fund FBP program and administer remaining FBD funds. Plan and host the Ferryboat Meeting as needed. Information concerning the new Ferryboat Formula Fund Grant Program was shared with the ferryboat operators at site visits and via emails. Requests for FBD funds were received from 2 ferries and 2 more plan to submit request in the coming months. KYTC reviewed and recommended to FHWA the requests for FBP projects. One project has been completed and another is in FHWA review. 100% Complete
- Conduct annual on-site visits of Kentucky Ferryboat Operations. KYTC visited half of the ferryboat operations and interfaced monthly with all of the ferryboat operations. 50% Complete
- Work with Ferry Authorities to develop fiscally constrained plans for FBP funds. KYTC has reached out to Ferry Authorities on multiple occasions to assist in the development of plans but the ferry authorities are not interested or cannot afford it at this time. 50% Complete

CHAPTER 12

Multimodal Freight Transportation

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch

PRODUCTS

- Prioritize Riverport applications - 12 projects were approved for funding **100% Complete**
- Updated Statewide Rail Plan - Draft out for public and agency comment **80% Complete**
- Updating railroad GIS database and maps for KYTC purposes **100% Complete**
- Working ferryboat operations, contracts, site inspections, and invoice review/approval **85% Complete**
- ICAT documentation **25% Complete**
- FBP awards administered **100% Complete**
- Annual Waterways meeting as needed – Meetings were held with riverports, ferryboats, and other waterways representatives. An Annual Waterways meeting was not held. **100% Complete**
- Kentucky Shortline Railroad Assistance administration **100% Complete**
- Water Transportation Advisory Board staff support **100% Complete**

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$246,700	\$236,401.96	95.8%
OTHER	\$40,000	\$3,734.12	9.3%
TOTAL	\$286,700	\$240,136.08	83.8%

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Outsourcing

- \$150,000 Rail Plan (addressing PRIIA) Update (80%)

Other

- \$5,000 Operation Lifesaver **100% Complete**
- \$10,000 Other Operational Cost **100% Complete**
For items such as travel, mileage, equipment, and other costs directly associated to the completion of this work chapter
- Tombigbee Waterway Dues are paid through Regional Planning (EA51 General Fund \$50,000). **100% Complete**
- \$25,000 Mid-America Freight Coalition, an AASHTO subcommittee paid as a pooled fund study. **100% Complete**
- \$64,000 Institute for Trade and Transportation Studies, a SAASHTO subcommittee paid as a pooled study. Institute For Trade and Transportation Studies 5 Year Commitment of \$64,000. \$200,000 paid in advance in 2FY 2012 to cover 3 years and \$8,000 in 4th. First of 5 Years Commitment. (This is the 2nd year) **100% Complete**

CHAPTER 13

Traffic Data Forecasting Statewide Traffic Model

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch
Forecasting and Modeling Team

PURPOSE AND SCOPE

The Forecasting and Modeling Team will maintain traffic trends, provide current and projected traffic volume estimates for planning, project development, operations, and other purposes. They will update and maintain local, regional, and statewide traffic models (KySTM). They will collect, process, and assemble data for determining route location or relocation, selecting among alternate routes, or as input into KySTM.

PROPOSED ACTIVITIES FOR 2013-2014

Traffic Forecasting and Modeling Reports, Studies, and Analysis

- Prepare traffic estimates for planning studies, design projects, road user costs, maintenance, and other purposes, as needed. **Received 32 traffic forecast requests and completed 55 reports. 100% Complete**
- Administer statewide traffic forecasting contracts and provide quality review for traffic projections prepared by the MPOs and Project Development consultants. **Completed 4 statewide forecasting contracts that were carried forward from the previous year. Provided quality review for 5 forecasting projects prepared by Districts as part of their design contract. 100% Complete.**
- Maintain databases that track traffic forecasts and traffic forecast parameters. Make databases available to other users and offices. Maintain the traffic forecasting web page as a tool for other users. **Database maintained and a copy made available to other users within the Division of Planning. Started providing a monthly report to all District and Design requestors and end-users of forecasts. 100% Complete**
- Maintain and update internal traffic forecasting tools e.g. ESAL spreadsheets; turning movement spreadsheets. **Updated ESAL spreadsheet format and turning movement spreadsheets. 100%**
- Provide future year forecasting of K-factors/D-factors for the Highway Performance Monitoring System HPMS and compare result with TRADAS outputs. **Provided factors for HPMS in May 100% Complete**
Participate in Regional Forecaster User's Group. This group includes forecasters from surrounding states that are trying to identify the state of practice for traffic forecasts. **No Forecaster User's Group sessions were held during the year. 100% Complete**
Host/Facilitate the Traffic Model Users Group and a TransCAD workshop for traffic forecasters and traffic modelers composed of members from government, academia, and the private sector. **No Model User's Group sessions were held during the year. 100% Complete**
- Participate in Caliper workshops held at adjacent states, foster a peer exchange with such agencies regarding statewide model and regional models. **KYTC held a workshop July 30-August 1, 2013 and invited other agencies and consultants 100% Complete**

CHAPTER 13

Traffic Data Forecasting
Statewide Traffic Model

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch
Forecasting and Modeling Team

Traffic Forecasting and Modeling Reports, Studies, and Analysis continued

- Create city, county, multi-county, regional models as needed for Project Development. Four modeling projects were initiated and seven modeling projects completed. There were 8 modeling projects carried from the previous year. Continuing to manage Owensboro MPO, Etown-Radcliff MPO, Bowling Green MPO, & Christian County modeling contracts. KYTC reviewed the Lexington Area MPO model and validated a second version which used innovative third party data more extensively. Statewide model was found to be insensitive to future socioeconomic conditions. A new standard model was rolled out in April 2014 with further validation through June 19, 2014. 100% Complete
- Conduct studies to better calibrate and validate models. Extend peer review of large MPO models and coordinate model updates as needed for small MPO models. Initiated a review of micro-simulation models developed for KYTC. Developed a list of calibration checks and deliverables when models are developed. VISSIM software now installed on Modal Modeler's computers. 100% Complete
- Identify areas needing an area-wide model. Develop models using a standardized interface. Initiated a broader standardization of modeling to small MPO and county models to be time-of-day models, automation of "Select Link," incorporation of special generator capabilities, and use of common attribute field names 50% Complete

PRODUCTS

- Corridor or other traffic forecasts: 55 forecast reports 100% Complete
- District Office coordination regarding models and forecasts
Involved in modeling efforts in Districts 3, 4, 5, 6, and 12 100% Complete Complete
Reviewed forecasts included in Design contracts for Districts 1, 5, 6 and 10 100% Complete
- Travel Time Analysis for models and performance measures
Travel Time in 5 minute intervals using NavteQ data applied to US-231 in D-3 and KY-169 in D-7 100% Complete
- Road User Cost Reports 100% Complete
- Traffic forecast factors for HPMS 100% Complete
- Updated tools for consultants and District e.g. ESAL Calculator; look-up tables 100 % Complete
- Maps and database of mobility measures on freeways and arterials Performance Measure Chapter 100% Complete
- Various City/County/MPO & Statewide Traffic Models such as, but not be limited to the following: 100% Complete
 - Nelson County Deferred in order to initiate MPO model updates 0% Complete
- Validation and Calibration of new and existing statewide models- LAMPO & Statewide models underwent further validation & calibration 100% Complete

CHAPTER 13

Traffic Data Forecasting
Statewide Traffic Model

RESPONSIBLE UNIT

Division of Planning
Multimodal Programs Branch
Forecasting and Modeling Team

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$548,600	\$447,221	81.5%
OTHER	\$20,000	\$715.07	3.6%
TOTAL	\$568,600	\$447,936.59	78.8%

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Outsourcing

- \$300,000 for County-Wide Traffic models (outsource) (100% Complete)
- For items such as equipment and software directly associated to the completion of this work chapter.
- \$15,000 TransCAD & TransModeler Workshops (100% Complete)
For items such as travel, mileage, registration, and other costs directly associated with attending Caliper training sponsored by adjacent State Transportation Agencies and sponsoring an advanced TransCAD workshop

Other

- \$5,000 Other Operational Cost

CHAPTER 14

Pedestrian and Bicycle Program

RESPONSIBLE UNIT

Division of Planning
Modal Programs Branch

PURPOSE AND SCOPE

The team will coordinate the state's Bicycle and Pedestrian Program, continue to develop a statewide bikeway system, and work within Transportation and other Cabinets. They will work to expand active transportation opportunities in Kentucky by providing assistance to state and local governments and other groups, as requested. This assistance will be in the form of technical advice, development of plans, and coordinating studies. The responsibility of the Kentucky Pedestrian and Bicycle Coordinator is to prepare, assist, and promote bicycle and pedestrian programs throughout the state as well as to work with project teams to recommend opportunities for bicycle-pedestrian facilities for proposed highway projects. The Bicycle and Pedestrian Coordinator will also act as secretariat for the Kentucky Bicycle and Bikeway Commission.

The Bicycle and Pedestrian team will coordinate with the Cabinet for Tourism, Arts and Heritage, the Governor's Office of Local Development, as well as the Cabinet for Health and Family Services to promote pedestrian and bicycle travel as well as recreational trails and Adventure Kentucky programs. Promote livability through biking and walking.

The KYTC Office of Local Programs and Local Programs coordinate several programs that support and encourage active transportation. The team will coordinate with them, regarding Scenic Byways, Transportation Alternatives, Recreational Trail Programs, and CMAQ programs.

PROPOSED ACTIVITIES FOR 2013-2014

Planning

- Assist local governments in the development of local bicycle and pedestrian network facilities and plan using bikeability and walkability audits. The team recorded bicycle and pedestrian master plan data from the yearly ADD Office work program survey. This information was shared on the KYTC Bike-Walk web site for future consideration planning needs. The team worked with 11 cities on creating and or improving their bicycle and pedestrian planning documents and maps. 100% complete
- Participate in the KYTC Strategic Safety Plan implementation. Pedestrian safety is now a separate section. The team has worked with 14 local governments to provide guidance and specific requirements needed for bicycle and pedestrian safety and related signage that may be needed with these facilities. 100% complete
- Participate in FHWA Pedestrian Fatality Focus Study for Louisville and Kentucky. The team helped write grant proposals with the Office of Highway Safety and Louisville Metro Government for 2 pedestrian safety programs. The team has attended the national pedestrian safety focus phone conferences. 100% complete
- Revise and update the USBR and statewide bike tours system. Changes to the USBR system include the submittal to AASHTO for approval. The team provided the data and resources to have way-finding signage funded and installed for USBR 76. This information was provided to the Office of Adventure Tourism. Adventure Tourism has agreed to be the coordinator for this final step in the USBR route selection and implantation. All USBR's that are also named as in-state bike routes have been placed on the Bike/Walk web site. The remaining USBR's may be review by a newly formed state-wide bicycle advocacy group with coordination with our staff. 100% complete

CHAPTER 14

Pedestrian and Bicycle Program

RESPONSIBLE UNIT

Division of Planning
Modal Programs Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Review, revise and update the Kentucky Bicycle and Pedestrian Plan and the Kentucky Pedestrian and Bicycle Travel Policy, as needed. The team constantly reviews the bicycle and pedestrian travel policy. There is no current need to update this plan. 100% complete

Engineering and Projects

- Answer requests concerning planning and design guidelines regarding pedestrian and bicycle facilities and provide review of bicycle and pedestrian projects and facilities with KYTC's HDO and CO Divisions, ADDs, MPOs, and local government. The team has started providing bicycle and pedestrian considerations proposals with traffic forecast reports (12 reports). The team also reviews 'Share the Road' sign request and encroachment applications that include bike/ped facilities. The team has been included as a member of 12 project teams to better consider bike/ped accommodations. 100% complete
- Review the list of proposed resurfacing projects for opportunities to improve biking and walking facilities through restriping and other improvements as part of Maintenance activities. Review for compliance with local bike/ped plans where appropriate. The team organized meetings with each HDO and KYTC maintenance staff to better consider bike/ped accommodations within resurfacing projects. Six of the 12 HDO participated in this work for FY 2014. Future work will include new/proposed drawing standards, specs, and procedures with Highway Safety, Design, and Construction. 50% complete
- Review Share the Road sign requests for applicability and proper system placement. The team has reviewed and or recommended Share the Road signs in 7 counties for FY 2014. The request and recommendations are all shared and discussed with the regional HDO, central office staff, and the local governments. 100% complete
- Develop/update in coordination with HDO, Maintenance, Traffic Operations, Design, and Planning Share the Road (STR) sign procedures for review, placement, and maintenance. The team provided an updated procedure for the warrants of the 'Share the Road' signage. The team made exhibit document 21 (STR request) into the official STR request form TC 59-101. 100% complete
- Provide and assist with implementation of the Lane Reconfiguration Guide to KYTC district Maintenance and Traffic staff. Update as need with their input. Meet with each HDO and provide the design standards for active transportation considerations by providing alternative lane usage within existing R/W. The team continues to work with each HDO and central office staff to better consider bike/ped accommodations. The team has worked with the Central Office Highway Design staff to have the AASHTO Bicycle and Pedestrian Facility Guides officially adopted for considerations. The bike/ped team provides currently accepted standards for review and reference each time we meet with the HDO staff during project meetings. The team also provides resources and specs for recommendations made during Traffic Forecast Analysis. 100% complete
- GIS applications- Develop and maintaining a GIS of bicycle and pedestrian network facilities and plans statewide. Document linkage between the local and regional network facilities. The team is working with all 15 ADD Offices to collect the current inventory of bike/ped facilities for two (2) cities per ADD each year. This collection effort is a part of the regular ADD and KYTC work program. 80% complete.

CHAPTER 14

Pedestrian and Bicycle Program

RESPONSIBLE UNIT

Division of Planning
Modal Programs Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Obtain federal, state, local, or private funds available to the cabinet. The team has helped secure several federal grants for pedestrian safety in the City of Louisville. The team has also partnered with the State Health Department to secure grants from the Center for Disease Control (CDC) to improve or create pedestrian action plans. The first mini grants were awarded to 3 cities (Frankfort, Franklin, and Richmond). The team provided assistance to the Offices of Local Programs and Local Governments on updates as needed for the funding applications. 100% complete

Education & Enforcement

- Provide technical training that includes pedestrian and bicycle design to planners, designers, local governments, and other KYTC staff statewide. Provide the design and construction standards to each District office and additional. The team is working with the Office of Highway Design and Construction to have the AASHTO guides for bicycle and pedestrian facilities officially adopted. The team has created (with guidance from the HDO's) several draft documents to better explain, create, and report bike/ped projects from the local government's point of view. These documents include: step-by-step process for a road diet (and the criteria for what roads within the state are good candidates), a step by step guide for bike/ped project studies, and a step-by-step guide for roadway signage associated with STR, way finding, and route marking. 100% complete
- Provide training to HDO, ADD, MPO, and local staffs on how to conduct a walkability and bikeability audits as requested. The bike/ped team coordinated with the State Health Department to conduct walkability audits in three cities; Frankfort, Franklin, and Richmond. The team provides walkability and bikeability surveys at all MPO and ADD regional transportation meetings. These checklists surveys are also made available on our web site under the resources page. 100% complete
- Facilitate public education of non-motorized modes of transportation, as opportunity arises. Introduce a series of PSA for both pedestrian and cycling awareness as appropriate. Links to these PSA would be found on the Walk-Bike web page. Provided educational brochures to DMV offices, bike shops, multi sport retail locations, health departments, and various related groups. The team created new safety and educational brochures for bicycling and walking. These brochures were made available on our web site and provided to organizations upon request. The web site is updated with new bike/ped safety brochures, resource links, and interactive maps. 100% complete
- Work with local law enforcement to promote education and enforcement of pedestrian and bicycle safety laws. Provide information brochures and prepare a presentation at the annual Life Savers Conference. The team was provided a booth at the Life Savers Conference in which we displayed educational material for both walking and bicycling. The team helped organize the City of Louisville pedestrian safety presentation session. The team provides educational materials to several police departments for their national night out program (public safety awareness with kids). 100% complete

CHAPTER 14

Pedestrian and Bicycle Program

RESPONSIBLE UNIT

Division of Planning
Modal Programs Branch

PROPOSED ACTIVITIES FOR 2013-2014 (continued)

- Respond to citizens' need for information, maps, bike routes, walking trails, availability of funds for projects as requested. The team responded to 23 request for information: requesting travel maps, preferred bicycle routes, and request for bicycle and pedestrian facility funding. We provided links to instate and US Bike Routes via our web site, contact information for the bicycle clubs in their travel areas, and provided resource information for funding bike/ped projects. 100% complete
- Develop and maintain a clearinghouse of information concerning active transportation - research, methods, the criteria to CO Divisions, ADDs, MPOs, and the local government The web site serves as an information clearing house. The team sends reminder emails monthly to promote new and/or updated material resources and links. The team used an email list serve to provide information to a statewide audience. 100% complete
- Maintain www.bikewalk.ky.gov website. The web site served as an information clearing house. 100% complete

Kentucky Bicycle and Bikeways Commission (KBBC)

- Plan quarterly KBBC meetings. The KBBC had 4 regularly scheduled video/web cast meetings for the FY 2014 and 1 business meeting. The business meeting was held at Jenny Wiley State Park. The bike/ped team coordinated all travel arrangements and provided administrative assistance with travel reimbursement. 100% complete
- Prepare agenda before each KBBC meeting and minutes after each KBBC meeting. 100% complete.
- Assist KBBC on communications and technical matters. The team provided each commissioner with an informational booklet that explains commission responsibilities, KRS and KAR relating to the KBBC, KYTC forms associated with the KBBC, KYTC contact information, and other information relating to the KBBC. The team responded to over 400 emails for the FY 2014 related to KBBC affairs. 100% complete
- Assist in facilitating the Paula Nye Education Grant program. The team received 10 application for the Paula Nye Memorial Education Grant for the FY 2014 (2013 awarded grants). Nine programs were awarded funding. The final KBBC recommendations were provided to the Secretary's Office via a reporting memo. The team sent reminder emails to all organizations of their reporting requirements. The team received, scanned, and documented all accounting and status reports for each awarded program. This information was placed in one central document and shared quarterly. 100% complete

PRODUCTS

- Local pedestrian and bicycle master plans, as needed. 100% complete
- Provide a clearing house/tool box of bike/ped resources and related items for the creation or improvement of local master plans. 100% complete
- Updated bicycle and pedestrian brochures and promotional materials. 100% complete
- Provide pedestrian and bicycle technical training courses as appropriate. 100% complete
- Walkability/Bikeability Audits Quarterly KBBC meetings. 100% complete
- NYE Grant status reports. 100% complete

CHAPTER 14

Pedestrian and Bicycle Program

RESPONSIBLE UNIT

Division of Planning
Modal Programs Branch

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$80,900	\$107,687.07	133.1%
OTHER	\$37,500	\$3,984.88	10.6%
TOTAL	\$118,400	\$111,671.95	94.3%

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Other

- \$10,000 Pedestrian and bicycle training course instructor
- \$2,500 for attendance of national conference
- \$10,000 for Kentucky Bicycle and Bikeway Commission meetings.
- \$5,000 for Bicycle and Pedestrian Brochures
- \$5,000 for Bicycle and Pedestrian Promotional Items (bike lights, reflectors, pedometers)
- \$5,000 Other Operational Cost

For items such as travel, mileage, equipment and other cost directly associated to the completion of this work chapter.

CHAPTER 15

Highway Safety Improvement Program

RESPONSIBLE UNIT

Division of Traffic Operations
Traffic Engineering Branch
Highway Safety Improvement Program Team

PURPOSE AND SCOPE

The Highway Safety Improvement Program (HSIP) Team evaluates, develops, and implements safety improvements on all roadways. It enhances and continues to update an evaluation process for prioritizing projects for consideration for inclusion in the Highway Safety improvement Program. It also conducts Road Safety Audit Reviews performing the necessary levels of evaluation to identify and develop a conceptual purpose and need statement of safety issues needs. It identifies and evaluates alternatives, generates project cost estimates and recommends phasing priorities where appropriate. The team oversees outsourced activities and works with the other Division and Agencies as needed to complete necessary tasks.

PROPOSED ACTIVITIES FOR 2013-2014

- Continue to develop and update procedures for evaluating safety needs.
- Conduct Roadway Safety Audit Reviews.
- Respond to inquiries about safety issues.
- Identify, evaluate and prioritize safety needs through data analysis and public involvement.
- Evaluate identified needs District wide/Statewide to assist in prioritizing projects for programming in the Highway Safety Improvement Program.

PRODUCTS

- Crash Analysis
- Road Safety Audit Reviews
- Alternatives Studies
- Feasibility Studies
- Special Studies
- Environmental Studies
- Utility Studies
- Project Estimates
- Priorities for Highway Safety Improvement Program

CHAPTER 15

Highway Safety Improvement Program

RESPONSIBLE UNIT

Division of Traffic Operation
Traffic Engineering Branch
Highway Safety Improvement Program Team

DISTRIBUTION OF ESTIMATED COST FOR 2013-2014

	2013-2014	Expended	Percent Expended
PERSONNEL	\$500,000	\$348,447.15	69.7%
OTHER		\$12,433.09	
TOTAL	\$500,000	\$360,880.24	72.2%

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

Provide \$25,000 to each of 12 Districts to administer the Highway Safety Improvement Program (HSIP), including planning, implementation, evaluation, and reporting.

SEE ATTACHED SPREADSHEET FOR ACCOMPLISHMENTS

FY2014 HSIP Projects

District	County	Route	BMP	EMP	Category	Description	PR1	TC-10	Calc Total Cost	Letting Date	Design Cost	R/W Cost	Utility Cost	Construction Cost
01	018 Calloway	KY 280	0.000	9.209	RD Corridors	Perform low cost safety improvements.			\$ 250,000		\$ 250,000	\$ -	\$ -	\$ -
01	028 Crittenden	US 60	21.700	21.900	HFS	High Friction Surface	HSIP 0601 176	88365	\$ 70,000	9/27/2013	\$ -	\$ -	\$ -	\$ 70,000
01	042 Graves	US 45	25.361	25.361	Intersection Emphasis	Construct traffic signal at intersection of US 45 and KY 408 in Graves County.	HSIP 0451 006	88656	\$ 133,404	12/13/2013			\$ 4,000	\$ 129,404
01	073 McCracken	I 24	1.500	18.000	Cable Median Barrier	Cable Median Barrier			\$ 2,500,000	6/27/2014	\$ 125,000	\$ -	\$ -	\$ 2,375,000
01	079 Marshall	I 24	52.000	52.000	HFS	HFS - Ramp from JC 9003 NB to I-24 EB	HSIP 0241 087	89207	\$ 140,000	6/27/2014	\$ -	\$ -	\$ -	\$ 140,000
01	121 Various	Various			Signs and Markings	Place waterborne striping on various routes in Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, Lyon, McCracken, Marshall, and Trigg Counties in District #1.	HSIP 9010 (126)	88903	\$ 107,684	3/28/2014	\$ -	\$ -	\$ -	\$ 107,684
02	024 Christian	I 24	85.500	93.373	Cable Median Barrier	Cable Median Barrier	HSIP 0243 054	89023	\$ 1,125,000	6/27/2014	\$ 25,000	\$ -	\$ -	\$ 1,100,000
02	030 Daviess	KY 2127	0.000	5.762	RD Corridors		HSIP 9010 114	88506	\$ 250,000		\$ 250,000	\$ -	\$ -	\$ -
02	121 Various	Various			Signs and Markings	Striping in Caldwell, Christian, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Union, and Webster Counties in District #2.	HSIP 9010 (126)	88903	\$ 194,901	3/28/2014	\$ -	\$ -	\$ -	\$ 194,901
02	121 Various	Various			Signs and Markings	Ramp signing upgrades	HSIP 9010 135	88990	\$ 725,000	5/30/2014	\$ -	\$ -	\$ -	\$ 725,000
03	005 Barren	KY 2189	0.000	6.010	RD Corridors	Perform low cost safety improvements.			\$ 250,000	2/20/2015	\$ 250,000	\$ -	\$ -	\$ -
03	031 Edmonson	KY 2326	2.040	2.361	FE06 Match	Guardrail	HSIP 9010 115	88706	\$ 47,573	12/13/2013	\$ -	\$ -	\$ -	\$ 47,573
03	114 Warren	KY 526	5.600	5.700	LRMP	Intersection improvement at KY 1320			\$ 500,000		\$ 70,000	\$ 70,000	\$ 140,000	\$ 220,000
03	121 Various	Various			Signs and Markings	Place waterborne striping on various routes in Allen, Barren, Butler, Edmonson, Logan, Metcalfe, Monroe, Simpson, Todd, and Warren Counties in District #3.	HSIP 9010 (127)	88903	\$ 410,804	3/28/2014	\$ -	\$ -	\$ -	\$ 410,804
03	121 Various	Various			LRMP	Install ETs to unprotected bridge ends in Barren and Monroe	HSIP 9010 137	88991	\$ 290,000	8/22/2014	\$ -	\$ -	\$ -	\$ 290,000
04	082 Meade	KY 1638	0.000	4.264	LRMP	Add 4' shoulders	HSIP 5092 005	89197	\$ -	6/24/2014	\$ -	\$ -	\$ -	\$ -
04	090 Nelson	KY 162	0.000	8.157	LRMP	Remove roadside hazards, extend pipes, soften shoulder slopes			\$ 125,000	6/27/2014	\$ -	\$ -	\$ -	\$ 125,000
04	090 Nelson	KY 605	9.690	9.800	HFS	HFS - Curves			\$ 75,000	9/27/2013	\$ -	\$ -	\$ -	\$ 75,000
04	109 Taylor	KY 76	1.455	6.981	NHS ET	Replace turnout end treatments	HSIP 5111 002	88175	\$ 360,000	8/16/2013				\$ 360,000
04	115 Washington	KY 555	0.000	14.659	NHS ET	Replace turnout end treatments	HSIP 0551 041	88261	\$ 1,230,000	8/16/2013				\$ 1,230,000
04	121 Various	Various			Signs and Markings	Place waterborne striping on various routes in Breckinridge, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington Counties in District #4	HSIP 9010 (128)	88903	\$ 486,685	3/28/2014	\$ -	\$ -	\$ -	\$ 486,685
05	015 Bullitt	KY 44	0.000	9.285	RD Corridors	Perform low cost safety improvements.			\$ 250,000	5/1/2014	\$ 250,000	\$ -	\$ -	\$ -
05	037 Franklin	KY 420	0.000	2.145	RD Plan	Corridor signing	HSIP 7325 002	87570	\$ 40,000	2/21/2014	\$ -	\$ -	\$ -	\$ 40,000
05	052 Henry	I 71	24.727	28.000	Cable Median Barrier	Cable Median Barrier			\$ 447,000	9/26/2014	\$ 12,000	\$ -	\$ -	\$ 435,000
05	056 Jefferson	I 64	17.000	17.000	HFS	HFS - Ramp from EB to KY 913 NB	HSIP 0642 186	89201	\$ 90,000	6/27/2014	\$ -	\$ -	\$ -	\$ 90,000
05	056 Jefferson	I 64	25.000	25.000	HFS	HFS - Ramp from I 265 NB to WB	HSIP 0642 187	89202	\$ 90,000	6/27/2014	\$ -	\$ -	\$ -	\$ 90,000
05	056 Jefferson	I 65	10.000	10.000	HFS	HFS - Ramp from I 265 WB to NB	HSIP 0655 112	89204	\$ 120,000	6/27/2014	\$ -	\$ -	\$ -	\$ 120,000
05	056 Jefferson	I 65	125.000	125.000	HFS	HFS - Ramp from NB to I 265 EB	HSIP 0655 111	89203	\$ 130,000	6/27/2014	\$ -	\$ -	\$ -	\$ 130,000
05	056 Jefferson	I 71	35.000	35.000	HFS	HFS - Ramp from I 265 NB to NB	HSIP 0711 110	89205	\$ 130,000	6/27/2014	\$ -	\$ -	\$ -	\$ 130,000
05	056 Jefferson	KY 146	2.380	2.450	HFS	HFS - Curves	HSIP 9010 107	88367	\$ 50,000	9/27/2013	\$ -	\$ -	\$ -	\$ 50,000
05	056 Jefferson	KY 2845	0.580	0.650	HFS	HFS - Curves	HSIP 9010 108	88368	\$ 40,000	9/27/2013	\$ -	\$ -	\$ -	\$ 40,000
05	093 Oldham	I 71	15.000	17.700	Cable Median Barrier	Construct Cable Median Barrier on I-71	HSIP 0711 106	88060	\$ 400,000	8/16/2013	\$ -	\$ -	\$ -	\$ 400,000
05	093 Oldham	I 71	22.550	24.727	Cable Median Barrier	Cable Median Barrier			\$ 298,000	9/26/2014	\$ 8,000	\$ -	\$ -	\$ 290,000
05	112 Trimble	KY 625	6.574	6.680	FE06 Match	Install guardrail	HSIP 9010 141	89381	\$ 16,000	7/11/2014	\$ -	\$ -	\$ -	\$ 16,000
05	121 Various	Various			Signs and Markings	Place waterborne striping on various routes in Franklin, Henry, Oldham, Spencer, and Trimble Counties in District #5	HSIP 9010 129	88903	\$ 88,709	3/28/2014	\$ -	\$ -	\$ -	\$ 88,709
06	008 Boone	I 71	69.900	77.000	Cable Median Barrier	Cable Median Barrier			\$ 950,000	9/26/2014	\$ 25,000	\$ -	\$ -	\$ 925,000
06	008 Boone	KY 16	0.000	2.483	Low Cost	PAVEMENT RESURFACING AND SHOULDERING ON KY 16 IN VERONA BEGINNING AT THE GALLATIN COUNTY LINE AND ENDING AT KY 49/KY 14.	HSIP 9010 (109)	88534	\$ 200,000	10/25/2013	\$ -	\$ -	\$ -	\$ 200,000
06	008 Boone	US 42	0.000	2.236	HFS	PAVEMENT RESURFACING AND SHOULDERING ON US-42 BEGINNING AT THE GALLATIN COUNTY LINE AND ENDING AT MUD LICK CREEK BRIDGE.	HSIP 5138 063	88535	\$ 200,000	10/25/2013	\$ -	\$ -	\$ -	\$ 200,000
06	019 Campbell	I 275			HFS	HFS - Ramp from KY 9 SB to NB	HSIP 2759 128	89200	\$ 75,000	6/27/2014	\$ -	\$ -	\$ -	\$ 75,000
06	021 Carroll	I 71	38.808	50.800	Cable Median Barrier	Cable Median Barrier			\$ 1,642,000	9/26/2014	\$ 42,000	\$ -	\$ -	\$ 1,600,000
06	039 Gallatin	I 71	62.800	63.600	HFS	HFS - Curves	HSIP 0713 056	88369	\$ 950,000	9/27/2013	\$ -	\$ -	\$ -	\$ 950,000
06	039 Gallatin	I 71	63.500	63.700	HFS	HFS - Curves	HSIP 0713 058	89208	\$ 120,000	6/27/2014	\$ -	\$ -	\$ -	\$ 120,000
06	039 Gallatin	I 71	59.850	69.600	Cable Median Barrier	Construct Cable Median Barrier	HSIP 0713 054	88061	\$ 1,115,500	8/16/2013	\$ -	\$ -	\$ -	\$ 1,115,500
06	039 Gallatin	I 71	62.800	63.600	Low Cost	High Friction Surface	HSIP 0713 056	88369	\$ 950,000	9/27/2013	\$ -	\$ -	\$ -	\$ 950,000
06	041 Grant	KY 22	5.758	7.280	Low Cost	PAVEMENT RESURFACING AND SHOULDERING ON KY 22 BEGINNING AT KY 36 AND ENDING 0.609 MILES EAST OF BATON ROUGE ROAD.	HSIP 5140 037	88536	\$ 250,000	10/25/2013	\$ -	\$ -	\$ -	\$ 250,000
06	059 Kenton	I 275			HFS	HFS - Ramp from KY 16 NB to EB	HSIP 2759 129	89206	\$ 70,000	6/27/2014	\$ -	\$ -	\$ -	\$ 70,000
06	059 Kenton	KY 1303	0.562	0.842	HFS	PAVEMENT RESURFACING AND SHOULDERING ON KY 1303 BEGINNING AT TIMBER LANE AND ENDING AT BEECH GROVE DRIVE.	HSIP 9010 110	88537	\$ 85,000	10/25/2013	\$ -	\$ -	\$ -	\$ 85,000
06	059 Kenton	KY 1501	0.300	0.950	HFS	HFS - Curves	HSIP 9010 (111)	88371	\$ 250,000	9/27/2013	\$ -	\$ -	\$ -	\$ 250,000
06	059 Kenton	KY 536	7.470	7.525	HFS	HFS - Curves	HSIP 5392 001	88370	\$ 35,000	9/27/2013	\$ -	\$ -	\$ -	\$ 35,000
06	059 Kenton	KY 8	1.240	1.550	FE06 Match	Install guardrail	HSIP 8142 009	88707	\$ 42,105	12/13/2013	\$ -	\$ -	\$ -	\$ 42,105
06	094 Owen	KY 330	0.057	0.076	FE06 Match	Install guardrail	HSIP 9010 105	88413	\$ 15,000	9/27/2013	\$ -	\$ -	\$ -	\$ 15,000
06	112 Trimble	I 71	38.000	38.808	Cable Median Barrier	Cable Median Barrier			\$ 103,000	9/26/2014	\$ 3,000	\$ -	\$ -	\$ 100,000
06	121 Various	Various			Signs and Markings	Horizontal Alignment Signage in Various Counties in D6	HSIP 9010 120	88920	\$ 323,748	3/28/2014	\$ -	\$ -	\$ -	\$ 323,748
06	121 Various	Various			Signs and Markings	Striping in Boone, Bracken, Campbell, Carroll, Gallatin, Grant, Harrison, Kenton, Owen, Pendleton, and Robertson Counties.	HSIP 9010 129	88903	\$ 332,909	3/28/2014	\$ -	\$ -	\$ -	\$ 332,909
07	009 Bourbon	US 460	10.363	12.129	LRMP	Improve superelevation, add embankment and shoulder			\$ 100,000		\$ -	\$ -	\$ -	\$ 100,000

FY2014 HSIP Projects

District	County	Route	BMP	EMP	Category	Description	PR1	TC-10	Calc Total Cost	Letting Date	Design Cost	R/W Cost	Utility Cost	Construction Cost
07	025 Clark	KY 1927	3.766	6.826	Signs and Markings	FD05 Signing	HSIP 9010 142	88921	\$ 20,000	7/11/2014	\$ -	\$ -	\$ -	\$ 20,000
07	025 Clark	US 60	14.563	15.613	LRMP	Extend Culvert, repair landslide, add embankment to stabilize roadway, upgrade guardrail, improve superelevation, clear vegetation	HSIP 5211 102	89242	\$ 382,000	6/27/2014	\$ -	\$ -	\$ -	\$ 382,000
07	034 Fayette	KY 1975	2.928	5.410	Signs and Markings	FD05 signing	HSIP 9010 123	88921	\$ 13,500	3/28/2014	\$ -	\$ -	\$ -	\$ 13,500
07	034 Fayette	KY 353	5.237	5.715	HFS	Superelevation improvement	HSIP 5205 021	88538	\$ 291,000	10/25/2013	\$ -	\$ -	\$ -	\$ 291,000
07	034 Fayette	US 25	2.699	8.140	Signs and Markings	FD05 signing	HSIP 9010 123	88921	\$ 20,500	3/28/2014	\$ -	\$ -	\$ -	\$ 20,500
07	057 Jessamine	KY 169	5.052	6.752	HFS	Superelevation improvement	HSIP 5191 006	88539	\$ 650,000	11/22/2013	\$ -	\$ -	\$ -	\$ 650,000
07	057 Jessamine	KY 169	16.685	19.180	LRMP	Improve superelevation, add embankment, improve sight distance, remove roadside hazards			\$ 277,500		\$ -	\$ -	\$ -	\$ 277,500
07	076 Madison	KY 388	10.102	12.397	Signs and Markings	FD05 signing	HSIP 9010 123	88921	\$ 21,500	3/28/2014	\$ -	\$ -	\$ -	\$ 21,500
07	076 Madison	KY 52	4.150	4.854	HFS	Superelevation Improvement	HSIP 5283 005	88540	\$ 250,000	1/17/2014	\$ -	\$ -	\$ -	\$ 250,000
07	076 Madison	US 421	0.000	12.571	Signs and Markings	FD05 signing	HSIP 9010 123	88921	\$ 40,100	3/28/2014	\$ -	\$ -	\$ -	\$ 40,100
07	084 Mercer	KY 152	0.000	10.090	Signs and Markings	FD05 signing	HSIP 9010 142	88921	\$ 51,000	7/11/2014	\$ -	\$ -	\$ -	\$ 51,000
07	084 Mercer	US 68	12.503	20.058	RD Corridor	Perform low cost safety improvements	HSIP 2681 029	89243	\$ 250,000		\$ 250,000	\$ -	\$ -	\$ -
07	084 Mercer	US 68	14.270	17.542	Signs and Markings	FD05 signing	HSIP 9010 142	88921	\$ 20,000	7/11/2014	\$ -	\$ -	\$ -	\$ 20,000
07	087 Montgomery	KY 11			FE06 Match	Install guardrail	HSIP 5306 002	88843	\$ 18,000	1/24/2014	\$ -	\$ -	\$ -	\$ 18,000
07	120 Woodford	KY 169	2.121	3.440	HFS	Superelevation improvement	HSIP 5191 007	88541	\$ 500,000	10/25/2013	\$ -	\$ -	\$ -	\$ 500,000
07	121 Various	Various			Signs and Markings	Place waterborne striping on various routes in Anderson, Bourbon, Boyle, Clark, Fayette, Garrard, Jessamine, Madison, Mercer, Montgomery, Scott, and Woodford Counties in District #7.	HSIP 9010 130	HSIP 9010 130	\$ 237,538	3/28/2014	\$ -	\$ -	\$ -	\$ 237,538
08	069 Lincoln	KY 1194	0.000	6.602	RD Corridors	Perform low cost safety improvements	HSIP 9010 124	88923	\$ 250,000		\$ 250,000	\$ -	\$ -	\$ -
08	100 Pulaski	KY 70	3.550	13.814	LRMP	Improve superelevation, install HFS, upgrade GR/ETs, remove roadside hazards			\$ 350,000		\$ -	\$ -	\$ -	\$ 350,000
08	100 Pulaski	KY 80	24.500	25.100	LRMP	Intersection improvement at CR 1133 (Fire Tower Rd)		89009	\$ 499,000		\$ 63,000	\$ -	\$ -	\$ 436,000
08	100 Pulaski	KY 90	0.000	4.136	LRMP	Install 10' shoulders, CLRS/ELRS	HSIP 0901 046	88918	\$ 824,000	3/28/2014	\$ -	\$ -	\$ -	\$ 824,000
08	102 Rockcastle	KY 1505	8.100	8.500	LRMP	HFS	HSIP 9010 139	89199	\$ 70,000	6/27/2014	\$ -	\$ -	\$ -	\$ 70,000
08	104 Russell	KY 76	3.600	3.805	LRMP	Superelevation improvement		88986	\$ 100,000		\$ 15,000	\$ -	\$ -	\$ 85,000
08	116 Wayne	KY 90	8.710	9.100	LRMP	HFS	HSIP 0901 047	89198	\$ 215,000	6/27/2014	\$ -	\$ -	\$ -	\$ 215,000
08	121 Various	Various			Signs and Markings	Place waterborne striping on various routes in Adair, Lincoln, McCreary, Pulaski, Rockcastle, and Wayne Counties in District #8	HSIP 9010 131	HSIP 9010 131	\$ 28,664	3/28/2014	\$ -	\$ -	\$ -	\$ 28,664
09	010 Boyd	KY 3294	1.416	6.811	RD Corridor	Replace G/R, drainage improvements, shouldering	HSIP 9010 138		\$ -	6/27/2014	\$ -	\$ -	\$ -	\$ -
09	035 Fleming	KY 57	2.109	4.386	LRMP	Improve superelevation, upgrade GR/ETs, improve shoulder slopes	HSIP 5234 009	88967	\$ 397,465	4/25/2014	\$ -	\$ -	\$ -	\$ 397,465
09	103 Rowan	KY 519	3.370	3.912	FE06 Match	Install guardrail	HSIP 5319 017	88804	\$ 90,000	12/13/2013	\$ -	\$ -	\$ -	\$ 90,000
09	103 Rowan	US 60	11.668	12.020	FE06 Match	Install guardrail	HSIP 5211 103	88899	\$ 35,000	6/27/2014	\$ -	\$ -	\$ -	\$ 35,000
09	121 Various	Various			Signs and Markings	Place waterborne striping on various routes in Bath, Boyd, Carter, Elliott, Fleming, Greenup, Lewis, Mason, Nicholas, and Rowan Counties in District #9.	HSIP 9010 (132)	88903	\$ 458,953	3/28/2014	\$ -	\$ -	\$ -	\$ 458,953
10	013 Breathitt	KY 30	11.288	11.699	FE06 Match	Install guardrail	HSIP 5263 019	88844	\$ 42,000	1/24/2014	\$ -	\$ -	\$ -	\$ 42,000
10	033 Estill	KY 52	1.992	2.300	LRMP	Install turn lanes, improve clear zone	HSIP 5262 052	88987	\$ 274,730		\$ 15,000	\$ -	\$ -	\$ 259,730
10	033 Estill	KY 52	5.415	5.840	LRMP	Install left turn lane, install SRS	HSIP 5262 051	89041	\$ 498,225	7/11/2014	\$ -	\$ -	\$ -	\$ 498,225
10	088 Morgan	US 460	16.250	16.900	LRMP	Modify typical to provide equal shoulders on both sides.	HSIP 4602 088	88988	\$ 493,600		\$ 50,000	\$ -	\$ -	\$ 443,600
10	097 Perry	KY 550	0.774	1.182	LRMP	Add 2' shoulder, add right turn lane	HSIP 5375 037	88989	\$ 486,500		\$ 50,000	\$ -	\$ -	\$ 436,500
10	121 Various	Various			Signs and Markings	Place waterborne striping on various routes in Breathitt, Estill, Lee, Magoffin, Menifee, Morgan, Owsley, Perry, Powell, and Wolfe Counties in District #10	HSIP 9010 133	88903	\$ 337,254	3/28/2014	\$ -	\$ -	\$ -	\$ 337,254
10	121 Various	Various			NHS - ET	Replace turnout end treatments on KY 114 in Magoffin County (MP 0-4.7) and on US 460 in Magoffin (MP 3.621-7.362) and Morgan (18.787-24.079) counties			\$ 176,000	3/28/2014	\$ -	\$ -	\$ -	\$ 176,000
11	007 Bell	KY 2402	0.600	0.700	LRMP	HFS	HSIP 9010 144	89309	\$ 38,518		\$ -	\$ -	\$ -	\$ 38,518
11	026 Clay	KY 3472	0.100	0.500	LRMP	Resurface or HFS	HSIP 9010 143	89310	\$ 67,436		\$ -	\$ -	\$ -	\$ 67,436
11	048 Harlan	US 421	17.700	18.100	LRMP	Improve curve, improve sight distance			\$ 139,619		\$ -	\$ -	\$ -	\$ 139,619
11	048 Harlan	US 421	20.400	20.900	LRMP	Widen 2 curves			\$ 162,609		\$ -	\$ -	\$ -	\$ 162,609
11	061 Knox	KY 11	21.577	21.941	FE06 Match	Install guardrail	HSIP 5272 008	88900	\$ 45,000	3/28/2014	\$ -	\$ -	\$ -	\$ 45,000
11	063 Laurel	KY 363	9.000	10.000	HES	Roundabout at KY 1006	HSIP 5292 006	67549	\$ 1,460,000		\$ -	\$ -	\$ -	\$ 1,460,000
11	063 Laurel	KY 638	3.252	8.062	FE06 Match	Install guardrail	HSIP 9010 119	88845	\$ 221,100	1/24/2014	\$ -	\$ -	\$ -	\$ 221,100
11	063 Laurel	KY 80	0.000	4.200	NHS-ET	REPLACE GUARDRAIL END TREATMENTS ON KY 80 FROM THE ROCKCASTLE COUNTY LINE TO 0.2 MILE WEST OF HICKORY ROAD.	HSIP 0802 003	88330	\$ 450,000	10/25/2013	\$ -	\$ -	\$ -	\$ 450,000
11	118 Whitley	KY 204	1.672	11.248	FE06 Match	Install guardrail	HSIP 9010 116	88794	\$ 140,000	12/13/2013	\$ -	\$ -	\$ -	\$ 140,000
11	118 Whitley	KY 26	9.480	9.916	FE06 Match	Install guardrail	HSIP 5154 028	88881	\$ 45,000	3/28/2014	\$ -	\$ -	\$ -	\$ 45,000
11	121 Various	Various			Signs and Markings	Striping in Bell, Clay, Harlan, Jackson, Knox, Laurel, Leslie, and Whitley Counties in District #11.	HSIP 9010 131	88903	\$ 119,606	3/28/2014	\$ -	\$ -	\$ -	\$ 119,606
11	121 Various	Various			NHS-ET	Replace turn-down ETs	HSIP 9010 145	89322	\$ 550,000	7/11/2014	\$ -	\$ -	\$ -	\$ 550,000
12	036 Floyd	KY 404	2.048	2.195	FE06 Match	Install guardrail	HSIP 5350 001	88595	\$ 16,400	11/22/2013	\$ -	\$ -	\$ -	\$ 16,400
12	036 Floyd	KY 777	3.000	3.246	FE06 Match	Install guardrail	HSIP 9010 140	89230	\$ 32,000	6/27/2014	\$ -	\$ -	\$ -	\$ 32,000
12	098 Pike	KY 194	18.400	19.000	Low Cost	High Friction Surface	HSIP 5360 026	88372	\$ 200,000	9/27/2013	\$ -	\$ -	\$ -	\$ 200,000
12	121 Various	Various			Signs and Markings	Place waterborne striping on various routes in Floyd, Johnson, Knott, Lawrence, Letcher, Martin, and Pike Counties in District #12.	HSIP 9010 134	88903	\$ 321,168	3/28/2014	\$ -	\$ -	\$ -	\$ 321,168
Statewide	121 Various	Various			KTC Technical Assistance	Agreement with KTC for Technical Assistance	HSIP 9010 032	83960	\$ 500,000		\$ -	\$ -	\$ -	\$ 500,000
									\$ 32,447,507		\$ 2,003,000	\$ 70,000	\$ 144,000	\$ 30,230,507

CHAPTER 16

Value Engineering and Quality Assurance

RESPONSIBLE UNIT

Division of Highway Design
Quality Assurance Branch

PURPOSE AND SCOPE (continued)

Post-Construction Review (PCR) program is a cyclic process. Projects that meet the criteria of over \$1 million dollars (state and federally funded) and have been open to the public for approximately one year are solicited from the District's Transportation Engineer Branch Managers (TEBM) in July and August. The target is 4 projects per district per fiscal year. There is a possibility to review more and smaller projects in the future. Meetings are scheduled from August to April. Consultants, Contractors, Federal Highway Administration (FHWA) and KYTC Personnel are invited and provided prior information such as documented change orders. During these meetings, it is discussed how the project(s) progressed and what were the major issues that arose. The attendees participate as a team to identify collective solutions for the relevant issues. After the meeting, a draft Fact Sheet for each project is created and sent back to the participants for review. Once finalized, the Fact Sheet is distributed among Cabinet Personnel, FHWA Personnel and an American Council for Engineering Companies of KY (ACEC-KY) Organizer. Following the completion of the team meeting and data collection phases, data entry of the issues/solutions are inputted to the Lessons Learned GIS geodatabase. (The other programs are compiled into this database at different intervals throughout the year). The collection of data may also substantiate follow up meetings or contacting those who can make decisions to improve/change/revise the design process to improve overall quality and cost saving in future projects.

PROPOSED ACTIVITIES (Annually)

- Continue to develop and update policy and procedures for all aspects of each program.
 - Completed Lessons Learned Manual
 - Completed Post Construction Access Database Manual
 - Completed Website Manual
 - Participated in Highway Design Manual rewrite (for QAB programs)
- Conduct mandated Value Engineering studies to meet federal guidelines.
 - 3 VE Studies were conducted.[I-65, KY-15, Mountain Parkway]
- Conduct VE Mod 1 and overview training for KYTC staff and design consultants.
 - Held on Dec 2-6, 2013.
- Conduct Post-Construction Reviews in their prescribed cycle.
 - Completed 17 Post- Construction Reviews
- Conduct Constructability Reviews to improve quality of designs and enhance efficiency of work flow during the construction phase.
 - 100 Constructability Reviews completed for roadway District Project Managers
 - 43 Constructability Reviews completed on structures for Division of Structural Design
- Collect data for the 3 program datasets to include in the Lessons Learned GIS geodatabase.
 - All data entered and current for the three programs into ARC-GIS

CHAPTER 16

Value Engineering and Quality Assurance

RESPONSIBLE UNIT

Division of Highway Design
Quality Assurance Branch

PROPOSED ACTIVITIES (Annually) (continued)

- Provide technical assistance from the programs to identify, evaluate and prioritize needs for improvements and coordinate those recommendations within the Cabinet through the collection and analysis of data.
 - Quality Matters Newsletter (3 issues published): Distributed to KYTC personnel, design consultants, and contracting industry.
 - Participated in Highway Design Manual rewrite
 - Participated in VECP process with Division of Construction
- Ensure consistency and quality of design products delivered by the Cabinet.
 - Constructability Reviewers actively participated in Preliminary Line & Grade and Joint Inspection Meetings
 - Worked with Plan Processing Branch in Division of Highway Design on projects
 - Staff participated on VE study teams
 - Implementation (follow-up decision) meetings for VE studies
 - Participated in LSIORB Conflict of Interest Committee
 - Initiated Bridge End Settlement Evaluation and Prediction [KY 14-486] (Nov. 2013); Held SAC Kickoff meeting (Jan 2014)
- Train in-house and consultant personnel on findings for the betterment of designs and design processes.
 - Overview training at Project Development Academy (Oct 2013)
 - Overview training at Construction Management Academy (Dec 2013, Jun 2014)
 - Presentations at 2013 Partnering Conference (Sep 2013)
 - Shared information about webinars and reports with relevant KYTC personnel
- Oversee outsourced activities.
 - Chaired KTC research on Sustainable Infrastructure
 - Reviewed prequalifications for Advanced Traffic Engineering Design & Modeling

PRODUCTS

- VE Studies:
 - 3 studies completed and reports issued
- VE Punch Lists
 - 3 punch lists developed and submitted to project managers
- VE Project Database:
 - Database updated (completed and future VE studies)
- VECP Database:
 - Data entered and ARC-GIS updated
- Post-Construction Review Fact Sheets:
 - 17 posted in ProjectWise and emailed to review participants (KYTC staff, contractor, consultant) and Transportation Group (FHWA, ACEC, KAHC, KYTC)
- Post-Construction Review Database
 - Data entered and ARC-GIS updated

CHAPTER 16

Value Engineering and Quality Assurance

RESPONSIBLE UNITDivision of Highway Design
Quality Assurance Branch**PRODUCTS (continued)**

- Post Construction Review Access Database:
 - Database stores review data in Access format, pulls project data from Business Objects for new projects to review, and creates fact sheets for email distribution.
- Constructability Review Reports
 - 143 reports developed and distributed.
- Constructability Review Database
 - Data entered and ARC-GIS updated
- *Quality Matters* Newsletter:
 - 3 Issues Complete (Fall 2013, Winter 2013, Spring 2014)
 - Received Award of Excellence from Kentucky Association of Government Communicators for Volume 4 Issue 2.
- Lessons Learned Geodatabase
 - Data entered and ARC-GIS updated
- Lessons Learned Mapping:
 - Updated maps to develop various presentations
- Annual Reports from all Programs
 - FHWA FFY13 VE Annual Report
 - FHWA FY13 Annual Work Program Accomplishments
 - Constructability Status Report – updated monthly with 6YP data from TED
 - Internal QAB Momentous Events Report (calendar year 2013)
 - Special Studies Sustainable Infrastructure research completed
 - Evaluation of MSE Walls for Bridge Ends in KY research completed
 - Tools for Applying Constructability Concepts to Project Development completed

DISTRIBUTION OF ESTIMATED COST FOR 2012-2013

	2013-2014	Expended	Percent Expended
PERSONNEL	\$325,000	\$273,172.21	84.1%
OTHER	\$175,000	\$7,905.60	4.5%
TOTAL	\$500,000	\$281,077.81	56.2%

ESTIMATED OUTSOURCING EXPENSES AND PURCHASES

- \$175,000 to outsource but not limited to the following: Other VE studies that are state funded, Value Engineering Training, SAVE International Membership fees, SAVE International Annual Conferences, AASHTO VE Committee Conferences, Transportation Research Board (TRB) attendance and participation in TRB committees, American Society for Quality (ASQ) membership and attendance to meetings, research or assistance related to Quality Assurance and Quality Control. (FHWA will be notified in advance when the Quality Assurance Branch needs to utilize the funds when initiated.)