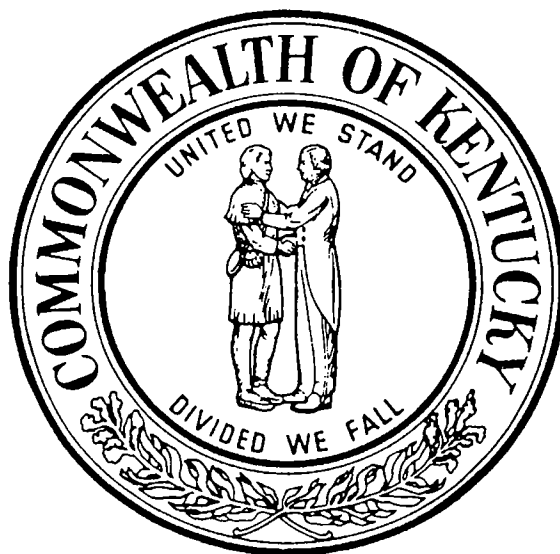


PLANNING WORK

PROGRAM

SPR-PL-1-(40)
JUNE 16, 2004 – JUNE 15, 2005



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

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

**WORK PROGRAM AND COST ESTIMATE
FOR
PROJECT SPR-PL-1(40)
June 16, 2004 through June 15, 2005**

**PART I
PLANNING
MULTIMODAL PROGRAMS**

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

FOREWARD

This Planning Program SPR-PL-1(40) for the period June 16, 2004 to June 15, 2005 is submitted in compliance with the provisions of Section 307 of Title 23, United States Code, and describes programs and operations for planning activities in the Kentucky Transportation Cabinet (KYTC). This program modifies and updates previous such programs and is specifically intended to reflect the needs of the Kentucky Transportation Cabinet. It is fully expected that products from this program will also have national applications.

The Divisions of Planning and Multimodal Programs are charged with the responsibility for recommending, advising, and assisting the chief administrators of the KYTC in the development of the overall goals, policies, project priorities, and procedures relating to the total transportation program of the Cabinet. Proposed activities for Fiscal Year 2005 are reported in detail by Volume and Chapter in this Work Program.

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
FISCAL YEAR 2005
PLANNING WORK PROGRAM

<u>PROGRAM IDENTITY</u>	<u>FEDERAL</u>	<u>STATE MATCH</u>	<u>LOCAL</u>	<u>TOTAL</u>
PLANNING				
SPR-PR Part I Planning	\$8,331,200	\$2,082,800		\$10,414,000
PL Funded Metropolitan Area Planning	\$1,594,000	\$96,875	\$301,625	\$1,992,500
Other Planning Activities	*\$300,000	*\$900,000		\$1,200,000
TOTALS - PLANNING	\$10,225,200	\$3,079,675	\$301,625	\$13,606,500

*Six Year Highway Plan charged to projects, not FH02.

<u>CHAPTER</u>	<u>TITLE</u>	<u>AMOUNT</u>
1	Administrative	\$331,700
2	Personnel Training	\$205,000
3	Equipment Management	\$1,175,000
4	Traffic Data Collection and Processing	\$1,892,000
5	Strategic Corridor Planning	\$1,737,200
6	Intermodal Statewide Planning	\$999,200
7	Roadway Systems	\$606,400
8	Geographic Information Systems	\$350,800
9	Cartography	\$297,300
10	GPS/HIS Development and Support	\$157,400
11	Global Positioning System (GPS)	\$339,600
12	Highway Information System	\$1,047,000
13	Special Analysis	\$152,100
14	Air Quality Conformity Analysis Program	\$177,300
15	Metropolitan Planning Organizations	\$362,800
16	Small Urban Areas Studies	\$57,500
17	Bicycle and Pedestrian Transportation Program	\$140,100
18	Traffic Congestion Management System & ITS Coordination	\$26,400
19	Smart Growth and Transportation Planning	\$76,100
20	Traffic Data – Forecasting	\$204,000
21	Statewide Traffic Model	\$79,100
	TOTAL	\$10,414,000

CHAPTER 1:

Administrative

RESPONSIBLE UNIT:

Division of Planning
 Customer Service Activity Center (Internal Customer Service Team, External Customer Service Team, and Administrative Team)
 Division of Multimodal Programs (Administrative Team)

PURPOSE AND SCOPE: The Customer Service Activity Center within the Division of Planning is comprised of the Internal Customer Service Team, External Customer Service Team, and the Administrative Team. The Internal Customer Service Team plans, organizes, directs, motivates, and controls activities to accomplish Division goals in accordance with Cabinet and federal transportation policies and procedures. They are responsible for the preparation of all correspondence, daily time and attendance records, and in state and out-of-state travel requests. This Team also oversees training, EEO reporting, ADA, Workers Comp, and FLSA reporting. The External Customer Service Team focuses on customers external to the Division for cartographic products, statistical reports, and responses to various data requests including responding to the Division's web page. This Team also oversees map sales. The Division produces city, county, and other miscellaneous maps for sale to other divisions within the Cabinet, other state government agencies, and to the general public. The External Customer Service Team is responsible for the plotting and sale of all maps upon request. They also keep records of maps sold and process the necessary paperwork for billing. In addition, they are also responsible for updating traffic count station maps for all counties and incorporated areas with the latest available traffic count and station data. The Administrative Team recommends, advises, and assists the chief administrators of the Cabinet in the development of the overall goals, policies, project priorities, and procedures relating to the transportation program of the Cabinet. This team is also responsible for the Appalachian Development Cost Estimate (APD). The APD is submitted every five years and submitted to FHWA. Additionally, it is the function of the Administrative Team to administer National Scenic Byway grants, oversee the state Scenic Byway program, prepare the annual Work Program, oversee federal reporting requirements, and monitor and process payments against various contracts awarded to the Division. The administration of the SPR Work Program, Area Development Districts Regional Transportation Program, and the Metropolitan Planning Organizations UPWPs also include full consideration of Title VI and the Civil Rights Act of 1964 and other social, environmental, and economic implications and is in compliance with the Cabinet's approved Affirmative Action Program.

PROPOSED ACTIVITIES FOR 2004-2005: Service and respond to all internal, external, and administrative requests in a precise, timely, and customer friendly manner regarding all inquiries for assistance as described above.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL	\$229,000	\$81,700	\$310,700
OTHER	*\$21,000	\$0	\$21,000
TOTAL	\$250,000	\$81,700	\$331,700

*Outsourced for completion of the FHWA 536 report

CHAPTER 2: Personnel Training

RESPONSIBLE UNIT: Division of Planning
Division of Multimodal Programs

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

PROPOSED ACTIVITIES FOR 2004-2005: 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 conference/workshops or like training: Highway Performance Monitoring System (HPMS), Highway Economic Requirements System (HERS), Exor (upgrade of Highway Information System), TransCAD Traffic Model Training, ASCE Kentucky annual meeting, ITE Kentucky annual meeting, KBT Annual Meeting, Partnering Conference, Small and Medium Sized Communities Conference, National Access Management Conference, TRB Committee Meetings, Planning Applications Conference, NATMEC, TMG training, reauthorization and mobility measures training, and other miscellaneous workshops and conferences related to transportation planning and activities of this program.

We also anticipate training in the following areas: ArcGIS, Exor, Air Quality, Transportation Enhancement, Roundabouts, Highway Capacity, CORSIM, accident analysis, safety conscious planning, freight movement, rural transportation planning, federal highway bill provisions, National Environmental Policy Act, land use, access management, Road User Cost Analysis, GIS systems, Congestion Management Systems, MPO and rural Planning, as well as other courses/conferences that will teach us about any changes in the federal legislation, help us assist our customers better, and carry out the activities we are responsible for in the United States Code and the Code of Federal Regulations. Also provide annual in-state Traffic Data Recorder Training for District Personnel and training for the District Planning personnel in procedures, etc..

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	DISTRICT OFFICE	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL	\$80,000	\$21,000	\$67,900	\$168,900
OTHER	\$7,700	\$3,000	\$25,400	\$36,100
TOTAL	\$87,700	\$24,000	\$93,300	\$205,000

CHAPTER 3: Equipment Management

RESPONSIBLE UNIT: Division of Planning
Traffic and Equipment Management Activity Center
Equipment Management Team

PURPOSE AND SCOPE: This team focuses on the identification, purchase, repair/maintenance, placement, and operation of various pieces of traffic data collection equipment statewide with the Districts and within the Division.

PROPOSED ACTIVITIES FOR 2004-2005: Collect volume and classification data on fifty interstate index stations and volume data on 150 non-index interstate stations.

Collect data at approximately 450 regularly scheduled volume and classification stations to assist District efforts.

Collect, process, analyze, and submit quarterly one week of weigh-in-motion (WIM) data at 28 permanent WIM stations. Periodically calibrate and assess equipment for adjustments in order to obtain quality data.

Collect, process, and submit 48 hours of WIM data at ten portable WIM stations.

Install and maintain permanent vehicle sensors at approximately 30 high volume locations.

Repair and maintain 77 Automatic Traffic Recorders (ATR) and install additional stations as necessary.

Investigate and purchase new technologies, sensors, data recorders, and communication devices developed for the traffic-counting industry to provide for safer, more efficient and more accurate methods of collection.

Certify, repair, and maintain approximately 600 traffic data recorders.

Inspect, repair, and maintain 400 permanent vehicle sensor locations.

Track emerging highway projects and produce plans and specifications for new and replacement traffic sensor installations for submittal into construction and pavement rehabilitation contracts.

Oversee any outside assistance necessary to assist this team in accomplishing the above tasks.

Repair and maintenance of equipment is estimated to include the following:

Item Description	Quantity	Unit Cost	Total Cost
Asphalt cold patch	20	\$5.0000	\$ 100.00
ATR station repair parts (surge panel, low V disconnects, solar reg, fuses, harnesses)	1	\$5,000.0000	\$ 5,000.00
Band-it and accessories	1	\$500.0000	\$ 500.00

CHAPTER 3:**Equipment Management (Continued)****RESPONSIBLE UNIT:**

Division of Planning
 Traffic and Equipment Management Activity Center
 Equipment Management Team

Item Description	Quantity	Unit Cost	Total Cost
Batteries, equipment, 1.5V etc.	1	\$1,000.0000	\$ 1,000.00
Batteries, Storage, 12V	10	\$60.0000	\$ 600.00
Batteries, Storage, 6V	50	\$25.0000	\$ 1,250.00
Cables and parts (hoods, connectors, etc.)	1	\$1,000.0000	\$ 1,000.00
Camera, Digital cameras	4	\$200.0000	\$ 800.00
Camera, Film (delete if we can get digital cameras)	50	\$20.0000	\$ 1,000.00
Cleaning supplies, (solvent, towels, hand cleaner, brushes, buckets, etc.)	1	\$1,500.0000	\$ 1,500.00
Concrete (cabinet and pole bases)	150	\$3.0000	\$ 450.00
Concrete Saw Accessories- Blades, water pumps, gaskets, hoses	3	\$500.0000	\$ 1,500.00
Conduit, (Various sizes, types and fittings)	1	\$3,000.0000	\$ 3,000.00
Electronic Components (diodes, capacitors, soldering iron, solder, etc.)	1	\$500.0000	\$ 500.00
Epoxy, 2-part (Fabick)	400	\$30.0000	\$ 12,000.00
Epoxy, Mixing Tubes	200	\$3.0000	\$ 600.00
Equipment, New Technology and testing	2	\$25,000.0000	\$ 50,000.00
Equipment, NonIntrusive Counting Devices	4	\$12,500.0000	\$ 50,000.00
Equipment, rental	10	\$200.0000	\$ 2,000.00
Equipment, test (electrical, piezo, ground, meters, o'scope, loop, modem)	3	\$2,000.0000	\$ 6,000.00
Equipment, Traffic Data Recorder, (replacements for stolen, damaged beyond repair)	10	\$1,500.0000	\$ 15,000.00
Equipment, Traffic Data Recorder, repair parts	1	\$20,000.0000	\$ 20,000.00
Equipment, Traffic Data Recorders for use with existing ITS monitoring station.	12	\$6,000	\$ 72,000
Erosion Control, (mulch, nuggets, straw, etc.)	150	\$5.0000	\$ 750.00
Fasteners, (screws, nuts, bolts, nails, clamps, banding, brackets, straps, etc.)	1	\$2,000.0000	\$ 2,000.00
GPS and accessories	3	\$250.0000	\$ 750.00
Hardware, roadway - Chain	6	\$200.0000	\$ 1,200.00
Hardware, roadway - Chinese Fingers	500	\$3.0000	\$ 1,500.00
Hardware, roadway - Figure 8's	1000	\$1.0000	\$ 1,000.00
Hardware, roadway - Nails, PK (boxes)	14	\$20.0000	\$ 280.00
Hardware, roadway - Nails, Spikes	150	\$1.0000	\$ 150.00
Hardware, roadway - Tube clamps	200	\$0.6000	\$ 120.00
Inverters/power strips	3	\$250.0000	\$ 750.00

CHAPTER 3:

Equipment Management (Continued)

RESPONSIBLE UNIT:

Division of Planning
 Traffic and Equipment Management Activity Center
 Equipment Management Team

Item Description	Quantity	Unit Cost	Total Cost
Jbox, (6x6x4)	50	\$50.0000	\$ 2,500.00
Jbox, Type B	20	\$250.0000	\$ 5,000.00
Labels (repair tags, warning labels, wire numbers, etc.)	1	\$500.0000	\$ 500.00
Loop Sealant	1200	\$8.0000	\$ 9,600.00
Loop/Piezo Installation Materials, (mixing buckets, putty knives, spatulas, electrical tape, marking crayons, butt splices, spade lugs, drill bits, hole saws, etc.)	1	\$1,500.0000	\$ 1,500.00
Modems	4	\$300.0000	\$ 1,200.00
Paint and accessories (brushes, buckets, rollers, handle extensions)	1	\$1,000.0000	\$ 1,000.00
Pesticide and Herbicide	1	\$1,000.0000	\$ 1,000.00
Phone parts and accessories	1	\$1,000.0000	\$ 1,000.00
Piezo Cables Type I, 11 foot	20	\$800.0000	\$ 16,000.00
Piezo Cables Type I, 6 foot	20	\$500.0000	\$ 10,000.00
Piezo Cables Type II, 6 foot	40	\$300.0000	\$ 12,000.00
Poles, telescopic poles for equipment mounts	4	\$275.0000	\$ 1,100.00
Road Tubing (.2845/feet)	15,000	\$0.3000	\$ 4,500.00
Safety apparel, (Goggles, gloves, ear protection, rainsuits, hard hats, vests, flashlights, etc.)	1	\$1,000.0000	\$ 1,000.00
Sealant, waterproof (silicone, duct seal, etc.)	1	\$250.0000	\$ 250.00
Software, analytical (could range from \$50,000 to \$250k)	1	\$200,000.0000	\$ 200,000.00
Software, polling (if available)	1	\$2,000.0000	\$ 2,000.00
Solar panels	10	\$200.0000	\$ 2,000.00
Splice Kits (\$7.40 each)	80	\$7.5000	\$ 600.00
Tape Primer	30	\$10.0000	\$ 300.00
Tape, bookbinding	1	\$1,000.0000	\$ 1,000.00
Tape, asphalt tape in various sizes and types	1	\$6,000.0000	\$ 6,000.00
Toolboxes, containers	12	\$30.0000	\$ 360.00
Tools, hand tools (shovels, rakes, picks, hammers, pliers, cutters, pneu. and hand caulk guns, screwdrivers, meas. tape, etc.)	1	\$3,500.0000	\$ 3,500.00
Tools, small power (drills, weed eater, leaf blower, power washer, etc.)	1	\$3,000.0000	\$ 3,000.00
Traffic Control	1	\$70,000.0000	\$ 70,000.00
Training, (annual counter technician tng)	1	\$3,000.0000	\$ 3,000.00
Uniforms	52	\$50.0000	\$ 2,600.00

CHAPTER 3:**Equipment Management (Continued)****RESPONSIBLE UNIT:**

Division of Planning
 Traffic and Equipment Management Activity Center
 Equipment Management Team

Item Description	Quantity	Unit Cost	Total Cost
Vehicle, accessories dash hardware, safety lights, etc.	2	\$1,500.0000	\$ 3,000.00
Vehicle, new (2004-2005)	12	\$2,500.0000	\$30,000.00
Vehicles, operating cost, Central Office	12	\$2,500.0000	\$30,000.00
Vehicles, operating cost, Districts	12	\$6,000.0000	\$72,000.00
Walkie Talkies		\$200.00	\$200.00
Wire, 4 pair	500	\$0.8500	\$425.00
Wire, loop	50000	\$0.0600	\$ 3,000.00
Wire, piezo coax	2	\$500.0000	\$ 1,000.00
Wood, (posts, plywood, forms, boards, shelving, etc.)	10	\$25.0000	\$ 250.00
Misc.	1	\$10,000.0000	\$ 10,000.00
GRAND TOTAL (estimated)			\$ 677,685.00

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	CAPITAL EXPENDITURES	DISTRICT OFFICES	TOTAL
PERSONNEL	\$314,000	\$0	\$13,000	\$327,000
OTHER	\$168,000	*\$678,000	\$2,000	\$848,000
TOTAL	\$482,000	\$678,000	\$15,000	\$1,175,000

*This figure represents the purchase of new equipment and parts as outlined above.

CHAPTER 4: Traffic Data Collection and Processing

RESPONSIBLE UNIT: Division of Planning
Traffic and Equipment Management Activity Center
Traffic Data Collection and Processing Team

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

PROPOSED ACTIVITIES FOR 2004-2005: Approximately 6,500 regularly scheduled short-duration portable machine counts will be performed statewide. These counts are one-third of all short-duration traffic count stations in the state and are now performed on a three-year cycle.

Vehicle classification data at approximately 1,500 stations will be collected and processed. This is the beginning of an effort to increase the number of classification stations to 25-30% of all traffic count stations in accordance with the Traffic Monitoring Guide.

Review, assign, process, analyze, and distribute data for approximately 400 special count stations that have been requested by outside divisions.

Download, process, maintain, and analyze data from 77 permanent ATR stations. Review operation with Equipment Management Team for proper operation, locations, and coverage for possible new ATR station installations.

Maintain, update, analyze, provide quality control and assurance of data, and make available data from more than 13,000 traffic count stations.

Update axle, monthly factors used in adjusting short counts, such as weekly, monthly, and axle correction factors from data collected at ATR and vehicle classification stations.

Update in-house databases to include any new stations or roadway alignment changes. Correct beginning and ending milepoints to better represent traffic generators.

Detect, analyze, and adjust volume counts while combining and creating additional stations where necessary.

CHAPTER 4: Traffic Data Collection and Processing (Continued)

RESPONSIBLE UNIT: Division of Planning
Traffic and Equipment Management Activity Center
Traffic Data Collection and Processing Team

PROPOSED ACTIVITIES FOR 2004-2005 (continued):

Update data summaries developed under the research study entitled "Estimation of Equivalent Axleloads."

Purchase new software to move mainframe vehicle classification and potentially volume data to a pc-based software with much more capabilities for display, trend analysis, and viewing. Begin the process of converting the existing vehicle classification file from a mainframe to a PC environment.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	DISTRICT OFFICES	TOTAL
PERSONNEL	*\$675,000	\$856,700	\$1,531,700
OTHER	**\$325,000	\$35,300	\$360,300
TOTAL	\$1,000,000	\$892,000	\$1,892,000

*This figure includes the costs of three additional staff to this team.

**Includes \$300,000 outsourced for assistance with data collection.

CHAPTER 5: Strategic Corridor Planning

RESPONSIBLE UNIT: Division of Planning
Strategic Planning Activity Center
Strategic Corridor Planning Team

PURPOSE AND SCOPE: Develop and implement an evaluation/scoring process for prioritizing projects for inclusion in the Six-Year Highway Plan and the Unscheduled Projects List. Evaluate system and corridor needs for the state maintained roadway network. Analyze data to measure performance of the transportation network and identify needs. Perform the necessary level of planning to develop a conceptual purpose and need statement, identify major environmental issues including environmental justice, initiate consultation with local officials, initiate agency coordination, involve the public early and often for projects listed in the Six-Year Highway Plan and Statewide Transportation Plan (Long-Range Plan), identify and evaluate alternatives, generate project cost estimates, and oversee outsourced activities. Also included are brief technical project studies, interchange justification studies, and/or other special studies. Evaluate and research techniques to better inform and involve the public about the project development process. Work with the Highway District Offices (HDOs) and Area Development Districts (ADDs) as needed to complete necessary tasks.

PROPOSED ACTIVITIES FOR 2004-2005: Using available data such as adequacy ratings or other information, projects in the current Six-Year Highway Plan and Unscheduled Projects List (UPL) will be scored, evaluated, and prioritized for possible inclusion in future Six-Year Highway Plans. Brief scoping efforts may be conducted on these proposed projects to further define the project description, need, and cost prior to programming. Based on scheduled design starts or programmed planning phases, projects will be selected from the Six-Year Highway Plan (first priority) or the higher needs of the URL for analysis. This may include developing a conceptual purpose and need statement, establishing an environmental footprint, identifying major environmental issues for each project, coordinating with various agencies and organizations, initiating consultation with local officials and other stakeholders including potential affected minority and low-income populations as appropriate, participating in a public involvement process to solicit input about project needs and requirements, defining project concepts and alternatives, selecting preferred concepts and/or alternatives as appropriate, and developing cost estimates for project concepts and alternatives. Work with HDOs in setting up team meetings, reviewing and completing cost estimates, participating in project teams, and setting up public involvement activities. Assist HDOs in conducting early project planning studies. Works with ADDs in setting up meetings and evaluating environmental justice issues.

CHAPTER 5:

Strategic Corridor Planning (continued)

RESPONSIBLE UNIT:

Division of Planning
Strategic Planning Activity Center
Strategic Corridor Planning Team

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	CAPITAL EXPENDITURES	DISTRICT OFFICES	TOTAL
PERSONNEL	\$350,000	\$0	\$184,200	\$534,200
OTHER	*\$1,170,000	**\$30,000	\$3,000	\$1,203,000
TOTAL	\$1,520,000	\$30,000	\$187,200	\$1,737,200

*Includes \$300,000 for access management and \$500,000 for project scoping studies. An additional \$1,000,000 (non-SPR funds) is estimated for resources outside the Kentucky Transportation Cabinet.

**New vehicle to be purchased to replace current Planning van that was bought in 2001.

CHAPTER 6:**Intermodal Statewide Planning****RESPONSIBLE UNIT:**

Division of Planning
Strategic Planning Activity Center
Intermodal Statewide Planning Team
Division of Multimodal Programs

PURPOSE AND SCOPE: Conduct a comprehensive statewide transportation planning process with the Area Development Districts (ADDs), Metropolitan Planning Organizations (MPOs), and the Highway District Offices (HDOs). Periodically update a multimodal Statewide Transportation Plan (STP) based on the Cabinet's long-range goals and objectives and the public involvement process. Provide input to the Six-Year Highway Plan. This process includes intermodal and statewide transportation planning programs, Freight Team, Mobility Team, consideration of all modes and intermodal highway access, the development of a policy driven approach to identification and prioritization of needs, and support of the Rural Transportation Planning program through the fifteen ADDs and twelve HDOs.

PROPOSED ACTIVITIES FOR 2004-2005: Prepare an updated STP that incorporates the Cabinet's strategic goals and objectives, regional transportation goals, and data-driven needs assessment. Coordinate with other transportation modes to obtain input on intermodal issues for the STP. Obtain input for the intermodal and statewide transportation planning process and support the Cabinet's Freight Team and Mobility Team. Work closely with the ADDs/HDOs to enhance the statewide transportation planning process including data collection, analysis, public involvement, and coordination with the MPOs. Work with the ADDs and HDOs to conduct a comprehensive updating of Project Identification Forms. Provide the ADDs and HDOs with data, training, transportation systems information, tools, and guidance. Analyze, identify, and prioritize transportation projects through analyses of data, freight flow patterns, intermodal and freight facility locations, National Highway System (NHS) and National Truck Network (NN) access, and public input. Assist with the development and implementation of a scoring process for prioritizing projects for inclusion in the Six-Year Highway Plan as well as evaluation of system and corridor needs for the state maintained roadway network. Conduct special studies and collect data as needed to analyze riverport issues, rail transportation issues, and freight transportation and highway access to intermodal facilities. Provide direction for special projects. Respond to inquiries about proposed transportation projects. Review surplus property/right-of-way proposals and school site locations as relates to long-range transportation needs. Make information on intermodal and statewide transportation available for public use. Assist with other planning activities as needed, such as the Cabinet's Highway Safety Program through the ADDs and Division of Traffic Operations.

CHAPTER 6:

Intermodal Statewide Planning (continued)

RESPONSIBLE UNIT:Division of Planning
Strategic Planning Activity Center
Intermodal Statewide Planning Team
Division of Multimodal Programs**DISTRIBUTION OF ESTIMATED COST FOR 2004-2005**

	PLANNING	DISTRICT OFFICE	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL	\$400,900	\$390,000	\$39,300	\$830,200
OTHER	*\$159,000	\$10,000	\$0	\$169,000
TOTAL	\$559,900	\$400,000	\$39,300	\$999,200

* This amount includes \$50,000 in outsourced assistance for support of intermodal transportation planning activities and \$100,000 to assist in the annual Regional Transportation Program with the Area Development Districts. This chapter also includes \$698,600 (not financed with SPR funds) for the annual program with the Area Development Districts.

CHAPTER 7:**Roadway Systems****RESPONSIBLE UNIT:**

Division of Planning
 Transportation Systems Activity Center
 Roadway Systems Team

PURPOSE AND SCOPE: To maintain the official Department of Highways records for the State Primary Road System, National Highway System, Functional Classification System, Designated National Truck Network (NN), Coal Haul Highway System, and Forest Highway System. Work with our Highway District Office Planning staff to conduct the necessary research and evaluations relative to proposed system changes, prepare official documentation for approval and signature, and notify all necessary personnel of the approved changes. For the Coal Haul System, annually gather and compile source data on the transportation of coal by truck in the Commonwealth of Kentucky.

PROPOSED ACTIVITIES FOR 2004-2005: Continue to examine systems change process to respond in a more timely fashion. Work to scrub our State Primary Road System so that the Cabinet is maintaining roadways of significance that match our functional classification system. Update, maintain, and publish for distribution to interested parties and the trucking industry an official listing of truck route descriptions and a statewide map depicting the NN. Send out forms semi-annually to coal companies and truck transporters for reporting the truck transportation of coal, update database and maps from information on returned semi-annual reports, provide ton-mile statistics to Department for Local Government, publish Kentucky's Official Coal Haul System Report, study possible legislative proposals to streamline and stabilize the Coal Haul Road System, and provide the Division of Traffic Operations information for updating the "Extended Weight Coal Haul Road System."

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	DISTRICT OFFICES	TOTAL
PERSONNEL	*\$385,000	\$205,000	\$590,000
OTHER	\$10,000	\$6,400	\$16,400
TOTAL	\$395,000	\$211,400	\$606,400

*This amount includes the cost of one additional staff person to this team.

CHAPTER 8:

Geographic Information Systems (GIS)

RESPONSIBLE UNIT:

Division of Planning
 Transportation Systems Activity Center
 GIS Team

PURPOSE AND SCOPE: To meet the needs of the Division, Cabinet, other state agencies, and entities outside state government for accurate GIS based electronic maps. To maintain the transportation layer base map to the highest map standard level and most up-to-date status possible. See that data links to the base map are always complete and accurate. GIS will be utilized to analyze graphically and spatially the Cabinet's highway transportation needs.

PROPOSED ACTIVITIES FOR 2004-2005: Create and maintain a seamless statewide transportation GIS base map using GPS data on all public streets and roads; work with the Data Management Activity Center to conflate data to new GIS transportation layer for all public roads and link new data as required; develop new county maps using ESRI® based GIS tools to show all the transportation layers and other pertinent features; and maintain and update the GIS base maps to continually reflect the latest street and road alignments, road attribute data, and other map features. Provide various GIS displays of data to assist transportation decision-makers in their roles.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	TOTAL
PERSONNEL	\$240,800	\$240,800
OTHER	*\$110,000	\$110,000
TOTAL	\$350,800	\$350,800

*Includes \$100,000 for University of Kentucky technical assistance program.

CHAPTER 9:

Cartography

RESPONSIBLE UNIT:

Division of Planning
 Transportation Systems Activity Center
 Cartography Team

PURPOSE AND SCOPE: To meet the needs of the Division, Cabinet, other state agencies, and entities outside state government for general and special purpose maps. This continuing program involves creating, updating, printing, and distributing a wide variety of cartographic projects.

PROPOSED ACTIVITIES FOR 2004-2005: Continue development of electronic mapping for all city, county, state, and special-purpose cartographic products; maintain and publish electronic formats of cartographic products on the internet; use the large-format plotter to print city, county, and state maps as needed for distribution through the Division of Planning inter-account service and the Kentucky Geological Survey Map Sales function contained in Chapter 1, Administrative; update the Official State Highway Map and have necessary printing accomplished; create reports and exhibits for various Division projects and studies; and provide mapping and graphic assistance to other Divisions and Departments on request.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	CAPITAL EXPENDITURES	DISTRICT OFFICES	TOTAL
PERSONNEL	\$215,000	\$	\$ 6,300	\$221,300
OTHER	*\$55,000	**\$20,000	\$1,000	\$76,000
TOTAL	\$270,000	\$20,000	\$7,300	\$297,300

*Includes \$50,000 for the Official State Highway Map printing.

**New Plotter estimated at \$20,000.

CHAPTER 10:**GPS/HIS Development and Support****RESPONSIBLE UNIT:**

Division of Planning
 Data Management Activity Center
 Development and Support Team

PURPOSE AND SCOPE: Provide **assistance** and **support** for maintenance of Cabinet's Geographic Information System (GIS). Implement Highway Information System (HIS) database upgrade to "Highways by Exor" product. Research, develop, and incorporate available data options into base map and/or HIS database maintenance and updates.

PROPOSED ACTIVITIES FOR 2004-2005: Develop programs and procedures to review, edit, and update Cabinet's base map and HIS/Exor database. Work with Transportation's Office of Technology and other agencies to move existing data to new database, run in parallel with existing system, identify problems to be addressed by Cabinet or vendor, and to accept upgrade as the production system. Assist in resolving Division hardware and software problems. Review software that will assist in maintenance of base map and database. Work with other agencies to maintain link to current roadway network. Will be involved in testing, training, report migration, and looking for enhancements with the new Exor.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	TOTAL
PERSONNEL	\$139,400	\$139,400
OTHER	\$18,000	\$18,000
TOTAL	\$157,400	\$157,400

CHAPTER 11: Global Positioning System (GPS)

RESPONSIBLE UNIT: Division of Planning
Data Management Activity Center
GPS Team

PURPOSE AND SCOPE: Coordinate **data collection activities** for the statewide Geographic Information System (GIS) transportation layer in cooperation with the Area Development Districts (ADDs). Match Global Positioning System (GPS) centerline data collected and processed with existing Linear Referencing System (county, route, milepoint). Assist in the migration of the existing Highway Information System (HIS) database to "Highways by Exor" using Oracle Spatial.

PROPOSED ACTIVITIES FOR 2004-2005: Collect and maintain roadway centerline data using GPS technology or incorporating alignments from highway design plans for all public roads, statewide. Perform office reviews to verify data meets the required standards and confidence levels established by this Division and in accordance with the National Standard for Spatial Data Accuracy. Incorporate newly acquired centerline data to the existing highway network; includes updating and verifying roadway mileage, highway systems data, and use in maintaining and generating data driven maps. These include County Road Aid Series, functional, truck, state system, and traffic station maps. Make GIS base map changes as necessitated by changes to the highway network.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	DISTRICT OFFICES	TOTAL
PERSONNEL	\$282,100	\$31,500	\$313,600
OTHER	\$18,000	\$8,000	\$26,000
TOTAL	\$300,100	\$39,500	\$339,600

CHAPTER 12:

Highway Information System

RESPONSIBLE UNIT:

Division of Planning
 Data Management Activity Center
 HIS Team

PURPOSE AND SCOPE: Maintain and operate the Highway Information System (HIS) database. Use the Highway Performance Monitoring System (HPMS) to establish a baseline for measuring highway system performance and produce the highway data submittal required annually by Federal Highway Administration (FHWA). Provide information to the Transportation Cabinet, other governmental agencies, consultants, and private organizations. Continue development and maintenance of the HIS database interface with the Geographic Information System (GIS) and other Cabinet databases. Provide data to be posted to Division's web site.

PROPOSED ACTIVITIES FOR 2004-2005: Work with the Office of Technology and other divisions within the Transportation Cabinet to: upgrade the HIS database to "Highways by EXOR" and consolidate the Cabinet's data maintenance efforts. Assist in the development and maintenance of a Cabinet GIS and maintain database network for Kentucky's public highway system. Provide up-to-date route network, DMI, functional class, NHS, and urban area information. Utilize HPMS to update Rating Indices, Capacity, and Volume/Service Flow ratio in the HIS database. Use HIS to measure highway system performance and assist with analyses of the Unscheduled Needs List. Maintain currency of HPMS software, perform changes required by federal legislation, regulations, policies, and/or guidelines, as needed to the HPMS. Make updates to the HIS database. Investigate results of HPMS each year and analyze changes in processes to improve output of report.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	CAPITAL EXPENDITURES	DISTRICT OFFICES	TOTAL
PERSONNEL	\$300,000	\$0	\$42,000	\$342,000
OTHER	\$50,000	*\$650,000	\$5,000	\$705,000
TOTAL	\$350,000	\$650,000	\$47,000	\$1,047,000

* Purchase new Data Collection Van

CHAPTER 13:

Special Analysis

RESPONSIBLE UNIT:Division of Planning (Special Analysis Team)
Division of Multimodal Programs

PURPOSE AND SCOPE: Numerous requests are made throughout the year for activities and information that may not directly relate to an applicable chapter of the work program. These requests vary from information assimilation requests that may require only hours to complete to technical analyses and reviews and policy review/recommendations that may require extensive efforts. Develop and implement a scoring process for prioritizing projects for inclusion in the Six-Year Highway Plan. Evaluate system and corridor needs for the state maintained roadway network. Analyze data to measure performance of the transportation network and identify needs. Conduct studies to determine a “backbone” highway network for the Commonwealth. Work with the Highway District Offices (HDOs) and Area Development Districts (ADDs) as needed to complete necessary tasks. Other requests may include reviews and recommendations of new policies, editing of existing policies, and procedures that require extensive research and development efforts. This chapter will also include some work for our Highway District Office staff to administer and oversee consultant and local agreements for roadway projects.

PROPOSED ACTIVITIES FOR 2004-2005: It is anticipated that a large volume of special requests will continue to be received and processed by both Divisions. One type of request that is increasing in consistency and number is Road User Cost Analysis. This analysis may include comparisons for detour versus non-detour, bituminous pavement or PCC pavement. Kentucky has received great acclaim for using advanced construction techniques, Road user Cost Analysis that determined that the cost of delaying the public and commercial traffic is significant. Multimodal Programs will explore computer models to assist in road user cost analysis, such as TSIS, CORSIM, QuickZone, Autoturn, or other simulation software. Census Transportation Planning Package will be released in FY 2005. Multimodal will review the new data for use in SUA as well as use for MPO and ADDs.

Using available data such as adequacy ratings or other information, projects in the current Six-Year Highway Plan and Unscheduled Projects List will be scored, evaluated, and prioritized for possible inclusion in future Six-Year Highway Plans. Brief scoping efforts may be conducted on these proposed projects to further define the project description, need, and cost prior to programming. Develop a recommendation for a major transportation “backbone” network for the Commonwealth that serves as the major skeletal support for the other minor roadways. Develop policy and procedures for project selection for the Six-Year Highway plan based on data driven needs, “backbone” network needs, and Cabinet goals and objectives. Work with HDOs in setting up meetings, reviewing and completing cost estimates, participating in project teams, and setting up public involvement activities. Assist HDOs in conducting special studies. Works with ADDs in setting up meetings and evaluating issues for studies or prioritizing projects.

CHAPTER 13: Special Analysis (continued)

RESPONSIBLE UNIT: Division of Planning (Special Analysis Team)
Division of Multimodal Programs

Highway District Office Planning staff will coordinate the development of private or public agency projects that involve state transportation facilities that may require a contractual agreement.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	PLANNING	DISTRICT OFFICE	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL	\$76,900	\$5,500	\$47,400	\$129,800
OTHER	\$5,000	\$2,000	\$15,300	\$22,300
TOTAL	\$81,900	\$7,500	\$62,700	\$152,100

CHAPTER 14:

Air Quality Conformity Analysis Program

RESPONSIBLE UNIT:

Division of Multimodal Programs

PURPOSE AND SCOPE: Coordinate and perform analyses necessary for Air Quality Conformity Determinations for both rural and several MPO areas to allow for the timely advancement of projects. Coordinate with Division for Air Quality, EPA-Atlanta, FHWA, FTA, MPOs, and KYTC for conformity approvals. Review and comment on the air quality rules, proposed rules, regulations, implementation standard, and guidance that impact transportation. Maintain a working knowledge of EPA's air quality modeling software, as well as, review and comment on air quality model updates. Develop new modeling methods for rural conformity. Establish and maintain conformity consultation processes, which specifies each agency's roles and responsibilities.

PROPOSED ACTIVITIES FOR 2004-2005:

- Establish conformity consultation agreements statewide.
- Develop sub-area models from the Statewide Traffic Model for proposed rural nonattainment areas as needed.
- Review and comment on the guidelines for the 8-Hour Ozone and PM 2.5 Standards, MOBILE Model 6, air quality regulations/implementation guidance, and nonattainment designations.
- Run the MOBILE Model for all necessary regional air quality conformity analyses. DMP will be responsible for performing Air Quality Conformity analysis for the five maintenance areas for the one-hour standard and at least two nonattainment areas for the 8-Hour Ozone Standard. DMP coordinates with the MPOs, Division of Environmental Analysis, Natural Resources and Environmental Protection Cabinet's Division for Air Quality, FHWA, FTA, and EPA. DMP will provide traffic model output in the form of vehicle miles of travel (VMT) and speeds for the five maintenance areas (Ashland, Paducah area, Marshall County, Scott County, and Owensboro) that will be used to determine conformity of the area's Transportation Plans, STIP, and TIPs.
- Ashland, Louisville, Northern KY, and Christian County are proposed nonattainment areas for the 8-hour Ozone Standard. DMP will coordinate air quality conformity analyses for Christian County and Ashland as well as any new area designated under the 8-Hour PM 2.5 Standard.
- Review and comment during the preparation of mobile budgets for the State Implementation Plan (SIP) for the updates to the One-Hour Air Quality Standards, 8-Hour Ozone and PM2.5 Standards Designations, SIP amendments and budget adjustments.

CHAPTER 14:

Air Quality Conformity Analysis Program (continued)

RESPONSIBLE UNIT:

Division of Multimodal Programs

PROPOSED ACTIVITIES FOR 2004-2005 (Continued):

- Promote and educate the Cabinet, public officials, and general public about air quality, conformity analysis, and federal guidelines.
- DMP staff will continue to monitor and coordinate various CMAQ projects in the nonattainment and maintenance areas. Projects will include ozone awareness programs, traffic management and operation centers, transit, bicycle/pedestrian, and other programs.
- Spearhead the development, implementation, and maintenance of a Speed and VMT Database Estimation portable computer program that will serve as a data input for new speed values to be put in the Highway Information System.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL	\$113,800	\$113,800
OTHER	\$63,500	\$63,500
TOTAL	\$177,300	\$177,300

- \$30,000 for Air Quality Models for new nonattainment areas and \$31,000 for KTC Speed Database Programming are not included in "Other" until the budget passes.
- \$2,500 for travel is included in "Other"

CHAPTER 15: Metropolitan Planning Organizations
(Areas over 50,000 Population)

RESPONSIBLE UNIT: Division of Multimodal Programs

PURPOSE AND SCOPE: Kentucky has nine MPO areas, four are TMAs. Provide technical assistance and coordination to the Metropolitan Planning Organizations (MPOs) for developing and maintaining a continuing, cooperative, and comprehensive (3C) transportation planning process. The results are TIPs, LRTP, UPWPs, studies, plans or programs consistent with the 3C planning for urbanized areas in accordance with the 1991 ISTEA, 1997 TEA 21, and subsequent federal transportation legislation. This process ensures that KYTC and local transportation projects remain eligible to receive federal funding. The scope of work for the 3C planning process is in accordance with the UPWP, which describes all anticipated urban transportation and transportation-related planning activities to be performed.

PROPOSED ACTIVITIES FOR 2004-2005:

- The continuing technical assistance and review of MPO activities and documents, plus attendance at technical, policy, and other committee meetings to represent the Cabinet. The Division of Multimodal Programs (DMP) staff will continue to ensure consistency between local and state plans and programs, including MPO and state transportation improvement programs, congestion management plans, the Cabinet's Six-Year Highway Plan, MPO Long-Range Transportation Plans, and the Cabinet's Statewide Long-Range Plan. The DMP will continue to provide technical assistance for MPO traffic models.
- Special traffic assignments and analyses for the design and implementation of various highway and street projects. The DMP maintains traffic models for the Ashland, Bowling Green, and Radcliff-Elizabethtown areas and does analyses for projects in these areas. The Owensboro MPO has traffic modeling software and is assuming some responsibility for performing traffic assignments and analysis of projects. Traffic assignments for the other urbanized areas are done by the local MPOs (with assistance from this Division) but are coordinated through our Division for distribution throughout the Cabinet.
- DMP staff will continue to coordinate with the Transportation Cabinet's Office of Transportation Delivery on transit and transit planning issues.
- MPOs will continue to provide traffic data for Cabinet projects. The Cabinet will do traffic projections for some projects in MPO areas.
- The MPOs will continue transportation planning activities as outlined in their UPWPs. Several special planning efforts are expected to be continued or are new this year including: OKI-Cincinnati's Brent Spence Bridge, KIPDA-Transportation Tomorrow, LTADD-Public Transportation Study, BRADD-Aerial Photography, EUTS- I-69 and Freight Study, GRADD-Downtown Travel Study, and LFUCG-Congestion Management Study.

CHAPTER 15: Metropolitan Planning Organizations (continued)
(Areas over 50,000 Population)

RESPONSIBLE UNIT: Division of Multimodal Programs

PROPOSED ACTIVITIES FOR 2004-2005 (Continued):

- DMP staff will continue to monitor and coordinate programs by the MPO such as Rideshare, Bicycle Pedestrian Programs, ITS, Congestion Management, CMAQ, TCSP, and other programs.
- The MPOs will continue to update and improve the Congestion Management Programs in Evansville-Henderson, Louisville, Lexington, and Northern Kentucky. Continuing effort will be directed toward the updating or amending long range transportation plans in all MPO areas.
- The Cabinet and the MPOs will continue to expand the use of TransCAD, the GIS based transportation modeling software program. DMP will continue to support the use of both MINUTP and TransCAD for MPO area transportation modeling.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	MULTIMODAL PROGRAMS	DISTRICT	TOTAL
PERSONNEL	\$275,700	\$77,300	\$353,000
OTHER	\$9,000	*\$800	\$9,800
TOTAL	\$284,700	\$78,100	\$362,800

PL funds passed through to MPOs (\$1,594,000-Federal and \$96,875-Road Fund as well as \$301,625 local funds for the PL Program that does not flow through the Cabinet).

*When we update this work program for a new state budget, \$77,300 will be allocated for our Highway District Offices to attend MPO meetings.

CHAPTER 16: Small Urban Areas Studies

RESPONSIBLE UNIT: Division of Multimodal Programs

PURPOSE AND SCOPE: Identify and analyze traffic operational and transportation system deficiencies in small urban areas (5,000 to 50,000 population). The purpose of this analysis is to provide transportation professionals with urban transportation needs and information sufficient to determine project priority and unfunded needs list. These prioritized projects are used as input to KYTC's Six-Year Highway Plan and Long-Range Needs Plan. Coordination with the Cabinet's Divisions of Planning, Traffic Operations, Environmental Analysis, Design, District Offices, and ADDs is required. The emphasis of this effort will be to provide a timely response to transportation system issues.

PROPOSED ACTIVITIES FOR 2004-2005:

- Small Urban Area (SUA) Transportation Study will be completed by a consultant engineering firm for the area of Winchester. One to three more areas will be selected by a multi-divisional meeting. The meeting will be held as soon as we have a state budget that includes SUA funds.
- Cabinet staff from the DMP provides general oversight and guidance, along with some data input, and serves on advisory committees set up with local representatives for providing input to the studies. State road funds are used to fund the contracts with the consultants.
- Project proposals and requests for studies are routinely received from local governments. Project and priority recommendations will be made as appropriate.
- With the availability of updated socioeconomic data and modeling techniques, efforts will be directed toward the improvement of existing models and the translation of older models to TransCAD. Procedures will be developed to incorporate GIS data and tools in the model development process. DMP will continue to support both MINUTP and TransCAD models as approved.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	MULTIMODAL PROGRAMS	DISTRICT OFFICES	TOTAL
PERSONNEL	\$51,500	\$5,000	\$56,500
OTHER	\$1,000	\$0	\$1,000
TOTAL	\$52,500	\$5,000	\$57,500

An additional \$400,000 of State Road Funds are identified in the Cabinet's Six-Year Highway Plan for Urban Transportation Studies for areas with 5,000-50,000 population.

CHAPTER 17: Bicycle & Pedestrian Transportation Program

RESPONSIBLE UNIT: Division of Multimodal Programs

PURPOSE AND SCOPE: Coordinate with the state bicycle and pedestrian program, develop a statewide bikeway system, work and coordinate with the Kentucky Bicycle & Bikeway Commission to provide assistance to the general public, municipal governments and other state agencies in the planning and development of bicycle and pedestrian facilities and programs. This assistance will be in the form of technical advice, assisting in the development of plans, and coordinating studies.

PROPOSED ACTIVITIES FOR 2004-2005:

- Assist local government in the development of local bicycle and pedestrian network facilities and plans. Travel to various meeting and opportunities to promote pedestrian and bicycle safety and facilities.
- To revise and update the statewide bike-route system and associated maps.
- Answer requests concerning KYTC's design guidelines regarding pedestrian and bicycle facilities.
- Promote and facilitate the increased use and public education of non-motorized modes of transportation, including developing pedestrian and bicycle facilities. As well as, assist and expand safety programs for using such facilities.
- Review Planning Studies for bicycle and pedestrian facilities.
- Research Project
Goal: Reduce the number of pedestrian injuries and fatalities in Kentucky by providing the latest technology for pedestrian visibility and educating citizens how to be a safe pedestrian.

To develop a research project with the University of Kentucky to reduce the number of pedestrian injuries and fatalities in Kentucky by educating pedestrians about the importance of being visible to motorists.

As nationally we encourage walking for transportation and exercise, we need to educate on how to be a safe pedestrian. The most current research indicates pedestrian injuries and fatalities will be reduced if pedestrian are more visible to motorists. We want to provide the pedestrians of Kentucky the newest reflective safety technology for pedestrian visibility. UK Research Program, partnering with statewide Health Departments, County Extension Services and local police departments, would distribute Reflexite® pedestrian safety armbands. Throughout the state, Health Departments and Extension Services are developing walking programs designed to improve the cardiovascular health and stem the obesity threat prevalent among Kentucky's population. Because local police departments hire school crossing guards, the Kentucky Association of Chiefs of Police will be another partner distributing Reflexite pedestrian safety armbands and training students how to be safe pedestrians.

CHAPTER 17: Bicycle & Pedestrian Transportation Program (continued)

RESPONSIBLE UNIT: Division of Multimodal Programs

The Reflexite© safety armbands are transferable from clothing, season-to-season, and person-to-person as they have Velcro closures. 25,000 Reflexite© safety armbands in four different sizes: extra small, small, medium, and large. There is no handling charge and shipping will be \$20.00.

Every recipient of a safety armband will be required to provide his or her name, address, telephone number, age, and school (if applicable). UK Research Program will maintain the database of recipients and mail at least on survey within the next year to determine the effectiveness of the safety armband, including recipient usage and understanding of pedestrian safety. Research Project Cost: \$60,000

Total Project Cost: \$127,500 (\$83,200 Paid with Work Program funds, the remainder will be funded with other Division funds).

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL	\$56,200	\$56,200
OTHER	\$83,900	\$83,900
TOTAL	\$140,100	\$140,100

- \$83,200 for research project in "Other."
- \$700 for travel included in "Other."

CHAPTER 18: Traffic Congestion Management System and ITS Coordination

RESPONSIBLE UNIT: Division of Multimodal Programs

PURPOSE AND SCOPE: Assist with the development and implementation of traffic congestion management systems in the Louisville, Northern Kentucky, Evansville-Henderson, and Lexington urbanized areas of the state. The TMAs shall develop, review, and maintain the traffic congestion management. Coordinate with the ITS Branch of the Division of Traffic Operations. The Cabinet is active in several aspects of the National ITS Architecture and Implementation Programs at the local, state, and national levels.

PROPOSED ACTIVITIES FOR 2004-2005:

- Coordinate with the MPOs in Louisville, Northern Kentucky, Evansville-Henderson, and Lexington in the development and implementation of the required Traffic Congestion Management Programs for their areas.
- Assist with the development and implementation of a comprehensive and integrated statewide ITS plan including a statewide ITS architecture.
- Manage Archived Data Management System research study, which uses data from various ITS operations.
- Coordinate with Lexington Traffic Information Center and the Bluegrass ITS (BITS) group. This involves work with the ITS Branch, District 7 Traffic and Planning, Lexington MPO, Bluegrass ADD, and the Lexington Traffic Information Center.
- Coordinate with the ARTIMIS Regional Traffic Management System for the Cincinnati-Northern Kentucky area. This involves work with ODOT, ITS, Northern KY ADD, and the NKY MPO.
- Coordinate with the TRIMARC Freeway Incident Management System for Louisville. This involves work with ITS Branch, INDOT, and the Louisville MPO.
- During the normal statewide transportation planning process, traffic congestion is routinely used to select and prioritize projects that are considered for the Six-Year Highway Plan, STIP, the State Long-Range Transportation Plan, and Small Urban Area Transportation Studies in addition to the MPO TIP, LRTP, and UPWP documents.

CHAPTER 18:

Traffic Congestion Management System and ITS Coordination
(continued)

RESPONSIBLE UNIT:

Division of Multimodal Programs

PROPOSED ACTIVITIES FOR 2004-2005: (continued)

- Coordinate urban mobility team and serve as Kentucky liaison for the *Annual Urban Mobility Study*.
- Test using the Texas Transportation System performance measures in the statewide model and any new urban models being developed

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL	\$26,300	\$26,300
OTHER	\$100	\$100
TOTAL	\$26,400	\$26,400

CHAPTER 19: Smart Growth & Transportation Planning

RESPONSIBLE UNIT: Division of Multimodal Programs

PURPOSE AND SCOPE: To affect the planning methods and policies used by KYTC and local planning organizations that will lead to a more efficiently planned, multimodal transportation system.

PROPOSED ACTIVITIES FOR 2004-2005:

- Coordinate the Statewide Access Management Task Force in development of the Kentucky Access Management Program. This will include the development of policies, procedures, and training needed to carry out such a program.
- Provide training through KAPA and KACO to train local officials and planning commission members on the need for improved land-use and transportation coordinated planning. This will include the development of training materials.
- Provide training, technical expertise, and review to KYTC District/Central Office staff, ADD planners and MPO planners on specific smart growth applications, as needed. This will include instruction to district office personnel on including overlay (land-use) planning as part of highway project development.
- Develop the 3rd annual Successful Communities Conference to bring national and regional expertise on transportation-related smart growth issues.
- Develop, populate, and maintain a GIS tracking system for smart-growth projects.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL	\$72,600	\$72,600
OTHER	\$3,500	\$3,500
TOTAL	\$76,100	\$76,100

CHAPTER 20: Traffic Data - Forecasting

RESPONSIBLE UNIT: Division of Multimodal Programs
Urban Transportation and Traffic Forecasting Branch

PURPOSE AND SCOPE: To maintain traffic trends, provide current and projected traffic volume estimates, and associated elements such as design hour volumes, directional distribution, composition of traffic, and truck loadings for project development and design purposes.

PROPOSED ACTIVITIES FOR 2004-2005:

- Numerous traffic estimates will be prepared for planning studies, design projects, environmental analysis, and other purposes as needed. Various procedures, including trendline analysis and the use of computerized traffic models (including statewide traffic model and small urban models) will be utilized to determine traffic assignments. Traffic trends will be monitored to assure usage of accurate K-factors, directional factors, and growth rates. Socioeconomic and site data will be reviewed for usage in traffic model analysis and forecasting.
- Monitor and provide quality review for traffic projections provided by the MPOs and planning consultants.
- Administer statewide traffic forecasting contract and provide quality review for traffic projections made by the consultant.
- Provide assistance and training to users of the ESAL Forecasting for Superpave computer program.
- Maintain databases that track traffic forecasts and traffic forecast parameters. Make databases available to other user offices. Maintain the traffic forecasting web page.
- Update the 2003 Traffic Forecasting Report.
- Future year forecasting factors will be provided for the Highway Performance Monitoring System.
- \$40,000 of this budget estimate will be utilized by the Kentucky Transportation Center for producing ESAL tables and vehicle classification summary files.
- Coordinate with the Division of Planning to ensure that traffic forecasting data needs are met.
- Work on Commercial Vehicle Monitoring (CVM) Team to provide traffic forecasts of heavy truck usage of existing and proposed new CVM stations. Also provide assistance with reviewing consultant work on ongoing CVM scoping study.
- Chair the Traffic Model Users Group which is a peer group for traffic forecasters and traffic modelers composed of members from government, academia, and the private sector.

CHAPTER 20:

Traffic Data – Forecasting (continued)

RESPONSIBLE UNIT:

Division of Multimodal Programs
Urban Planning Branch

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL *	\$128,500	\$128,500
OTHER **/**	\$75,500	\$75,500
TOTAL	\$204,000	\$204,000

* Charges will be made to SYP projects for some forecasts.

**Does not includes up to \$56,500 for use of resources outside the Kentucky Transportation Cabinet until budget is passed.

1. Statewide Forecasting Contract - \$200,000 (\$30,000 FH02, \$170,000 will be charged to projects).

2. Kentucky Transportation Center Intern - \$5,000.

3. Kentucky Transportation Center Equivalent Axleload Processing - \$21,500.

*** Does include \$18,500 for KTC Equivalent Axleload Processing.

CHAPTER 21: Statewide Traffic Model

RESPONSIBLE UNIT: Division of Multimodal Programs

PURPOSE AND SCOPE: To update and maintain the Statewide Traffic Model (KySTM). To collect data on vehicular movement on the highway system through various survey tools. Process and assemble data to aid in determining travel desires for the location of new routes, relocation of existing routes, decisions between alternate route improvements, or as input into KySTM.

PROPOSED ACTIVITIES FOR 2004-2005:

- Oversee the statewide traffic model update by consultant forces.
- Use upgraded model for corridor studies, air quality conformity, system analysis, and special requests.
- This chapter provides for the coding and processing of data for a few O-D surveys to be made upon request or as needed on a project by project basis.
- Incorporate NPTS (National Personal Transportation Survey) data and Census 2000 data in the appropriate models.
- Use KySTM to develop sub-area studies on a county-wide basis for air quality analysis.

DISTRIBUTION OF ESTIMATED COST FOR 2004-2005

	MULTIMODAL PROGRAMS	TOTAL
PERSONNEL	\$39,000	\$39,000
OTHER	\$40,100	\$40,100
TOTAL	\$79,100	\$79,100

*Includes \$20,000 for STM maintenance by consultant and \$20,000 for KTC Research Study. Other expenses --\$100.