Unified Planning Work Program

for the Birmingham Metropolitan Planning Organization

FY 2020

October 2019 – September 2020

This document is posted at http://www.rpcgb.org/transportation/upwp/

For further information, please contact Scott Tillman, Director of Planning and Operations Regional Planning Commission of Greater Birmingham (RPCGB) Two 20th Street North, Suite 1200 Birmingham, AL 35203

Email: stillman@RPCGB.org

Adopted: September 11, 2019

Regional Planning Commission of Greater Birmingham

Staff to the MPO Charles Ball, Executive Director Scott Tillman, Director of Planning and Operations Michael Kaczorowski, Principal Planner Lindsay Puckett, Principal Planner Harry He, Transportation Engineer Brett Isom, GIS Manager Marshall Farmer, Senior GIS Analyst Laurel Land, Senior Planner Lisa Smith, CommuteSmart/APCA Program Manager

This UPWP was prepared as a cooperative effort of the U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Alabama Department of Transportation (ALDOT), and local governments in partial fulfillment of requirements in Title 23 USC 134 and 135, amended by the FAST Act, Sections 1201 and 1202, December 4, 2015. The contents of this document do not necessarily reflect the official views or policies of the U.S. Department of Transportation.

TRANSPORTATION CITIZENS COMMITTEE 2019

Chair: Vice-Chair:	Willie Osborne Phillip Wiedmeyer		
Last Name	First Name	Membership District	
Adcock	Joanne	North/Northwest Jefferson County	
Bivins	Tyrome	Shelby County	
Brown	Anna	City of Birmingham	
Carroll	Rod	St. Clair County	
Dye	Jackie	Shelby County	
Ferrell	Butch	City of Birmingham	
Giddens	Harry	City of Birmingham	
Ludwig	Bruce	South/Southeast Jefferson County	
McKenna	Barbara	North/Northwest Jefferson County	
Osborne	Willie	City of Birmingham	
Owen	Pittman	City of Birmingham	
Parker	Ryan	South/Southeast Jefferson County	
Richardson	Robert	Shelby County	
Rumph	Calvin	Shelby County	
Saling	Joe	West/Southwest Jefferson County	
Stokes	Sarah	South/Southeast Jefferson County	
Wiedmeyer	Phillip	South/Southeast Jefferson County	

TRANSPORTATION TECHNICAL COMMITTEE 2019

Chair:

Christie Hester

Vacant	•
Vacant	
First Name	Representing
Richard	ClasTran
Clint	Federal Highway Administration (FHWA) (non-voting)
Nan	Birmingham Business Alliance (BBA) (non-voting)
Ken	Jefferson County Dept of Roads and Trans
Geoffrey	UAB Campus Planning
Christopher	City of Vestavia Hills
Matthew	At-Large
Richard	At-Large
Fenn	Trucking Industry
Matthew	City of Homewood
Dan	St. Clair County Engineer
Richard	At-Large
André	UAB Parking and Transportation Services
Greg	At-Large
Tim	City of Birmingham Chief Planner
Ron	ADEM Air Division Chief (non-voting)
Doug	Bicycle/Pedestrian
-	Traffic Safety
	At-Large
Steve	ALDOT Birmingham Area
Christie	At-Large
Scott	Shelby County Highway Dept
	ALDOT Metro Trans Planning Admin (non-voting)
Darrell	At-Large
	BJCTA
	Jefferson County Dept of Health
	Railroad Industry
	ALDOT East Central Region
	City of Hoover
	At-Large
-	At-Large
	At-Large
	At-Large
	City of Alabaster
	At-Large
	At-Large
-	At-Large
-	Federal Transit Authority (FTA) (non-voting)
	At-Large
	Blount County Engineer
	At-Large
	At-Large
	At-Large
	At-Large
	REV Birmingham
	City of Birmingham Transportation
LUNC	
Eric	Shelby County Development Services
	Vacant First Name Richard Clint Nan Ken Geoffrey Christopher Matthew Richard Fenn Matthew Dan Richard André Greg Tim Ron Doug Alacyia Fred Steve Christie Scott Michael

MPO POLICY COMMITTEE 2019

Chair	William Parker
Vice Chair	Randy Cole
Secretary	Stan Hogeland

*Advisory Committee Member

Title	Last Name	First Name	Representing
Councilor	Abbott	Valerie	City of Birmingham
Mr.	Ammons	Steve	Unincorporated Jefferson County
Mr.	Armstrong*	Allen	Blount County Public Transportation
Mr.	Bartlett*	Mark	Federal Highway Administration (non-voting)
Mr.	Beard	Cletus	St. Clair County
Mr.	Bittas*	André	City of Birmingham
Mayor	Brasseale	Jerry	Jefferson County Municipalities - Pleasant Grove
Mayor	Brocato	Frank	Jefferson County Municipalities - Hoover
Ms.	Carter*	Heather	Unincorporated Jefferson County
Mayor	Choat*	Buddy	Jefferson County Municipalities - Trussville
Mr.	Cole*	Randy	Shelby County
Mr.	Curry	Ashley	Jefferson County Municipalities – Vestavia Hills
Mayor	Davis	Clark	Jefferson County Municipalities - Graysville
Mr.	Fowler	James	City of Birmingham
Mayor	Hall	Mark	Shelby County - Helena
Mayor	Handlon	Marty	Shelby County - Alabaster
Mr.	Hatcher	Chris	City of Birmingham
Mr.	Hawkins	Fred	City of Birmingham
Mayor	Henderson	Tom	Jefferson County Municipalities – Center Point
Ms.	Hester*	Christie	Shelby County
Mayor	Hogeland*	Stan	Jefferson County Municipalities – Gardendale
Mr.	Holladay*	Scott	Shelby County
Mr.	Jacks*	Tim	St. Clair County Public Transportation
Commissioner	Knight*	Joe	Unincorporated Jefferson County
Mr.	Leonard*	DeJarvis	Alabama Department of Transportation East Central Region
Mr.	Long	Rod	Shelby County - Hoover
Mayor	Lowery	Jim	Jefferson County Municipalities – Fultondale
, Mr.	, Markert*	Cal	Unincorporated Jefferson County
Mayor	McCondichie*	Roger	Jefferson County Municipalities - Brookside
Ms.	Nolen	Maranda	St. Clair County
Councilor	O'Quinn	Darrell	City of Birmingham
Councilor	Parker*	William	City of Birmingham
Mayor	Parsons	Stevan	Jefferson County Municipalities – Sylvan Springs
, Mr.	Phillips*	Ed	Alabama Department of Transportation (non-voting)
Mayor	Ragland	Johnny	Jefferson County Municipalities - Warrior
Mr.	Revell*	Edwin	City of Birmingham
Mr.	Rice	Allan	Hoover – Jefferson County
Mayor	Richardson	Gary	Jefferson County Municipalities - Midfield
Senator	Roberts	Dan	State of Alabama – State Senator (non-voting)
Commissioner	Shepherd	Rick	Shelby County Commission
Mr.	Smith*	Theodore	Birmingham-Jefferson County Transit Authority
Commissioner	Stephens	Jimmie	Unincorporated Jefferson County
Mayor	Tuck	Loxil	Jefferson County Municipalities - Tarrant
Mr.	Washburn*	Nick	Blount County
Mayor	Waters	Gary	Shelby County - Pelham
Mr.	Westhoven*	Tim	Hoover – Jefferson County
Mayor	Woodfin	Randall	City of Birmingham

RESOLUTION 2019-6

FY 2020 Unified Planning Work Program Birmingham Metropolitan Planning Organization (MPO)

WHEREAS, the Birmingham Metropolitan Planning Organization (MPO) is the organization designated by the Governor of the State of Alabama as being responsible, together with the State of Alabama, for implementing the applicable provisions of 23 USC 134 and 135 (amended by the FAST Act, Sections 1201 and 1202, December 2015); 42 U.S.C. 2000d-1, 7401; 23 CFR 450 and 500; 40 CFR 51 and 93; and

WHEREAS, the U.S. Department of Transportation requires all urbanized areas, as established by the U.S. Bureau of the Census, doing area-wide urban transportation planning that involves more than one Department of Transportation operating administration, to submit a Unified Planning Work Program as a condition for meeting the provisions of 23 U.S.C. § 134; and

WHEREAS, the Regional Planning Commission of Greater Birmingham, in cooperation with the Alabama Department of Transportation, has prepared a Unified Planning Work Program for Fiscal Year 2020; and

NOW THEREFORE, BE IT RESOLVED that the Birmingham Metropolitan Planning Organization (MPO) adopts the Unified Planning Work Program for FY 2020 this 11th day of September 2019.

Birmingham MPO Chair, Vice chair, or Secretary

Charles Ball, Executive Director, RPCGB

TABLE OF CONTENTS

The Trans	portatio	on Planning Process	1
Task 1.0	Admir	nistration	
	1.1	MPO Administration	5
	1.2	Unified Planning Work Program	6
	1.3	Capital and Operating Purchases	7
	1.4	Education and Training	9
Task 2.0	Planni	ng Information	10
	2.1	Data Collection and Management	10
	2.2	Data Analysis and Forecasting	12
	2.3	Geographic Information Systems	14
	2.4	Model Development Program (rev. 11/14/19)	16
Task 3.0	Public	Involvement	18
	3.1	Public Involvement and Outreach	18
Task 4.0	Enviro	nmental Process Planning	20
	4.1	Air Quality Planning	20
	4.2	Environmental Consultation Process	21
	4.3	Advance Planning, Programming, and Logical Engineering (APPLE)	23
	4.4	Climate Change	26
Task 5.0	Transp	portation Systems	28
	5.1	Regional Transportation Plan	28
	5.1.1	Air Quality Conformity Analysis and Reporting	30
	5.1.2	Regional Transportation Plan Project Listing for Air Quality Conformity	31
	5.2	Transportation Improvement Program (TIP)	32
	5.2.1	Amend TIP Project Listings for Air Quality Conformity	33
	5.3	Public Transportation Planning	34
	5.4	Active Transportation Planning	35
	5.5	Logistics Systems Planning	37
	5.6	Transportation System Performance Management and Monitoring (rev. 11/14/19)	. 39
	5.7	Transportation Safety Planning (rev. 11/14/19)	41
	5.8	Technical Assistance for Local Communities and Agencies (rev. 11/14/19)	
Task 6.0	Progra	ams and Technical Assistance	45
	6.1	CommuteSmart Program (Rideshare)	45
	6.2	Building Communities Program	46
Task 7.0	ADA		. 47
	7.1	Compliance	47

List of Acronyms	A-1
Table 1: FY 2020 Organizational Responsibility, Federal (rev 11/14/19)	A-2
Table 2: FY 2020 Funding Sources (rev 11/14/19)	A-4
Structure of the Birmingham MPO	A-5
Metropolitan Planning Area/Transportation Management Area Map	A-6
Livability Indicators	A-7
Current and Potential Planning Studies	A-8

THE TRANSPORTATION PLANNING PROCESS

OVERVIEW

As a condition to the receipt of federal highway and transit capital and operating assistance, each Metropolitan Planning Organization (MPO) is required to have a transportation planning process. This process includes the development of a long-range or regional transportation plan, short-range transportation improvement program, a plan to promote attainment of air quality standards, human services coordinated transportation plan, and a work program that identifies planning and project development activities.

Certification of the transportation planning process is conducted every four years by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) and is necessary to receive surface transportation program, air quality, national highway system, interstate maintenance, state bridge replacement, and transit capital and operating funds. The Birmingham Metropolitan Planning Organization (MPO) membership is geographically representative of the Metropolitan Planning Area (MPA), the entire boundaries of Jefferson and Shelby counties, and portions of Blount and St. Clair Counties, based upon the most recent (2010) decennial U.S. census.

The Regional Planning Commission of Greater Birmingham (RPCGB) is the designated recipient of U.S. Department of Transportation (USDOT) planning funds used to assist the MPO in the performance of its responsibilities. These funds are designated by the State of Alabama, in agreement with the RPCGB.

Work tasks described in this report are conducted on a continual basis. An agreement among the Alabama Department of Environmental Management (ADEM), Alabama Department of Transportation (ALDOT), Birmingham-Jefferson County Transit Authority (BJCTA), RPCGB, Jefferson County Department of Health (JCDH), and the MPO outlines the responsibility of each organization in the transportation planning process.

PURPOSE

The Unified Planning Work Program (UPWP) is the document that guides the MPO in fulfilling its planning responsibilities for the upcoming year. The primary objective of the UPWP is the development of an integrated planning program that considers planning activities and coordinates these activities to produce a total transportation plan that serves everyone. The UPWP presents the budget and work tasks necessary to accomplish and maintain the transportation planning process within the Birmingham MPA.

TITLE VI IN THE PREPARATION OF THE UPWP

It is the policy of the Birmingham MPO to provide open public input in the preparation of plans and programs, consistent with the requirements under the current transportation legislation:

- 1. Open Process: To have an open planning process that encourages early and continued public participation.
- 2. Information Access: To provide complete and timely information to interested parties and the public regarding the plans, programs, procedures, policies and technical data produced or used during the planning process.
- 3. Notice of Activities: To provide timely and adequate public notice of meetings, reviews and major document availability.
- 4. Public Input and Organization Response: To demonstrate consideration and recognition of public input and to provide appropriate responses thereto.
- 5. Inclusive Process: To protect low income and minority communities/citizens from disproportionate adverse impacts based on planning and implementation of projects and programs identified in the

RTP and TIP. The MPO provides considerable opportunities for participation, both formal and informal, for citizens to share ideas and concerns throughout the planning and decision-making process.

Additionally, the Birmingham MPO is and will be compliant with and will follow all Title VI laws, processes, and programs to include the following:

- Civil Rights Act of 1964, 42 USC 2000d, et seq. which prohibits exclusion from participation in any federal program on the basis of race, color, or national origin.
- 23 USC 324 which prohibits discrimination on the basis of sexual orientation, adding to the landmark significance of 2000d. This requirement is found in 23 CFR 450.334(1).
- Rehabilitation Act of 1973, 29 USC 701 Section 504, which prohibits discrimination on the basis of a disability, and in terms of access to the transportation planning process.
- Americans with Disabilities Act of 1990 which prohibits discrimination based solely on disability. ADA encourages participation of people with disabilities in the development of transportation and paratransit plans and services. All meetings conducted by the MPO will take place in locations which are accessible by persons with mobility limitations or other impairments.
- Executive Order 12898 or referred to as Environmental Justice, which requires that federal programs, policies and activities affecting human health or the environment will identify and avoid disproportionately high and adverse effects on minority or low-income populations. The intent is to ensure that no racial, ethnic, or socioeconomic group bears a disproportionate share of negative environmental consequences resulting from government programs and policies.
- A Limited English Proficiency (LEP) Plan is required by Title VI of the Civil Rights Act of 1964, Executive Order 13166, and FTA Circular C 4702.1B, October 2012. The Birmingham MPO has completed a Four Factor Analysis of the Birmingham MPA to determine requirements for compliance with the Limited English Proficiency (LEP) provisions. An LEP Plan has been developed and can be accessed as part of the Public Participation Plan at http://www.rpcgb.org/transportation-planning/public-involvement/

The UPWP is developed annually and is available on the RPCGB website prior to being introduced for discussion at committee meetings. All committee meetings of the MPO are preceded by notices (containing the agenda, date, time, and location of the meeting) and supporting documentation. Notice is provided at least one week prior to meetings or as designated in committee bylaws. Notice is also provided to local media representatives and groups and individuals representing disadvantaged communities. All notices ask that individuals needing special accommodations notify the RPCGB at least three business days prior to the date of the meeting, so necessary arrangements can be made. Notices are posted on the internet and the bulletin board outside RPCGB offices. The public has an opportunity to participate in discussions held at the committee meetings. Detailed public participation procedures are outlined in the 2014 Public Participation Plan (PPP) which can be found at http://www.rpcgb.org/transportation-planning/public-involvement/

SCOPE OF THE PLANNING PROCESS

Planning tasks reflect the planning factors in the Fixing America's Surface Transportation (FAST) Act.

- 1. Support the economic vitality of the metropolitan area
- 2. Increase the safety of the transportation system for motorized and non-motorized users
- 3. Increase the security of the transportation system for motorized and non-motorized users
- 4. Increase accessibility and mobility of people and freight
- 5. Protect and enhance the environment, promote energy conservation, improve quality of life

- 6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- 7. Promote efficient system management and operation
- 8. Emphasize the preservation of the existing transportation system
- 9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation
- 10. Enhance travel and tourism

The committee process is the basis for conducting UPWP tasks. Meetings of the Transportation Citizens Committee, Transportation Technical Committee, MPO Advisory Committee, and the MPO Policy Committee are held monthly or as needed. In addition to the four transportation committees, subcommittees and joint committees are regularly used for the development of the Transportation Improvement Program (TIP), Regional Transportation Plan (RTP), congestion management activities, and major transit projects.

Most traditional tasks are funded with planning funds (PL). Specialized tasks related to ridesharing, air quality, and local land use/transportation, utilize supplemental funds from the Congestion Mitigation Air Quality Program (CMAQ) and Surface Transportation Block Grant (STBG). Large-scale transit planning projects are funded through the FTA.

Livability Principles and Indicators

Federal and state agencies are using performance measures as a way of ensuring greater accountability for expenditure of public funds. ALDOT has adopted the Livability Principles and Indicators as a sustainability measurement against future actions. These indictors will be used to develop the Birmingham RTP, TIP, Public Participation Plan, Congestion Management Plan, and the Air Quality Conformity Report.

All planning tasks will be measured against these Livability Principles:

- 1. Provide more transportation choices
- 2. Promote equitable, affordable housing
- 3. Enhance economic competitiveness
- 4. Support existing communities
- 5. Coordinate policies and leverage investment
- 6. Value communities and neighborhoods

As a measure of these principles, the MPO has developed Livability Indicators:

- 1. Mode Share percent of travelers using different travel modes
- 2. Jobs/Housing Balance total number of jobs/total housing by area
- 3. Travel Time Index congested vs. free-flow travel time
- 4. Number of crashes/incidents by travel mode (community safety emphasis)
- 5. Project Funding Diversity percent of transportation projects utilizing multiple funding sources (federal, state, local)
- 6. Partnerships and Public Involvement number of partnerships and documentation of PI Activities

Transportation Performance Management

In accordance with MAP-21 and the FAST Act performance-based surface transportation program, appropriate targets have been adopted by ALDOT, the Birmingham MPO, and the Birmingham-Jefferson County Transit Authority.

<u>Vision</u>

Following is the vision statement for the Birmingham metropolitan area:

Transportation has become the connective tissue of the region. By foot, by bike, by car, or by public transportation, residents experience reduced congestion and higher mobility, both of which are the result of four important decisions:

- 1. Preserving and improving the existing local and interstate highways;
- 2. Developing a responsive, efficient, and effective public transportation system;
- 3. Supporting the use of alternative transportation modes; and
- 4. Encouraging sustainable development patterns.

This UPWP contains work tasks necessary for the RPCGB, BJCTA, and ALDOT to conduct transportation planning activities for the Birmingham MPA.

TASK 1.0: ADMINISTRATION

1.1 MPO Administration

Objectives

To provide transportation committees, agencies, governments, and the public with transportation-related information, education, and training to support transportation operations and federal, state, and local transportation initiatives.

Previous Work

- Prepared for and participated in committee meetings
- Attended RPCGB board meetings and annual meeting
- Prepared and submitted invoices to ALDOT and reviewed RPCGB financial statements
- Provided information to the RPCGB auditors and reviewed audit report
- Reviewed all agreements for consistency with bylaws
- Reviewed all funding agreements
- Provided information and assistance to individuals, businesses, organizations, and committees
- Participated in cooperative efforts with agencies and organizations outlined in the 3C agreement

Proposed Work

- Monthly business and committee meetings (Citizens, Technical, Advisory, and Policy)
- Ad hoc committee meetings (Congestion Management)
- Attend RPCGB Board, Finance, Program Budget, and annual meetings
- Prepare and submit monthly invoices to ALDOT and review monthly financial statements
- Provide information to the RPCGB auditors and review draft and final audit reports
- Review agreements for consistency with regulations and bylaws
- Prepare scopes of work for programs and projects
- Provide information and assistance to individuals, businesses, organizations, and committees
- Update committee bylaws

Products

- Committee notices, agendas, minutes, resolutions, and support documentation
- Invoices to ALDOT
- Update of committee bylaws
- Staff services necessary to ensure certification of the transportation planning process

Staffing

RPCGB

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$330,165</u>
PL	\$264,132
Local	\$66,033

1.2 Unified Planning Work Program

Objectives

To produce a document that outlines work and identifies planning priorities and activities to be carried out within the Birmingham MPA.

Previous Work

- Adopted a UPWP that identified tasks and funding sources
- Developed an annual report for ALDOT, noting participation of Disadvantaged Business Enterprises (DBEs)

Proposed Work

- UPWP activities will be identified by using planning emphasis areas for expenditure of PL funds. Priorities for funding projects in the TIP are determined from the National Planning Goals, federal Planning Factors, and the interests of the transportation committees.
- An annual report will be completed and submitted to ALDOT, noting the status of tasks and DBE participation.
- Prepare a Draft and Final FY 2021 UPWP

Products

- Draft and Final UPWP for FY 2021
- FY 2020 annual report with DBE participation

Staffing

RPCGB

Timeline for Proposed Work

- Draft and Final FY 2021 UPWP Summer 2020
- FY 2020 annual report with DBE participation October 2020

Financial Responsibility

Total	<u>\$23,125</u>
PL	\$18,500
Local	\$4,625

1.3 Capital and Operating Purchases

Objectives

To maintain, upgrade, and purchase software and hardware for gathering information, simplifying tasks, and articulating data to support transportation planning functions.

Previous Work

Purchased demographic information

Proposed Work

- Software purchases, including license/maintenance fees and upgrades, are regularly made for geographic information systems, surveys, databases and spreadsheets, graphics, and operating systems
- Capital purchases to include servers, personal computers and peripherals, and hardware/software for field data collection
- Analyze existing and potential transit routes and evaluate demographic information
- Monitor and contextualize capacity utilization, operational performance and finance data

As outlined in the Agreement for Administering U.S. Department of Transportation for Financial Assistance for Transportation Planning between the State of Alabama and the Regional Planning Commission of Greater Birmingham, Article 21 states, in part, "All purchases over \$1,500 must be approved by the State, in advance, in writing, to be eligible for reimbursement." Further, ALDOT requires anticipated purchases more than \$5,000 to have a line item entry in the UPWP.

Product	Total Cost	UPWP Task	Purpose
3D Analyst	\$500	2.3	Desktop extension license for GIS analysis
Adobe Creative Cloud	\$3,500	2.2	Software subscription for online map publishing and docu- ment production
ArcEditor CU/SU	\$9,900	2.3	Desktop software licenses for GIS analysis and mapping
ArcGIS Online/ ArcGIS Pro	\$3,500	2.3	GIS subscription service for cloud-based mapping
ArcInfo CU	\$3,000	2.3	Desktop software licenses for GIS analysis and mapping
ArcServer Enterprise	\$5,000	2.3	GIS server software application
ArcView CU	\$2,700	2.3	Desktop software licenses for GIS analysis and mapping
ArcView SU	\$700	2.3	Desktop software licenses for GIS analysis and mapping
Community Viz	\$1,000	2.2	Desktop software license for GIS data analysis and model- ing
Equipment for Planning	\$5,500	2.3	Tablets, Projectors, kiosk mounts for public input, etc.
ESRI Community Analyst	\$4,000	2.3	GIS subscription service for data profiles and analysis
InfoGroup	\$7,000	2.1	Employment data purchase for GIS analysis
Linear Referencing System (LRS) Data Acquisitions	\$2,500	2.2	Transportation data purchases for LRS event table produc- tion, GIS analysis, and model forecasting
Maxwell Render Full Suite	\$2,000	6.2	Advanced 3D rendering software
MioVision Data Processing	\$3,000	5.6	Traffic cameras data collection and processing
mySidewalk	\$5,000	2.1	City intelligence platform to track and analyze data
Network Analyst	\$500	2.3	Desktop extension license for GIS analysis

The following capital and operating equipment are programmed:

Product	Total Cost	UPWP Task	Purpose
SketchUp Pro	\$1,100	6.2	3D modeling software upgrade
Southern Exposure Infor- mation	\$7,000	2.2	Construction Permits and Housing Market Data for socio- economic and economic forecasting/analysis
Spatial Analyst	\$500	2.3	Desktop extension license for GIS analysis
Strava Metro	\$5,000	5.4	Additional/updated aggregated bicycling data for bicycle planning - upgrade
Woods and Poole	\$495	2.2	Demographic and socioeconomic data purchase for analy- sis and forecasting.
X Tools Pro	\$265	2.3	Desktop software licenses for GIS analysis and mapping
TOTAL ANNUAL COSTS	\$73,660		

Products

- Software and upgrades
- Hardware and servers
- License and maintenance fees

<u>Staffing</u>

RPCGB and third-party suppliers

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$73,660</u>
PL	\$58,928
Local	\$14,732

1.4 Education and Training

Objectives

To develop and maintain technical proficiency of staff to enable proper guidance and development of the planning process.

Previous Work

Staff members attended, made presentations at, hosted, and assisted with workshops, conferences, and trainings; subscribed to and read relevant professional publications.

Proposed Work

- Attend, make presentations, host, and/or assist with workshops, conferences, and trainings
- Subscribe to and read relevant professional publications

Products

- Knowledgeable staff
- Increased cooperation with other agencies
- Annual transportation/planning conferences
- Training for elected officials, municipal staff, and consultants
- Other workshops, conferences, and trainings

Staffing

RPCGB

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$75,000</u>
PL	\$60,000
Local	\$15,000

TASK 2.0: PLANNING INFORMATION

2.1 Data Collection and Management

Objective

To collect, create, and maintain data in support of local and regional transportation and community planning projects.

Previous Work

The RPCGB has purchased data and data subscriptions from vendors including ESRI, InfoGroup, Southern Exposure, Geolytics, and other supplementary data services such as Strava and Inrix transportation data. The RPCGB expanded its existing GIS inventory to include additional economic, transportation, property, environmental, and demographic data. Data collection activities have focused on population and socioeconomic information, local developments, brownfields, and employment characteristics.

The maintenance and expansion of event tables for use in the regional LRS is necessary to better manage and analyze transportation issues. The RPCGB has continued to collect and build transportation data to improve the capabilities of the Linear Referencing System (LRS). Event tables specific to transit routes, Inrix (travel time and freight) datasets, TIP, and functionally classified roadways have been evaluated for incorporation into the LRS.

RPCGB continues to expand its GIS resources. Through the sustained production and maintenance of demographic, socioeconomic, and transportation data, RPCGB has advanced its GIS data inventory and has added cloud-based mapping resources, geo-applications, and open data resources to its GIS assets. Mobile GIS resources have also been utilized.

Proposed Work

The RPCGB will purchase information from vendors such as ESRI, InfoGroup, Geolytics, Southern Exposure, Woods and Poole Economics, and other supplemental data services including origin and destination data, Inrix (to support travel time data collection efforts for functionally classified non-National Highway System roadways), and Strava to support non-motorized transportation. Reports generated will address demo-graphic/socioeconomic trends, county profiles, comparison reports, socioeconomic datasets, transportation system inventories, travel characteristics, and infographics. Additional collection activities may include, but are not limited to physical data, market data, industry subscriptions, online purchases, and data services.

The RPCGB will work with ALDOT to coordinate and align their LRS in order to create a near seamless data flow between the two systems. The RPCGB also will maintain and expand event tables for use in these LRS as it is necessary to better identify, analyze, and manage transportation issues. The RPCGB will continue to collect and build transportation data to improve the capabilities of the LRS. Event tables specific to transit routes, Inrix (travel time and freight) datasets, TIP, and functionally classified roadways will be incorporated into the LRS. The maintenance and expansion of event tables for use in the regional LRS is necessary to better manage and analyze transportation issues.

The RPCGB will continue to expand its web presence through cloud-based mapping functionalities and open data resources. This web enhancement provides easier public access to tabular and spatial data to better facilitate sharing and decision-making. In addition to the provision of maps, map services, downloadable spatial data, traffic counts, and associated reports, this portal is intended to provide a single-source point for information to the public, elected officials, and the development community.

The MPO will collect, maintain, and report on performance indicators, including metrics to support the federal Planning Factors, for use in benchmarking transportation system performance and informing the decision-making process. This would include project prioritization and selection, as directed by Congress and regulated by the FHWA, and in support of other tasks within this UPWP.

Products

- Update of the spatial data catalog and spatial data assets
- Spatial data expansion and maintenance through necessary development, purchases, and partnerships
- Demographic, socioeconomic, economic, transportation and other planning-related data files
- Regional reports that compare selected data and regional development characteristics, including demographic and socioeconomic regional trends, regional population and employment projections, county and local profiles, and both themed analytical data reports and maps.
- Reporting on local roadway facility traffic counts, transit ridership, nonmotorized travel information, and other transportation and planning statistics for incorporation into the LRS. Other information collected includes, but is not limited to freight/goods movement, incident management, travel times, congestion by travel mode, TSMO, and regional roadway characteristics.
- Addition and update of static maps to the RPCGB website
- Expansion of the online map gallery to make selected thematic maps readily available for public use through the RPCGB website and project websites
- Continued expansion of public domain spatial datasets to the Open Data portal

Staffing

RPCGB, direct contract labor, and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$50,000</u>
PL	\$40,000
Local	\$10,000

2.2 Data Analysis and Forecasting

Objectives

To collect, create, and maintain current and forecasted demographic and socioeconomic data used for the transportation demand model and other planning activities.

Previous Work

The RPCGB has continued to develop and refine demographic and socioeconomic data in support of its transportation and community planning efforts. In addition to the development of traffic analysis zone (TAZ) datasets, several intermediate year datasets have been developed for multiple census geographies, including TAZ, Block Group, Census Tract, Planning District, and County levels, and has been utilized for travel demand evaluations, as well as local area projects and publications. Continued refinement and maintenance of these forecasts has included data purchases, such as those from InfoGroup, ESRI, and Woods & Poole Economics. The data has been used in projects and publications, including the RTP and in support of other agency planning objectives.

The RPCGB has continued to collect a variety of data, such as census, economic, natural resources, transportation, transit, demographic, and socioeconomic, for use within the overall local and regional planning environment.

The RPCGB developed and maintained a regional transportation demand model for the Birmingham MPA, which is a primary screening tool used to identify deficiencies in the future transportation system. The Cube Voyager (Avenue) modeling software was used for travel demand modeling and all other applicable processes, up to and including air quality conformity analysis in support of budget-based estimate preparation using the MOVES2014a software.

Proposed Work

Proposed work includes the continued refinement and maintenance of forecast datasets. Proposed work also includes the development, maintenance, and reporting of regional planning factors. Toward this effort, additional data may be purchased from selected vendors for use in the developing forecasts, and may include, but not be limited to, such vendors as ESRI, InfoGroup, Woods and Poole, Southern Exposure, Geolytics, and/or other appropriate economic and/or forecasting tools and models.

In support of broader regional planning efforts, the proposed forecasting will consider data and projections outside the MPO boundaries. The RPCGB will also coordinate with appropriate agencies beyond the MPO boundaries in this effort.

Products

- Socioeconomic, demographic, and economic datasets (base year and forecast) by TAZ, planning district, census tract, county and region
- Regional Projections Report
- Special Reports
- Support of other agency reports and studies

Staffing

RPCGB, direct contract labor, and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

FHWA PL and FTA 5303 planning funds have been consolidated into one PL category

 Total
 \$45,000

 PL
 \$36,000

 Local
 \$9,000

2.3 Geographic Information Systems

Objectives

To provide spatial data resources, including software, hardware, and data, to support agency operations for both program management and project analysis.

Previous Work

The RPCGB has been successful in developing and expanding its GIS capabilities, including ESRI cloud-based mapping services. This mapping service has enabled the RPCGB to publish interactive thematic maps in a public domain gallery. In addition to the visual dissemination of regional data, users can query data and incorporate published features into their own maps. The RPCGB has additionally added the functionality of geospatial applications, enhanced map viewing applications, and launched an Open Data portal for the dissemination of public domain geospatial data.

RPCGB has continued to expand its library of GIS datasets, including county parcel updates, street centerlines, building footprints, and aerial imagery. Utilization of the ESRI geospatial platform has been critical to the success of the planning staff through improved project analysis. RPCGB upgraded to ArcMap 10.7 and has remained current on maintenance through its participation in the state Enterprise License Agreement (ELA) program. The RPCGB has also continued to utilize mobile GIS technology to enhance data collection efforts.

Proposed Work

- Continue to develop and expand GIS capabilities specific to the ESRI cloud-based map service platform and geospatial/mobile application needs
- Continue to build inventory of GIS datasets, including both raster and vector datasets
- Acquire routine imagery and/or LiDAR updates to support its planning efforts
- Continued acquisition, development, and maintenance of GIS-related data for use in the spatial analysis and visual display components of transportation and community planning projects
- Continue to advance the development of an online GIS open data portal site in cooperation with participating agencies to enable public access to selected GIS datasets (public domain) to promote data sharing and use of common datasets
- Additional training and/or GIS-related software or hardware, applications, extensions, or licenses may be acquired once evaluated and determined to be necessary and appropriate to fulfill project or staff expectations
- Map Services

Products

- Hardware/software acquisition
- Derivative products and analyses
- Partnerships and collaborations
- Updated orthophotographic imagery
- Updated LiDAR
- The continuation of data collection, development, and maintenance
- The continued expansion of the GIS system including the cloud-based platform environment
- The expansion of GIS capabilities through training, conferences, workshops, and product evaluations
- Local government hardware and software assistance

- ESRI maintenance of the GIS system, map services and analysis tools (ESRI ArcMap, ArcGIS Online, ArcGIS Pro, and ESRI Community Analyst)
- The identification and acquisition of additional GIS visualization and analytical tools such as ArcGlobe, ArcScene, City Engine, and ArcGIS Pro

Staffing

RPCGB, direct contract labor and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$105,000</u>
PL	\$64,000
STPBH	\$20,000
Local	\$21,000

2.4 Model Development Program (rev. 11/14/19)

Objectives

To develop and maintain traffic models, air quality emission models, and traffic simulation model for the transportation planning process.

Previous Work

Cube Voyager is the primary travel demand modeling software in use by the Birmingham MPO. It is used to analyze travel demands within the Birmingham MPA, perform network travel demand modeling, and support air quality conformity estimate preparation using the Motor Vehicle Emission Simulator (MOVES) software. Within the Birmingham MPA, both Cube Voyager and MOVES2010b are used for the 2045 RTP and for Air Quality Transportation Conformity Determination, respectively.

In the early part of FY2019, completed both travel demand model runs and air quality model runs for the 1997 ground level Ozone 1-hour standard for the 2040 RTP by FHWA/EPA. With new base year 2015, coded highway networks for years 2017, 2024, 2034, 2040, and 2045 for the 2045 RTP. Completed both travel demand model runs and air quality model runs for the 2045 RTP.

The MOVES2010b has been updated to the latest version of Air Model from EPA, MOVES2014 (version a and b). The MOVES2014b was used as the regional transportation conformity air model for the new FY 2020-2023 TIP and 2045 RTP in 2019. The MOVES2014b was used for the regional emission rate estimates and CMAQ project emission calculations in 2018. Traffic projection and OD analysis based on travel demand model were conducted in various studies and projects in 2018. The transit network updates based on 2015-2016 were completed.

In FY 2011, Cube Avenue was purchased and has been successfully tested for subarea traffic simulation. The Cube Avenue model was successfully expanded and applied at the regional level, enabling the Birmingham MPO to evaluate the impacts of projects at a larger geographic scale, as well as the ability to conduct before and after studies.

In FY 2015, Synchro Studio was purchased and has been installed successfully for corridor traffic simulation.

Proposed Work

The RPCGB will maintain the Cube Voyager and Air Model for the short and long-range transportation plans. In recognizing changes affecting the Greater Birmingham region, and the changing needs of the MPA as it relates to transportation planning, the RPCGB will review the OD datasets generated from Citilab's Streetlytics. The transit network and future transit development plan will be merged for modeling. The model will be modified to address regional travel demands, congestion situation, and performance measures. Local datasets will be compiled as inputs for the Air Model.

Specific work tasks include:

- Development and maintenance of the regional travel demand model for the Birmingham MPA, as needed for RTP and TIP updates
- Training of staff to utilize the best modeling practices
- Utilization of the model in support of existing projects and scenario planning
- Development and maintenance of MOVES2014b. Update MOVES input files with all local datasets and validate speed profiles based on local observations. Emissions factors will be developed in accordance with MOVES2014b to meet the requirements set forth in 40 CFR 51 and 93.

- Cooperate with ALDOT, ADEM, FHWA, FTA, EPA, and other agencies to oversee/share the data collections, methodologies of data development, documentations, and modeling practices
- Project level analysis air quality models will be developed
- Scripts will be added into models to address performance measures related to congestion mitigation and air quality
- Modify the model/factors in order to merge the new OD datasets to the Cube Voyager
- Use Synchro Studio to enhance analyses of existing traffic conditions and, if necessary, operational and scenario planning in corridor studies and transportation sectors of the comprehensive plan

Products

- Travel Demand Model Updates with OD datasets
- MOVES2014b Air Quality Models for regional emission rate datasets
- Project Level Analysis Model Runs for CMAQ projects
- Congestion and Air Quality Analysis related to Performance Measures
- Synchro Traffic Simulation Model

Staffing

RPCGB, direct contract labor, and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$175,000</u>	
PL	\$140,000	(rev. 11/14/19)
Local	\$35,000	

TASK 3.0: PUBLIC INVOLVEMENT

3.1 Public Involvement and Outreach

Objectives

To maintain a process for providing opportunities for everyone to be involved in the transportation planning process, with attention to individuals who are disadvantaged and/or vulnerable.

Previous Work

- Announcements for all meetings, trainings, and public involvement were posted on the RPCGB/MPO website and emailed to parties of record.
- A public involvement meeting was held in December 2018 for the 2015 Conformity Determination Report Amendment and documented in a Public Involvement Report.
- A public involvement meeting was held in May 2019 for the 2045 RTP, FY 2020-2023 TIP, and 2019 Air Quality Conformity Report and documented in a Public Involvement Report.
- Notices and supporting documentation were provided to committee members.
- The website was maintained and updated with links to project documentation.
- Social media was used to communicate with the public; online participation for all planning activities was encouraged.
- A DBE and Title VI report was completed and submitted to ALDOT.
- All procedures were followed in accordance with the Public Participation Plan.
- The MPO facilitated, participated, and/or hosted training opportunities, including the RPCGB Annual meeting, workshops, and other opportunities for education on multimodal transportation.

Proposed Work

- Coordinate with ALDOT on setting goals, objectives, performance measures, and targets, as required by the FAST Act, for inclusion into the operational plans (RTP, TIP, Congestion Management Plan, and Conformity Report)
- Update the Public Participation Plan (PPP) to ensure that agencies and the public have full access to documents and data
- Maintain MPO website with updates and links to project documentation
- Update and maintain MPO participant database
- Indicator data collection, processing, and presentation
- Meetings and meeting announcements, including monthly committee meetings, public involvement meetings, project meetings, and community outreach, as needed
- Project newsletters
- Direct mailings, email announcements, press releases, flyers, notices, and fact sheets
- Facilitate technical workshops. Costs to include, but are not limited to, speakers, logistics, and handouts
- Develop interactive online surveys and other web-based outreach activities
- Prepare and distribute comment forms and surveys

- Title VI, Americans with Disabilities Act, and DBE Activities:
 - Documentation of minority representation
 - o Documentation of third-party DBE activities conducted for projects funded by FHWA and FTA

Products

- Documentation of public involvement meetings/outreach activities
- Documentation and reporting of public involvement outreach
- Title VI Report
- DBE Report
- Transportation planning/project web pages
- MPO member training and education events/courses

Staffing

RPCGB, direct contract labor and/or third-party contractors

Timeline for Proposed Work

- Title VI Report October 2019
- DBE Report October 2019
- Updated Public Involvement Plan Fall 2019

Financial Responsibility

Total	<u>\$48,000</u>
PL	\$38,400
Local	\$9,600

TASK 4.0: ENVIRONMENTAL PROCESS PLANNING

4.1 Air Quality Planning

Objectives

To achieve and maintain compliance with national air quality standards, to protect and improve public health, to minimize the economic impacts on existing businesses and support economic growth consistent with clean air goals in Jefferson and Shelby counties.

Previous Work

Alabama Partners for Clean Air (APCA) worked on many outreach events throughout the year, particularly in the business and civic community. APCA conducted voluntary emission testing, promoted idle-free zones and facilitated a Car Care program. A report documenting the program and funding activities of APCA was completed for the period October 1, 2018 – September 30, 2019.

Proposed Work

The following activities will be conducted by the APCA, with assistance provided by the RPCGB:

- Marketing and public outreach educates the public about air quality issues and the consequences that individual choices have on air quality
- Employer and employee outreach to get major employers involved in air quality issues and encourage employees to travel to work by modes other than single-occupant vehicles
- Science and environmental education teaches children about air pollution, its health impacts, and how it can be prevented
- Clean Cities and Alternative Fuels program to reduce emissions from fleet vehicles through hybrid technology and alternative fuels. The Alabama Clean Fuels Coalition is lead partner
- Air Quality Forecasting program is to produce and issue daily forecasts of particle pollution levels in Jefferson and Shelby counties. The lead partner for this activity is the Jefferson County Department of Health.
- Voluntary Emissions Testing and Vehicle Repair provides a free emissions check for vehicle owners and encourages owners of high emitters to have their vehicles serviced
- Program Administration includes managing all air quality contracts, processing invoices, producing the annual report, monitoring performance and execution of contracts, and providing support to the APCA

Products

Annual Report documenting contract performance of organizations, including emissions reductions for the previous fiscal year

Staffing

RPCGB, direct contract labor and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Annual Report – April 2021

Financial Responsibility

Total	<u>\$812,500</u>
CMAQ	\$650 <i>,</i> 000
Local	\$162,500

4.2 Environmental Consultation Process

Objectives

To link the transportation planning and environmental assessment processes early in the project development phase. To inform the project development and NEPA processes with the results of the environmental consultation process. To establish inter-agency, cross-disciplinary communication and education. To identify and pursue collaborative, cross-disciplinary environmental mitigation strategies and funding opportunities.

Previous Work

- Collected a brownfields database for the Voluntary Cleanup Program locations
- Participated in the Brownfield Task Force
- Consulted with federal and state resource agencies regarding the development and advancement of federal aid, and state/locally funded transportation projects
- Environmental data collected to catalog and update information specific to:
 - Hazardous Waste Air Release (FRS sites)
 - Superfund Sites
 - o Toxic Release Inventory
 - o Brownfields
 - o Environmental Hazards

Proposed Work

- Environmental Mapping continuous updates and refinements to the environmental maps and data including cultural resources
- Continue to participate in and provide support to brownfield planning efforts
- Promote consistency between the RTP and state and local land use plans and plans for conservation and development
- Encourage the reduction or mitigation of stormwater impacts on surface transportation
- Outreach and Education Activities Provide educational opportunities and training to state and municipal governments on environmental planning topics

Note:

- 1. The Alabama Department of Transportation Environmental Technical Services (ALDOT ETS) shall remain the sole arbiter of environmental issues on state and federal projects in Alabama and must be consulted in all instances. ALDOT may seek consultation with the FHWA on certain matters and will seek federal approval on a project only when all issues have been addressed.
- 2. Except for certain duties and responsibilities extended to the Birmingham MPO in writing and specific to a project and/or a consultant representing an MPO for a specific project, all other actions are the province of ALDOT ETS.
- 3. Early or initial environmental coordination relating to a specific project with state and federal resource agencies shall only be carried out by the ALDOT ETS.

Products

- Environmental data acquisition and mapping
- Outreach and education activities

Staffing

RPCGB, direct contract labor and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$2,250</u>
PL	\$1,800
Local	\$ 450

4.3 Advanced Planning, Programming, and Logical Engineering (APPLE)

Objectives

To improve the quality and timelines of the overall project development process by:

- Assisting local governments in determining project feasibility in advance of entering an expensive and extended project development process
- Assisting project sponsors in better articulating project scope and understanding both the planning considerations and potential costs
- Assisting the project development process by educating local governments about the ALDOT project development process
- Providing information to the Birmingham MPO to better manage uncertainties in program funding

Previous Work

Completed and ongoing APPLE Projects include:

- City of Vestavia Hills Cahaba Liberty Trail Project (complete)
- Homewood Intersection and Corridor Traffic Operational Study (complete)
- St. Clair County US 411 from CR 10 (Park Avenue) to Kerr Road (complete)
- Mountain Brook Traffic Study (complete)
- Pelham Trails and Greenways Study (complete)
- Mountain Brook Bridges Study (complete)
- Pelham New Roads Study (complete)
- Helena School Intersections Study (complete)
- Jefferson County Acton Road Study (complete)
- UAB Complete Streets/Road Diet Study (complete)
- Dunnavant Valley Greenway Study (complete)
- Mountain Brook Sidewalks Study (complete)
- Lakeshore Extension Study
- CR-47/CR-39 Intersection Study (complete)
- Vulcan Greenway Study (complete)
- Crosshaven Drive Study (complete)
- Hollywood Blvd/US-280 Study
- 20th Street Study (complete)
- Avenue F Bridge Study
- Argo Intersections Study (complete)
- Gardendale New Road Study (complete)
- Cahaba River Road Study (complete)
- UAB North-South Streets Study (complete)
- Springville SR-174/Murphrees Valley Road Study (complete)
- US-411 Interchange Study
- Commuter Rail Study
- Crestwood Blvd Corridor Study
- Calera State Route 25 Realignment Study
- Vestavia Hills Traffic Operations Study Phase 1
- Overton Road Traffic Study
- Central Avenue Connector Study

Proposed Work

The RPCGB will continue to assist local governments and small project sponsors in assessing a project's feasibility. The feasibility assessment will better inform the local governments and small project decision making process and aid them in determining their level of commitment for advancing the project. The goals of the APPLE program will be accomplished in several ways, including:

- Funding consultant/contractor work activities that directly develop APPLE reports
- Managing the feasibility assessment process for small municipalities/local governments
- Support consultant/contractor activities as related to the development of APPLE reports
- Educating project sponsors and contractors about the ALDOT project development process, to include the NEPA process

Safety Studies

In addition to the feasibility studies for various transportation projects, the APPLE program will help local governments perform Road Safety Assessments (RSA). The purpose of these studies will be to identify the cause of crashes and recommend appropriate safety enhancements and countermeasures that conform to the Manual on Uniform Traffic Control Devices (MUTCD). Some of the tasks performed in the RSA will include:

- Data collection and analysis
- Field site visits
- Identify safety enhancements and countermeasures
- Estimate costs for the proposed improvements
- Develop RSA Report

The RSA reports will not publish specific crash data and will contain the appropriate clause as per ALDOT's document titled *The Alabama Transportation Planner's Guide to Safety Data Access and Documentation – June 2016.*

Note:

- 1. ALDOT ETS shall remain the sole arbiter of environmental issues on state and federal projects in Alabama and must be consulted in all instances. ALDOT may seek consultation with FHWA on certain matters and will seek federal approval on a project only when all issues have been addressed.
- 2. Except for certain duties and responsibilities extended to the Birmingham MPO in writing and for a specific project and/or a consultant representing an MPO for a specific project, all other actions are the province of ALDOT ETS.
- 3. Early or initial environmental coordination relating to a specific project with state and federal resource agencies shall only be carried out by ALDOT ETS.

Products

- Project specific advanced planning reports and technical memoranda
- Project status reports
- Project development educational workshops and seminars

Staffing

RPCGB, ALDOT, direct contract labor and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$500,000</u>
STPBH	\$400,000
Local	\$100,000

4.4 Climate Change

Objectives

- Develop Climate Change evaluation metrics
- Evaluate the RTP's impact on climate change
- Evaluate planned and programmed transportation projects' impact on climate change
- Provide guidance about regional strategies for air quality and congestion mitigation, as well as energy efficiency in order to reduce the Birmingham MPA's carbon footprint

Previous Work

Greenhouse Gas (GHG) emissions are set up as an option in the air quality model in FY 2018. Previous work produced a report titled *Climate Change Considerations and On-Road Greenhouse Gas Emissions in the Birmingham Metropolitan Planning Area*.

Proposed Work

The Birmingham MPO has reassessed its approach to climate change, and how it will incorporate climate change into the metropolitan planning process. As such, the Birmingham MPO has chosen to narrow its focus, and will address road infrastructure vulnerability. The RPCGB will conduct a Vulnerability and Risk Assessment of transportation infrastructure by performing a thorough inventory and analysis of current road culverts/road crossings and report on the current status and conditions of these assets. An element of this assessment will include the evaluation the impact of storm events and future climate change scenarios on the assets. The process for completing this project is to emulate, or follow, FHWA's current Vulnerability and Risk Assessment Conceptual Model and to utilize other studies that have taken place in the region in order to promote consistency of data.

Other climate change evaluation activities will consider:

- Update GHG inventory, and specifically the contribution of mobile source emissions
- Evaluate and monitor mobile source energy consumption
- Develop Climate Change Performance Measures Establish GHG emission and mobile source energy consumption baseline measures
- Integrate Performance Measures Incorporate GHG and mobile source energy consumption measures into the MPO's transportation system performance metrics
- Develop GHG and Energy Consumption Targets Develop a recommended GHG emissions and mobile source energy consumption targets
- Identify a menu of potential climate change adaptation strategies

Products

- Vulnerability analysis of transportation infrastructure to climate change and weather hazards
- Baseline climate change performance measures

Staffing

RPCGB, direct contract labor and/or third-party contractors, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year.

Financial Responsibility

Total	<u>\$3,125</u>
PL	\$2,500
Local	\$ 625

TASK 5.0: TRANSPORTATION SYSTEMS

5.1 Regional Transportation Plan

Objectives

To ensure that the MPO maintains a long-range transportation plan for the Birmingham MPA that is:

- Technically based on the latest available data for land use, demographics, and travel patterns
- Comprehensive in nature and supports the development of a multimodal transportation system
- Philosophically based on regional goals and values, and are informed by the federal Planning Factors and Livability Principles
- Financially based on predictable, reliable funding sources

To ensure that the Regional Transportation Plan (RTP) promotes a performance-based planning approach, is consistent with local comprehensive plans and goals, and supports the federal Planning Factors and Livability Principles.

Previous Work

- Development, completion and adoption of the 2045 Regional Transportation Plan.
- Financial analysis and update to the Financially Constrained Plan; assessment of existing and anticipated expenditures and revenue sources to support and advance transportation projects.
- In-person and online public participation meetings and activities.
- Coordination with IAC, ALDOT, FHWA and MPO committees.
- Update the list of Visionary Plan projects and RTP goals.
- Adopt the Birmingham Regional Active Transportation Plan (Task 5.4) and Regional Freight Plan (Task 5.5); components of those plans were incorporated into the 2045 RTP.
- Coordinate with ALDOT on performance measures, baseline reporting and performance targets, as required by MAP-21 and the FAST Act. The Birmingham MPO opted to support the Alabama state targets. ALDOT developed these targets based on performance over the last four years, which were then projected into future trends.

Proposed Work

- Amend the 2045 RTP Capacity Project List and maps as appropriate to be consistent with the FY2020-2023 Transportation Improvement Program.
- Coordinate with ALDOT to fulfill federal requirements related to performance measures.
- Partner or participate in regional transportation planning efforts conducted by ALDOT, other state and federal partners, member municipalities, and/or other agencies.
- Data collection for use in RTP reports and analysis of proposed project and policy recommendations.
- Update the Transportation System Management and Operations Plan.
- In support of the PEA *Models of Regional Planning* (referenced in Task 2.2), continued development of the RTP will consider the transportation system outside the MPO boundaries and coordinate with appropriate agencies.

Products

- Amend the 2045 RTP Capacity Project list and maps
- Performance Measures

Staffing

RPCGB and direct contract labor and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$131,250</u>
PL	\$105,000
Local	\$26,250

5.1.1 Air Quality Conformity Analysis and Reporting (RTP)

Objectives

To demonstrate that the RTP, and the funded projects and programs contained within it and the TIP, conform to the approved regional air quality standards as determined by the Statewide Implementation Plan (SIP), and are consistent with the Clean Air Act of 1990.

Previous Work:

- The RPCGB worked with the IAC to review proposals related to air quality and to recommend ways to reduce emissions and congestion. A new set of analysis years for air quality conformity has been set.
- Air quality model runs via MOVES2010b/MOVES2014 were conducted for annual PM2.5 and 24-hour PM2.5 standards in FY 2016. Project level analysis for CMAQ projects are introduced in FY 2017 and FY 2018.
- Complete the 2016 and 2017 emission rate runs for Jefferson and Shelby Counties

Proposed Work

- Continue the involvement and cooperation with IAC to monitor air quality for the MPA
- Based on MOVES2014a, continue the air quality conformity analysis and the air quality conformity determination reporting to comply with changes in the regulations governing air quality and transportation planning
- Continue to update input files of MOVES2014a with local data collections when they become available
- Climate Change will be supported (see Task 4.4 for details)
- Adjustments based on a new set of highway networks and transit routes with a new base year 2015 will be made in the conformity determination process to accommodate the 2045 RTP and FY 2020-2023 TIP

Products

- An Air Quality Conformity Determination Report that demonstrates the total projected emissions are within the allowable limits for the 2045 RTP and FY 2020-2023 TIP.
- Emission Rate Datasets for Jefferson and Shelby Counties

Staffing

RPCGB, direct contract labor, and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$35,000</u>
PL	\$28,000
Local	\$7,000

5.1.2 Regional Transportation Plan Project Listings for Air Quality Conformity

Objectives

To amend the RTP as required, using additions and deletions to the program listings, and modifications to existing scopes of work and budgets.

Previous Work

- Monitored the proposed projects and changes of project scopes of work
- Identified capacity projects to be included in the conformity analysis
- Selected capacity project based on the air quality conformity analysis years

Proposed Work

- Continue monitoring the capacity project changes
- Identify new highway capacity projects to be added to the 2045 RTP/TIP
- Monitor highway capacity project schedule changes crossing the conformity analysis years
- Review and document proposed new highway capacity projects and plan amendment subject to assignment to an air quality conformity year and a system level conformity determination

Products

- Capacity Project maps
- Capacity Project Listing for 2045 RTP and FY 2020-2023 TIP

Staffing

RPCGB

Timeline for Proposed Work

Updated capacity project listing table when needed

Financial Responsibility

Total	<u>\$2,125</u>
PL	\$1,700
Local	\$ 425

5.2 Transportation Improvement Program (TIP)

Objectives

To develop a list of federally funded transportation projects to be completed by the ALDOT, the BJCTA, local governments, and other project sponsors. Monitor the financial constraint, status of projects programmed (to include advancement) under STPBH and CMAQ, and achievement of the federal Livability Principles and Indicators. Administer TIP amendment requests and ensure that the TIP is advancing the goals, objectives and priorities of the RTP.

Previous Work

- Coordinated TIP development with ALDOT and project sponsors
- TIP amendments the RPCGB processed TIP amendments as needed
- Continued to maintain TIP financial constraint
- Annual Obligations Listing Published a list of obligated projects for the previous fiscal year
- Continued to monitor the status of CMAQ and STPBH projects
- Updated and refined online interactive TIP map
- Coordinated with ALDOT on setting goals, objectives, performance measures, and targets, as required by the FAST Act, for inclusion into the TIP
- Develop the draft FY2020-2023 TIP and send to ALDOT for review
- Present draft FY2020-2023 TIP to the public and the MPO committees
- Post final FY2020-2023 TIP on website

Proposed Work

- TIP amendments the RPCGB will process TIP amendments as needed
- Continue to maintain TIP financial constraint
- Annual Obligations Listing RPCGB will publish a list of obligated projects for previous fiscal year
- Continue to monitor status of CMAQ and STPBH projects
- Identify and contact sponsors of inactive projects with a focus on projects over 10 years old
- Update and refine online interactive TIP map
- Continue to coordinate with ALDOT on requirements from the FAST Act for inclusion into the TIP

Products

Annual listing of previous year obligated (authorized) projects

Staffing

RPCGB

Timeline for Proposed Work

Annual Obligations Listing – Fall 2019

Financial Responsibility

Total	<u>\$150,000</u>
PL	\$120,000
Local	\$30,000

5.2.1 Amend TIP Project Listings for Air Quality Conformity

Objectives

To amend the TIP, both annually and as required, in accordance with additions and deletions to the RTP project and program listings and modifications to existing scopes of work and budgets.

Previous Work

- Completed the 2015, 2016, and 2017 annual CMAQ obligated project emissions report
- Selected existing and committed projects for plan updates

Proposed Work

- Continue annual summary reporting of emissions reductions to document reductions achieved through projects obligated with CMAQ funding
- Continue monitoring the capacity project changes
- Identify new highway capacity projects to be added to the 2045 RTP/TIP
- Monitor highway capacity project schedule changes crossing the conformity analysis years
- Review and document proposed new highway capacity projects constituting a Plan amendment that are subject to assignment to an air quality conformity year and a system level conformity determination

Products

- Project listings
- Project location maps
- Annual obligated project emissions report for FHWA that documents total emissions achieved for projects funded with the CMAQ program

Staffing

RPCGB

Timeline for Proposed Work

- E+C project list October 2018
- Annual CMAQ obligated project emissions report February 2020

Financial Responsibility

Total	<u>\$2,500</u>
PL	\$2,000
Local	\$ 500

5.3 Public Transportation Planning

Objectives

To promote a regional public transportation system that connects people to activities and services, while encouraging job growth, especially in economically distressed areas. RPCGB will help existing and potential public transportation providers with planning, service delivery, financing strategies, and evaluation of multi-modal needs, deficiencies, and opportunities.

Previous Work

- Participated in meetings with the BJCTA
- Assisted BJCTA in the administration of the local Section 5310 grant
- Included approved 5310 projects in the TIP and STIP
- Supported BJCTA with transit planning guidance and assistance
- Procured vehicles on behalf of nonprofit organizations
- Provided technical assistance to agencies, governments, and transportation providers

Proposed Work

- Coordinate with ALDOT and BJCTA re setting goals, objectives, performance measures, and targets, as required by the FAST Act, for inclusion in the RTP, TIP, and other necessary documentation required by ALDOT
- Provide technical assistance to agencies, governments, and transportation providers
- Identify and evaluate local bus and paratransit needs
- Assist with coordination of elderly and disabled transportation, including:
 - o Administration of FTA Section 5310 grant
 - Maps and analysis of demographic data
 - Technical assistance with service enhancements, transit-oriented development, alternate modes, and consolidation of services/central call center
 - Update Human Services Coordinated Transportation Plan
 - Ensure approved projects are included in the TIP and STIP
 - \circ $\;$ Assist the BJCTA with maintaining and modifying transit system and route maps

Products

- Human Services Coordinated Transportation Plan
- Data collection and analysis
- Route and system maps (as requested)
- Requests for Projects (FTA 5310)

Staffing

RPCGB, transportation providers, contract labor and/or third-party contractors

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$40,500</u>
PL	\$32,400
Local	\$8,100

5.4 Active Transportation Planning

Objectives

To support regional connectivity and active transportation networks utilizing multimodal streets, greenways, parks, and other public greenspace by establishing short-term and long-term implementation strategies that address the federal Livability Principles.

Previous Work

- Developed, completed and adopted the Birmingham Regional Active Transportation Plan (B-Active Plan)
- Hosted Bike-to-Work Day and Walk-to-School Day activities
- Updated and maintained a GIS database of all federally funded bicycle facilities (existing and funded/proposed)
- Updated and maintained a GIS database for all federally funded pedestrian projects
- Coordinated with Freshwater Land Trust to implement Red Rock Ridge and Valley Trail System in area plans
- Utilized information from Strava, which collects GPS data from actual bike rides, thereby mapping the most popular routes in the region
- Coordinated with and provided data to the City of Birmingham for their Citywide Transportation Plan
- Utilized Miovision for bike/ped counts to identify corridors with high bicycle and pedestrian activity
- Participated in an Alabama Communities for Excellence (ACE) walkability planning workshop where technical information and support was provided to certified cities.

Proposed Work

- General Bicycle/Pedestrian Planning respond to requests from Birmingham MPO member governments for assistance in planning bicycle and pedestrian facilities. Encourage cities to select projects from the B-Active Plan, the Red Rock Ridge and Valley Trail System or other local bike/ped plans when submitting projects for the Transportation Alternative Program (TAP) or CMAQ funding.
- Continue to maintain the GIS database of federally funded pedestrian and bicycle facilities.
- Birmingham Regional Active Transportation Plan (B-Active Plan) Publish the Annual State of the Network Report; promote, support and assist with the implementation of the Plan.
- Utilize Strava data to identify high use bicycle corridors.
- Facilitate the Birmingham MPO's Active Transportation (formerly Bike/Ped) Advisory Committee as needed.
- Utilize the Miovision camera to collect bike/ped counts at various locations.
- Local Planning Assistance Regular coordination with nonprofit and advocacy groups to provide assistance with the planning and development of trails, on-street bike facilities, and sidewalks. Staff will:
 - $\circ \quad$ encourage cities to adopt Complete Streets policies and ordinances
 - provide assistance to Jefferson County regarding the development of their own active transportation plan on county roads

- Education and Outreach Activities Support ongoing programmatic activities; assist with outreach efforts; coordinate regional events for Bike/Walk to Work Day; and provide support to CommuteSmart Birmingham.
- Safety Collect and analyze safety data for trends and develop options to mitigate concerns.

Products

- GIS database and maps illustrating bicycle and/or pedestrian projects
- Birmingham Regional Active Transportation Plan Annual State of the Network Report
- Bike/ped traffic counts (Miovision)
- B-Active Plan and Red Rock Ridge and Valley Trail System GIS shapefiles and maps for municipalities to use in implementation efforts
- Documentation of annual Bike/Walk to Work Day events
- Education events, presentations, workshops, outreach, and webpage development

Staffing

RPCGB, direct contract labor and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$31,250</u>
PL	\$25,000
Local	\$6,250

5.5 Logistics Systems Planning

Objectives

To develop a regional intermodal goods movement transportation strategy that will identify improvement for freight movements and address the federal Livability Principles.

Previous Work

- The first Birmingham Regional Freight Plan was adopted in March 2019. The plan addressed all freight system components, including motor carrier, air, barge, and rail, as well as the intermodal movement between them. The Freight Plan identified freight assets that currently exist in the region as well as characteristics of freight movements into, out of, and through the area.
- The MPO adopted the ALDOT targets for performance measures for Truck Travel Time Reliability Index and congestion at truck freight bottlenecks.

Proposed Work

- Continue coordination with ALDOT to fulfill federal requirements related to performance measures (i.e. reporting and progress toward meeting goals).
- Stakeholder outreach/continuation of the Freight Transportation Advisory Committee (FTAC) that is composed of public and private sector representatives host meetings and conduct outreach activities to provide input on the implementation of the Regional Freight Plan recommendations, identify and describe emerging needs and issues, keep up-to-date on best practices.
- Implement some of the 17 recommendations in the Regional Freight Plan that will drive the freight program into the future. These recommendations are organized around four strategies that illustrate: the importance of partner engagement and establishment of freight processes; the ability to acknowledge the role freight plays in driving economic prosperity and economic development opportunity; ongoing planning activities to identify and implement best practices in freight program development and implementation; and the successful funding of projects and studies through formula and competitive funding programs. This may include:
 - Using performance data and reports produced by ALDOT to monitor performance of the network in the Birmingham region. Reviewing the state's performance data and reports and develop regional summaries by extracting information from state reports.
 - Working with economic development officials to evaluate brownfield sites that can be marketable based upon transportation access, buildability, and extent of contamination and cleanup required (if known).
- Support TDOT after they were awarded a National Economic Partnership Grant from FHWA in April 2019 to conduct a Freight and Goods Movement and Truck Parking Study in the Chattanooga Region. As a Consortia Member of this grant, the Birmingham MPO committed \$5,000 in matching funds and data collection assistance during the project.
- Identify, collect and evaluate available updated freight system data (see Task 2.1 Data Collection and Management)

Products

- Performance Measures
- Outreach/Continuation of the Freight Advisory Committee
- Implementation of the recommendations in the Regional Freight Plan

- Data collection related to the Freight and Goods Movement and Truck Parking Study in the Chattanooga Region
- Data updates

Staffing

RPCGB, direct contract labor and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$25,625</u>
PL	\$20,500
Local	\$5,125

5.6 Transportation System Performance Management and Monitoring (rev. 11/14/19)

Objectives

To identify and/or develop appropriate measures to monitor the performance of the transportation system in accordance with the RTP goals and objectives, the Congestion Management Process (CMP), federal and state performance targets, and supporting/complementary planning functions, i.e., economic development or land use.

Previous Work

- CMP committee coordination
- Regional transportation data clearinghouse agreement (UAB Transportation Data Center)
- INRIX data monthly summary reports
- Top 10 Bottleneck summary reports
- Hosted FHWA workshop titled "Integrating Planning for Operations into the Regional Transportation Planning Process"

RPCGB coordinated with ALDOT on setting goals, objectives, performance measures, and targets, as required by the FAST Act concerning operations in the planning area.

Proposed Work

The CMP enables the Birmingham MPO to comply with federal regulations for Transportation Management Areas having populations of 200,000 or more. It empowers the RPCGB, acting as the Birmingham MPO, to identify and/or develop performance metrics on which to continuously monitor and compare congested conditions. The information gathered is also used to inform the transportation decision-making process.

Transportation System Performance Monitoring and Reporting - Building from previous work and following the guidance of the U.S. Department of Transportation, the Birmingham MPO will identify performance measures including analyzing and summarizing INRIX data. This will involve an expansion of the ongoing coordination with ALDOT and their efforts with this work. The MPO will also endeavor to improve transportation system resiliency and reliability.

Trail Count Program - conduct bicycle and pedestrian counts along both regional and local off-road trails and on-street bicycle facilities. Data will be downloaded, tabulated, and assessed to evaluate usage and demand characteristics.

BJCTA will collect, maintain and report on transit performance indicators to include metrics for use in benchmarking the system's performance for both the MPO's and BJCTA's decision-making process.

Products

- Update goals, objectives, performance measures, and targets that will be used to monitor the transportation system throughout the region
- Update and enhance the freight database
- Regional transportation data clearinghouse agreement
- INRIX data monthly summary reports
- Top 10 Bottleneck summary reports
- Regional transportation data clearinghouse administration
- Data processing for MioVision

Staffing

RPCGB, direct contract labor and/or third-party contractors for activities and organizations

Financial Responsibility

FHWA PL and FTA 5303 planning funds have been consolidated into one PL category

 Total
 \$493,000

 PL
 \$94,400
 (rev. 11/14/19)

 STPBH
 \$300,000

 Local
 \$98,600

5.7 Transportation Safety Planning (rev. 11/14/19)

Objectives

To incorporate transportation safety into the planning process and improve transportation safety in the community. To support ALDOT's efforts to improve safety on the transportation system for motorized and nonmotorized users.

Previous Work

- Presented ALDOT's Safety Performance Targets to the MPO and ensured they were formally adopted
- Attended Safety Planning Workshop hosted by ALDOT
- Assisted in drafting Strategic Highway Safety Plan to be developed by University of Alabama and Cambridge Systematics
- Expanded the education and outreach efforts of the Translational Research for Injury Prevention (TRIP) Laboratory at the University of Alabama at Birmingham (Dr. Despina Stavrinos, Assistant Professor of Psychology). The TRIP Lab will further educate young drivers about the consequences of distracted driving.
- Coordinated with ALDOT on setting goals, objectives, performance measures, and targets, as required by the FAST Act, concerning safety in the MPA

Proposed Work

- Coordinate with ALDOT on setting goals, objectives, performance measures, and targets, as required by the FAST Act, concerning safety in the MPA
- Continue to support pedestrian and bicycle safety outreach campaigns, to include Public Service Announcements to educate non-motorists and motorists about behaviors impacting traveler safety
- Monitor federal rulemaking on performance measures for safety
- Continue to expand the education and outreach efforts of the Translational Research for Injury Prevention (TRIP) Laboratory at the University of Alabama at Birmingham (Dr. Despina Stavrinos, Assistant Professor of Psychology). The TRIP Lab will further educate young drivers about the consequences of distracted driving.
- Coordinate with ALDOT on setting goals, objectives, performance measures, and targets required by the FAST Act for inclusion in the RTP, TIP, and other necessary documentation required by ALDOT
- Establish method and funding for local municipalities to perform safety studies (see APPLE Program)

Products

- Set goals, objectives, performance measures, and targets
- Identify high accident locations
- Develop maps and reports concerning safety issues
- Evaluate traffic, freight, bicycle, and pedestrian movements
- Progress reports from Translational Research for Injury Prevention (TRIP) Laboratory

Staffing

RPCGB, direct contract labor and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

FHWA PL and FTA 5303 planning funds have been consolidated into one PL category

 Total
 \$106,250

 PL
 \$85,000
 (rev. 11/14/19)

 Local
 \$21,250

5.8 Technical Assistance for Local Communities and Agencies (rev. 11/14/19)

Objectives

To provide technical assistance, and/or support to local entities (governmental and non-governmental) and the public for planning-related issues and requests that are either too small in scope or too short-lived to rise to the level of requiring a formal scope and budget.

Staff time spent addressing technical assistance and support requests as described above may include:

- Participation in technical review committees and task forces
- Developing monthly progress and budgetary reports
- Technical quality control
- Minor mapping updates
- Data/document request fulfillment

Previous Work

- Meeting attendance
- Assistance to local governments
- Data mining and report processing
- Document printing and delivery
- Printing maps
- Meeting facilitation/organization
- Local government planning and mapping assistance

Proposed Work

The RPCGB will assist local governments, small project sponsors, and nongovernmental organizations by providing general planning support and technical assistance on an as-requested basis, and when financially and technically feasible. This includes:

- Attending city council, local planning commission, neighborhood association, and other community and/or organizational meetings as requested
- Providing comments/input to reports, correspondence, and discussions on transportation-related topics, issues, or items
- Local government planning and mapping assistance
- Data assistance

Products

- Assistance with project management and implementation as necessary
- Analyses, mapping, and planning assistance as requested
- Reports and memoranda related to local assistance as required.
- Attendance at meetings as requested.
- Attendance, if available, at workshops, conferences, and training to improve efficiency and skills under this work program task

Staffing

RPCGB

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$112,500</u>	
PL	\$90,000	(rev. 11/14/19)
Local	\$22,500	

TASK 6.0: PROGRAMS and TECHNICAL ASSISTANCE

6.1 CommuteSmart Program (Rideshare)

Objectives

To improve air quality and reduce traffic congestion by working with individuals and employers to reduce the number of drive-alone commutes.

Previous Work

Ongoing activities have been conducted for employer-based outreach programs, vanpool operations services, and park-and-ride lot development. An annual report documenting accomplishments was prepared and printed.

Proposed Work

- Outreach and Marketing Activities Designed to increase the number of employers who encourage use of commuting alternatives and the number of participants in the program
- Turn-Key Vanpool Operations Services
- Study the establishment of a regional bikeshare cooperative

Products

- Document emissions reduction estimates March 2020
- Outreach and marketing of vanpool and rideshare programs Ongoing
- Customer service support to program participants Ongoing
- Commuter incentive programs such as GetGreen and CommuterClub Ongoing
- Partner with companies with 150 or more employees Ongoing
- Annual Report March 2020

Staffing

RPCGB, direct contract labor and/or third-party contractors for activities, and other organizations

Timeline for Proposed Work

- Document emissions reduction estimates March 2020
- Annual Report March 2020

Financial Responsibility

Total	<u>\$1,300,000</u>
STPBH	\$1,300,000
Local	\$0

6.2 Building Communities Program

Objectives

To provide grants to local communities within the Birmingham MPA for projects, strategies, and services that support the Scope of the Planning Factors and meet the federal Livability Principles, including transportation and land use integration, economic vitality, safety and security, accessibility and mobility, environmental/air quality, and system preservation.

Previous Work

The following projects were completed in FY 2019:

- City of Homewood Central Business District Master Plan
- Chelsea U.S. 280 Overlay District and Design Guidelines
- City of Birmingham Pratt-Ensley Framework Plan
- City of Birmingham Eastern Area Framework Plan
- Center Point Zoning Ordinance and Sign Ordinance Updates
- City of Pelham Comprehensive Plan

Proposed Work

A negotiated process between the RPCGB and MPO governments will be used to develop Building Communities projects consistent with eligible transportation and land use activities. Land use and transportation needs are identified, a determination is made for consistency with Building Communities' goals, a project scope of work and budget are developed, and a cost sharing agreement is made. The MPO will document projects in the semi-annual report.

Projects currently in progress and scheduled to be completed in FY 2020 include:

- City of Homewood Central Business District Zoning Update
- City of Birmingham:
 - o Birmingham Center Master Plan
 - o Northside Southside Framework Plan
 - o Built Environment and Health Extension Project (for 79 of the 99 Birmingham Neighborhoods)
- City of Chelsea Comprehensive Plan

Projects anticipated to begin in FY 2020 and be completed during FY 2020 or FY 2021:

- City of Birmingham Southern Area Framework Plan
- City of Montevallo Comprehensive Plan
- City of Pelham Zoning Updates

Products

Plans and programs suitable for implementation

Staffing

RPCGB, direct contract labor and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$812,500</u>
STPBH	\$650,000
Local	\$162,500

TASK 7.0: ADA

7.1 Compliance

Objectives

The RPCGB, on behalf of the Birmingham MPO, will continue to provide technical assistance to various cities and counties within the MPA to perform ADA Self Evaluations, ADA Transition, or ADA Access Plans in accordance with the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973.

Previous Work

- Documented the status of municipalities and ADA Coordinators on a tracking table
- Assisted municipalities with their Self Evaluations, Transition Plans, or Access Plans (only assistance was provided; no plan development)
- Performed field reviews to provide research and recommendations to municipalities

Proposed Work

- Continue to document the status of municipalities and ADA Coordinators on tracking table
- Continue to make recommendations for those municipalities that do not have a Self-Evaluation or Transition Plan
- Continue to assist municipalities with their Self Evaluations, Transition Plans, or Access Plans (only assistance will be provided; no plan development)
- Continue to perform field reviews as necessary to provide research and recommendations

Products

• ADA Tracking Table including status

Staffing

RPCGB, direct contract labor, and/or third-party contractors for activities, and organizations

Timeline for Proposed Work

Ongoing activities throughout the fiscal year

Financial Responsibility

Total	<u>\$12,500</u>
PL	\$10,000
Local	\$2,500

APPENDICES

LIST OF ACRONYMS

ADEM	Alabama Department of Environmental Management
ALDOT	Alabama Department of Transportation
APCA	Alabama Partners for Clean Air
BJCTA	Birmingham Jefferson County Transit Authority
CMAQ	Congestion Mitigation Air Quality
CPG	FHWA and FTA Consolidation of Planning Fund
СТР	Comprehensive Transportation Plan
EPA	Environmental Protection Agency
FAST Act	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	Greenhouse Gases
GIS	Geographic Information System
HSCTP	Human Services Coordinated Transportation Plan
IAC	Interagency Consultation
JCDH	Jefferson County Department of Health
LAP	Language Assistance Plan
LEP	Limited English Proficiency
LRTP	Long Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21 st Century Act
MOVES2014a	MOtor Vehicle Emissions Simulator
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act of 1969
PL	Federal Highway Administration Planning Funds
RTP	Regional Transportation Plan
SLS	State or Local Share
SRTS	Safe Routes to School
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
STPBH	Surface Transportation Program for Birmingham
ТАР	Transportation Alternatives Program
TAZ	Traffic Analysis Zones
TIP	Transportation Improvement Program
USDOT	U.S. Department of Transportation
VMT	

TABLE 1 UNIFIED PLANNING WORK PROGRAM FY 2020 (rev. 11/14/19) (Organizational Responsibility) Federal Dollars Only	
--	--

IASKS IASKS I.0 1.1 MPO Administration 1.2 Unified Planning Work Program 1.3 Capital and Operating Purchases	PL-FHWA/FTA \$264,132 \$18,500 \$58,928 \$58,928	RPC	AND RESEARCH FUNDING (SPR)	CONTRACTOR	FEDERAL	ERAL
1.0 ADMINISTRATION 1.1 MPO Administration 1.2 Unified Planning Work Program 1.3 Capital and Operating Purchases	\$264,132 \$18,500 \$58,928					
	\$264,132 \$18,500 \$58,928					
	\$18,500 \$58,928	\$264,132			\$	\$264,132
	\$58,928	\$18,500				\$18,500
				\$500 3D Analyst	2.3	\$58,928
				\$3,500 Adobe Creative Cloud	2.2	
				\$9,900 ArcEditor CU/SU	2.3	
				\$3,500 ArcGIS Online/ArcGIS Pro	2.3	
				\$3,000 ArcInfo CU	2.3	
				\$5,000 ArcServer Enterprise	2.3	
				\$2,700 ArcView CU	2.3	
				\$700 ArcView SU	2.3	
				\$1,000 CommunityViz	2.2	
				\$5,500 Equipment for Planning	2.3	
				\$4,000 ESRI Community Analyst	2.3	
				\$7,000 InfoGroup	2.1	
				\$2,500 LRS Data Acquisitions	2.2	
				\$2,000 Maxwell Render Full Suite	6.2	
				\$3,000 MioVision Data Processing	5.6	
				\$5,000 mySidewalk	2.1	
				\$500 Network Analyst	2.3	
				\$1,100 SketchUp Pro	6.2	
				\$7,000 Southern Exposure Information	2.2	
				\$500 Spatial Analyst	2.3	
				\$5,000 Strava Metro	5.4	
				\$495 Woods and Poole	2.2	
				\$265 X Tools Pro	2.3	
	¢00			Ş58,928 (Total x .8)		¢ c 0 0 0 0
2.0 PLANNING INFORMATION	nonioné	nnninge				nnnína¢
2.1 Data Collection and Management	\$40,000	\$10,000		\$30,000 Third Party Contractor	_	\$40,000
	\$36,000	\$36,000				\$36,000
2.3 Geographic Information Systems	\$64,000	\$64,000		\$20,000 Third Party Contractor		\$84,000
2.4 Model Development Program	\$140,000	\$60,000		\$80,000 Third Party Contractor	ŝ	\$140,000
3.0 PUBLIC INVOLVEMENT						
3.1 Public Involvement and Outreach	\$38,400	\$28,400		\$10,000 Technical workshops; topics to be determined		\$38,400
≝ .						
		\$100,000		\$550,000 Alabama Partners for Clean Air	Ş	\$650,000
4.2 Environmental Consultation Process	\$1,800	\$1,800				\$1,800

TABLE 1 UNIFIED PLANNING WORK PROGRAM FY 2020 (rev. 11/14/19) (Organizational Responsibility) Federal Dollars Only

TASKS	PL-FHWA/FTA	RPC	STATE PLANNING AND RESEARCH FUNDING (SPR)	CONTRACTOR	TOTAL FEDERAL
4.3 Advanced Planning, Programming, and Logical Engineering (APPLE)		\$25,000		\$375,000 Third Party Contractor	\$400,000
4.4 Climate Change	\$2,500	\$2,500			\$2,500
5.0 TRANSPORTATION SYSTEMS					
5.1 Regional Transportation Plan	\$105,000	\$75,000		\$30,000 Third Party Contractor	\$105,000
5.1.1 Air Quality Conformity Analysis and Reporting	\$28,000	\$28,000			\$28,000
5.1.2 Regional Transportation Plan Project Listing for Air Quality Conformity	\$1,700	\$1,700			\$1,700
5.2 Transportation Improvement Program (TIP)	\$120,000	\$120,000			\$120,000
5.2.1 Amend TIP Project Listings for Air Quality Conformity	\$2,000	\$2,000			\$2,000
5.3 Public Transportation Planning	\$32,400	\$32,400			\$32,400
5.4 Active Transportation Planning	\$25,000	\$25,000			\$25,000
5.5 Logistics Systems Planning	\$20,500	\$20,500			\$20,500
5.6 Transportation System Performance Management and Monitoring	\$94,400	\$14,400		\$380,000 Third Party Contractor	\$394,400
5.7 Transportation Safety and Security Planning	\$85,000	\$5,000		\$80,000 Third Party Contractor	\$85,000
5.8 Technical Assistance for Local Communities and Agencies	\$90,000	\$30,000		\$60,000 Third Party Contractor	\$90,000
6.0 PROGRAMS AND TECHNICAL ASSISTANCE					
6.1 CommuteSmart Program (Rideshare)		\$685,000		\$400,000 Enterprise \$150,000 Marketing/Media	\$1,300,000
				\$65,000 Third party contractor	
6.2 Building Communities Program		\$650,000			\$650,000
7.0 ADA COMPLIANCE					
7.1 ADA Compliance	\$10,000	\$2,000		\$8,000 Third party contactor	\$10,000
STATE PLANNING AND RESEARCH FUNDING (SPR)					
SPR			\$108,000		\$108,000
ΤΟΤΑΙS	\$1,338,260	\$2,361,332	\$108,000	\$2,296,928	\$4,766,260

PL = \$1,213,260 (annual FY 2020 mark) + \$125,000 projected carryover from FY 2019 = \$1,338,260 FHWA PL and FTA 5303 planning funds have been consolidated into the PL-FWA/FTA category

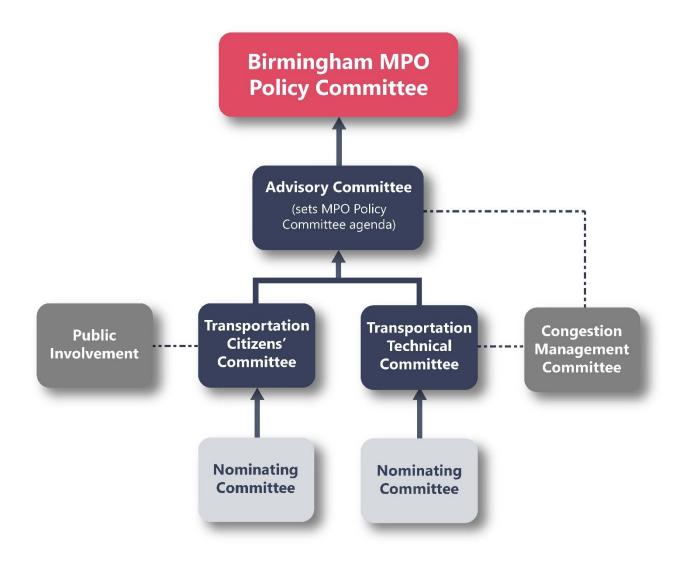
TABLE 2 UNIFIED PLANNING WORK PROGRAM FY 2020 (rev. 11/14/19) (Funding Sources)

TASKS	PL-FHWA/FTA:SLS	A:SLS	STP:SLS		CMAQ: SLS	ALDOT SUPPORT:SLS	TOTAL FEDERAL:SLS	IAL:SLS
1.0 ADMINISTRATION								
1.1 MPO Administration	\$264,132	\$66,033					\$264,132	\$66,033
1.2 Unified Planning Work Program	\$18,500	\$4,625					\$18,500	\$4 , 625
1.3 Capital and Operating Purchases	\$58,928	\$14,732					\$58,928	\$14,732
1.4 Education and Training	\$60,000	\$15,000					\$60,000	\$15,000
2.0 PLANNING INFORMATION								
2.1 Data Collection and Management	\$40,000	\$10,000					\$40,000	\$10,000
2.2 Data Analysis and Forecasting	\$36,000	\$9,000					\$36,000	\$9,000
2.3 Geographic Information Systems	\$64,000	\$16,000	\$20,000	\$5,000			\$84,000	\$21,000
2.4 Model Development Program	\$140,000	\$35,000					\$140,000	\$35,000
3.0 PUBLIC INVOLVEMENT								
3.1 Public Involvement and Outreach	\$38,400	\$9,600					\$38,400	\$9,600
4.0 ENVIRONMENTAL PROCESS PLANNING				- /				
4.1 Air Quality Planning					\$650,000 \$162,500		\$650,000	\$162,500
4.2 Environmental Consultation Process	\$1,800	\$450					\$1,800	\$450
4.3 Advanced Planning, Programming, and Logical Engineering (APPLE)			\$400,000	\$100,000			\$400,000	\$100,000
4.4 Climate Change	\$2,500	\$625					\$2,500	\$625
5.0 TRANSPORTATION SYSTEMS								
5.1 Regional Transportation Plan (\$40,000**)	\$105,000	\$26,250					\$105,000	\$26,250
5.1.1 Air Quality Conformity Analysis and Reporting	\$28,000	\$7,000					\$28,000	\$7,000
5.1.2 Regional Transportation Plan Project Listing for Air Quality Conformity	\$1,700	\$425					\$1,700	\$425
5.2 Transportation Improvement Program (TIP)	\$120,000	\$30,000					\$120,000	\$30,000
5.2.1 Amend TIP Project Listings for Air Quality Conformity	\$2,000	\$500					000'Z\$	\$500
5.3 Public Transportation Planning	\$32,400	\$8,100					\$32,400	\$8,100
5.4 Active Transportation Planning	\$25,000	\$6,250					\$25,000	\$6,250
5.5 Logistics Systems Planning (\$10,000**)	\$20,500	\$5,12 5					\$20,500	\$5,125
5.6 Transportation System Performance Management and Monitoring	\$94,400	\$23,600	\$300,000	\$75,000			\$394,400	\$98,600
5.7 Transportation Safety and Security Planning (\$40,000**)	\$85,000	\$21,250					\$85,000	\$21,250
5.8 Technical Assistance for Local Communities and Agencies	\$90,000	\$22,500					000'06\$	\$22,500
6.0 PROGRAMS AND TECHNICAL ASSISTANCE								
6.1 CommuteSmart Program (Rideshare)			\$1,300,000	\$0			\$1,300,000	\$0
6.2 Building Communities Program			\$650,000	\$162,500			\$650,000	\$162,500
7.0 ADA COMPLIANCE								
7.1 ADA Compliance (\$8,000**)	\$10,000	\$2,500					\$10,000	\$2,500
STATE PLANNING AND RESEARCH FUNDING (SPR)								
						\$108,000 \$27,000	\$108,000	\$27,000
TOTALS	\$1,338,260	\$334,565	\$2,670,000	\$342,500	\$650,000 \$162,500	\$108,000 \$27,000	\$4,766,260	\$866,565

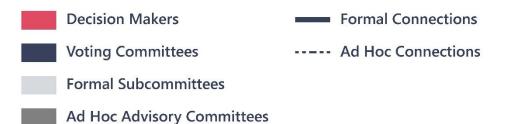
PL = \$1,213,260 (annual FY 2020 mark) + \$125,000 projected carryover from FY 2019= \$1,338,260 ** indicates carryover funding by task from FY 2019. All carryover is for contracts with consultants from FY 2019

FHWA PL and FTA 5303 planning funds have been consolidated into the PL-FHWA/FTA category MPOs may carry over funds for 3 years. The oldest unexpended funds will be returned to the funding pool for reallocation.

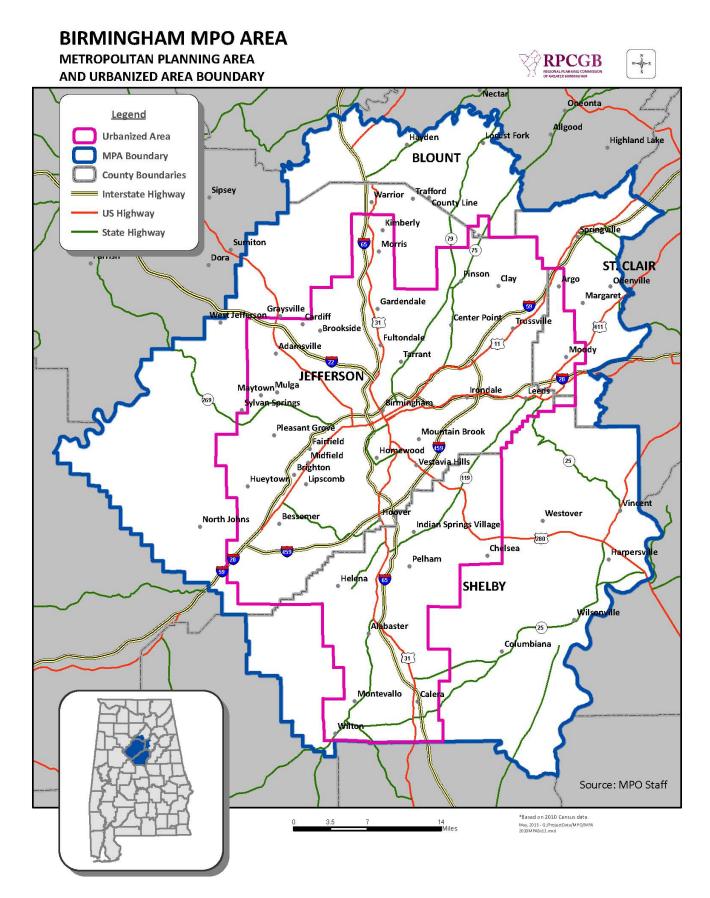
STRUCTURE OF THE BIRMINGHAM MPO



The staff of the Regional Planning Commission of Greater Birmingham also serves as staff to the Birmingham MPO.



METROPOLITAN PLANNING AREA/TRANSPORATION MANAGEMENT AREA MAP



LIVABILITY INDICATORS

1. Provide more transportation choices

Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.

Performance Indicator: Mode Share

2. Promote equitable, affordable housing

Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

Performance Indicator: Jobs/Housing Balance

3. Enhance economic competitiveness

Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services, and other basic needs by workers, as well as expanded business access to markets.

Performance Indicator: Travel Time Index

4. Support existing communities

Target federal funding toward existing communities—through strategies like transit-oriented, mixed-use development and land recycling—to increase community revitalization and the efficiency of public works investments and to safeguard rural landscapes.

Performance Indicator: Percentage of Projects that Include Air Quality Mitigation

5. Coordinate and leverage federal policies and investment

Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

Performance Indicator: Project Funding Diversity

6. Value communities and neighborhoods

Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

Performance Indicator: Partnerships and Public Involvement

CURRENT AND POTENTIAL PLANNING STUDIES

Completed and	Ongoing Studies since October 2014 (sorted by sponsor then by title)
Sponsor	Title
ALDOT	Lakeshore Extension - ongoing
Alabaster	Alabaster Comprehensive Plan - completed March 2016
Alabaster	State Route 119 Overlay District and Design Guidelines - completed March 2017
Argo	Argo Traffic Study - completed April 2018
Birmingham	20th Street Pedestrian Mall - completed January 2018
Birmingham	Avenue F Bridge Study - ongoing
Birmingham	Birmingham City Center Master Plan - ongoing
Birmingham	Built Enviromental & Health Project (SHAPE BHAM) - completed November 2017
Birmingham	Built Environment and Health Expansion Project (SHAPE BHAM EXPANSION PROJECT) - ongoing
Birmingham	Crestwood Blvd Corridor Study - ongoing
Birmingham	Eastern Area Framework Plan - completed August 2018
Birmingham	Grants Mill Road Extension Study - ongoing
Birmingham	Citywide Transportaton Plan - ongoing
Birmingham	North Birmingham Framework Plan - March 2015
Birmingham	Northeastern Area Framework Plan - completed July 2017
Birmingham	Northside / Southside Framework Plan - ongoing
Birmingham	Pavement Management Plan - ongoing
Birmingham	Pratt - Ensley Framework Plan - completed September 2018
Birmingham	Southwest Area Framework Plan - completed July 2017
Birmingham	Titusville Framework Plan - completed February 2015
Birmingham	Western Area Framework Plan - completed May 2015
Birmingham	Vulcan Greenway Study - completed March 2018
BJCTA	Commuter Rail Study - ongoing
BJCTA	Route Optimization Plan - onging
Calera	SR-25 - ongoing
Center Point	Center Point Comprehensive Plan - completed April 2017
Center Point	Zoning Ordinance and Sign Ordinance Updates - completed July 2019
Chelsea	City of Chelsea Highway 280 Overlay District - completed February 2019
Chelsea	Chelsea Comprehensive Plan - ongoing
Gardendale	Gardendale Comprehensive Plan - completed October 2014
Gardendale	Gardendale New Road Study - completed February 2018
Helena	School Intersections - completed August 2017
Homewood	Downtown Master Plan and Zoning Update - Master Plan completed Oct 2018; zoning ongoing
Homewood	Citywide Sign Code Update - ongoing
Homewood	Central Avenue Study - ongoing
Homewood	Hollywood Blvd/US-280 Intersection Study - completed July 2018
Hoover	Hoover Comprehensive Plan - completed July 2019
Hoover	Bicycle/Pedestrian Plan - completed July 2019
rondale	Irondale Comprehensive Plan - completed April 2016
efferson County	Acton Road Corridor Study - completed May 2017
lefferson County	Bicycle/Pedestrian Plan - ongoing
lefferson County	Cahaba River Road Study - completed April 2019
lefferson County	Crosshaven Drive Corridor Study - completed January 2019
Mountain Brook	Mountain Brook Sidewalks Study - completed August 2017
Mountain Brook	Mountain Brook Traffic Study - completed August 2018
Mountain Brook	Overton Road Corridor Study - ongoing

Pelham	Pelham Comprehensive Plan - ongoing
Pelham	New Roads Study - ongoing
Pelham	Pelham Greenway - completed April 2016
RPCGB	Active Transportation Plan - completed March 2019
RPCGB	Regional Freight Plan - completed March 2019
Shelby County	Bicycle/Pedestrian Plan - completed 2018
Shelby County	CR-47 Intersection Improvements - completed September 2017
Shelby County	Dunnavant Valley Trail - completed October 2017
St. Clair County	Springville Traffic Study - completed December 2018
St. Clair County	US-411 Interchange Study - ongoing
UAB	UAB – North South Streets Study - completed March 2019
UAB	UAB – Road Diets - completed September 2016
Vestavia Hills	Traffic Study - completed July 2019

Potential Studies

Title
Trails/Greenways
Transit Station
Green Streets
Southern Area Framework Plan
BRT Transit Station Area Studies
Chesser Drive Study
Edgewood Study
Comprehensive Plan
Intersection Study
Highway 31 Overlay District and Zoning Ordinance Updates
St. Clair County Railroad Crossing Study
Travel Demand Model (TDM) Expansion and Enhancement
Intelligent Transportation Systems Inventory
Roadway Ownership/Maintenance Study
Truck Parking Inventory
US-31 Corridor Signal System Study - Pelham and Alabaster

Statewide Plans

Sponsor	Title
ALDOT	Alabama Rail Plan – <u>www.dot.state.al.us/dsweb/divTed/Rail/pdf/RailPlanFINAL.pdf</u>
ALDOT	Statewide Airport System Plan - <u>www.dot.state.al.us/aerweb/alabamaStateAirportSystemPlan.html</u>
ALDOT	Statewide Bicycle and Pedestrian Plan - <u>www.dot.state.al.us/oeweb/bicyclePedestrian.html</u>
ALDOT	Statewide Freight Plan - <u>www.dot.state.al.us/oeweb/freightPlanning.html</u>
ALDOT	Statewide Management Plan – <u>www.dot.state.al.us/ltweb/transit/doc/SMP.pdf</u>
ALDOT	Statewide Transportation Plan – <u>www.dot.state.al.us/oeweb/statewideTransportationPlan.html</u>
	Note: for more information on any of these studies, contact the project sponsor or the RPCGR

Note: for more information on any of these studies, contact the project sponsor or the RPCGB