



TRANSPORTATION CABINET

Frankfort, Kentucky 40622
www.kentucky.gov

Ernie Fletcher
Governor

Bill Nighbert
Acting Secretary

Marc Williams
Commissioner of Highways

September 23, 2005

Mr. Jose Sepulveda
Division Administrator
Federal Highway Administration
330 West Broadway
Frankfort KY 40601

Dear Mr. Sepulveda:

Enclosed are the accomplishments for the June 16, 2004 – June 15, 2005 Planning Work Program (SPR-PL-1-(40) of the Kentucky Transportation Cabinet, using SPR and PL funds.

If you have any questions or need additional information, please contact me at 564-7183.

Sincerely,

A handwritten signature in black ink, appearing to read "Annette Coffey".

Annette Coffey, P. E.
Director
Division of Planning

AC:CTG

Enclosures

ACCOMPLISHMENTS FOR 2004-2005

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)

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 planned, organized, directed, motivated, and controlled activities to accomplish Division goals in accordance with Cabinet and federal transportation policies and procedures. The Internal Customer Service Team:

- Prepared daily correspondence for the Division
- Prepared daily time and attendance and maintained records for the Division
- Prepared approximately 20 monthly in-state travel reimbursements
- Prepared approximately 30 TE's (travel request) per month
- The Internal Customer Service Team also prepared all registrations for various training, maintained training records, oversaw EEO reporting, ADA, Workers Comp and FLSA reporting.

The External Customer Service Team focused last year on customers external to the Division for cartographic products, statistical reports, and responses to various data requests including responding to approximately 500 requests from the Division's web page. This Team also oversees map sales. The External Customer Service Team is responsible for the plotting and sale of all maps upon request. The Division produced and sold approximately 1000 city, county, or other miscellaneous maps to other divisions within the Cabinet, other state government agencies, or to the general public. They also maintained records of maps sold and processed the necessary paperwork for billing. In addition, they assisted in updating 2004 traffic count station maps for all counties and incorporated areas with the latest available traffic count and station data.

The Administrative Team recommended, advised, and assisted 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. The administrative Team administered the National Scenic Byway grants, reviewing and processing over \$511,000 in Federal Grant money, oversaw the state Scenic Byway program, prepared the June 16, 2005 - June 15, 2006 annual Work Program, oversaw federal reporting requirements, and monitored and processed payments against various contracts awarded to the Division. This team also prepared various requisitions and tracked budgets and the annual work program expenditures.

AMOUNT EXPENDED FOR 2004-2005

PLANNING	\$249,395.87	MULTIMODAL PROGRAMS	\$80,857.54
----------	--------------	---------------------	-------------

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 2: Personnel Training

RESPONSIBLE UNIT: Division of Planning
Division of Multimodal Programs

The training of personnel was essential to the transportation program in order to keep pace with changing techniques and evaluate new procedures and developments. This was particularly essential to the Cabinet's multimodal/intermodal programs as more and better technical analyses and assistance was required. An effort was made to continue a level of staff training which maintain the integrity of professional career development and improvement of technological skills.

Training for 2004-2005 included conferences/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
- 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
- Access Management
- GIS systems, Congestion Management Systems

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 2: Personnel Training (Continued)

RESPONSIBLE UNIT: Division of Planning
Division of Multimodal Programs

- Road User Cost Analysis
- MPO and Rural Planning
- Other miscellaneous workshops and conferences related to transportation planning and activities of this program.

AMOUNT EXPENDED FOR 2004-2005
(Including District Offices)

PLANNING \$59,292.90 MULTIMODAL PROGRAMS \$41,269.29

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 3: Equipment Management

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

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.

- Collected volume and/or classification data on 190 interstate stations across the state.
- Collected data at approximately 350 regularly scheduled volume and/or classification stations to assist District data collection efforts
- Collected, processed, analyzed, and submitted quarterly one week of weigh-in-motion (WIM) data at 28 permanent WIM stations to include two LTPP sites.
- Periodically calibrated and assessed equipment for adjustments in order to obtain quality data. WIM sites were calibrated before each data collection as part of a research project to insure the accuracy of the collected data.
- Installed and/or repaired permanent vehicle sensors at approximately 30 high volume locations
- Repaired and maintained 77 Automatic Traffic Recorders (ATR) sites.
- Investigated 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.
- Three personnel attended the NATMEC 2004 conference.
- Certified, repaired, and maintained approximately 600 traffic data recorders located in Central Office and across the state at the Districts
- Inspected, repaired, and maintained 400 permanent vehicle sensor locations.
- Tracked emerging highway projects and produced plans and specifications for new and replacement traffic sensor installations for submittal into construction and pavement rehabilitation and resurfacing contracts.
- Oversaw any outside assistance necessary to assist this team in accomplishing the above tasks. Utilized contractors to help install sensors at various sites across the state.

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 3: Equipment Management (Continued)

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

Other items of note:

- Collection of WIM data at portable WIM stations has been limited to that for a research project to determine calibration requirements for permanent and portable WIM sites.
- Due to the contract with PEEK not being renewed until the expiration date to purchase items, \$107,000 set aside to buy equipment for repair/replacements and new ITS sites was not spent.

AMOUNT EXPENDED FOR 2004-2005

(Including District Offices)

PLANNING \$676,980.75

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 4: Traffic Data Collection and Processing

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

Working with our Highway District Offices we 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.

- Worked with the Highway District Offices to perform approximately 5,050 regularly scheduled short-duration portable machine counts. 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 1,000 stations was collected and processed. This was the beginning of an effort to increase the number of classification stations to 25-30% of all traffic count stations in accordance with the FHWA Traffic Monitoring Guide.
- Reviewed, assigned, processed, analyzed, and distributed data for approximately 250 special count stations that have been requested by the Division of Planning and outside divisions.
- Downloaded, processed, maintained, and analyzed data from 77 permanent ATR stations. Reviewed operation with Equipment Management Team for proper operation, locations, and coverage for possible new ATR station installations.
- Maintained, updated, analyzed, provided quality control and assurance of data, and made data available from more than 13,000 traffic count stations.
- Updated 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.
- Updated in-house databases to include any new stations or roadway alignment changes. Correct beginning and ending milepoints to better represent traffic generators.
- Detected, analyzed, and adjusted volume counts while combining and creating additional stations where necessary.
- Continued work to document the entire TMS process.

AMOUNT EXPENDED FOR 2004-2005 (Including District Offices)

PLANNING \$1,084,525.90

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 5: Strategic Corridor Planning

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

A total of 10 studies were completed during the period of June 16, 2004 to June 15, 2005. This is based on the date the final report was printed for those projects that were completed in-house, or the date the final report was submitted by the consultant.

Two studies were consultant studies managed by Districts 2 and 4 planning staff respectively. The other eight were managed or completed in-house by central office staff. In addition, District 12 planning staff completed one study in-house in June 2004.

The first phase of the I-69 Eddyville to Henderson study was completed in March, 2005. Additional work is now being scoped to allow the Cabinet to sign the existing parkways as I-69.

There are also four other studies that are nearing completion.

Several studies were large-scale efforts with coordination and public involvement efforts that were greater than what is usually required. All of the studies required 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 also developed Environmental Justice reports for many of the studies. Many of the studies had designated funds set up specifically for that project, but they were sometimes supplemented with work-program funds when they were not sufficient to get the study to completion.

Some, and in many cases, a substantial amount of work has been completed on eight other projects during the past work-program year.

As noted above, some 27 projects have been worked on during the past year, with 10 being completed and 4 others nearing completion.

AMOUNT EXPENDED FOR 2004-2005 (Including District Offices)

PLANNING \$457,486.59

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 6: **Intermodal Statewide Planning**

RESPONSIBLE UNIT: Division of Planning
Strategic Planning Activity Center
Intermodal Statewide Planning Team
Division of Multimodal Programs

The Intermodal Statewide Planning Team (ISPT), through the 15 Area Development Districts (ADDs), 9 Metropolitan Planning Organizations (MPOs) and 12 Highway District Offices (HDOs), initiated and completed a comprehensive task to collect, analyze and report data and develop project purpose and need statements on all unscheduled needs throughout the Commonwealth during FY 2005. To that end the following tasks were undertaken and completed:

- Organized a team of ADD, MPO and HDO Transportation Planners to redesign and develop a new Project Identification Form (PIF) for all unscheduled projects which is designed to provide a “problem-driven” approach to identifying needs. The form was also designed to encourage a data-driven approach to identifying and analyzing needs and provides comprehensive information on every unscheduled project. The form was designed to provide limited scoping information for every project. Various iterations of the form were reviewed and enhanced over a 3-4 month period with input from the ADDs, MPOs and the HDOs.
- Provided training to the ADD/MPO/HDO Transportation Planners on a “problem-based” approach to identifying and describing projects/needs.
- Provided training on the collection and analysis of data through the PIF process, utilizing HIS Data and newly developed adequacy ratings for evaluating needs.
- Scheduled and coordinated the completion of a PIF form for every UPL project (over 2400 projects) through the ADDs, MPOs and HDOs.
- Reviewed each PIF and undertook a major updating of the UPL database, based on the information provided in the newly developed PIF for over 2400 projects.
- Each ADD maintained regional transportation advisory committees with diverse membership including representatives of local government, transportation interests, other special interests, and the general public. These committees met, at a minimum, bimonthly, playing an important role in developing regional transportation goals/objectives for their transportation systems, evaluating the long-term needs and identifying/evaluating/prioritizing specific project needs in their respective regions. Several ADDs maintained county committees also. Through this state-funded regional planning program, local governments and transportation interests were directly consulted and given an opportunity to identify highway needs and priorities on the state system, which provided local input along with the regional input to the development of the state’s Six-Year Highway Plan and Statewide Transportation Plan.

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 6: **Intermodal Statewide Planning (Continued)**

RESPONSIBLE UNIT: Division of Planning
Strategic Planning Activity Center
Intermodal Statewide Planning Team
Division of Multimodal Programs

The Division of Planning through the ISPT initiated and developed a policy driven approach to identifying needs and describing the problem, as opposed to assuming a solution and development of a project based on that solution.

- Provided extensive training and workshops on Purpose and Need for the ADDs and HDOs
- Researched and collected data for the development of a problem statement for all Six-Year Plan Projects

The ISPT reviewed and revised a Prioritization and Ranking Process for the Unscheduled Needs List Projects and Six-Year Highway Plan Projects. This process will provide priorities for every UPL and 6YP project at the local, regional and highway district levels. The process also includes the ranking of the top ten projects for each region, as well as top ten ranking lists for three specific funding tiers. The prioritization and rankings will then be used as input to the KYTC's scoring and analysis process. This scoring process, which also includes factors such as congestion, safety, roadway functional classification, project type and cost, and economic development opportunity, was significantly refined during FY 05 and will allow the Cabinet to objectively prioritize projects based on the Cabinet's policies and goals as recommendations for the 2006 Six-Year Highway Plan.

Initiated an effort with the 15 ADDs to develop a Regional Transportation Concept Plan for each of the 15 ADD regions in the state. This concept plan includes data and information intended to be used as a tool when reviewing and identifying transportation issues in the region including but not limited to: Regional Goals and Objectives, Public Involvement Plan, Plan for including underserved populations, Major Traffic Generators and assessment of access routes to these sites, Inventory of Land Use Plans and Inventory of all transportation systems within the region.

The ISPT undertook the task of preparing the 2005 Update of the Kentucky Statewide Transportation Plan. To that end the following activities have occurred:

- Researched Statewide Transportation Plans for other states
- Invited representatives from private industry, state government, all transportation modes, various economic and local government organizations and KYTC key personnel to participate in a "Visioning" process to develop long-term goals for Kentucky's transportation system over the next twenty years. These goals were considered with the joint FHWA/KYTC Goals and public input to develop the goals and direction for the 2005 Kentucky Statewide Transportation Plan.

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 6: Intermodal Statewide Planning (Continued)

RESPONSIBLE UNIT: Division of Planning
Strategic Planning Activity Center
Intermodal Statewide Planning Team
Division of Multimodal Programs

- Developed a plan to produce a policy based Statewide Transportation Plan based on current and projected data for Kentucky's transportation system and integrating the policies of the Cabinet.
- Completed a first draft of the 2005 Kentucky Statewide Transportation Plan for internal review. A final draft should be completed for public review before the close of FY 2005, finalizing the document in early FY 2006.

Participated on the KYTC Freight Team to identify issues in freight movement and assisted in the review/preparation of numerous freight surveys. Provided the opportunity and administrative support for KYTC employees to participate in the FHWA "Talking Freight" Web casts on a monthly basis. Also participated in the planning/development of a FHWA/KYTC Freight Conference on May 10-11, 2005.

The ISPT responded to numerous inquiries regarding unscheduled project lists projects or Six-Year Plan projects. Reviewed surplus property/right of way proposals and school site locations as they relate to long-range transportation needs.

AMOUNT EXPENDED FOR 2004-2005 (Including District Offices)

PLANNING and MULTIMODAL PROGRAMS \$780,448.29

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 7: Roadway Systems

RESPONSIBLE UNIT: Division of Planning
Transportation Systems Activity Center
Roadway Systems Team

State Primary Road System (SPRS):

- Completed SPRS review
- Processed a total of 137 official orders
- Processed 20 electronic changes to the SPRS
- Trained new employee on SPRS procedures including production of ArcView maps

Coal Haul Highway System:

- Updated address list and mailed forms in December 2004 (581) and in June 2005 (574)
- Processed 636 routes for the 2004 Coal Haul report
- Provided ton-miles data to the Governor's Office for Local Development
- Published Annual Coal Haul Report
- Provided data to Division of Maintenance for updating Extended Weight Coal Haul Road System
- Trained new employee to process coal haul information including use of Surface Mining Information System, ArcView, Kentucky GIS Portal, and Route Log

Functional Classification System:

- Completed functional classification review for all counties and districts and recommended changes and updates and made those changes in HIS.

AMOUNT EXPENDED FOR 2004-2005

(Including District Offices)

PLANNING \$451,525.42

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 8: Geographic Information Systems (GIS)

RESPONSIBLE UNIT: Division of Planning
Transportation Systems Activity Center
GIS Team

GIS Maintenance:

- Assisted in developing standards for maintenance
- Worked with KSP and ADD's plan overall maintenance program
- Performed processes to incorporate ADD updates to GIS road network for 71 counties
- Adjust GIS coverages (state and county) to match HIS data for EXOR load attempts

State Highway Map:

- Created new map with new alignments and road classifications
- Made 15 city inset maps in Adobe Illustrator
- Worked with Tourism and Creative Services to publish new Official State Highway map

Special Maps:

- 2005 Getaway Guide map for Tourism
- Map of state highlighting Welcome Centers for Tourism
- Map of state highlighting State Parks
- Series of nine regional maps plus state map for 2006 Visitors Guide

Special Exhibit Projects for SPAC:

- KY 441 Study in Middlesboro
- Fairview to Tollesboro Corridor Study
- Strings and Ribbons maps
- VSF maps

Miscellaneous Projects

- Produced Coal Haul maps
- Created County Road Series maps
- Assisted in update of bridge data
- Assisted making of new SPRS and Functional Classification

AMOUNT EXPENDED FOR 2004-2005

PLANNING \$161,560.51

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 9: Cartography

RESPONSIBLE UNIT: Division of Planning
Transportation Systems Activity Center
Cartography Team

Maps:

- Revised 120 County and 85 city SPRS maps
- Revised 120 County and 54 city Functional Classification maps
- Created new Louisville, Lexington, and Northern Kentucky SPRS and Functional Classification maps from GPS data
- Performed annual update of Economic Development Counties map
- Updated base layouts for city maps
- Updated maps for names changes, etc. after GIS maintenance by ADD's
- Converted several maps to ArcMap (NHS, NN, etc.)
- Made prioritization maps for District 9
- Made map showing Legislators and their districts
- Completed Urban Area Census maps
- Made series of maps for Operations:
 - Wildflowers/Redbud trees locations in eastern Kentucky
 - Wildflowers location map statewide
 - Rest Area "You are here" maps
 - Maintenance and support facilities maps

Special Exhibit Projects for SPAC:

- Trapp area study
- KY 71 in Northern Kentucky
- US 421 study in Franklin County
- US 421 study in Clay County
- VMT displays for Commissioner
- Work on Priority Network

Other Special Projects:

- Bridge Location project for Division of Maintenance
- Sending out working/check-out electronic coverages for Add maintenance work
- Work on pilot project for ADD's to do CRA maps
- Maintain the computer backup system for Division
- Presentation for SHE Russia trip
- Developed GIS maintenance tracker system
- Create and automate CRA road list in Access

AMOUNT EXPENDED FOR 2004-2005

(Including District Offices)

PLANNING \$284,989.03

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 10: GIS/HIS Development and Support

RESPONSIBLE UNIT: Division of Planning
Data Management Activity Center
Development and Support Team

- Currently loading HIS database and GIS layers to EXOR systems
- Developed programs to convert layer tables back to familiar format after exporting from EXOR for the purpose of providing a seamless transfer to EXOR for existing costumers.
- Ran numerous quality control measures to assure current HIS/GIS records matched before the EXOR load began. All records not matching were assessed for correctness and the proper adjustments were made to either HIS or GIS.
- Have conducted weekly status meetings with EXOR staff through conference calls to assure the tasks assigned to complete the transfer to EXOR are on schedule and successfully accomplished. Problem tasks were addressed as to why and a solution provided to proceed.
- Hold many work sessions to review existing work processes for the purpose of developing new work processes as they are to be accomplished in EXOR.
- Reviewed many scripts developed by EXOR to create tables to attempt to match existing tables as defined in the current HIS System. Provided feedback to EXOR as to validity and functionality of the scripts.
- Provided much input to EXOR staff in developing custom tools for KYTC for the purpose of providing better functionality of the EXOR product pertaining to KYTC's needs and updating the states road network
- Designed GPS Maintenance Process to systematically update the GIS centerlines developed. Existing routines modified and new routines written for automation of the process and QC
- HPMS annual submittal two weeks early
- Provided support for Rating and Scoring of projects
- Developed process to replace horizontal curve data from GPS'd centerlines
- Developed process to update GIS road centerlines with CAD design plans

AMOUNT EXPENDED FOR 2004-2005

PLANNING \$205,478.70

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 12: Highway Information System

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

- Processed HIS data through the HPMS software to prepare for HPMS submittal.
- Produced the following summary reports for HPMS submittal:
 - Statewide summary
 - Pavement Type
 - Travel Activity
 - Length Totals
 - Travel Totals
 - Urbanized Length Totals
 - Urbanized Travel Totals
- Validated data integrity of all data items questioned to be in error by the HPMS software.
- Completed statewide data accuracy check of all “High” (>1.2) vsf sections involving HPMS samples to assure accuracy of road inventory contributing to the vsf calculation.
- Conducted statewide Functional Class review and updated in HIS database.
- Conducted statewide Traffic Station review and updated in HIS database.
- Conducted statewide State System review and updated HIS database
- Produced the annual Certified Public Mileage report.
- Produced the Annual Vehicle Miles Traveled by functional class report.
- Produced roadway mileage spreadsheet by functional class and county.
- Produced System Length and Daily Vehicle Travel report and uploaded to Division of Planning website.
- Produced National Highway System (NHS) report and uploaded to the Division of Planning website.
- Produced Governmental Ownership Length report and uploaded to the Division of Planning website.
- Produced Daily Truck Travel report and uploaded to the Division of Planning website
- Produced Mileage and Daily Vehicle Miles Traveled (DVMT) report and uploaded to the Division of Planning Website.

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 12: Highway Information System (Continued)

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

- Performed monthly extract of all road inventory and systems items then converted to ESRI shapefiles for submittal to the Division of Planning website for downloading by general public and update Interactive mapping program.
- Calculated New Horizontal degree of curvature using GPS'd centerlines for approximately 50% of state

AMOUNT EXPENDED FOR 2004-2005
(Including District Offices)

PLANNING \$272,412.35

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 13: Special Analysis

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

Studies

A study and report was completed titled "Economic Analysis Proposed Bridge to Replace Monroe County Ferry on KY 214 at Cumberland River".

Census Transportation Planning Package (CTPP)

- Volume flow diagrams visually identifying commuter data into and out of each central Kentucky counties were prepared.
- Commuter Data used to update inter-county travel information for Division of Air Quality for PM 2.5 Designations
- Combined Zones geography was imported and provided to a consultant for use in statewide model analysis.
- In a collaborative process, a review of CTPP Parts I, II, and III as well as journey-to-work data for Kentucky was completed. This review included spot-checking data for inaccuracies and overall data-checking with alternative sources.
- Completed a paper on the use of CTPP data in Kentucky for the statewide model. Prepared a summary of work completed in KY using the CTPP. Paper was published.
- Feature article in CTPP newsletter written collaboratively between KY and consultant.
- Created a Transportation Research Board (TRB) poster session on the use of CTPP data in Kentucky and for the statewide model partnering with a consultant.

Road User Costs

- Reviewed new software that could be used in future road user cost analysis, primarily on interstate routes or areas that have a travel demand model. Quickzone was recommended for purchase.
- Reviewed simulation modeling for possible future use in more complicated rural or sub-urban area road user costs.
- Updated source for commercial and non-commercial travel costs.
- Reviewed and updated Lexington US 421 User Cost Analysis. Included auto, truck, bike, transit and pedestrian detour cost analysis.

AMOUNT EXPENDED FOR 2004-2005 (Including District Offices)

PLANNING	\$40,801.56	MULTIMODAL PROGRAMS	\$50,918.99
----------	-------------	---------------------	-------------

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 14: Air Quality Conformity Analysis Program

RESPONSIBLE UNIT: Division of Multimodal Programs

8-Hour Ozone Conformity Analysis

(Note) New areas were designated as nonattainment for the 8-Hour Ozone NAAQS on June 15, 2004 and conformity demonstration was required by June 15, 2005.

Conformity analysis was completed for the Ashland Area, Christian County (Clarksville Area) and the Owensboro Area (Owensboro is in attainment; analysis was completed only so Owensboro could continue to utilize CMAQ funds). Activities included:

- Worked with FHWA and MPO to schedule and conduct Interagency Consultation (IAC) meetings for each air quality conformity area.
- Participated with IAC to determine analysis years and planning assumptions for each project in the Long Range Transportation Plan.
- For required analysis years (2005,2009, 2015,2025,2030), prepared MOBILE6.2 emission model input (including VMT forecasts and average speeds) and worked with IAC to approve inputs.
- Ran MOBILE6.2 model to get emission factors and used VMT forecasts to determine emissions for each required analysis years.
- Wrote conformity chapters for respective MPO Long Range Transportation Plans and TIPs for Ashland, Christian County, and the Owensboro area..

Fine Particulate (PM2.5) Conformity Analysis

(Note) New areas were designated as nonattainment for the Fine Particulate (PM2.5) NAAQS on April 5, 2005 and conformity demonstration is required by on April 5, 2006.

- Began work with IAC to develop input for PM2.5 conformity analysis for each nonattainment area
- Ashland Area includes 3 states, 3 FHWA Division Offices, 3 EPA Offices- IAC calls have begun to develop coordination and procedures for this unusual area..

Transportation data prepared for the Kentucky Division for Air Quality

- Prepared VMT forecasts and average speeds for MOBILE6.2 input for Bullitt and Oldham Counties for Louisville Area 8-Hour Ozone conformity analysis. DAQ ran MOBILE6.2 model and determined emissions.
- Prepared VMT and speed forecasts for EPA's Visibility Improvement - State and Tribal Association of the Southeast (VISTAS) program to analyze particulate matter air quality and regional haze.
- Prepared VMT and speed forecasts and commuter pattern data (from 2000 census CTPP data) for several counties for use in making and defending PM2.5 designations.
- Prepared additional commuter pattern data for central Kentucky counties to dispute EPA's recommendation of nonattainment for PM2.5.
- Prepared VMT and speed forecasts and other MOBILE6.2 input parameter data for use in determining 8-Hour Ozone mobile emissions budgets for Christian County.

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 14: Air Quality Conformity Analysis Program (Continued)

RESPONSIBLE UNIT: Division of Multimodal Programs

MPO Coordination

- Worked with KIPDA (Louisville Area), OKI (Northern Kentucky Area) and LFUCG (Lexington) to insure their Travel Demand Models (TDM) are consistent with KYTC VMT and speed forecasts.
- Coordinated, along with FHWA, monthly air quality conference calls.
- Provided appropriate educational air quality agenda items for quarterly MPO meetings.

Speed Study

- Guided University of Kentucky effort to develop a methodology for determining county level average daily speeds by functional class using FHWA's Highway Economic Requirements System (HERS).
- Kicked off phase 2 of the speed study which will include an hourly speed methodology and a speed database.

Standards Guidelines

- Updated KYTC's knowledge of conformity regulations through study and discussion with federal partners (ex: worked through the regulations to show that Henderson, Kentucky is not subject to conformity requirements even though the Indiana side of the MPO is).
- Reviewed and commented on FHWA/EPA guidelines for 8-Hour Ozone and PM2.5 conformity.
- Provided status of new regulations, standards and designations to KYTC staff.

CMAQ

- Managed CMAQ process for review and selection of 40 applications for 2006 CMAQ projects.
- Managed the programming of 23 2005 CMAQ projects.
- Provided emissions reduction analysis for numerous CMAQ applications, including Owensboro's roundabout project and bike lane project.

Outreach

- Worked with Division of Public Affairs and our consultant to coordinate an air quality media campaign designed to encourage folks to bike or walk instead of driving.
- Worked with small MPOs (Ashland, Owensboro) to implement or improve their outreach programs.
- Represented KYTC on the interagency Earth Day preparations and activities.
- Participated in the interagency Governor's Green School Initiative along with a multi-Cabinet Team.
- Worked with Bicycle and Pedestrian Coordinator and other Divisions to prepare for Safe Routes to School Initiative.

AMOUNT EXPENDED FOR 2004-2005

MULTIMODAL PROGRAMS \$173,484.45

ACCOMPLISHMENTS FOR 2004-2005

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

RESPONSIBLE UNIT: Division of Multimodal Programs

The Division of Multimodal Programs, now the Division of Planning, continued to provide technical assistance and coordination to Kentucky's nine MPO areas in FY 2005. This assistance helped maintain the continuing, cooperative, and comprehensive (3C) transportation planning process and resulted in the following accomplishments:

- UPWPs reviewed and contracts executed – all nine MPOs
- UPWP formal review process completed for the second year
- TIPs reviewed and adopted – Ashland, Cincinnati/N. Kentucky, Clarksville, Lexington, Owensboro, Radcliff/Elizabethtown and draft TIPs for Bowling Green and Evansville/Henderson
- LRTPs reviewed (included fiscal constraint information) and adopted – Ashland, Clarksville, Owensboro, Rad/E-town and draft LRTPs for Bowling Green, Evans/Hend
- TIP and LRTP amendments reviewed and adopted – 6 in Lex, 4 in Cin/NKY, 2 in Lou, 1 in Owensboro
- Traffic models created or updated – Radcliff/Elizabethtown, Lexington, Ashland, Clarksville, Owensboro, Louisville (conversion to TransCAD)
- Traffic assignments/forecasts completed - 1 Clarksville, 2 Owensboro
- Modeling software assistance provided – MUG meetings, TransCAD class, simulation modeling in Owensboro
- Air quality coordination – conformity analysis, quarterly meetings, monthly conference calls, numerous Interagency Consultation meetings
- General coordination – quarterly MPO meetings, monthly FHWA/KYTC meetings, frequent contacts (phone, email), combined MPO/ADD meetings
- MPO reference book completed and updated
- A tracking process established with Program Management to better follow project expenditures with emphasis on dedicated STP projects
- Rideshare, congestion management, ITS, and bike/pedestrian, transit activities coordinated at various levels in each MPO
- CMAQ, dedicated STP, Earmarked, and TCSP projects coordinated, programmed, and contracted

MPO planning activities outlined in their UPWPs and coordinated with this Division:

Ashland

- Initiated a combined rural and urban planning UPWP
- Initiated an air quality outreach program (CMAQ)

Clarksville

- Tracked KY 911 project funded with discretionary dollars
- Completed a new LRTP with expanded model area and conformity analysis

ACCOMPLISHMENTS FOR 2004-2005

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

RESPONSIBLE UNIT: Division of Multimodal Programs

Cincinnati / N. Kentucky

- Tracked the Brent Spence Bridge project
- Completed a certification review
- Completed the Kenton County Transportation Study

Louisville

- Closed out the T2 process
- Completed the Technical committee project evaluation process
- Completed an 8-hour conformity analysis
- Initiated the Oldham County access management project
- Participated in the Bicycle summit
- Interstate system congestion report produced
- Completed the Old Henry Road/Crestwood Connector study
- Expected to complete the I-71 Corridor Improvement study
- Completed the KY 44 Alternatives study
- Expected to complete the Eastern Parkway Traffic and Safety study

Radcliff / Elizabethtown

- Expected to complete the Public transportation study
- Completed 1st LRTP

Bowling Green

- Completed aerial photography phase I
- Completed Major Thoroughfare plan
- Created a PR campaign to introduce the MPO and its process to the community

Evansville / Henderson

- Completed the first certification review
- Continued to track the I-69 project
- Completed a freight study

ACCOMPLISHMENTS FOR 2004-2005

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

RESPONSIBLE UNIT: Division of Multimodal Programs

Owensboro

- Downtown travel study in progress

Lexington

- Completed the congestion management toolbox/study
- Continued Newtown Pike extension project tracking
- Initiated a downtown transportation study
- Completed a certification review

AMOUNT EXPENDED FOR 2004-2005

(Including District Offices)

MULTIMODAL PROGRAMS \$388,743.61

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 16: Small Urban Areas Studies

RESPONSIBLE UNIT: Division of Multimodal Programs

The Small Urban Area (SUA) study for the area of Winchester is continuing, and progress has been made. The base year model work has been finished, and a work group meeting has been held to discuss the study goals and progress. Identification of current conditions has been completed.

Prioritization

- The prioritization of the next round of SUA studies began with updating the socioeconomic data to use in identifying the greatest needs of the SUAs across the state. This needs analysis was presented to a multi-divisional prioritization team that included representatives from the Divisions of Multimodal Programs, Traffic Operations, Planning, Environmental Analysis, Design, District Offices and Area Development Districts.

SUA Study Process Review

- A complete review of the SUA process was conducted, and the goals of the program were confirmed to match the three priorities of the Cabinet: safety, mobility, and economic development.

Reviewed technical documentation for the Radcliff/Elizabethtown model for an example of best practices for future technical model documents in small urban area studies.

AMOUNT EXPENDED FOR 2004-2005 (Including District Offices)

MULTIMODAL PROGRAMS \$36,535.10

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 17: **Bicycle & Pedestrian**

RESPONSIBLE UNIT: Division of Multimodal Programs

Assist local government in development of local bicycle and pedestrian network facilities. Travel to various meetings.

- 12 Kentucky Bicycle and Bikeway Commission (KBBC) meeting via conference call,
- Met with City Frankfort about their bike/ped plan
- Attended Lexington Bicycle Pedestrian Advisory Committee meetings
- Attended the Louisville Bike Summit two days
- Western Kentucky University Bike Plan meeting
- Three UK Bike Plan meetings with consultants, UK, and committee
- Met with Louisville Bike/Ped coordinator to introduce their new B/P coordinator.
- Colleagues (other bike/ped coordinators, greenway coord, other professionals) asking specific information about specific bike/ped facilities - about 4 to 5 inquiries per month.

Revise and update the statewide bike-route system and maps.

- Worked with Transportation GIS Branch, on bike routes and kygeonet.ky.gov. In order for inclusion on the kygeonet certain metadata criteria must be met.
- Discussed and accepted the Abandoned Rail Database.

Answer requests concerning KYTC design guidelines regarding pedestrian and bicycle facilities.

- Worked with Highway District Offices and the Division of Highway Design on specific projects on a case-by-case basis
- Respond via email to an average of 5 to 7 customers (generally out-of-state) per month about bike routes in KY.

Promote and facilitate the increased use and public education of non-motorized modes of transportation, including developing pedestrian and bicycle facilities.

- Met with KEEN, Obesity Prevention Steering Committee, UK Center for School Safety, Earth Day Committee, Green School Committee, EPA Grant Anti-Idling meeting to discuss cooperative letter from KYTC and EPPC about grant, and the Statewide Air Quality Media Campaign.
- Attended and presented at the Your Town Conference at Breaks Interstate Park
- Presentation to the Physical Activity Conference in Lexington Kentucky

Develop a statewide non-motorized transportation master plan.

- Attended two Pine Mountain Trail meetings, one legislative.

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 17: **Bicycle & Pedestrian (Continued)**

RESPONSIBLE UNIT: Division of Multimodal Programs

Review project plans for bicycle and pedestrian facilities.

- Worked with Highway District Offices and the Division of Highway Design on specific projects on a case-by-case basis
- District Offices - always on a case-by-case basis - about once a month. Central Office about once a month for specific bike/walk information. These requests can be very detailed, plan sheets, etc.

Research Project

- Project statement and commitment from KTC final. Had meeting with principal UK research associates.
- Purchased reflective armbands proceeding

General Research

- Attended TRB presented conference highlights
- Bimonthly National State Bicycle/Pedestrian Coordinators Conference Calls
- Met with KTC about innovative research ideas

Training

- Arranged and attended the National Highway Institutes Pedestrian and Bicycle Facilities Course - 3 days
- Attended GIS remote sensing workshop
- Attended National Bicycle and Pedestrian Coordinators Conference and Training - 3 days

AMOUNT EXPENDED FOR 2004-2005

MULTIMODAL PROGRAMS \$136,452.57

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 18: Traffic Congestion Management System and ITS Coordination

RESPONSIBLE UNIT: Division of Multimodal Programs

- Participated in Certification Review for OKI, LEX, and EUTS concerning Congestion Management Plans
- Participated in FHWA/KYTC ITS Coordination Team-Tracked CMAQ and STP-Dedicated funding used for ITS and TCM Projects.
- Co-sponsored Urban Mobility Study and administered contract.
- Reviewed Urban Mobility Study annual document for applicability to KYTC processes and procedures.
- Held Mobility Analysis Work session on June 20-22, 2005
- Established draft web page for TRIMARC archived data via ongoing archived data management system research study (KTC)

AMOUNT EXPENDED FOR 2004-2005

MULTIMODAL PROGRAMS \$11,245.75

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 19: Smart Growth & Transportation Planning

RESPONSIBLE UNIT: Division of Multimodal Programs

Statewide Access Management Task Force

- Continued the efforts of the task force for the entire fiscal year.
- Completed development of classification system (criteria).
- Mapped (assigned classes to roads) for one highway district under new classification system- District 4, Elizabethtown
- Completed draft access management standards.
- Began drafting permitting, variance and appeals processes
- Began review of legal issues

Training on local transportation planning

- 3 training courses provided through KAPA and KACO statewide (Lexington, Ft. Mitchell,
- 1 training course provided through KLC

Training & technical assistance on smart growth applications

- US 25 (Dixie Highway – D-6) Corridor Plan: Speech to steering committee and technical assistance.
- Review of proposed roundabout on KY22 in Jefferson County.
- KY100 – Simpson County – technical assistance on access management and roundabouts
- Alexandria Road – Fayette County – technical assistance on roundabout planning and design
- KY 53 Access Management Study – technical assistance on scope of work and consultant negotiation
- KY363/1006 – Laurel County – technical assistance on scoping of roundabout
- KY17 – Kenton County – technical assistance on corridor plan
- KY81 – Daviess County – technical assistance on planning/design of roundabout
- Access management trainings
 - APWA annual conference
 - Boyle County (and surrounding counties) local officials training
 - Annual KYTC Permit Staff Conference

Successful Communities Conference

- The first two conferences, hosted by KTC and KYTC were held in 2003 and 2004. It was decided jointly between KTC and KYTC that a conference would not be held in 2005; the next one would be possibly be held in 2006.

ACCOMPLISHMENTS FOR 2004-2005

CHAPTER 21: Statewide Traffic Model

RESPONSIBLE UNIT: Division of Multimodal Programs

- Converted statewide model to TransCAD/GIS and updated.
- Held training on new statewide model
- Co-authored nationally published paper on National Household Travel Survey
- Used Statewide model on multiple traffic forecasts to estimate traffic of new and changed routes.

AMOUNT EXPENDED FOR 2004-2005

MULTIMODAL PROGRAMS \$65,335.81