

STATE PLANNING AND RESEARCH (SPR)

PERFORMANCE AND EXPENDITURE REPORT

STATE FISCAL YEAR 2022

**Z550 Apportionment
Part I - Planning**



Arkansas Department of Transportation
Transportation Planning and Policy Division
System Information and Research Division
in cooperation with the
U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration

September 2022

PERFORMANCE AND EXPENDITURE REPORT
Federal-aid State Planning and Research (SPR) Funds
Z550 Apportionment
Part I – Planning
State Fiscal Year 2022

September 2022

Prepared by the
Transportation Planning and Policy Division
System Information and Research Division
Arkansas Department of Transportation

In Cooperation with the

FEDERAL HIGHWAY ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION

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TABLE OF CONTENTS

ITEM	PAGE
Introduction	5
TRANSPORTATION PLANNING AND POLICY	6
Administration	6
GIS and Mapping	6
Performance Management	7
Reference Library and Publications	7
Travel, Training and Seminars	7
Legislative Review	7
Finance	7
Statewide Plan	7
Travel Demand Modeling	8
Highway System Planning Studies	8
Freight Planning	8
Railroad Crossing Coordination	8
Cities Over 50,000 Population	8
Air Quality Activities	8
Local Planning Technical Assistance	9
Miscellaneous Planning Needs	9
GIS Data Management	9
General Planning Studies	9
SYSTEM INFORMATION AND RESEARCH	9
Administration	9
Travel, Training, and Seminars	9
Data Acquisition/Technology Integration	10
Traffic Data Analysis	10
Automated Traffic Data Collection	10
Contract Collection of Turning Movement Counts	10
Contract Collection of Traffic Volume Counts	10
Contract Collection of Vehicle Classification Counts	10
Traffic Data Collection	10
Asset Management System	10
Asset Management System Analysis	11
Data Quality Management	11
Pavement Structural Testing	11
Pavement Friction Data Collection Equipment	11
Nondestructive Subsurface Investigation	11
Automatic Road Analyzer (ARAN)	11
Pavement Management System (PMS)	12
Pavement Engineering Data Processing	12
Pavement Engineering Data Analysis	12

Transportation Asset Management Plan	12
Multimedia-Based Highway Information System (MMHIS)	12
Highway Performance Monitoring System (HPMS)	13
Highway Condition Inventory and Analysis	13
System Information – Program Coordination	13
Profilograph Studies	13
STUDIES FUNDED THROUGH OTHER FEDERAL PROGRAMS	13
Railroad-ARDOT Mitigation Strategies	13
STBGP GT 200K ATTRIBUTABLE FUNDING	14
NARTS Planning Study	14
CARTS Planning Study	14
WMATS Planning Study	14
CONGESTION MITIGATION AND AIR QUALITY (CMAQ) IMPROVEMENT	14
WMATS Air Quality - MPO	14
CARTS Ozone Awareness	14
PLANNING BY METROPOLITAN PLANNING ORGANIZATIONS	14
SUMMARY TABLES	15
State Fiscal Year 2022 Part I - Planning Approved Budget with Revisions	16
Final Performance and Expenditure Report In-House Planning	17

INTRODUCTION

This report has been developed in compliance with 23 CFR 420.117, Program Monitoring and Reporting Requirements. It records the use of Federal-aid State Planning and Research (SPR) Part I – Planning Funds during Fiscal Year 2022 (FY22). Activities using SPR Part II – Research Funds during this period will be documented in reports developed for individual projects. These reports will be submitted separately.

Presented in this document are accomplishments listed by job number, the approved budget with revisions, and a comparison of actual costs expended to the amounts budgeted for planning activities. Accomplishments are also included for projects that have oversight provided within the Transportation Planning and Policy and System Information Research Divisions but that are funded with other Federal-aid Funds. Many of the projects included in this report are ongoing and will continue into Fiscal Year 2023 (FY23).

Individual Performance and Expenditure Reports are developed and submitted separately by the Metropolitan Planning Organizations (MPOs). These reports present accomplishments made by each of the State's eight MPOs for FY22.

PART I PLANNING

TRANSPORTATION PLANNING AND POLICY FEDERAL-AID STATE PLANNING AND RESEARCH FUNDS

Activities for Jobs 400 through 419 and 468 through 497 represent in-house transportation planning projects. Expenditures which exceed apportioned Federal-aid funds and the required state match are paid using 100 percent state funds. During FY22, there were adequate SPR funds available for project activities.

Accomplishments during FY22 for SPR Part I – Planning funded activities follow. The approved budget with revisions and the final Performance and Expenditure Report tables are located at the conclusion of the report.

400 – ADMINISTRATION

Administrative guidance and controls were accomplished in accordance with the goals and objectives set forth for the Division. The necessary purchasing, storing, and distribution of supplies continued. An accurate inventory was maintained for the Division. Federal Registers were reviewed for information affecting Department operations, planning, and the administration of funds.

401 – GIS AND MAPPING

- State Highway Map (Tourist Map) was updated and 300,000 copies were printed. Copies are available at Arkansas Welcome Centers and Parks and Tourism facilities but can also be distributed by request either in person, in writing, by telephone, or through the Department's website.
- Migrating away from using Microstation to update and display the section's cartographic products. The ArcGIS platform is utilized to maintain the statewide, county, and city mapping templates. Staff compiled the new map versions in the Department's GIS platform, ESRI's ArcMap.
- Maintained and collected information for the all public road Intersection MIRE FDE dataset. The section partners with the Traffic Safety Section to maintain the dataset. GIS and Mapping personnel are currently populating the traffic control and junction geometry for each intersection location.
- GIS base map templates maintained to ensure consistent mapped products including state, district, route, and section, county route and section, county general highway, and city maps.

Other Duties/Special Projects/Regular Maintenance:

- Created, updated, and posted layers for the IDrive Arkansas website (Public Information Office).
- Prepared study maps and figures for planning studies and public involvement maps and displays (Project Planning and Multimodal Planning).
- Director's book maps (Governmental Relations).
- Arkansas Highway Police District Map (Traffic Management Center).
- Provided guidance and training opportunities regarding GIS software (Department-wide).
- Collaborated with other sections and divisions on data enterprise and asset collection efforts (Department-wide).
- Updated the Intranet and Internet with PDF images of most recently updated city and county maps.
- Provided printed versions of all city and county maps produced for distribution (Map Sales).

402 – PERFORMANCE MANAGEMENT

Staff continued to identify, monitor, and report as needed on performance measure. The Department continued participation in AASHTO's TPM Technical Assistance Pooled Fund Program. A Corridor Prioritization Tool for National Highway System (NHS) corridors within Arkansas was migrated to the Department's network with the assistance of the Information Technology Division. Programming recommendations for the upcoming Statewide Transportation Improvement Program were developed from analysis of reliability data. Numerous reports were compiled, including the Travel Time Reliability report for the HPMS submittal, the CMAQ TPM report, the Act 789 Report for the Arkansas Legislature, quarterly Traffic Incident Management (TIM) reports, and a federal grant performance report.

403 – REFERENCE LIBRARY AND PUBLICATIONS

Staff maintained the planning study library and the GIS-based web application for the library. All relevant transportation data, reports, and notices were collected, scanned, and filed. Professional articles on transportation issues were reviewed, and reports were prepared as necessary.

404 – TRAVEL, TRAINING AND SEMINARS

Time was allocated to attend transportation related meetings and seminars to acquire training, to update knowledge and techniques, and to network with others involved in planning and financing transportation programs and systems.

405 – LEGISLATIVE REVIEW

State and federal legislative actions were monitored and analyzed for their impact to the Department. Prepared comments for federal notices of proposed rulemaking.

406 – FINANCE

Federal and state regulations are being monitored to ensure the proper use of federal funds in support of the Division's programs. The FY23 SPR Work Program and the FY21 Performance and Expenditure Report were developed in compliance with federal requirements and submitted to FHWA.

408 – STATEWIDE PLAN

Staff continued coordination with state, local, and federal agencies regarding transportation needs and plans. Planning activities were performed in preparation for the next Arkansas Transportation Planning Conference. Continued implementation efforts associated with the delivery of the PlanWorks Pooled Fund Study, including a performance dashboard and corridor prioritization tool. Initiated update to the State Rail Plan and development of a Department TSMO Plan. Entered into an agreement with AASHTO to initiate the Econworks Pooled Fund Study, coordinated with AASHTO and other DOTs on the scope and execution of the study, and monitored the financial aspects of the study.

409 – TRAVEL DEMAND MODELING (TDM)

Staff performed and coordinated model runs for corridor planning studies using the ARTDM, CARTS TDM, and NARTS TDM. On-going model maintenance was performed. A two-day travel demand modeling course was developed and led by a consultant. General staff training continued. LOI and RFP documents were drafted in anticipation of upcoming model update procurement.

410 – HIGHWAY SYSTEM PLANNING STUDIES

Various studies analyzed route and corridor feasibility in order to maintain the highest quality highway system and to provide the best service for the safe and efficient movement of people and goods within and through the State.

411 – FREIGHT PLANNING

Technical assistance was provided to state freight partners. Support functions were provided to AASHTO standing committees. Department input was provided in developing the Institute for Trade and Transportation Studies (ITTS) five-year work program and execution of ITTS activities. Updates to the State Freight and Rail Plans were initiated.

412 – RAILROAD CROSSING COORDINATION

Special provisions were prepared for over 85 projects. C&M Agreements were obtained for two overpass construction projects, and others were submitted. Preliminary Engineering agreements were executed for 13 projects. More than 20 requests were submitted for Maintenance Consent Letters (MCLs) required for Pavement Preservation projects on UPRR's right-of-way. All District installation activities were completed for the FRA CRISI grant.

413 – CITIES OVER 50,000 POPULATION

The Metropolitan Planning Process (23 USC 134 (c) (3)) was coordinated in all urbanized areas, and necessary activities were carried out for each area as explained in each MPO Unified Planning Work Program (UPWP). UPWPs, various funding agreements, performance and expenditure reports, data analyses, and the Annual Listing of Obligated Projects were developed for each metropolitan area. Department staff attended MPO Committee meetings, participated in regular conference calls, reviewed MPO documents, and approved reimbursement requests. Department staff continued to work with the MPOs to establish a performance-based planning process, including cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, and performance reporting. The MPOs adopted the required performance targets for their areas, and Metropolitan Transportation Plans (MTPs) were amended to incorporate the performance measures.

414 – AIR QUALITY ACTIVITIES

CMAQ funds were awarded to the WMATS and CARTS areas to support air quality planning efforts. Specific activities in the CARTS area included coordination with Metroplan for the Ozone Action Days Program. In the WMATS area, air quality planning and monitoring activities performed relate to ongoing coordination of the planning process and designation as a Maintenance Area. Staff participated in regional and national meetings, webinars, and peer exchanges relating to electric vehicle infrastructure, and coordinated with the ADEE on upcoming Alternative Fuel Corridor designations and implementation of the National Electric Vehicle Infrastructure Program.

415 – LOCAL PLANNING TECHNICAL ASSISTANCE

Efforts were made to enhance coordination with local planning agencies in the areas of transportation planning, access management, and traffic engineering.

418 – MISCELLANEOUS PLANNING NEEDS

Utilized by other Divisions to support the Project Planning and Multimodal Planning Sections.

419 – GIS DATA MANAGEMENT

- Updated, maintained, and published the ARNOLD dataset with changes as needed.
- Managed the intersection MIRE FDE database.
- Collected, maintained, and oversaw the database for the ADA ramp and sidewalk inventory efforts.
- Identified and advanced GIS data management and best practices.
- Updated the network base map as changes occurred for the oversize/overweight permitting system.
- Began to maintain the new highway sign database.
- Developed the speed limit database and map application.
- Developed a field app to test for sign location collection in the field.

420 – BICYCLE AND PEDESTRIAN PLANNING AND COORDINATION PLANNING

Related efforts included coordination of bicycle and pedestrian accommodations in highway construction projects; review of applications for Transportation Alternatives Program and Recreational Trails Program funding; Complete Streets research; participation in regional bicycle and pedestrian planning efforts; participation in the development of bicycle and pedestrian elements of the Strategic Highway Safety Plan; walk audits; and others.

UNKNOWN – GENERAL PLANNING STUDIES

Task orders were issued for consultant planning studies. Once a planning study was identified for consultant services, a job number was established. These task orders were tracked by their job numbers.

SYSTEM INFORMATION AND RESEARCH FEDERAL-AID STATE PLANNING AND RESEARCH FUNDS

468 – ADMINISTRATION

Administrative guidance and controls were accomplished in accordance with the goals and objectives set forth for the Division. The necessary purchasing, storing, and distribution of supplies continued. An accurate inventory was maintained for the Division.

469 – TRAVEL, TRAINING, AND SEMINARS

Both virtual and in-person conferences, meetings, and webinars were attended to acquire training, update knowledge and techniques, and network with others involved in Traffic Information, Research, and Asset Management related programs.

473 – DATA ACQUISITION/TECHNOLOGY INTEGRATION

Continue enhancements to the SIR Division centralized Geodatabase. Continue the conflation process of Road Inventory and Traffic databases to ARNOLD. Improve the model to process ARAN data, assist HPMS reporting, assist end-of-year close-out and maintain various GIS web applications. Evaluated an application of artificial intelligence/machine learning technology intended to assist in the development of ADT estimates for all public roadways.

474 – TRAFFIC DATA ANALYSIS

All statewide coverage counts, special counts, turning movement counts, video counts, and vehicle classification counts were processed, including 2,679 classification counts, 118 video counts, 9,102 volume counts, and 145 turning movement counts. Truck weight data and associated vehicle classification data from the Automatic Traffic Recorders (ATR) were collected, analyzed, and reported. Seasonal and axle adjustment factors were calculated using the permanent count station data. Traffic forecasts and load spectra files were provided to the Design Branch as requested. Traffic count databases were maintained, and scopes of work for FY22 were developed. The ADT Web App was updated to include 2021 ADT, and paper maps of traffic data were developed. Miovision Central was used to submit and track special counts collected by the Traffic Group.

475 – AUTOMATED TRAFFIC DATA COLLECTION

The Recorder Shop maintained all records of repairs to all data collection devices and maintained supplies for the installation of permanent data collection sites. WIM sites that went down were converted to Miovision video classification counts to ensure data was collected. One site was rehabilitated, and three sites were repaired in the fiscal year. Additional data collection equipment was purchased to replace equipment past its useful life. An additional ATR and WIM site was added on I-49 near the Missouri state line.

476 – CONTRACT COLLECTION OF TURNING MOVEMENT COUNTS

Approximately 145 turning movement counts were completed.

477 – CONTRACT COLLECTION OF TRAFFIC VOLUME COUNTS

Approximately 9,102 traffic volume counts were completed.

478 – CONTRACT COLLECTION OF VEHICLE CLASSIFICATION COUNTS

Approximately 494 vehicle classification counts and 177 video classification counts were collected.

479 – TRAFFIC DATA COLLECTION

Classification counts were collected at 2,185 stations by Department personnel. Speed data was collected at all classification sites. Special counts, including holiday counts, were also conducted. Additional data collection equipment was purchased as part of the replacement cycle.

480 – ASSET MANAGEMENT SYSTEM (AMS)

The Pavement Performance and Imagery Data Collection was signed and collection and reporting of the APHN and part of the Non-APHN was completed. A comprehensive QA/QC analysis was performed on the data and imagery. The parameters used in Deighton's Total Infrastructure Management System (dTIMS) to perform pavement and bridge data analyses were refined and adjusted for the Arkansas system.

481 – ASSET MANAGEMENT SYSTEM ANALYSIS

New pavement management segments have been developed/refined and are under review. The "sandbox" was used for training purposes with dTIMS. The Department has moved to a 3D data collection system for pavement distress and is in the process of updating the internal dTIMS parameters used in the pavement analyses. Asset Management hired a database analyst. A consultant was hired to complete the dTIMS analysis for the 2022 TAMP update.

482 – DATA QUALITY MANAGEMENT PLAN (DQMP)

Initial control sites were identified, and manual distress data collection was completed. ARAN equipment operators were trained by the equipment manufacturer. Data processors and analysts received training in new pavement distress software. Impacts from COVID-19 limited progress on many aspects of DQMP objectives.

483 – PAVEMENT STRUCTURAL TESTING

FWD data was collected on bond jobs, construction jobs, weight-restricted routes, Fayetteville shale routes, research projects, and other areas where pavement preservation or rehabilitation was considered. The normal calibration and maintenance schedule resumed this year after a delay due to the COVID-19 pandemic and subsequent travel restrictions.

484 – PAVEMENT FRICTION DATA COLLECTION EQUIPMENT

The PFT collected data requested by the Traffic Safety Section, Maintenance Division, and various District offices and provided SNs of pavement surfaces. The DFT and CTM were used to collect friction data in locations where the geometry of the highway prevented collection using the PFT. The data collected was processed and loaded into a statewide database and mapped for internal use. The normal statewide network data collection was interrupted due to the COVID-19 pandemic and a nationwide shortage of tires.

485 – NONDESTRUCTIVE SUBSURFACE INVESTIGATION

The SAV finished collecting pavement thickness data for weight-restricted routes and other roads in the APHN. Additionally, SAV data was collected and analyzed for FWD analyses. The GcR system continued to assist in various project level surveys for the Districts, as well as the State Aid, Right of Way, and Environmental Divisions. A coring rig was also acquired in order to supplement GPR layer data.

486 – AUTOMATIC ROAD ANALYZER (ARAN)

Previous issues with the ARAN purchased in 2021 were resolved, and collection efforts were continued. The ARAN collected pavement performance data and imagery on several Interstates and other routes on the Arkansas Primary Highway Network (APHN).

487 – PAVEMENT MANAGEMENT SYSTEM (PMS)

Data from the NHS and Secondary Systems were used to report to FHWA and provide to District offices and other Divisions. The PMS database was used to provide the most current International Roughness Index (IRI), rutting, faulting, cracking, and geometric data on the state-maintained highway network to the Highway Performance Monitoring System (HPMS). The data from all routes collected with the ARAN have been entered into a PMS database, and the images were loaded into the Multimedia-based Highway Information System (MMHIS).

488 – PAVEMENT ENGINEERING DATA PROCESSING

The 3D ARAN data collected in-house was processed, and the contract data was imported. FWD data was processed and reported to Design, Construction, Permits, and Research. GPR data was processed to support FWD analysis and reported to Construction. PFT data was processed and reported to Traffic Safety and various Districts.

489 – PAVEMENT ENGINEERING DATA ANALYSIS

The data from the ARAN was evaluated to determine pavement conditions and was reported for the Preventive Maintenance Plan (PMP) and the HPMS. The data from the FWD was used to perform an analysis of overweight loading on restricted routes for the Highway Police's Permit Section and the analysis on the Fayetteville Shale (FS) Maintenance Assessment and Fee Calculation for 2021- 2022. The data was also provided to Roadway Design to aid in their decision-making processes. The GPR vehicle provided sub-surface properties when needed to supplement layer data and void detection for FWD analysis as well as initiating the collection of network-level data. Thickness data was analyzed from the Interstate Work Priority list, weight-restricted routes, and others. A series of computer programs continued to be developed for analysis and visual representation of the analyzed and raw GPR data. The Pavement Friction Tester (PFT) collected skid numbers for pavements as requested. Skid numbers were reported to the Traffic Safety Section and the Maintenance Division when requested. The data was also used for development of the State Transportation Improvement Plan (STIP). It was also used to analyze project-level jobs such as Interstate Rehabilitation jobs, weight-restricted routes, STIP projects, and research projects.

490 – TRANSPORTATION ASSET MANAGEMENT PLAN

The Department's fully compliant TAMP was approved by the FHWA – Arkansas Division on August 28, 2019. The annual submittal included documentation demonstrating consistency and implementation between the TAMP and the Department's investment strategy. A contract was signed to have Deighton run the TAMP-related dTIMS analysis. Also included in this contract was dTIMS training provided by Deighton. The quadrennial TAMP update was started.

491 – MULTIMEDIA-BASED HIGHWAY INFORMATION SYSTEM (MMHIS)

Redevelopment and migration of the MMHIS application and program to a SQL Server environment, which will create a more robust platform and aid in the development of new data reporting tools, continued. The development and enhancement of a web version of MMHIS were also completed.

494 – HIGHWAY PERFORMANCE MONITORING SYSTEM (HPMS)

The HPMS data package was submitted via the HPMS software in June. Field validations were performed on approximately 1/3 of the HPMS sample sections, and ongoing sample adequacy checks and reviews were conducted. HPMS samples were reviewed to ensure they were compatible with the All Roads Network of Linear Referenced Data (ARNOLD). HPMS data was developed and assessed for quality. Field data collection was conducted to ensure all HPMS data fields were reported.

495 – HIGHWAY INVENTORY AND ANALYSIS

Activities included the continuation of updating and maintaining roadway inventory data and the job record database. Public road mileage calculations and updates were performed utilizing GIS and mapping-based technologies. GPS-enabled tablets were successfully used to perform various data collection efforts.

496 – SYSTEM INFORMATION – PROGRAM COORDINATION

Provided administrative support and analysis of the APHN and published annual reports and maps. Provided administrative support for the Highway System Change Minute Order through the U.S. Route application process with AASHTO. Continued cross-training programs to aid in staff development for the System Information Group. Updates were made to the off-system inventory to ensure ARNOLD compatibility.

497 – PROFILOGRAPH STUDIES

Successful evaluations were completed at various construction sites throughout the state, both currently under construction and long completed. Data was collected and analyzed using the high-speed profiler, walking profiler, and software.

STUDIES FUNDED THROUGH OTHER FEDERAL PROGRAMS

Projects in this section are funded using various Federal funds from programs other than SPR. Oversight is provided within the Transportation Planning and Policy Division. Matching funds may be provided by a local source such as a city, county, trail sponsor, or an MPO. Accomplishments listed below are for informational purposes and provide examples of the additional planning activities that occurred during FY22.

012432 – ARKANSAS ELECTRIC VEHICLE INFRASTRUCTURE DEPLOYMENT PLAN

The Department and Arkansas Department of Energy and Environment (E&E) created a Public Engagement plan. This effort consists of creating the Arkansas Electrification Working Group, the Department landing webpage, a Public Involvement Meeting, and presenting at various stakeholder meetings.

STBGP GT 200K ATTRIBUTABLE FUNDING

060630 – CARTS PLANNING STUDY

STBGP 200K funds were used to support various work tasks identified in the CARTS UPWP.

110273 – WMATS PLANNING STUDY

STBGP 200K funds were used to support various work tasks identified in the WMATS UPWP.

012193 – NARTS PLANNING STUDY

STBGP GT 200K funds were used for transportation planning activities in the NARTS area for the following Work Elements: General Development and Comprehensive Planning, Short and Long-Range Transportation Planning (including ITS-TSMO) and Transportation Improvement Program development.

CONGESTION MITIGATION AND AIR QUALITY (CMAQ) IMPROVEMENT FUNDING

110481 – WMATS AIR QUALITY

Coordination with ADEE, EPA, and Memphis-Shelby County air quality planning groups continued in the West Memphis-Marion area to ensure that the requirements of the current NAAQS attainment status are being met.

012178 – CARTS OZONE AWARENESS

The use of CMAQ funds in the CARTS area continued the cooperative effort among the MPO, the Department, ADEE, and other agencies for an Awareness and Public Education campaign stressing voluntary actions to reduce seasonal emissions (ridesharing, refueling during the evening, etc.). Public relations, an advertising campaign, and notifications to local media and major employers of potential high ozone days were continued.

PLANNING BY METROPOLITAN PLANNING ORGANIZATIONS

Accomplishments and information concerning the FTA/FHWA consolidated funding will be provided in the reports for the following areas:

- Central Arkansas Regional Transportation Study (CARTS)
- Frontier Metropolitan Planning Organization (FMPO)
- Hot Springs Area Metropolitan Planning Organization (HSA - MPO)
- Jonesboro Area Transportation Study (JATS)
- Northwest Arkansas Regional Planning Commission (NWARPC)
- Pine Bluff Area Transportation Study (PBATS)
- Texarkana Urban Transportation Study (TUTS)
- West Memphis-Marion Area Transportation Study (WMATS)

SUMMARY TABLES
APPROVED BUDGET WITH REVISIONS
AND
FINAL PERFORMANCE AND EXPENDITURE REPORT
Z550 Apportionment
PART I – PLANNING
FISCAL YEAR 2022

FY2022 Approved Budget with Revisions

Job No.	Title	Budgeted Amounts			Federal Participation Rate	Federal SPR	State Match
		Work Program (As Approved)	Revision 1*	Revised Total			
In-House Planning							
400	Administration	\$ 150,000		\$ 150,000	0%	\$ -	\$ 150,000
401	GIS and Mapping	\$ 965,000		\$ 965,000	80%	\$ 772,000	\$ 193,000
402	Performance Management	\$ 200,000		\$ 200,000	80%	\$ 160,000	\$ 40,000
403	Reference Library and Publications	\$ 50,000	\$ (15,000)	\$ 35,000	80%	\$ 28,000	\$ 7,000
404	Travel, Training and Seminars	\$ 15,000	\$ 15,000	\$ 30,000	80%	\$ 24,000	\$ 6,000
405	Legislative Review	\$ 10,000		\$ 10,000	80%	\$ 8,000	\$ 2,000
406	Finance	\$ 150,000		\$ 150,000	80%	\$ 120,000	\$ 30,000
408	Statewide Plan	\$ 300,000		\$ 300,000	80%	\$ 240,000	\$ 60,000
409	Travel Demand Modeling	\$ 145,000		\$ 145,000	80%	\$ 116,000	\$ 29,000
410	Highway System Planning	\$ 900,000		\$ 900,000	80%	\$ 720,000	\$ 180,000
411	Freight Planning	\$ 400,000		\$ 400,000	80%	\$ 320,000	\$ 80,000
412	Railroad Crossing Coordination	\$ 120,000	\$ 35,000	\$ 155,000	80%	\$ 124,000	\$ 31,000
413	Cities Over 50,000 Population	\$ 400,000		\$ 400,000	80%	\$ 320,000	\$ 80,000
414	Air Quality Activities	\$ 30,000		\$ 30,000	80%	\$ 24,000	\$ 6,000
415	Local Planning Technical Assistance	\$ 75,000	\$ (35,000)	\$ 40,000	80%	\$ 32,000	\$ 8,000
418	Miscellaneous Planning Needs	\$ 50,000		\$ 50,000	80%	\$ 40,000	\$ 10,000
419	GIS Data Management	\$ 200,000		\$ 200,000	80%	\$ 160,000	\$ 40,000
U/K	Planning Studies	\$ 4,500,000		\$ 4,500,000	80%	\$ 3,600,000	\$ 900,000
468	Administration	\$ 200,000		\$ 200,000	0%	\$ -	\$ 200,000
469	Travel, Training and Seminars	\$ 20,000		\$ 20,000	80%	\$ 16,000	\$ 4,000
473	GIS Data Integration	\$ 350,000		\$ 350,000	80%	\$ 280,000	\$ 70,000
474	Data Analysis	\$ 915,000		\$ 915,000	80%	\$ 732,000	\$ 183,000
475	Automated Traffic Data Collection	\$ 750,000		\$ 750,000	80%	\$ 600,000	\$ 150,000
476	Contract Turning Movement Counts	\$ 270,000		\$ 270,000	80%	\$ 216,000	\$ 54,000
477	Contract Collection of Traffic Volume Counts	\$ 900,000		\$ 900,000	80%	\$ 720,000	\$ 180,000
478	Contract Collection of Vehicle Classification Counts	\$ 850,000		\$ 850,000	80%	\$ 680,000	\$ 170,000
479	Traffic Data Collection - Traffic Counts	\$ 575,000		\$ 575,000	80%	\$ 460,000	\$ 115,000
480	Asset Management System	\$ 350,000	\$ 60,000	\$ 410,000	80%	\$ 328,000	\$ 82,000
481	Asset Management System Analysis	\$ 75,000	\$ 20,000	\$ 95,000	80%	\$ 76,000	\$ 19,000
482	Pavement Performance Data Collection Vehicle	\$ 100,000		\$ 100,000	80%	\$ 80,000	\$ 20,000
483	Pavement Structural Testing	\$ 200,000	\$ (40,000)	\$ 160,000	80%	\$ 128,000	\$ 32,000
484	Pavement Friction Data Collection Equipment	\$ 75,000	\$ 13,000	\$ 88,000	80%	\$ 70,400	\$ 17,600
485	Nondestructive Subsurface Investigation	\$ 150,000	\$ (13,000)	\$ 137,000	80%	\$ 109,600	\$ 27,400
486	Automatic Road Analyzer	\$ 350,000	\$ (40,000)	\$ 310,000	80%	\$ 248,000	\$ 62,000
487	Pavement Management System (PMS)	\$ 300,000		\$ 300,000	80%	\$ 240,000	\$ 60,000
488	Pavement Engineering Data Processing	\$ 270,000	\$ 30,000	\$ 300,000	80%	\$ 240,000	\$ 60,000
489	Pavement Engineering Data Analysis	\$ 600,000	\$ (30,000)	\$ 570,000	80%	\$ 456,000	\$ 114,000
490	System Information - Program Coordination	\$ 200,000		\$ 200,000	80%	\$ 160,000	\$ 40,000
491	Multimedia Highway Information System (MMHIS)	\$ 275,000		\$ 275,000	80%	\$ 220,000	\$ 55,000
494	Highway Performance Monitoring System (HPMS)	\$ 260,000		\$ 260,000	80%	\$ 208,000	\$ 52,000
495	Highway Condition Inventory and Analysis	\$ 270,000		\$ 270,000	80%	\$ 216,000	\$ 54,000
496	Transportation Asset Mgmt Plan	\$ 75,000		\$ 75,000	80%	\$ 60,000	\$ 15,000
497	Profilograph Studies	\$ 100,000		\$ 100,000	80%	\$ 80,000	\$ 20,000
Total for In-House Planning		\$ 17,140,000		\$ 17,140,000		\$ 13,432,000	\$ 3,708,000
Totals - Part I Funds		\$ 17,140,000		\$ 17,140,000		\$ 13,432,000	\$ 3,708,000

* **Revision** - Adjustments based on anticipated expenditures through the end of the fiscal year.

**Final Performance and Expenditure Report
Z550 Apportionment
State Fiscal Year 2022 Part 1 - In-House Planning**

Job No.	Title	Federal Participation Rate	Work Program (Revised)			Estimated Costs			Balance SPR Funds
			Federal SPR	State Match	Total	Federal SPR	State Match	Total	
	<u>In-House Planning</u>								
400	Administration	0%	\$ -	\$ 150,000	\$ 150,000	\$ -	\$ 74,431	\$ 74,431	\$ -
401	GIS and Mapping	80%	\$ 772,000	\$ 193,000	\$ 965,000	\$ 585,412	\$ 146,353	\$ 731,765	\$ 186,588
402	Performance Management	80%	\$ 160,000	\$ 40,000	\$ 200,000	\$ 92,287	\$ 23,072	\$ 115,359	\$ 67,713
403	Reference Library and Publications	80%	\$ 28,000	\$ 7,000	\$ 35,000	\$ 3,914	\$ 978	\$ 4,892	\$ 24,086
404	Travel, Training and Seminars	80%	\$ 24,000	\$ 6,000	\$ 30,000	\$ 22,851	\$ 5,713	\$ 28,564	\$ 1,149
405	Legislative Review	80%	\$ 8,000	\$ 2,000	\$ 10,000	\$ -	\$ -	\$ -	\$ 8,000
406	Finance	80%	\$ 120,000	\$ 30,000	\$ 150,000	\$ 80,132	\$ 20,033	\$ 100,165	\$ 39,868
408	Statewide Plan	80%	\$ 240,000	\$ 60,000	\$ 300,000	\$ 146,636	\$ 36,659	\$ 183,295	\$ 93,364
409	Travel Demand Modeling	80%	\$ 116,000	\$ 29,000	\$ 145,000	\$ 74,662	\$ 18,666	\$ 93,328	\$ 41,338
410	Highway System Planning	80%	\$ 720,000	\$ 180,000	\$ 900,000	\$ 581,330	\$ 145,332	\$ 726,662	\$ 138,670
411	Freight Planning	80%	\$ 320,000	\$ 80,000	\$ 400,000	\$ 38,960	\$ 9,740	\$ 48,700	\$ 281,040
412	Railroad Crossing Coordination	80%	\$ 124,000	\$ 31,000	\$ 155,000	\$ 127,290	\$ 31,823	\$ 159,113	\$ (3,290)
413	Cities Over 50,000 Population	80%	\$ 320,000	\$ 80,000	\$ 400,000	\$ 230,654	\$ 57,663	\$ 288,317	\$ 89,346
414	Air Quality Activities	80%	\$ 24,000	\$ 6,000	\$ 30,000	\$ 334	\$ 83	\$ 417	\$ 23,666
415	Local Planning Technical Assistance	80%	\$ 32,000	\$ 8,000	\$ 40,000	\$ -	\$ -	\$ -	\$ 32,000
418	Miscellaneous Planning Support	80%	\$ 40,000	\$ 10,000	\$ 50,000	\$ 5,113	\$ 1,278	\$ 6,391	\$ 34,887
419	GIS Data Management	80%	\$ 160,000	\$ 40,000	\$ 200,000	\$ 154,282	\$ 38,570	\$ 192,852	\$ 5,718
U/K	Planning Studies	80%	\$ 3,600,000	\$ 900,000	\$ 4,500,000	\$ 2,111,136	\$ 527,784	\$ 2,638,920	\$ 1,488,864
468	Administration	0%	\$ -	\$ 200,000	\$ 200,000	\$ -	\$ 116,726	\$ 116,726	\$ -
469	Travel, Training and Seminars	80%	\$ 16,000	\$ 4,000	\$ 20,000	\$ 7,022	\$ 1,755	\$ 8,777	\$ 8,978
473	GIS Data Integration	80%	\$ 280,000	\$ 70,000	\$ 350,000	\$ 214,336	\$ 53,584	\$ 267,920	\$ 65,664
474	Data Analysis	80%	\$ 732,000	\$ 183,000	\$ 915,000	\$ 677,331	\$ 169,333	\$ 846,664	\$ 54,669
475	Automated Traffic Data Collection	80%	\$ 600,000	\$ 150,000	\$ 750,000	\$ 450,398	\$ 112,600	\$ 562,998	\$ 149,602
476	Contract Turning Movement Counts	80%	\$ 216,000	\$ 54,000	\$ 270,000	\$ 120,079	\$ 30,020	\$ 150,099	\$ 95,921
477	Contract Collection of Traffic Volume Counts	80%	\$ 720,000	\$ 180,000	\$ 900,000	\$ 312,372	\$ 78,093	\$ 390,465	\$ 407,628
478	Contract Collection of Vehicle Classification Counts	80%	\$ 680,000	\$ 170,000	\$ 850,000	\$ 470,382	\$ 117,595	\$ 587,977	\$ 209,618
479	Traffic Data Collection - Traffic Counts	80%	\$ 460,000	\$ 115,000	\$ 575,000	\$ 322,621	\$ 80,655	\$ 403,276	\$ 137,379
480	Asset Management System	80%	\$ 328,000	\$ 82,000	\$ 410,000	\$ 321,898	\$ 80,474	\$ 402,372	\$ 6,102
481	Asset Management System Analysis	80%	\$ 76,000	\$ 19,000	\$ 95,000	\$ 73,439	\$ 18,360	\$ 91,799	\$ 2,561
482	Pavement Performance Data Collection Vehicle	80%	\$ 80,000	\$ 20,000	\$ 100,000	\$ 39,978	\$ 9,995	\$ 49,973	\$ 40,022
483	Pavement Structural Testing	80%	\$ 128,000	\$ 32,000	\$ 160,000	\$ 126,150	\$ 31,537	\$ 157,687	\$ 1,850
484	Pavement Friction Data Collection Equipment	80%	\$ 70,400	\$ 17,600	\$ 88,000	\$ 70,305	\$ 17,576	\$ 87,881	\$ 95
485	Nondestructive Subsurface Investigation	80%	\$ 109,600	\$ 27,400	\$ 137,000	\$ 73,690	\$ 18,422	\$ 92,112	\$ 35,910
486	Automatic Road Analyzer	80%	\$ 248,000	\$ 62,000	\$ 310,000	\$ 174,357	\$ 43,589	\$ 217,946	\$ 73,643
487	Pavement Management System (PMS)	80%	\$ 240,000	\$ 60,000	\$ 300,000	\$ 109,734	\$ 27,433	\$ 137,167	\$ 130,266
488	Pavement Engineering Data Processing	80%	\$ 240,000	\$ 60,000	\$ 300,000	\$ 237,972	\$ 59,493	\$ 297,465	\$ 2,028
489	Pavement Engineering Data Analysis	80%	\$ 456,000	\$ 114,000	\$ 570,000	\$ 264,334	\$ 66,084	\$ 330,418	\$ 191,666
490	System Information - Program Coordination	80%	\$ 160,000	\$ 40,000	\$ 200,000	\$ 21,398	\$ 5,349	\$ 26,747	\$ 138,602
491	Multimedia Highway Information System (MMHIS)	80%	\$ 220,000	\$ 55,000	\$ 275,000	\$ 65,519	\$ 16,380	\$ 81,899	\$ 154,481
494	Highway Performance Monitoring System (HPMS)	80%	\$ 208,000	\$ 52,000	\$ 260,000	\$ 148,818	\$ 37,204	\$ 186,022	\$ 59,182
495	Highway Condition Inventory and Analysis	80%	\$ 216,000	\$ 54,000	\$ 270,000	\$ 106,515	\$ 26,629	\$ 133,144	\$ 109,485
496	Transportation Asset Mgmt Plan	80%	\$ 60,000	\$ 15,000	\$ 75,000	\$ 8,252	\$ 2,063	\$ 10,315	\$ 51,748
497	Profilograph Studies	80%	\$ 80,000	\$ 20,000	\$ 100,000	\$ 6,242	\$ 1,560	\$ 7,802	\$ 73,758
TOTAL IN HOUSE PLANNING			\$ 13,432,000	\$ 3,708,000	\$ 17,140,000	\$ 8,678,135	\$ 2,360,687	\$ 11,038,822	\$ 4,753,865