

The preparation of this report was financed in part with funding from United States Department of Transportation (USDOT), and administered by the Louisiana Department of Transportation and Development (LADOTD). The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of USDOT, and LADOTD.

Project Number
H.972216

Unified Planning
Work Program
(July 1, 2016 - June 30, 2017)
UPWP FY 2016



ADOPTED – 05/10/16

Table of Contents

1	Introduction	1
1.1	What is UPWP?.....	2
1.2	How is UPWP Developed?	2
1.3	How is UPWP Funded?	3
1.4	UPWP FY16 vs. UPWP FY17.....	3
2	Planning Area	8
3	Organization and Management	10
4	Task A-1: Citizen Participation and Public Outreach	12
5	Task A-2: Congestion Management Process	15
6	Task A-3: Coordinated Public Transit Human Services	19
7	Task A-4: MPO Planning Progress and UPWP	21
8	Task A-5: Non-motorized Planning and Complete Streets	24
9	Task A-6: Clean Air	27
10	Task A-7: Intelligent Transportation System (ITS)	31
11	Task A-8: Title VI Planning	34
12	Task A-9: Model Enhancement	37
13	Task A-10: Safety and Security Planning	40
14	Task A11: Development of Transportation Plans & Programs	44
15	Task A13: Data Development and Maintenance	47
16	Task B1: Land Use, Socio-Economic and Environmental	50
17	Task B2: Transportation System - Inventory & Performance Monitoring	53
18	Task C1: Transportation Plan Reappraisal	56
19	Task D3: Technical Assistance (Highway)	59
20	Task D4: Technical Assistance (Public Transit)	61
21	Task H1: Travel Demand Management (TDM)	64
22	Task H3: Regional SHSP Implementation	66
23	Task SP-1: Nicholson Corridor High-Capacity Transit System	68
24	Task SP-2: Metropolitan Transportation Plan Update 2042	70
25	Appendix A – Indirect Cost Rate Allocation Plan (ICAP)	72

1 Introduction

Federal legislation requires that cities with a population of over 50,000 form a Metropolitan Planning Organization or MPO, and federal agencies serve to fund the planning process. The MPO is a transportation policy-making organization made up of representatives from local government and transportation authorities to carry out transportation planning with coordination with the state and with operators of publicly-owned transit services. MPOs were created in order to ensure that expenditures for transportation projects and programs were based on a continuing, cooperative and comprehensive (3-C) planning process.

Capital Region Planning Commission (CRPC) is the Baton Rouge area's designated Metropolitan Planning Organization (MPO). Capital Region MPO (CRMPO) is also designated as Transportation Management Area (TMA) since the urbanized area population is over 200,000. The following are eight core functions of CRMPO:

1. Establish a setting for effective decision making

Establish and manage a fair and impartial setting for effective regional decision making in the metropolitan area.

2. Identify and evaluate transportation improvement options

Develop a Unified Planning Work Program (UPWP) that identifies and evaluates transportation improvement options to support the planning factors and performance based planning specified in the latest approved transportation law FAST Act.

3. Prepare and maintain a Metropolitan Transportation Plan (MTP)

Develop and update an MTP for the Capital Region metropolitan area covering a planning horizon of at least 20 years using performance measures and targets.

4. Develop a Transportation Improvement Program (TIP)

Develop a short-range, four-year program of priority transportation improvements drawn from the long-range transportation plan. The MPO creates the TIP with spending, regulating, operating, management, and financial tools. The TIP represents immediate priority actions to achieve the area's goals and associated system performance targets.

5. Identify performance measure targets and monitor whether implemented projects are achieving targets

Coordinate with State and public transportation operators to establish performance targets that address performance measures, as set forth in Federal law, related to surface transportation and public transportation.

6. Involve the public

Involve the general public and other affected constituencies related to the essential decision making elements listed above.

7. Demonstrate Transportation Conformity or Conform to State's air quality plan

Coordinate with air quality interagency partners such as Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Environmental Protection Agency (EPA), Louisiana Department of Transportation and Development (LADOTD), and Louisiana Department of Environmental Quality (LDEQ) to demonstrate that transportation projects and plans conform to State's air quality plan.

8. Maintain Congestion Management Process (CMP)

Maintain a congestion management process (CMP) that identifies actions and strategies for reducing congestion and increasing mobility. Projects and strategies from the CMP are considered for inclusion in the MTP and TIP.

1.1 What is UPWP?

UPWP describes the transportation planning activities or work tasks that CRMPO proposes to undertake during or the State of Louisiana's fiscal year FY 2017 from July 1, 2016 to June 30, 2017. It serves to document the proposed expenditures of federal, state and local transportation planning funds, and provides a management tool for CRPC in scheduling major transportation planning activities, milestones and products. This activity is required under federal law Fixing America's Transportation System Act (FAST Act) that continued the section of federal law (initially adopted in 1962) defining the responsibilities of an MPO. Each of the work task proposed in the UPWP will include the following details:

- What is the objective of a particular work task?
- What were the previous accomplishments related to that task?
- What will the staff be working on in the upcoming year?
- What are the performance measures of this task?
- What are the general results/products from this task?
- What is the proposed budget for this task?

1.2 How is UPWP Developed?

The UPWP serves as the document for identifying ways to carry out the continuing, cooperative and comprehensive transportation planning process in the Capital Region MPO area (CRMPO). An MPO is required to perform all planning tasks set forth in federal laws and regulations, many of which are conducted annually. However, some tasks require more than one year to complete and are carried forward from one UPWP to the next. To effectively identify all work tasks, CRPC prepares this UPWP with input from federal, state and local jurisdictions and transportation providers in the CRMPO region.

This year's work program represents a continuation of the strategic planning process begun with last year's work program. The focus continues to be on maintaining, improving, and utilizing the information resources collected by the MPO in the day-to-day transportation decision-making process. It will continue to address the eight planning factors identified in SAFETEA-LU and continued under MAP-21 that must be considered by MPOs in developing transportation plans and programs. In addition, this year's UPWP will also address additional factors that are proposed in the new transportation law FAST Act. All these factors are outlined below:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
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 the accessibility and mobility of people and for freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
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.

Unified Planning Work Program 2017

10. Reduce or mitigate storm water impacts of surface transportation; and
11. Enhance travel and tourism

Table 1 summarizes the correlation between the above planning factors and the proposed work tasks. Emphasis will also be given to FAST Act Implementation: Transition to performance based planning and programming and Ladders of Opportunity: Access to essential services - as part of the transportation planning, identify transportation connectivity gaps in access to essential services. The work tasks programmed in the UPWP also addresses the national goals introduced under MAP-21 in the following seven areas.

- Safety,
- Infrastructure Condition,
- Congestion Reduction,
- System Reliability,
- Freight Movement and Economic Vitality,
- Environmental Sustainability, and
- Reduced Project Deliver Delays.

To achieve these goals, MAP-21 and the current law FAST Act emphasizes a streamlined, performance-based, and multi-modal approach to transportation planning and project implementation. CRPC will work with Louisiana Department of Transportation and Development (LADOTD), local policy makers, and stakeholders to establish local targets that will help achieve performance measures both at the local and national level.

1.3 How is UPWP Funded?

The UPWP is partially funded with federal transportation planning funds from Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). The federal funds require a non-federal match. The detailed funding breakdown by UPWP task and funding source is shown in Table 2. The UPWP must be approved by CRPC's Transportation Policy Committee (TPC) and submitted to FHWA and FTA for approval. If priorities change or additional funds become available, the UPWP will be amended anytime during the fiscal year.

1.4 UPWP FY16 vs. UPWP FY17

Figure 1 compares funding breakdown by UPWP task in FY 2016 and 2017. The following are some of the highlights that can be observed from the chart.

- Elimination of Tasks G1 – Administration (Hwy) and G2 – Administration (Transit) have been eliminated in FY 2017
- Addition of new Task A5 – Bicycle and Pedestrian Planning has been added as a separate task in FY 2017. Previously this work was being accomplished under tasks A2, A6, A11.
- Increased allocation to Task A2 (Congestion Management Process) – CRPC will continue to analyze travel time data as in FY 2016 but will also be focusing efforts on finalizing the Congestion Management Process (CMP) document.
- Increased allocation to Task A6 (Air Quality Planning) – CRPC is coordinating with regional environmental partners Such as Baton Rouge Clean Air Coalition (BRCAC) and Louisiana Department of Environmental Quality (LDEQ) to implement Emission

Unified Planning Work Program 2017

Table 1. UPWP Tasks Relation to Planning Factors

Planning Factors	UPWP Task Codes																				
	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-10	A-11	A-13	B-1	B-2	C-1	D-3	D-4	H-1	H-3	SP-1	SP-2
Support the economic vitality of the Urbanized Area	X	X		X			X	X		X	X		X		X	X	X	X		X	X
Increase safety of the transportation system for motorized and non-motorized users	X	X		X	X		X	X		X	X		X	X	X	X	X		X		X
Increase security of the transportation system	X	X		X			X	X		X	X		X	X	X	X	X				X
Increase accessibility and mobility options for people and freight	X	X	X	X			X	X		X	X			X		X	X	X		X	X
Protect and enhance the environment, and improve quality of life	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X
Enhance integration and connectivity of the transportation system, across modes, for people and freight	X	X	X	X	X		X	X		X	X	X		X	X	X	X	X		X	X
Promote efficient system management and operation	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X			X
Emphasize preservation of the existing transportation system	X	X	X	X		X	X			X	X	X	X		X			X			X
Improve the resiliency and reliability of the transportation system		X					X				X				X						X
Reduce or mitigate storm water impacts of surface transportation				X							X				X						X
Enhance travel and tourism						X					X				X					X	X
FAST Act Implementation / Performance Based Planning	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
Ladders of Opportunity	X	X	X					X			X	X			X						X

Unified Planning Work Program 2017

Table 2. FY 2016 UPWP Tasks by Funding Sources

Task Code	Task Name	Total Funds	FHWA PL	Carry Over PL	FTA 5307	FTA 5303	CMAQ	SPR	HISPPEN	FTA TIGER Grant	STP>200K	Local Match
A-1	Citizen Participation and Public Outreach	89,713	71,770									17,943
A-2	Congestion Management (Hwy)	161,188	128,950									32,238
A-3	Coordinated Human Services Transportation Plan	16,088	4,870			10,000						1,218
A-4	MPO Planning Progress and UPWP	68,163	54,530									13,633
A-5	Bicycle/Pedestrian Planning	63,788	51,030									12,758
A-6	Air Quality Environmental Planning	180,356	64,285	80,000								36,071
A-7	Regional ITS Architecture	111,675	89,340									22,335
A-8	Title VI Planning	23,163	18,530									4,633
A-9	Model Enhancement	26,250	21,000									5,250
A-10	Safety and Security Planning	18,950	15,160									3,790
A-11	Transportation Plans & Programs	62,526	50,020									12,505
A-13	Data Base Mapping	55,913	44,730									11,183
A Total		877,769	614,215	80,000	0	10,000	0	0	0	0	0	173,554
B-1	Land Use and S-E-E	42,144	33,715									8,429
B-2	Inventory and Performance Monitoring	299,569	119,655	120,000								59,914
B Total		341,713	153,370	120,000	0	0	0	0	0	0	0	68,343
C-1	Plan Reappraisal (Hwy)	74,600	59,680									14,920
C Total		74,600	59,680	0	0	0	0	0	0	0	0	14,920
D-3	Technical Assistance (Hwy)	37,500	30,000									7,500
D-4	Technical Assistance (Transit)	396,197			163,903	153,054						79,239
D Total		433,697	30,000	0	163,903	153,054	0	0	0	0	0	86,739
H-1	Travel Demand Management/Rideshare	285,000					160,000				125,000	0
H-3	Regional State Highway Safety Plan Implementation	172,106							172,106			0
H Total		457,106	0	0	0	0	160,000	0	172,106	0	125,000	0
SP-1	Nicholson Corridor High-Capacity Transit System	2,760,000								1,760,000		1,000,000
SP-2	MTP 2042 Update	727,000	33,080	52,320				413,500			165,400	62,700
SP Total		3,487,000	33,080	52,320	0	0	0	413,500	0	1,760,000	165,400	1,062,700
Grand Total		5,671,885	890,345	252,320	163,903	163,054	160,000	413,500	172,106	1,760,000	290,400	1,406,256

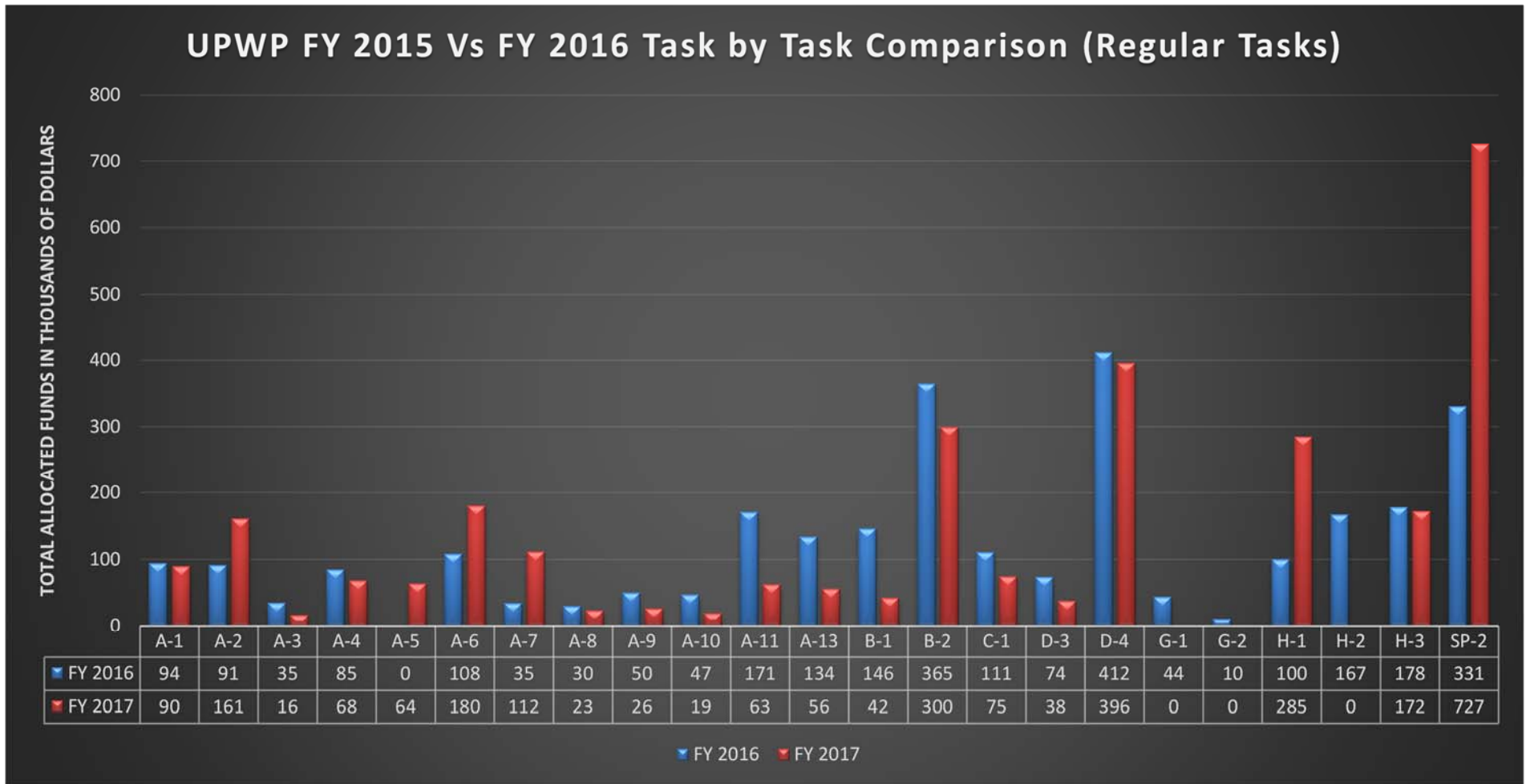


Figure 1. UPWP FY 16 Vs FY 17

Unified Planning Work Program 2017

Reduction Credits (ERC) program to innovatively promote industrial/economic growth without negatively affecting the air quality in the Capital Region.

- Increased allocation to Task A7 (Intelligent Transportation System) – Staff will continue to work closely with DOTD, FHWA, and LTRC to enhance the utilization of locally available ITS data for planning purposes. CRPC work on analyzing this data and also historical travel time data to study recurring Vs. non-recurring congestion in the Capital Region and work with regional transportation partners and stakeholders to identify proactive strategies to have a resilient transportation system.
- Increase in allocation to Task H1 (Travel Demand Management) – Typically DOTD was distributing hundred thousand dollars (\$100,000) in CMAQ funds to each of the MPO in the state to implement Travel Demand Management (TDM) strategies in the region. CRPC and DOTD will be working together to implement a more rigorous and effective TDM program that will be replicable across the state.
- Increase in allocation to Task SP-2 (Metropolitan Transportation Plan 2042 Update) – CRP's major focus in FY 2017 will be to develop a new MTP 2042. A significant amount of resources will be working on this project with a goal of have a new conforming MTP in place before the current one expires on July 17, 2017.
- Decrease in allocation to Tasks
 - A9 (Model Enhancement)
 - A11 (Development of Transportation Plans and Programs)
 - A13 (Database Development and Maintenance)
 - B1 (Land Use, socio economic, and Environmental)
 - C1 (Transportation Plan Reappraisal) and
 - D3 (Technical Assistance Hwy) etc.

A significant amount of resources will be working on the MTP 2042 project as mentioned above and most of the work efforts that pertain to these tasks will be performed as part of MTP 2042 task/project.

2 Planning Area

The CRMPO study area shown in Figure 2 is based on the 2010 census urbanized area boundaries. It is comprised of East Baton Rouge and portions of Ascension, Iberville, Livingston and West Baton Rouge Parishes. The urbanized planning area and the study area boundaries were adjusted based on the 2010 U.S. Census boundaries. By federal definition, CRMPO's planning/study area must at least include the 2010 urbanized area (as defined by the U.S. Bureau of the Census) and the contiguous area that may reasonably be expected to become urbanized in the next 20 years. Within the study area lies the municipalities of Addis, Baker, Baton Rouge, Brusly, Central, Denham Springs, Donaldsonville, French Settlement, Gonzales, Livingston, Plaquemine, Port Allen, Port Vincent, Sorrento, St. Gabriel, Walker, White Castle, and Zachary.

EPA designated the five parish Baton Rouge area as non-attainment for ozone based on the 2008 8-hr standard of 75 ppb. Planning activities in the UPWP that addresses the air quality issues can be carried in the entire non-attainment area.

Based on recent census data the five parish area has seen an increase in population from 705,973 in 2000 to over 732,500 in 2010.

Table 3. **Population change in five parish Baton Rouge non-attainment area**

Parish	2010 Census Population	2000 Census Population	% Change
Ascension	107,215	76,627	39.9
East Baton Rouge	440,171	412,852	6.6
Iberville	33,387	33,320	0.2
Livingston	128,026	91,814	39.4
West Baton Rouge	23,788	21,601	10.1
Total	732,587	636,214	15.1

Unified Planning Work Program 2017

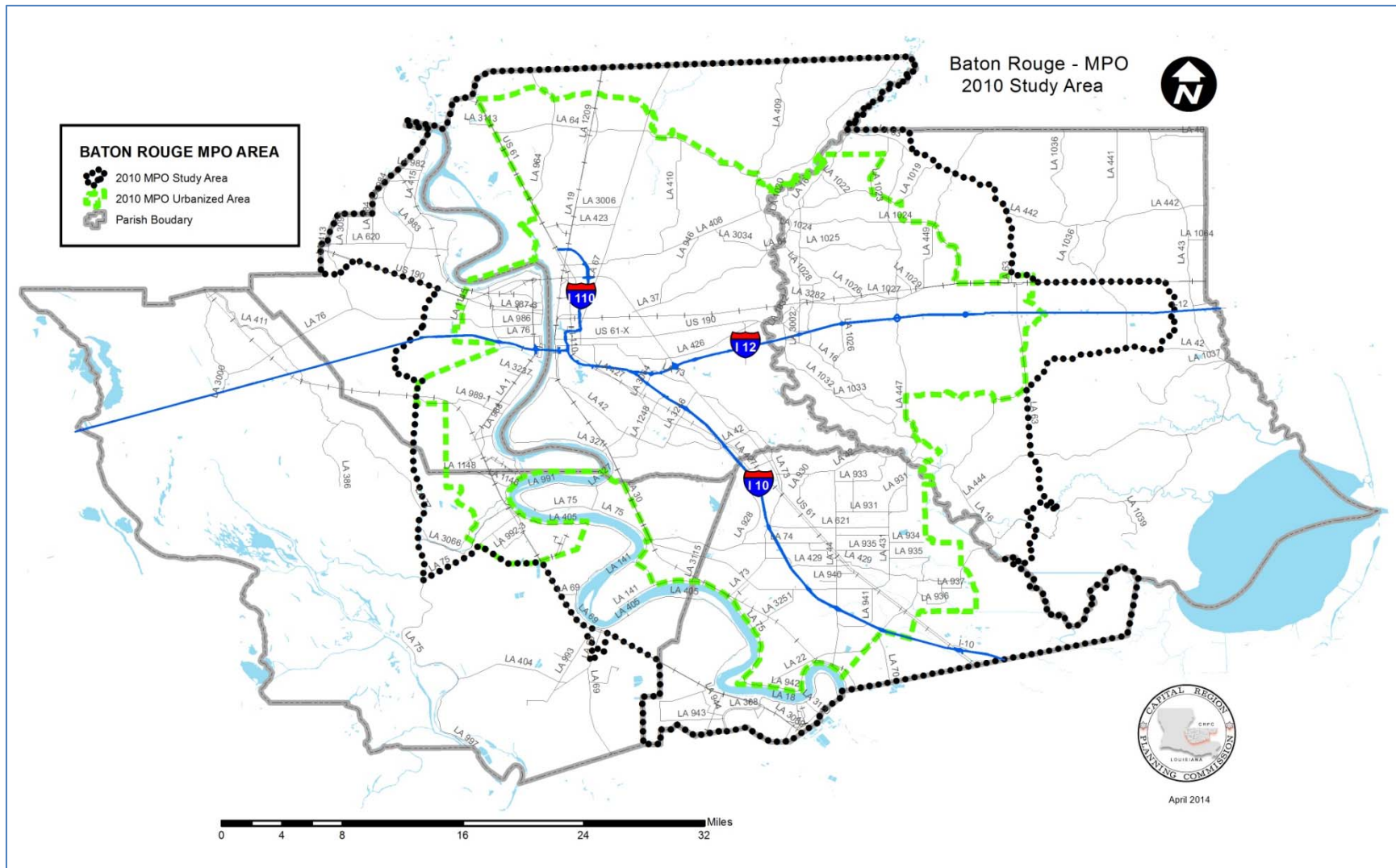


Figure 2. Capital Region Metropolitan Planning Area

3 Organization and Management

The Transportation Policy Committee (TPC), provides policy direction for CRMPO. The TPC is composed of chief elected officials from Baton Rouge, City of Central, Port Allen, Baker, Brusly, Zachary, Gonzales, Sorrento, Walker and Denham Springs and the Parishes of East Baton Rouge, West Baton Rouge, Ascension, and Livingston, in addition to members from LADOTD, the FHWA (non-voting member), CRPC, and the quasi-public Capital Area Transit System (CATS). The Greater Baton Rouge Airport Commission is a creation of the East Baton Rouge City-Parish Government and is represented on the committee by the Mayor-President of East Baton Rouge Parish. The detailed list of the TPC and other subcommittee members is also available on www.crpc-la.org.

The Policy Committee also has several committees for which the CRPC staff provides administrative support and technical assistance. Some of these committees have members who do not currently serve on the Policy Board but represent stakeholders in the community:

Technical Advisory Committee (TAC) The Transportation Technical Advisory Committee membership is comprised of principally representatives of general purpose government who manage the day to day technical aspects of the transportation system infrastructure or their designee. In order to broaden the base of technical expertise available to the committee, and meet Chapter I, Title 23 CFR Part 450 subpart C 450.306 (i), requirements of the membership of the TAC includes representatives from several affected transportation modes and community organizations. The TAC, under the direction of the TPC, makes recommendations to the TPC for matters necessary to comply with the requirements of federal and state law.

Bicycle and Pedestrian Advisory Committee (BPAC) The purpose of the Capital Region MPO Bicycle and Pedestrian Advisory Committee is to improve bicycling and pedestrian conditions for commuters, children and elderly, persons with disabilities and recreational bicyclists and walkers of the area. In addition, the committee analyzes issues arising within the planning area from a bicycle and pedestrian perspective and make recommendations to the TAC and TPC. This committee also promotes and reviews implementation of complete streets concepts for relevant projects.

Coordinated Human Transportation Services Committee (CHTSC) The purpose of the Capital Region MPO Coordinated Human Services Transportation Planning Committee is to improve utilization of transit service resources and transit funding resources for commuters, elderly, persons with disabilities, persons with low income, rural area commuters and school system commuters of the area. The goals of the Committee will be the same as those established in the Regional Major Transportation Plan. In addition, the committee will analyze issues arising within the planning area from a coordinated mass transit perspective and make recommendations to the TAC and TPC.

Freight Committee (FC) The purpose of the freight committee is to Understand and assess the needs of the Baton Rouge Urbanized Area regional freight community, identify opportunities to address safe and efficient future freight transportation expansion, further the region's understanding of freight movement/land use issues and implications, address the growing challenge of accommodating both passenger and freight activity on the same transportation system, including issues related to congestion and public safety concerns, and play a key role to inform decision-makers as to the need/rationale for land use strategies/initiatives and infrastructure to support efficient freight movement in the region.

ITS Committee The purpose of the ITS committee to discuss any outstanding ITS issues, status of ITS projects, promote new ITS projects, and monitor regional ITS architecture. It also provides a venue for personnel from different Traffic Management Centers (TMC's) to collaborate and create seamless communications among themselves.

Unified Planning Work Program 2017

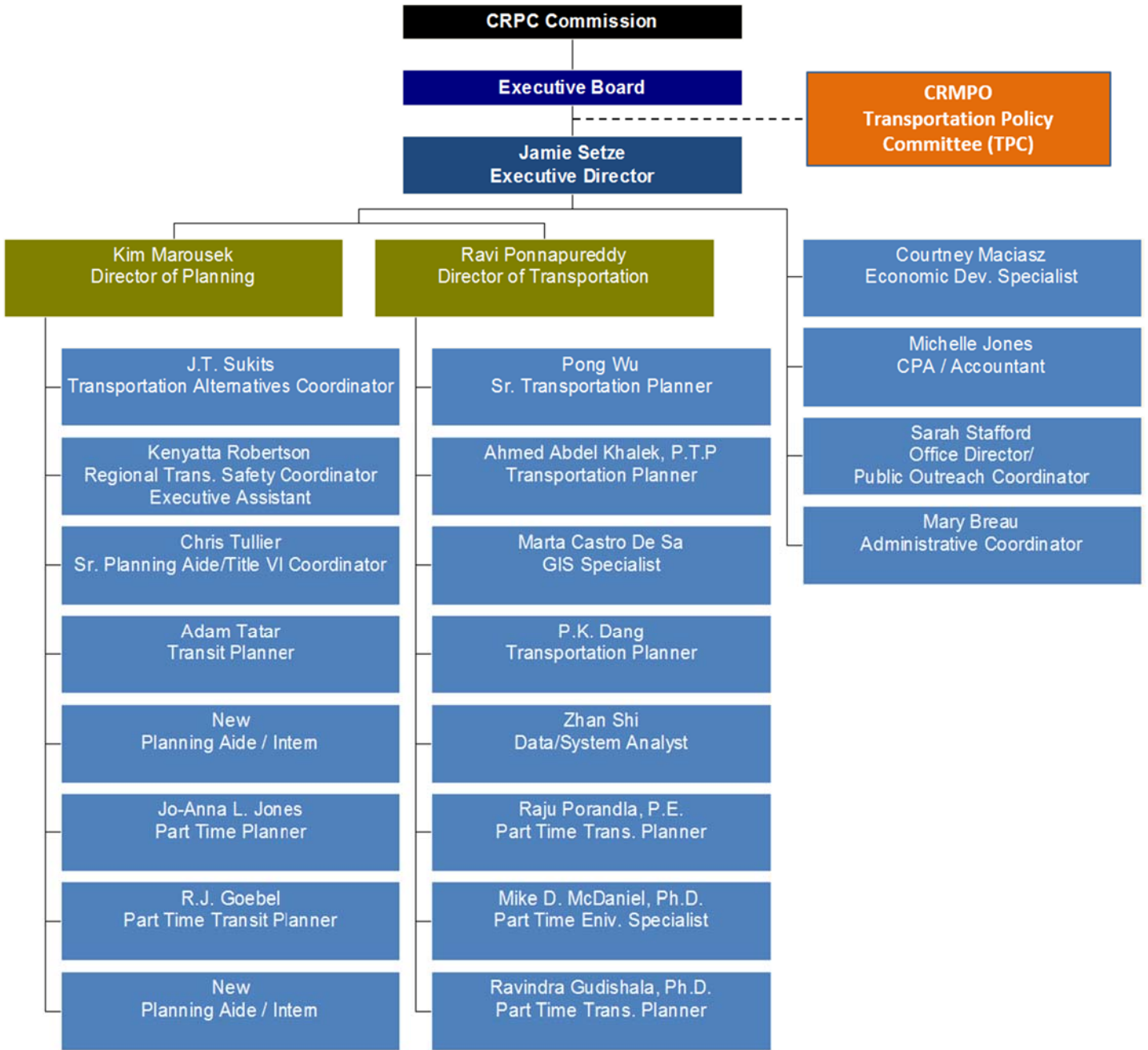


Figure 2. CRPC Organization Chart

4 Task A-1: Citizen Participation and Public Outreach

This task will address CRPC's public participation plan that provides reasonable opportunities for interested parties to comment on the Metropolitan Transportation Process as required by MAP-21 and previous legislations.

4.1 Objectives

- To develop informational materials that support a cooperative planning process and explain CRPC plans and activities in a concise and straight forward manner.
- To increase both awareness and interest in transportation plans and the transportation planning process using traditional and innovative approaches.
- To provide frequent opportunities for interested parties from the private business community, public officials, neighborhood organizations, the physically challenged and other groups impacted by transportation plans to participate in the development of CRPC transportation plans and to encourage public participation in transportation planning activities at all levels.

4.2 Previous Work/Accomplishments

- CRPC staff also worked on revamping the website to make it visually appealing and also easy to use. The revamped website was launched on August 11, 2015. Click on the link below to view the new website.
<http://www.crpcla.org/>
- CRPC published second, third, and fourth editions of the newsletter on August 11, December 8 2015, and March 21 2016 respectively. Staff worked on drafting the contents of these newsletters. The newsletters can be viewed and downloaded from the link below. Hard copies of the newsletters were distributed at various public meetings, electronic versions were emailed to all the contacts in the stakeholder database, and links to the newsletters were also posted on CRPC's facebook page.
<http://www.crpcla.org/newsletter/>
- Staff participated in various project level public meetings that were conducted by DOTD and local governments. Staff attended public meetings regarding the meetings on I-10 @ Pecue Interchange, I-10 traffic flow improvements, TranLinkBR, and many other projects.
- Staff met with the Black North Shore elected officials and discussed ways to include their constituency into the transportation planning process.
- Staff met with local and state elected officials to update about the MPO and transportation planning activities in the region. Staff prepared a presentation titled "CRPC 2.0" to educate public and elected officials about CRPC and its role in solving regional problems related to transportation, planning, economic development etc.
- Researched about the new transportation law Fixing America's Surface Transportation Act (FAST Act) and presented a general overview at the TAC & TPC meetings.
- Conducted workshops to educate the elected officials and public about MAP-21, federal funding sources, and also the process to access these funds for local projects.

Unified Planning Work Program 2017

- Disseminated timely information regarding the TIP amendments, TIP administrative modifications, air quality issues, TAC and TPC meetings, Commission meetings and other processes using breadth of communication strategies.
- Utilized facebook and other social media to notify public about upcoming events and also up to date information on CRPC activities.
- Assisted Capital Area Transit System (CATS) with public outreach activities during 2014 system expansion implementation and subsequent system modifications.
- Developed and conducted various online surveys to gather information from the employees in the CRPC area especially Downtown Baton Rouge about issues that inhibits from using Travel Demand Management (TDM) options and also the possible actions that could encourage them to use car pool, van pool and other TDM options.
- Developed online survey to further reach out and gather input regarding the MTP update from the public, representatives from local governments and non-profit organizations.
- Continued providing technical assistance to the public, local governments, businesses and non-profit organizations as and when requested.
- Developed and updated the Public Participation Plan.
- Participated in various stakeholder and public meetings.
- Utilized visualization techniques in CRPC's plans and also while disseminating information to the public.

4.3 Expected Work

CRPC will

- Continue implementing community outreach and public participation guidelines mentioned in the MPO's Public Participation Plan (PPP).
- Continue to extend CRPC's outreach using social media, electronic and paper comment forms, electronic and paper newsletters, media releases, and appropriate innovative participation techniques.
- Continue to publish newsletters that will be made easily accessible to the public using methodologies mentioned in the PPP.
- Develop easy to understand citizen's guide that helps the public better understand about CRPC, Baton Rouge MPO, transportation and land use planning, federal grants and environmental issues.
- Continue to conduct training/workshop to keep the local elected officials and various other members informed about CRPC, MPO processes, Planning etc.
- Delve the possibility of creating additional committees such as the Citizens Advisory Committee (CAC), Complete Streets Advisory Committee (CSAC) and any other committee that will add value to the transportation planning process.
- Continue to update comprehensive database of stakeholders that includes environmental justice, neighborhood, non-profit, voluntary, and business organizations. An effort will be made to communicate and include as many stakeholders in the planning process.
- Continue presenting information regarding the local transportation and environmental issues at the MPO and CRPC meetings.

4.4 Performance Measures

- Number of website visits
- Number of Likes/Visits on facebook and other social media
- Number of document downloads from the website
- Number of stakeholders in the comprehensive stakeholder database
- Publication and dissemination of updated PPP, quarterly newsletters, citizen's guide and MPO planning documents.

4.5 Results/Products

- Updated PPP
- Quarterly Newsletters
- Citizens Guide to MPO Processes and Transportation Planning
- Updated Stakeholder Database
- Dissemination of information through website, social media and other traditional methods.
- Public notices regarding CRPC meetings

4.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	71,770
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	17,943
Total Funds	89,713

5 Task A-2: Congestion Management Process

The purpose of this task is to use a systemic approach collaboratively developed and implemented through out the CRMPO region to ensure safe and effective management and operations of new and existing transportation facilities through use of demand reduction and operational management strategies.

5.1 Objectives

- To develop and encourage Travel Demand Management (TDM) and Transportation System Management (TSM) strategies to provide alternatives to single occupancy vehicle (SOV) users in order to save energy (fuel) and money, improve air quality, and reduce peak period congestion.
- To promote and implement advanced traveler information system in order to influence traveler behavior and reduce the number and size of bottlenecks especially during peak hours.
- To develop and maintain a data driven Congestion Management Process (CMP) that promotes multimodal system performance measures and strategies that can be reflected in the Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP).

5.2 Previous Work/Accomplishments

- CRPC initiated the process of counting pedestrians and cyclists. Pedestrian and Cyclists were counted near the trailhead at Florida Blvd., River Road, near The LSU Lakes and many other locations.
- CRPC staff met with representatives of Burke Kleinpeter to go over the development of a Bicycle and pedestrian map on state owned facilities utilizing strava data. Meetings were held with local stakeholders to go over preferred and potential routes. CRPC staff held subsequent meetings with representatives of the City Parish Planning Commission to develop a larger map which merges routes on both city and state owned facilities.
- CRPC staff actively participated in the meetings of States Complete Streets Advisory Committee and The Sustainable Transportation Advisory Committee.
- CRPC continued working with representatives of LADOTD, LDNR, and LDEQ to improve the rideshare portals that have been developed at the state level. CRPC staff met with representatives of Uber regarding the development of a promo code for new users to have a guaranteed ride home. That code has since been developed and is operational. CRPC worked very closely with LDEQ and LCF to develop a promotional video educating the public of ridesharing/carpooling and also promoting the newly launched Geauxride tool. An official Geauxride launch party was also organized at North Blvd Town Square where the promotional video was played continuously for public to be aware about carpooling opportunities in the Capital Region.
- Staff participated in many meetings LADOTD to review the results and learn on the following projects
 - Transportation improvement projects in Ascension and Livingston
 - LA 73 corridor study
 - LA 415 study
 - LA 22 @ I-10 safety and traffic flow improvements

Unified Planning Work Program 2017

- Procured travel time data for 2011, 2012, 2013, and 2014 and also the software to Analyze congestion, travel time index, and planning time index. Staff Re-imported all the tables and re wrote the scripts to analyze the 2011-2013 speed data to calculate:
 - Annual average TMC level computations of free flow speed, average speed, speed differential, travel time index (TTI), fifth percentile speed, Planning Time Index (PTI) and Buffer Time Index (BTI) for the following time periods
 - All Daily – All 7 days of a week and all day (24 hr)
 - Week AM – Weekdays AM Peak (6 AM – 9 AM)
 - Week PM – Weekdays PM Peak (3 PM – 6 PM)
 - Week MD – Weekdays midday Peak (9AM – 3 PM)
 - Week NT – Weekdays night time (6PM – 6AM)
 - Monthly average TMC level computations of the same attributes mentioned above and by the same time periods.
 - Monthly and Hourly TMC level computations of the same attributes for each hour between 6 AM and 6 PM
 - Annual Day of Week (DOW) TMC level computations of the same attributes for each day of the week.
 - Annual average DOW and hourly TMC level computations of the same attributes for each day and each hour between 6 AM and 6 PM.
 - Worked on updating the road segment TMC correlation table to include all the roadways with functional classification major collector and above.
 - Researched DOTD and local traffic count data information to get traffic count data for the road segments defined in the above mentioned correlation table.
 - Wrote scripts to estimate the weighted averages of all the above mentioned attributes and time periods (1 through 5) and created views in a database to generate the above calculated data in meaningful and readable tables.
 - Prepared a draft list of top 20 interstate and principal arterial segments based on congestion (TTI) and reliability (BTI) for years 2011, 2012, 2013, and also three-year average by peak periods.
 - Developed graphical representation of the reliability of each interstate road segment for I-10, I-12, and I-110 by each direction by month for AM Peak and PM Peak for years 2011, 2012, and 2013.
 - Reviewed 2014 speed data and researched on developing a methodology to identify non-recurring congestion and its impacts.
- Initiated work to develop a mobility report and to update the CMP process and document. The current CMP document was developed in 2010 using the regional travel demand model as the tool to identify the congestion and delay.
- Actively engaged Bicycle and Pedestrian Committee and coordinated with other non-profit entities such as Downtown Development District (DDD), Bike BR etc. to discuss and promote bike and pedestrian projects, encourage the use of bike and pedestrian modes of travel and also advocate and promote about bike and pedestrian safety.

Unified Planning Work Program 2017

- Supported and encouraged traffic operational improvements to smoothen traffic flows, eliminate bottle necks, and mitigate congestion. A series of signal synchronization projects (Phases I through IV) were implemented on major congested corridors and phases V and VI will be implemented in the near future.
- Formed a Freight Committee to discuss the status and address issues related to safety, security and mobility of freight in the region.
- Actively participated in IBM's Smart Cities Grant program meetings and discussions to identify smarter ways of alleviating congestion in the Capital Region.
- Staff attended workshops, conferences and training to improve efficiency and skills for performing this task.

5.3 Expected Work

CRPC will

- Continue to implement and actively promote the Travel Demand Management (TDM) program in the CRMPO area.
- Continue to analyze the procured travel time data to produce details including but not limited to the following:
 - Average historic speed and total travel time by travel direction, by month, day of week and time period based upon user-selected segment, corridor or network.
 - Average historic daily speed profile by travel direction and day of week for a user-selected segment, corridor or network.
 - Mapping of average historic speed data set.
 - Calculate travel time statistics for a designated segment, corridor or network, such as Travel Time Index, total delay, average delay per commuter, etc.
- Develop mobility reports and a new CMP document utilizing the travel data analysis results. Crash data, functional classification, TDM strategies and other pertaining available data will also be utilized in prioritizing the congested segments and identifying implementation strategies and performance measures.
- Continue facilitating the Bicycle and Pedestrian Committee meetings, encourage the use of bike and pedestrian modes of travel and also advocate and promote about bike and pedestrian safety.
- Reactivate Freight Committee meetings and encourage participation of various freight mode agencies to support regional freight studies/initiatives that improves mobility, safety and security of freight movement in the region.
- Continue to facilitate the ITS committee meetings, support and promote regional ITS projects and coordinate with LADOTD to update the regional ITS architecture.
- Attend, if available, workshops, conferences and training to improve efficiency and skills under this work program task.

5.4 Performance Measures

- Number of proposed TDM activities implemented
- Updated CMP
- Number of meetings of the Bike and Pedestrian, Freight and ITS committees

5.5 Results/Products

- Congestion Analysis/Mobility Reports and Maps
- Updated CMP
- Implementation of TDM Strategies
- Facilitation of the appropriate committee meetings

5.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	128,950
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	32,238
Total Funds	161,188

6 Task A-3: Coordinated Public Transit Human Services

The purpose of this task is to address the Coordinated Public Transit Human Services Transportation Plan as required by MAP-21 and foster coordination and communication among all the transit providers in the region.

6.1 Objectives

- To develop and maintain a Coordinated Public Transit Human Services Transportation Plan through a process that includes representatives of public, private, and non-profit transportation and human services providers, as well as the public.

6.2 Previous Work/Accomplishments

- Organized Human Services Transportation Coordination meetings and workshops to provide information on the Human Services Transportation Coordination process. Staff presented on the RTAP program along with the monitoring and installation of security systems on LADOTD owned vehicles.
- Staff worked with the service provides and encourages them to conduct self-assessments.
- Identify need for coordination
- Identify challenges to coordination
- Provide the tools and information needed to facilitate the continued development of the Regional Coordination Plan.
- Developed a Coordinated Public Transit Human Services Transportation Plan in 2007 and updated it in 2010.
- Formed Coordinated Public Transit Human Services Transportation steering committee and working group and conducted regular meetings since 2007.
- Conducted survey of all the participants using the "Framework of Action Self-Assessment Tool".

6.3 Expected Work

CRPC will

- Continue quarterly meetings with the human services agencies that provide or have clients that need transportation services in the Baton Rouge Area.
- Collect information on transportation services, maintain and update the regional transportation coordination plan.
- Providing input to the statewide selection process for 5310, 5311, 5316 and 5317 funding.
- Utilize planning efforts from task D-4 for transit and special transportation efforts.

6.4 Performance Measures

- Quarterly Coordinated Public Transit Human Services Transportation working group meetings.
- Updated elderly population, families below poverty and disabled population maps.

6.5 Results/Products

- Updated information on transportation services that are being provided in the Baton Rouge area
- Updated Coordinated Human Services Transportation Plan
- Quarterly Coordinated Human Services Transportation meetings
- Administer a call for proposals on Job Access / Reverse Commute and New Freedom projects
- Input to the statewide selection process for 5310, 5311, 5316 and 5317 funding

6.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	4,870
CARRY OVER PL	0
FTA 5307	0
FTA 5303	10,000
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	1,218
Total Funds	16,088

7 Task A-4: MPO Planning Progress and UPWP

This task addresses periodic reviews, changes, and progress on the short range planning process and changes to the Unified Planning Work Program (UPWP) as required by MAP-21 and the previous legislations.

7.1 Objectives

- To conduct short range transportation and transportation-related planning activities with short-term and implementation focus, including the development and administration of Transportation Improvement Program (TIP) and the UPWP.
- To keep the Transportation Policy Committee (TPC), the Technical Advisory Committee (TAC), other committees and the public informed about the status of short range planning activities.

7.2 Previous Work/Accomplishments

- Participated in quadrennial FHWA certification review on February 17th and 18th 2016. Staff compiled all the necessary documents, provided responses, and prepared detailed presentations showing casing all CRPC activities that were performed since the previous certification review in 2012. Staff also reviewed the draft certification review observations and provided feedback to FHWA.
- Developed and updated the project selection process for STP>200K funded projects in cooperation with TAC, TPC and the public. Reviewed the existing process and developed initial updates to the selection process.
- Conducted an open and competitive call for STP>200K funded projects in 2012, 2013, and 2014 and incorporated the selected projects into the TIP.
- Monitored progress of STP>200K projects and coordinated with LADOTD and municipalities to ensure their timely implementation.
- Maintained the TIP through administrative modifications and technical amendments following and conforming to the applicable guidance of MAP-21, SAFETEA-LU and earlier legislations.
- Developed the required list of annual list of federally-funded obligated projects and published on CRPC's website.
- Prepared GIS and electronic database of TIP project information and published the same as web-based interactive maps.
- Developed, refined and administered UPWP annually.
- Conducted regular meetings of the TAC, TPC, BPAC, ITS, FC to keep them informed about the short range planning progress.
- Provided technical assistance to Capital Area Transit System (CATS) in implementation of various short range activities as described under UPWP Task D4.
- Published information and documents pertaining to the short range planning activities, and solicited input from the public and respective committees.
- Staff attended workshops, conferences and training to improve efficiency and skills for performing this task.

7.3 Expected Work

CRPC will

- Continue to evaluate the STP>200K project selection process and update it as needed with input from the TAC.
- Issue annual call for STP>200K projects, review and analyze the project submittals, facilitate TAC working group meetings, submit the selected projects to LADOTD and incorporate the approved projects to the TIP.
- Continue to monitor and maintain the current TIP and coordinate with ongoing local comprehensive planning efforts.
- Develop, refine and administer UPWP, related federal grants and third party contracts.
- Continue to conduct TAC, TPC and other committee meetings, keep them informed about the status of short range planning activities, solicit their input and incorporate their recommendations in the planning process.
- Prepare TIP self-certification document for internal purposes to document how the TIP projects address the MAP-21 planning factors and monitor performance measures.
- Analyze and prepare Environmental Justice (EJ) profile of the TIP and other planning activities to monitor proportional distribution of benefits and address any identified issues/concerns.
- Continue to support and provide technical assistance to CATS and other public transit agencies.
- Develop annual list of federally-funded obligated highway and transit projects.
- Continue to maintain the GIS and electronic database of the TIP projects and information and publish them on CRPC's website.

7.4 Performance Measures

- Implementation of the STP>200K project selection process
- Updated TIP and UPWP that conforms to federal, state and local requirements
- Documentation of annual list of federally-funded obligated projects

7.5 Results/Products

- Updated TIP and UPWP documents
- TIP self-certification document
- Annual List of Federally-Funded Obligated Projects
- GIS and electronic database of TIP projects and information
- Regular meetings of TAC, TPC, BPAC, ITS and FC
- Coordination with public, stakeholder groups and other partners and incorporation of their input in short range planning process

7.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	54,530
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	13,633
Total Funds	68,163

8 Task A-5: Non-motorized Planning and Complete Streets

This task addresses Federal requirements of 23 USC. 134(h)(1)(E) to protect and enhance the environment, and promote consistency between transportation improvements, and state and local planned growth and economic development patterns.

8.1 Objectives

- To develop, support and promote plans and projects that increase and improve cycling and walking facilities, improve safety and security of vulnerable roadway users, and create alternative transportation mode choices for all travelers.
- To prepare and evaluate transportation plans so that bicycle and pedestrian facilities are integrated wherever practicable, into the network.

8.2 Previous Work/Accomplishments

- Developed Travel Happy Now and Can You See Me Now Media Campaigns
- Conducted Can You See Me Now Video Contest at local area High Schools
- Partnered with BRPD to manage increased enforcement, education with local youth, and continuing education with local law enforcement.
- Collaborated with LADOTD and Burke/Kleinpeter to update Bike suitability map
- Managed the procurement and installation of Bike Racks throughout Downtown Baton Rouge and Southern University
- Co-sponsored on EPA technical assistance grant to develop a Bike Share in EBR
- Conducting Bike/Ped Counts throughout EBR Parish
- Worked with Sustainable Transportation Advisory Committee to develop a complete streets policy for EBR Parish
- Developed a non-motorized plan in 2009

8.3 Expected Work

CRPC will

- In conjunction with the MTP 2042 long range transportation plan efforts, update and expand the non-motorized transportation plan element to include the entire MPO planning boundary.
- Provide support to an expanded Bicycle and Pedestrian Advisory Committee as they work to update the regional Non-Motorized Plan. Generally prepare agendas and meeting minutes.
- Prioritize and recommend bicycle and pedestrian infrastructure projects needed to implement non-motorized plans throughout the region; and, as needed for safety improvements.
- Take and analyze bicycle and pedestrian counts at select locations throughout the region.
- Analyze crash data to develop countermeasures to create safe and attractive cycling and walking environments and to protect vulnerable roadway users.

Unified Planning Work Program 2017

- Promote bicycle use and safety at various community events throughout the region.
- Support and promote planning activities that increase awareness of the public health benefits associated with active transportation. Coordinate with both for-profit and non-profit community partners.
- Identify opportunities and potential projects for joint use of public lands and rights-of-way for bicycles and pedestrians.
- Monitor transportation improvement projects, comprehensive and community plans and land development proposals in the region to ensure the needs of non-motorized travelers is considered where appropriate. In particular, look for improvements that will connect neighborhoods, parks, schools and businesses.
- Assist local jurisdictions in implementing bicycle, pedestrian and livable roadway plans and guidelines. Assist with the incorporation of pedestrian and cycling-supportive design principles in local codes and standards, including complete street policies. Develop sample language where appropriate.
- Assess bicycle and pedestrian access to schools, parks, trails, community centers, transit stops and other key locations.
- Work with local jurisdictions where they have identified road diets and assist with the coordination and design of non-motorized roadway components considering connections to the surrounding neighborhoods and businesses.
- Research national best practices and federal guidance on innovative walk and bike infrastructure. Prepare reports and recommendations to Bicycle/Pedestrian Advisory Committee on recommendations of where innovative strategies could be applied in the region.

8.4 Performance Measures

- Bicycle/Pedestrian Advisory Committee membership expanded to incorporate MPO planning boundary.
- Coordination with various stakeholders.
- Technical assistance provided
- Community Events attended to promote active transportation and safety awareness.

8.5 Results/Products

- Updated Non-Motorized Transportation Plan for inclusion in the MTP 2042.
- Advisory Committee meetings held.
- Reports/presentations with maps, tables, charts and illustrations in hard copy as well as electronic forms.

8.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	51,030
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	12,758
Total Funds	63,788

9 Task A-6: Clean Air

This task addresses Federal requirements of 23 USC. 134(h)(1)(E) to protect and enhance the environment, and promote consistency between transportation improvements, and state and local planned growth and economic development patterns.

9.1 Objectives

- To monitor the transportation planning activities and ensure that such activities do not deteriorate the air quality in the five parish non-attainment area.
- To keep the public especially those with vulnerable health conditions informed about air quality through extensive proactive outreach activities.
- To promote use of alternative clean fuels.
- To reduce the number of Single Occupancy Vehicles (SOV) by promoting alternative modes of travel

9.2 Previous Work/Accomplishments

- Actively participated in inter-agency meeting at DOTD to discuss the timeline of the Juban road widening project and its impact on the current conforming plan. It was concluded that the EA can be approved and also that other phases can be authorized as long as the new changes are not affective before 2018.
- EPA visited Baton Rouge to host a two-day workshop to assess the feasibility of the project. EPA worked with Mayor President's Office, DDD, CRPC, CPEX, BRAF, and Bike BR, hosted Bike Share Information and Visioning Session. The city-parish was one of 22 regions to be selected for the Building Blocks for Sustainable Communities grant.
- Educated the local elected officials about mitigating air quality constraints to industrial growth through a new strategy for generating Emission Reduction Credits. An update was provided on current air quality status in the capital region, air quality constraints to economic and transportation development, and proposed new strategy mitigate the constraints.
- Assisted local governments and CATS by preparing air quality reports to support their CMAQ project applications in 2016, 2014 and also in 2012. Staff used EPA's MOVES 2014 model for analyses in 2016. CRPC has performed project level air quality analyses and reports since the 90's.
- Coordinated and conducted Air Quality Interagency meeting on August 26, 2015 to discuss about the MTP 2037 amendment process. Performed air quality analysis using MOVES and prepared amended conformity document for MTP 2037.
- Coordinated with LDEQ, LADOTD, and FHWA to expand the model and produce the VMT data required for analysis and submittal of MOVES based re-designation package to EPA.
- Coordinated with LDEQ, DOTD, FHWA and EPA to finalize the new 8-hr ozone MOVES based MBEBS. Staff worked on various MOVES modeling for MVEB budget scenarios to clear the confusion surrounding the new MVEB request.
 - MOVES 2010b utilizing same inputs as DEQ's consultant Environ and Stage II refueling
 - MOVES 2010b utilizing the same inputs as Environ but without State II refueling
 - MOVES 2010n with some default input data with Stage II refueling
 - MOVE 2014 with reformatted inputs

Unified Planning Work Program 2017

- Reviewed EPA's Proposed Rule to Update the Air Quality Standards for Ground-Level Ozone, Federal Register Vol. 79, No. 242, Wednesday, December 17, 2014. Prepared and submitted comments documenting the impacts of the proposed standards on the Capital Region and requested EPA to forgo or postpone the promulgation of a new, more stringent ozone standard.
- Actively participated in discussions to evaluate and research about employing "Off Property Projects" to earn Emission Reduction Credits (ERC's) as a strategy for helping to permit new industrial Projects and expansions in the Capital Region.
- Worked with BRCAC to prepare and update the Ozone and PM Advance report.
- Developed various online surveys to gather information from the employees in the capital region especially Downtown Baton Rouge about issues that inhibits from using Travel Demand Management (TDM) options and also the possible actions that could encourage them to use car pool, van pool and other TDM options.
- Coordinated with Louisiana Clean Fuels (LCF) to jointly kick off EPA 's School Flag and also anti-idling programs. CRPC also sponsored natural gas round table conference organized by LCF. The purpose of the conference is to bridge the gap between infrastructure and demand by fostering discussion between natural gas providers and existing and potential users.
- Coordinated with LCF, Re-Development Authority (RDA), CATS and local Governments to promote use of alternative fuels and develop strategic vision in the CRPC region.
- Coordinated with Downtown Development District (DDD) and other not-for-profit groups to promote alternative modes of transportation. Staff facilitated and participated in discussions to identify the locations and funding for installation of end of trip facilities such as the bike racks in the DDD area.
- Performed air quality conformity analysis MTP 2037 update. CRPC has performed conformity analyses on all the Plans since the 90's.
- Conducted air quality interagency meetings to address project level air quality and MTP 2037 update conformity analysis issues.
- Monitored new air quality regulations and presented the information at CRPC meetings and on the website.
- Regularly monitored changes to the MTP and TIP in order to avoid violations to the conformity document.
- Supported regional air quality planning initiatives such as the Ozone and PM Advance programs and efforts to identify, quantify, evaluate, implement and track on-road mobile measures to reduce Ozone precursors and Particulate Matter.
- Supported and provided technical assistance to the Baton Rouge Clean Air Coalition (BRCAC) and LCF.
- Researched and familiarized with Environmental Protection Agency's (EPA) new mobile source emissions modeling software MOVES.
- Staff attended workshops, conferences and training to improve efficiency and skills for performing this task.

9.3 Expected Work

CRPC will

Unified Planning Work Program 2017

- Continue to monitor changes in the MTP and TIP. CRPC will coordinate interagency meetings if the proposed changes violate the current conformity determination and take necessary action. Any such changes will only be made to the TIP or MTP after obtaining approval from FHWA and EPA.
- Support and coordinate with LDEQ, BRCAC, LCF and other regional stakeholders to develop a manageable, sustainable, and realistic strategic for increasing the availability of Emission Reduction Credits (ERC's). CRPC in coordination with partners will establish information management resources to support the program. The following are some of the tasks that will be required to setup the information resource.
- Documentation of the ERC process
- Research and documentation inventory of heavy equipment and the entity that owns the equipment
- Research and documentation of projects eligible and looking for ERC's and/or funding.
- Documentation of all the resources, firms with relevant specialties
- Interactive website displaying all of the above mentioned information.
- Continue to implement public education/outreach on air quality issues especially relating to transportation. This may include presentation, media events, seminars, conferences, and informational/promotional materials.
- Continue supporting regional air quality planning initiatives such as the Ozone Advance and PM Advance programs.
- Provide technical assistance to the local governments in quantifying emissions using the MOVES model and preparing air quality reports.
- Monitor, analyze and comment on regulatory developments at the federal, state and local level related to transportation air quality and report to the affected entities regarding impacts to planning activities.
- Collaborate and partner with BRCAC and LCF to promote regional clean air activities.
- Continue to implement the Travel Demand Management (TDM) program in the CRMPO area. CRPC intends to focus on the "Commuter Travel" side of TDM for this Year's Program using a four phase strategic implementation approach.
- Phase I: Data Collection
- Phase II: TDM Implementation Strategies
- Phase III: Outreach Strategies (Marketing Plan)
- Phase IV: Monitoring/Reporting
- Provide assistance/information to Louisiana Department of Environmental Quality (LDEQ), if required, regarding the emission reduction potential of Transportation Control Measures (TCM) and Travel Demand Management (TDM) activities related to criteria pollutants and their precursors.
- Coordinate and conduct air quality education, outreach and support programs that inform schools about EPA's school flag program and encourage them to take actions to protect the health of students, especially those with asthma.
- Attend workshops, conferences and training to improve efficiency and skills for performing this task.

9.4 Performance Measures

- Number of meetings with regional environmental partners
- Implementation of effective TDM strategies
- Number of schools that were contacted regarding the EPA school flag program
- Implementation of MOVES model for air quality analyses
- Gallons of natural gas used in the Baton Rouge non-attainment area
- Quantification of annual emission benefits

9.5 Results/Products

- Detailed ERC Report and Interactive Website
- Implementation of TDM strategies
- Air Quality analyses and reports using MOVES emission inventory model
- Education and outreach regarding air quality issues
- Educating local schools regarding EPA's school flag program
- Meetings with interagency and other regional environmental partners

9.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	64,285
CARRY OVER PL	80,000
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	36,071
Total Funds	180,356

10 Task A-7: Intelligent Transportation System (ITS)

The purpose of this task is to develop, maintain and enhance regional Intelligent Transportation System (ITS) activities to improve efficiency of the transportation network, public transit, emergency response, safety and security in the Baton Rouge MPO region.

10.1 Objectives

- To update and maintain the regional ITS architecture to ensure that ITS technologies are deployed in manner that will allow for communication, interoperability, and compatibility amongst systems and entities.
- To improve coordination among emergency response agencies, LADOTD, ATMC and other partners through incident management team meetings.
- To pursue advance data collection efforts to develop a data driven Congestion Management Process (CMP), check the performance of existing transportation system, and propose feasible strategies to improve the system performance.
- To continue providing technical assistance to Capital Area Transit System (CATS) in enhancing the Automatic Vehicle Location (AVL) and implementing other transit ITS technologies to improve the performance, reliability, safety and security of the public transit system.

10.2 Previous Work/Accomplishments

- Conducted regional ITS focus group meeting with participants from LTRC ITS Lab, EBR Traffic/ATMC, FHWA, and CRPC to discuss about ITS needs and the path forward. CRPC staff updated the group about the travel time database and the plan to do mobility reports and also recurring versus non-recurring congestion analysis.
- Reviewed 2014 travel time data to utilize it for analyzing recurring versus non-recurring congestion but found significant gaps in the raw data. Staff contacted Indiana DOT to discuss about their Mobility data report and the challenges they experienced with their data.
- Met with the personnel from LADOTD ITS and also the ATMC contractor to discuss about strategy to utilize the data for planning purposes and also about LADOTD's upcoming ITS projects in the region.
- Participated in regional ITS architecture update stakeholder meetings to provide input and develop vision to build an efficient regional ITS system. Staff worked with DOTD staff, to setup ITS meeting with DOTD ITS section, MPO and other stakeholders to discuss about the ITS projects outlined in the Regional ITS architecture document conditionally adopted by the TAC/TPC in Dec 2014.
- Procured travel time data and analyzed the data to check the performance of existing transportation system, and propose feasible strategies to improve the system performance.
- Preliminary Implementation Plan and Early Deployment Study for Intelligent Transportation Systems in the Baton Rouge MPO area were first developed in 1999. The regional ITS architecture was last updated in 2006 and is currently being updated under LADOTD's statewide ITS engineering and design contract.
- CRPC initiated and coordinated the Incident Management (IM) team meetings to foster coordination among various emergency response agencies and improve incident management and clearance in the Baton Rouge MPO area. The IM team meetings are

Unified Planning Work Program 2017

currently being conducted as part of LADOTD's statewide contract and CRPC actively participates in these meetings.

- Provided technical assistance to CATS in implementing the Automatic Vehicle Location (AVL) technology to help the transit agency and users to
 - Accurately track the location of the bus,
 - Automatically count the passengers getting on and off the bus,
 - Automatically announce the upcoming stops, and
 - Improve performance of the transit system
- Met with FHWA to discuss the role and responsibilities of MPO in the regional ITS activities, status of the Statewide ITS architecture update project, Turbo Architecture and other ITS related activities.
- Coordinated the process to update and renew the cooperative endeavor agreement among City/Parish of Baton Rouge, LADOTD and FHWA for the Advance Traffic Management Center and Emergency Operations Center (ATM-EOC).

10.3 Expected Work

CRPC will

- Continue to participate in the IM team meetings and coordinate IM/ITS activities with representatives from local and state law enforcement, emergency response agencies, LAODTD, FHWA, Louisiana Motor Transport Association (LMTA), Motorist Assistance Patrol (MAP), and other relevant entities to improve incident response and clearance times, and implement effective proactive counter measures.
- Coordinate with LADOTD ITS Division staff, the regional Federal Highway (FHWA) ITS representative, the City of Baton Rouge, and the consultants to provide significant input to the regional architecture implementation process by identifying regional stakeholders, existing ITS assets and planned ITS-related projects.
- Continue to provide technical support to CATS in enhancing and expanding the Automatic Vehicle Location (AVL) system and implementing other transit ITS technologies to improve the performance, reliability, safety and security of the public transit users and system.
- Develop a plan of action in coordination and consultation with LADOTD ITS Division staff, the regional Federal Highway (FHWA) ITS representative, the City of Baton Rouge, and the consultants to utilize data from the Baton Rouge and the state ATMC's for performance monitoring and planning activities.
- Continue to analyze the travel time data to check the performance of existing transportation system, and propose feasible strategies to improve the system performance.
- Support the efforts for establishing phase II of Intelligent Transportation Systems (ITS) Lab at LTRC. The purpose of the lab is to develop and demonstrate procedures that successfully transform existing ITS data into useful information, and then pass the procedures on to agencies in order to apply them on a routine.
- Pursue the use of Advanced Traveler Information Systems (ATIS) as a Travel Demand Management (TDM) strategy in order to improve the regional mobility by providing real time traffic and incident information to travelers to make alternative route/mode choice decisions.

Unified Planning Work Program 2017

- Conduct ITS committee meetings to discuss any outstanding ITS issues, status of ITS projects, and promote new ITS projects.
- Attend, if available, workshops, conferences and training to improve efficiency and skills under this work program task.

10.4 Performance Measures

- Number of Incident Management meetings attended
- Action Plan to utilize ATMC Data
- Improvements to CATS AVL system

10.5 Results/Products

- Process to utilize the data from ATMC for planning purposes
- Technical assistance to CATS for implementation of transit ITS technologies
- ITS Team Meetings

10.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	89,340
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	22,335
Total Funds	111,675

11 Task A-8: Title VI Planning

This task ensures that no person will, on the grounds of race, color, national origin, income, gender, age, and disability, as provided by Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 (PL 100.259), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity.

11.1 Objectives

- Comply with the public involvement and environmental justice requirements of the Federal and State regulations.
- Avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations.
- Provide specific opportunities for local citizens and citizen-based organizations to discuss their views and provide input on the subject areas addressed in plans, projects or policies of CRPC.
- Ensure full and fair participation by all potentially affected communities in the transportation decision-making process.
- Inform and educate citizens and other interested parties about ongoing CRPC and MPO planning activities and their potential role in those activities.

11.2 Previous Work/Accomplishments

- Developed a Title VI plan in 2009 and updated it annually during the subsequent years.
- Implemented the provisions documented in the Title VI plan.
- Prepared annual Title VI report detailing the accomplishments made and submitted it LADOTD.
- Relocated the TAC and TPC meetings from Bluebonnet Public Library to BREC headquarters on Florida Boulevard and all CRPC meetings are held in accessible locations.
- Provisions were made to accommodate disadvantaged community and Title VI/ADA for all the CRPC meetings and a Title VI/ADA notice is included with all the meeting invites.
- Developed and embedded web-based subscription and complaints form on CRPC's website.
- Evaluated the CRPC building and facilities for compliance with ADA requirements and made suggested improvements to accommodate citizens with disabilities.
- Assisted CATS in performing equity analysis for existing and proposed routes.
- Developed and maintained a viable Disadvantaged Business Enterprise (DBE) program in coordination with CATS
- Attended Title VI training, workshops and conferences whenever available and feasible.

11.3 Expected Work

CRPC will

- Maintain, update and use CRPC's database of interested citizens and businesses in Environmental Justice (EJ) areas to facilitate effective outreach to EJ populations.
- Monitor, evaluate and implement EJ and Title VI compliance guidance and requirements for all CRMPO plans, programs and activities.
- Continue to update the Title VI plan as needed and required.
- Continue to prepare annual Title VI performance reports.
- Participate in regional initiatives to broaden the discussion and understanding of transportation's impact on disadvantaged citizens and identify possible ways to minimize, avoid or mitigate potential disproportionate adverse impacts on them.
- Continue to hold all the meetings at accessible locations to disadvantaged citizens.
- Continue to accommodate disadvantaged citizens at all the meetings and also include support information with all the meeting notices.
- Develop easy to understand citizens guide to transportation planning as described under Task A1 and ensure that it is disseminated to disadvantaged citizens and to citizens in EJ areas.
- Continue to enhance Title VI/ADA expertise by attending webinars, seminars, training sessions and conferences.
- Coordinate with CATS to support and maintain their DBE program.
- Develop process for addressing DBE participation in collaboration with LADOTD.
- Collect, analyze and update data on population, housing, employment and other demographics and prepare maps depicting distribution of EJ and ADA citizens.
- Perform Limited English Proficiency (LEP) analysis to understand the LEP demographic composition and distribution in the CRMPO area and assess the need to develop and implement a LEP plan.

11.4 Performance Measures

- Updated Title VI/Environmental Justice/ADA database
- Annual Title VI performance report
- Completion and dissemination of citizens guide
- Increased outreach targeting disadvantaged population

11.5 Results/Products

- Updated Title VI Plan
- Annual Title VI Report
- Updated data and maps of disadvantaged population demographics
- LEP analysis
- Citizens guide to transportation planning

Unified Planning Work Program 2017

- Education and outreach targeting disadvantaged population

11.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	18,530
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	4,633
Total Funds	23,163

12 Task A-9: Model Enhancement

The purpose of this task is to continue to review and analyze existing travel demand and air quality models in order to determine feasible enhancements to the modeling procedures that are used in Baton Rouge MPO study area.

12.1 Objectives

- To conduct demographic analysis to determine both the baseline and future land use and economic development patterns in the Baton Rouge MPO study area and use the results of this analysis in developing or refining the regional travel demand model.
- To refine in-house model run capabilities and research the state of the art practice in travel demand modeling and the capabilities to simulate interaction of land use and regional transportation system.
- To refine in-house model run capabilities and research the state of the art practice in air quality modeling and the capabilities to simulate interaction of proposed transportation improvements and air quality.
- To perform air quality, regional travel demand, and micro simulation model runs for existing and future projects as requested.

12.2 Previous Work/Accomplishments

- Continued providing support to LADOTD in modeling numerous project scenarios for the following projects:
 - I-10 between I-110 and I-10/I-12 split in support of LADOTD's I-10 traffic flow improvements study.
 - Impact on the Capital Region transportation network with and without mega projects.
 - LA 1 - LA 30 Connector - New Scenarios
 - I-10 (LA 415 - I-10/I-12 Split) Traffic Flow Improvements
 - Government Street Road Diet Project
 - Old Hammond Hwy Project\
 - Essen Ln - Bluebonnet Connector - New Hospital Roadway
 - Government Street (I-110 - Jefferson Hwy) Complete Streets Study
 - New Mississippi River crossing, BUMP and Westside Expressway Study
 - Nicholson Dr Widening
 - LA 408 (Hooper Rd) Widening and Extension
 - Jones Creek Extension
 - LA 70 Widening
 - I-10 (LA 415 to Essen lane) Traffic Flow Improvements
 - Ascension-Livingston Parkway
 - I-10/LA 1 Connector Study ies
 - LA 64 Mobility Improvements
 - I-12 @ Essen Lane West Bound Off-Ramp
 - LA 415 and LA 73 Corridor Study
- Modeled various E+C and plan scenarios and prepared custom maps in ArcGIS for publishing the same on CRPC's website to support stakeholders and public request.
- Worked on learning the MOVES model for helping the local entities in quantifying VOC and NOx emissions in support of their CMAQ project application(s). Assisted local

Unified Planning Work Program 2017

entities with project level emissions analysis to support their application for CMAQ project calls in 2016, 2014, and 2012.

- Development and Calibration of the Baton Rouge MPO Metropolitan Transportation Model starting in 1992.
- Coordinated with LDEQ, LADOTD, and FHWA to expand the model and produce the VMT data required for analysis and submittal of MOVES based re-designation package to EPA. The tasks that were performed as part of this work effort are listed under Task A-6.
- The following are some of the tasks that were implemented during the MTP 2037 plan and model update.
 - Completed the 2010 base year data on population, employment, traffic counts, roadway and transit networks leading to the development of 2010 base year model.
 - Hosted agency consultation and visioning meetings to reach out to CRMPO members and public to review the base year population and employment data and also gather input about their vision of growth inside the CRMPO study area. Future year data variables were forecasted using the input from the member governments and various available public and commercial data sources.
 - Refined the Traffic Analysis Zone (TAZ) structure, developed the base and future year networks and calibrated the model.
- Performed air quality analysis and prepared reports for Capital Area Transit System's (CATS) CNG and service expansion projects, East Baton Rouge's signal synchronization project phase VI and West Baton Rouge's multi-use trails project during the 2012 LADOTD CMAQ call for projects. CRPC has performed project level air quality analyses and reports since the 90's.
- Provided technical support to the Air Quality Interagency Committee members in reviewing, analyzing and troubleshooting MOBILE6.2 vehicle registration input data
- Researched and initiated development of model-user agreement document in coordination with FHWA to ensure quality control and consistency in regional travel demand runs.
- Attended training, workshops and conferences to enhance modeling skills.

12.3 Expected Work

CRPC will

- Continue to update and refine databases of regional growth and transportation networks for the preparation of future MTP updates and amendments associated for the existing MTP.
- Continue to refine in-house model run capabilities and research the state of the art practice in travel demand modeling and the capabilities to simulate interaction of land use and regional transportation system.
- Perform regional travel demand model runs for alternative or sub-area analysis as requested.
- Perform air quality analysis and quantify emission benefits for projects as requested. CRPC staff will try to keep track of other projects/efforts being implemented in region and quantify air quality emission reductions for applicable projects.

Unified Planning Work Program 2017

- Research and prepare a transition plan to transition from the current air quality MOBILE6.2 to MOVES. Staff will coordinate with the Air Quality Interagency Committee in converting the input files to MOVES format.
- Coordinate with LADOTD and FHWA and finalize the model-user agreement in order to have documented process to ensure quality control and consistency in regional travel demand runs.
- Attend workshops, conferences and training to improve efficiency and skills for performing this task.

12.4 Performance Measures

- Transition to new EPA air quality model MOVES
- Regional Travel Demand Model Runs
- Completion of the model-user agreement

12.5 Results/Products

- Updated GIS based travel demand model
- Implementation of the MOVES model
- Regional travel demand, air quality, and micro simulation models
- Completed model-user agreement

12.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	21,000
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	5,250
Total Funds	26,250

13 Task A-10: Safety and Security Planning

The purpose of this task is to reduce the human and economic toll on the region's multi-modal transportation system due to traffic crashes through widespread collaboration and an integrated 4E (Engineering, Enforcement, Education and Emergency Response) approach.

13.1 Objectives

- To ensure safety is a major goal, with commitment to it at the highest level identify the needed safety improvements in the transportation system and identify performance measures.
- To collaborate with regional safety stakeholders and keep them engaged throughout the planning process.
- To collect and analyze safety data to identify specific transportation safety areas, issues, and feasible solutions.
- To routinely monitor safety programs and projects to evaluate successes or identify course corrections, assess progress towards performance targets, and use tracking information to continually revise and refine the planning process.
- To work with State and Federal agencies and address multi-modal security planning.

13.2 Previous Work/Accomplishments

- Analyzed the crash data received from DOTD for the years between 2009 and 2014. Detailed results were presented at the December TAC/TPC meeting. Prepared hotspot maps for each Parish in the MPO region. Analyzed the total crashes by roadway segment and also by intersection and prepared a report to assist local governments to identify the safety needs of their region. Crash rate for each roadway segment and intersection was also calculated and compared to the state average for similar functioning facility. All the segments and intersections where the crash rate was higher than the state average were also identified. Regional crash report has been finalized
- Participated in LADOTD Road Safety Assessment (RSA) process to identify road safety deficiencies and risk characteristics and proposed cost effective counter measures.
- Promoted the Safe Routes to School program and provided technical assistance to local governments in applying for these projects.
- Coordinated and participated in the Capital Region Transportation Safety Coalition (CRTSC) Meetings. Participated and provided input in drafting the action plans for all the CRTSC emphasis areas. Conducted Impaired Driving events in conjunction with Live After Five to survey area drinkers regarding their perceived level of impairment, measure and inform them on their alcohol blood alcohol content (BAC) readings, and educate them on the dangers of impaired driving.
- Hosted a High School Video Contest aimed at educating youth about road safety before bad habits can be formed. Extend a formal invitation to all students in grades 9-12 in the parishes of Ascension, E. Baton Rouge, Iberville, Livingston, and W. Baton Rouge to participate in the contest. The contest focused on bicycle and pedestrian safety and the responsibility of everyone – including drivers – to share the road safely. Louisiana's goal is "Destination Zero Deaths" on our roads.
- Supported and sponsored safety projects and studies.

Unified Planning Work Program 2017

- Established safety as a decision factor for the selection of transportation projects by including safety as a goal in the Metropolitan Transportation Plan (MTP) 2037 and considering it in the scoring and ranking process. This plan was adopted by the TPC on January 29, 2013 contingent upon passing and approval of the air quality conformity analysis.
- Provided technical support to CATS in developing and launching the Automatic Vehicle Location (AVL) system. AVL system provides benefits to transit users through reduction in wait times and increasing their feeling of security.
- Conducted a very aggressive and successful Capital Region Bicycle & Pedestrian Safety Campaign and developed materials to assist Parishes, Municipalities and Citizens to improve bike and pedestrian safety.
- Conducted free one hour bike classes in association with Bike and Pedestrian Associates to improve safety while riding bike on the street, in bike lanes or on multi-use trails.
- Solicited consultant services for complete streets road diet stage 0 study on Government Street between I-110 and Jefferson Highway. CRPC also promoted and attended the Government Street complete streets demonstration project "Better Block BR " hosted by the Mayor's office of the City of Baton Rouge - Parish of East Baton Rouge, Center for Planning Excellence, and Mid City Redevelopment Alliance.
- Partnered and coordinated with regional safety stakeholders and participated in various stakeholder meetings, trainings, and workshops.
- Conducted monthly Bicycle and Pedestrian Advisory Committee meetings to discuss about the bike/pedestrian projects, promote alternative modes of travel, and bike/pedestrian safety.
- Formed Freight committee and conducted regular meetings to discuss mobility, safety, and security of freight movement as explained in detail under Task A-11.

13.3 Expected Work

CRPC will

- Coordinate and participate in the Capital Region Transportation Safety Coalition (CRTSC) Meetings and outreach events. Support CRTSC in the implementation of regional safety action plans to improve safety in the capital region. Participate in the development of Parish safety plans.
- Continue to establish safety as a decision factor for selection, scoring and ranking of transportation projects in the Congestion Management Process (CMP), Transportation Improvement Program (TIP), Metropolitan Transportation Plan (MTP), and other planning processes or documents.
- Continue to collaborate with LADOTD, collect crash data and analyze the data to identify high crash intersections, corridors and other hot spots for all modes of travel. It is important to indentify the crash locations for all modes even if some modes do not have high number of crashes.
- Continue to participate in LADOTD Road Safety Assessment (RSA) process to identify road safety deficiencies and risk characteristics and propose cost effective counter measures to improve safety.
- Continue to conduct a very aggressive Bicycle & Pedestrian Safety Campaign and develop materials to assist Parishes, Municipalities and Citizens to improve bike and pedestrian safety. The following are some of the tasks planned as part of the campaign.

Unified Planning Work Program 2017

- Conduct Crash Data analysis to identify corridors with high incidence of collisions between cyclists and motorists
- Set up equipment distribution centers where reflective gear and helmets can be distributed
- Conduct media campaign aimed at behavior modification and emphasizing bicycle safety
- Conduct Traffic Skills 101 Courses via curriculum from The League of American Cyclists
- Continue to conduct monthly Bike and Pedestrian Advisory Committee meetings to discuss and promote various non-motorized activities in the region. CRPC in coordination with BPAC and other regional stakeholders will review road improvements planned in the MPO area and encourage incorporating complete streets elements to relevant projects.
- Continue to provide technical support to CATS in enhancing and expanding the Automatic Vehicle Location (AVL) system. AVL system provides benefits to transit users through reduction in wait times and increasing their feeling of security.
- Monitor safety performance and evaluate safety programs and policies by tracking the progress of the regional safety improvements and also using quantitative data analysis methods.
- Continue to collaborate with regional safety partners and stakeholders and promote complete streets policies, and regional safety priorities and objectives outlined in the State Highway Safety Plan (SHSP).
- Coordinate with Local Technical Assistance Program (LTAP) and LADOTD to promote Local Road Safety Program (LRSP) and Safe Routes to School programs to increase local community participation in roadway safety and to develop and implement road safety improvements on public roads under parish or municipal jurisdiction. CRPC staff will provide technical assistance to the local governments applying for these safety programs.
- Continue to coordinate Freight Committee meetings and collaborate with various multi-modal freight partners to engage consultant services for conducting a regional freight study.
- Participate in the State's Traffic Records Coordinating Committee, Incident Management meetings.
- Continue to work with Federal and State agencies, and other regional stakeholders in addressing security planning policies and activities.
- Attend, if available, workshops, conferences and training to improve efficiency and skills under this work program task.

13.4 Performance Measures

- Identification of high crash locations through crash data analysis
- Number of regional safety stakeholder meetings, workshops and conferences attended by CRPC staff
- Number of Bike and Pedestrian Safety educational classes or activities
- Implementation of Regional Safety Plan

13.5 Results/Products

- Crash data analysis and report identifying multi-modal high crash locations
- Coordination with various regional safety stakeholders on various safety programs and initiatives
- Bike and Pedestrian Safety Campaign, materials and educational activities
- Technical assistance to CATS for expanding and enhancing AVL system and other safety and security initiatives
- Regional Safety Plan

13.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	15,160
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	3,790
Total Funds	18,950

14 Task A11: Development of Transportation Plans & Programs

The purpose of this task is to evaluate, support, analyze and implement multi-modal transportation plans and programs that foster accessibility, mobility, safety and other MAP-21 planning factors.

14.1 Objectives

- To promote programs that preserve and use the existing transportation facilities more efficiently.
- To develop plans, programs and projects that addresses movement, safety and security of freight on a multi-model scale.
- To develop plans, programs and projects that addresses movement, safety and security of passengers on a multi-model scale.
- To study and understand the overall social, economic, energy, and environmental effects of transportation planning decisions.
- To improve communication and foster collaboration among various freight and passenger multi-modal stakeholders.

14.2 Previous Work/Accomplishments

- Working on developing a regional Transportation and Asset Management Plan (TAMP) document. Following is the draft outline of the various components of the document.
 - Asset Inventory & Condition Evaluation
 - Life Cycle Management / LCCA
 - Risk Management
 - Performance Gaps
 - Financial Plan and Investment Strategies
 - Implementation
- Analyzed and supported many projects that increase connectivity, accessibility, mobility, safety and security in the region as listed under Task A9.
- Coordinated with DOTD to set up the MTO 2042 Update project. Following are some of the tasks that were accomplished:
 - Drafted a cope of scope work with required tasks and budget information and got approval form DOTD.
 - Prepared a PR Campaign RFP, advertised and selected a consultant. Coordinated with the consultant team to plan out a robust public outreach plan for the MTP 2042 Update project.
 - Completed initial analysis of 2009-2014 crash data from DOTD and prepared a draft report. Identified the top roadway and intersections with high crash rate.
- Coordinated with many regional stakeholders and elected officials to identify critical transportation needs and provided technical support as and when needed.
- Collaborated with New Orleans Regional Planning Commission (NORPC) and Baton Rouge Area Foundation (BRAAF) and co-sponsored the Baton Rouge - New Orleans passenger rail study.

Unified Planning Work Program 2017

- Formed a freight committee and conducted regular meetings to:
- Understand and assess the needs of the Baton Rouge Urbanized Area regional freight community;
- Identify opportunities to address safe and efficient future freight transportation expansion;
- Further the region's understanding of freight movement/land use issues and implications;
- Address the growing challenge of accommodating both passenger and freight activity on the same transportation system, including issues related to congestion and public safety concerns; and
- Play a key role to inform decision-makers as to the need/rationale for land use strategies/initiatives and infrastructure to support efficient freight movement in the region.
- Conducted and sponsored a bike and pedestrian safety campaign to promote safety by educating both the motorized and non-motorized users. Also collaborated with the Baton Rouge Police Department (BRPD) and conducted bike and pedestrian safety classes/seminars.
- Formed a Bike and Pedestrian Committee and conducted monthly meetings to discuss and promote projects that enhances the use of alternative modes of transportation.
- Technical assistance and support to local agencies with various federal/state transportation programs project submittals.
- Conducted planning commissioner training workshops to provide opportunity for planning officials to complete their Act 859 four-hour training requirements.

14.3 Expected Work

CRPC will

- Continue to analyze, support and implement any transportation projects that increase connectivity, accessibility, mobility, safety and security in the region.
- Continue to coordinate with local governments and develop a regional Pavement Management Strategy (PMS) to collect pavement condition information, analyze the data and efficiently preserve the transportation system.
- Engage with the freight committee and collaborate with regional freight partners to draft a scope, prepare a Request for Proposals (RFP) and possibly solicit consultant services to conduct a regional freight study.
- Analyze the effect of transportation planning on land use and development, and the consistency of transportation plans and programs with short-term and long-term development plans.
- Work with all the transit agencies in the region to expand, enhance and to increase the use of such services.
- Continue to assist and support local agencies with Transportation Alternatives Program (TAP), Safe Routes to School (SR2S), Louisiana Roads Safety Program and any other federal or state programs.
- Continue Bicycle and Pedestrian planning efforts:
- Asses the existing non-motorized plan and update it as needed
- Conduct the monthly bike and pedestrian committee meetings and incorporate their input/suggestions in the planning process

Unified Planning Work Program 2017

- Continue the public outreach and education about bike and pedestrian safety, and rules of the road.
- Analyze the issues with and identify the needs for connectivity, safety, security, and accessibility of all the transportation modes (automobiles, transit, bike and pedestrian).
- Analyze preservation of right-of-way for construction of future transportation projects.
- Attend, if available, workshops, conferences and training to improve efficiency and skills under this work program task.

14.4 Performance Measures

- Number of meetings with elected officials and stakeholders
- Functioning Web based dashboard for Pavement Management System
- Finalized TAMP

14.5 Results/Products

- Functioning Web based dashboard for Pavement Management System
- Pavement Management Strategy and Process
- Technical assistance to local agencies regarding various federal/state transportation programs

14.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	50,020
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	12,505
Total Funds	62,526

15 Task A13: Data Development and Maintenance

The purpose of this task is to collect, maintain and analyze regional information on topics including but not limited to, census, land use and related data that will be used in regional demographic forecasting, transportation planning, land use planning, air quality planning, emergency planning, Title VI and economic development efforts.

15.1 Objectives

- To be central repository of regional census, land use, transportation, transit, bicycle and pedestrian, and any related datasets.
- To assist member governments in developing and coordinating a comprehensive GIS database.
- To analyze and create various static and web based maps that will assist on various topics including but not limited to transportation, land use, safety, air quality and title VI planning.

15.2 Previous Work/Accomplishments

- Procured a database server to manage various regional databases and host data driven web applications.
- Collected/procured, and analyzed regional information on topics including but not limited to census, land use, pavement condition, travel time, and related data that will be used in regional demographic forecasting, transportation planning, land use planning, air quality planning, emergency planning, Title VI and economic development efforts.
- Created numerous static themed cartographic maps for planning and presentation purposes. The general mapping areas include the following:
 - Transit routes and bus stops
 - Census demographic maps such as population density, income distribution, age distribution, major employment centers etc.
 - Title VI and ADA
 - MTP and TIP projects
 - Congested corridors
 - Land use information
 - Traffic counts
 - Crash data
- Participated in the Louisiana Geographic Information Council meetings.
- Provided technical assistance to local governments, private and non-profit organizations.
- Created web based maps using the Google Maps API and published various maps such as the MTP, TIP, Transit, Bicycle/Pedestrian, Congested corridors, traffic count and boundary maps. This tool utilized the power and features of Google maps and helped public visualize and understand the above published data. The public were also provided the option to download high resolution PDF maps.
- Downloaded and created geo databases of census 2010 and American Community Survey (ACS) data.

Unified Planning Work Program 2017

- Developed regional forecast of population and employment data for 2017, 2027 and 2037 as part of MTP 2037 Update using various data sources such as census data, LSU population estimates, Woods and Poole, InfoUSA and lastly but most importantly input from local governments and public. Parish level control totals for population and employment were established first and then the data was subdivided in to planning districts and eventually in to Traffic Analysis Zones (TAZ).
- Attended workshops, conferences and training to improve efficiency and skills under this work program task.

15.3 Expected Work

CRPC will

- Continue to collect, maintain and analyze regional information on topics including but not limited to, census, land use and related data that will be used in regional demographic forecasting, transportation planning, land use planning, air quality planning, emergency planning, Title VI and economic development efforts.
- Coordinate with local governments that do not have GIS system and assist them in developing GIS databases of their comprehensive/master plans and any other data they need.
- Coordinate with all the local governments and develop regional land use geodatabases.
- Continue developing cartographic maps as listed in section 7.2 above, for planning and presentation purposes.
- Enhance the web based GIS mapping tool by making it more efficient and publishing additional maps.
- Update the traffic count map and make it available on the website.
- Obtain updated crash data, geocode and perform detailed analysis to identify high crash corridors and intersections, bicycle and pedestrian crash locations, locations by injury type etc. and assist in safety planning.
- Update roadway, transit, bicycle/pedestrian GIS data.
- Coordinate with various agencies such as LAGIC, FEMA, USGS, DHS etc. to understand and use their data for regional planning purposes.
- Attend, if available, workshops, conferences and training to improve efficiency and skills under this work program task.

15.4 Performance Measures

- Compilation of regional land use data and maps
- Enhanced web based GIS interface
- Organized and structured geodatabases
- Number of local entities assisted in developing GIS databases of comprehensive plans

15.5 Results/Products

- Cartographic maps
- Organized and structured geodatabases

Unified Planning Work Program 2017

- Web based GIS interface
- Regional land use GIS data
- Updated roadway, transit and bicycle/pedestrian data
- Updated traffic count map

15.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	44,730
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	11,183
Total Funds	55,913

16 Task B1: Land Use, Socio-Economic and Environmental

The purpose of this task is to collect, maintain and analyze regional land use, socio-economic and environmental data that will be used in regional demographic forecasting, transportation planning, land use planning, air quality planning, emergency planning, Title VI and economic development efforts.

16.1 Objectives

- To collect, maintain and analyze regional land use, socio-economic and environmental data to support CRPC's program initiatives and work tasks elaborated in this Unified Planning Work Program (UPWP).

16.2 Previous Work/Accomplishments

- CRPC, since inception of this agency compiled, maintained and analyzed regional land use, socio-economic and environmental data acquired from a variety of data sources including but not limited to:
 - United States Decennial Censuses
 - U.S. Census American Community Survey
 - Census Transportation Planning Packages
 - U.S. Department of Commerce
 - Population projection data from Louisiana Tech and Louisiana State University
 - Woods and Poole
 - InfoUSA
 - Local Parishes and Municipalities
 - Louisiana Department of Labor
 - Louisiana Department of Education
 - Various State and Federal Agencies
- Worked with Ascension, E. Baton Rouge, Livingston, and W. Baton Rouge Parishes to support their comprehensive planning activities and obtained updated land use, permits, demographic and other growth data.
- CRPC in cooperation with consultants used various data sources mentioned above and input on local growth projections from member governments established control totals for future forecasts and developed Traffic Analysis Zone (TAZ) level demographics for all the horizon years as part of the Long Range Transportation Plan efforts since the late 1980's. The same methodology was used for developing the TAZ level demographic forecasts for the MTP 2037 update.

16.3 Expected Work

CRPC will

- Continue to collect, maintain and analyze regional information on topics including but not limited to, census, land use and environmental data from disparate sources as explained above that will be used in regional demographic forecasting, transportation planning,

Unified Planning Work Program 2017

land use planning, air quality planning, emergency planning, Title VI and economic development efforts. CRPC will also pursue to expand the list of data sources and also compile this data into user-friendly and accessible products both for internal use and to the public.

- Solicit professional services and data from local Parishes and Municipalities that have a robust planning and GIS capabilities.
- Provide technical assistance to Parishes and Municipalities that need help with planning, zoning, or developing and maintaining electronic/GIS databases of their comprehensive/master plans .
- Coordinate with local governments to develop and maintain a regional land use and socio economic databases.
- Continue to gather input about local growth projections from the member governments to establish future control totals and develop realistic demographics forecasts for use in planning purposes.
- Download the 2010 census data sets as they become available, analyze and organize into user-friendly products and make them available to member governments and public. A comparative analysis with the previous decennial census data will also be performed to understand the shifts and trends of various socio-demographics attributes.
- Gather and maintain a repository of environmental data from various local, state and federal sources including but not limited to Environmental Protection Agency (EPA), Louisiana Department of Environmental Quality (LDEQ), Federal Emergency Management Agency (FEMA) and Governors Office of Homeland Security and Emergency Preparedness (GOHSEP).
- Solicit third party professional or member government services to implement portions of this task, if necessary.

16.4 Performance Measures

- Compilation of regional census, land use and environmental data
- User-friendly and accessible data products
- Number of member governments assisted in developing GIS databases of comprehensive plans

16.5 Results/Products

- Repository of regional census, land use and environmental data
- User-friendly and accessible data products
- Regional comprehensive land use data
- Technical assistance to member governments

16.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	33,715
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	8,429
Total Funds	42,144

17 Task B2: Transportation System - Inventory & Performance Monitoring

The purpose of this task is to collect, maintain and analyze street inventory maintenance data in order to improve safety, reliability, efficiency, and extend life of the transportation system in the Baton Rouge MPO region.

17.1 Objectives

- To collect system wide pavement condition data in coordination and collaboration with the local agencies and LADOTD in order to quantitatively evaluate road conditions and efficiently improve the life and performance of the transportation system in the region.
- To collect real time traffic conditions using advanced data collection methodologies in order to measure system performance, identify congested corridors and develop a data driven Congestion Management Process.
- To collect, maintain and analyze system wide traffic count data through collection in the field and coordination with local agencies and LADOTD.
- Received the crash data from LADOTD, geocoded and analyzed the data to identify corridors with high crashes. Crash rate index was one of critical factors that was used to prioritize the congested segments as part of the Congestion Management Process.

17.2 Previous Work/Accomplishments

- Worked on preparing the RFP for regional traffic and vehicle classification counting program. Coordinated with LDEQ to secure Beneficial Environmental Projects (BEP) funds for this project. Obtained DOTD approval for this project and advertised the RFP to select a firm for conducting the traffic and vehicle classification counts in the region.
- Finalized contract with Fugro to process the Pavement and Asset data on local roads in Ascension Parish.
- Procured travel time data for 2011, 2012, 2013, 2014, and 2015 and also the software to analyze congestion, travel time index, and planning time index. Analyzed the data to identify the congested segments, temporal profiles, and other congestion parameters. Developed custom stored procedures and scripts in Microsoft SQL Server database to automatically calculate the average speed, free flow speed for different years and geometric links/segments.

In the past, CRPC contracted with LSU's Remote Sensing and Image Processing Laboratory (RSIP) to prepare an approach to conduct travel time studies. The data collection procedure was based on the use of GPS receivers to automatically collect time, local coordinates, and speed every one second. The data reduction procedure was based on the aggregation of GPS data using highway segments which are normally 0.2 mi. in length. LSU's travel time data was used for identification and prioritization of congested corridors and in the development of Congestion Management Process in 2002.

- CRPC in coordination with the local agencies (Only East Baton Rouge currently) and LADOTD collected traffic count data on both local and state routes and consolidated the two to generate system wide traffic count data. This data was analyzed and organized in user-friendly electronic and paper maps and was made available for the general public. This data was also used in calibration of the regional travel demand models that were

used to evaluate the deficiencies of the transportation system and in the development of Metropolitan Plans.

17.3 Expected Work

CRPC will

- Implement a regional traffic counting program and also continue to collect, maintain and analyze system wide traffic count data in coordination with the local agencies and LADOTD. Six vehicle classes based on the standard FHWA classification will also be collected for classification counts. The data will be organized in a user-friendly electronic format and published on CRPC's website and will be available in both downloadable PDF format or as a dynamic web based map integrated with google maps.
- Continue to analyze the acquired data to produce details including but not limited to the following:
 - Average historic speed and total travel time by travel direction, by month, day of week and time period based upon user-selected segment, corridor or network.
 - Average historic daily speed profile by travel direction and day of week for a user-selected segment, corridor or network.
 - Mapping of average historic speed data set.
 - Calculate travel time statistics for a designated segment, corridor or network, such as Travel Time Index, total delay, average delay per commuter, etc.
- Develop a plan of action in coordination and consultation with LADOTD ITS Division staff, the regional Federal Highway (FHWA) ITS representative, the City of Baton Rouge, and the consultants to utilize data from the Baton Rouge and the state ATMC's for performance monitoring and planning activities as explained in under Task A-7.
- Collaborate with LADOTD and coordinate with the local governments to establish a Pavement Management Strategy for the Baton Rouge MPO region. The purpose of this strategy is to collect, maintain and analyze pavement condition data on both state system and non-system roads. This will enable the local agencies and CRPC to use quantitative measures for prioritizing system preservation projects and investments. CRPC staff will also provide technical assistance to local agencies that do not have in-house expertise to process and analyze the pavement condition data.
- Continue to collaborate with LADOTD, collect crash data and analyze the data to identify high crash intersections, corridors and other hot spots for all modes of travel as explained under Task A-10.

17.4 Performance Measures

- Updated Traffic Count Data and Map
- Implementation and collection of new inventory data (average speed and pavement condition)

17.5 Results/Products

- Updated repository of traffic count, crash, average speed and travel time, and pavement condition data
- Technical assistance to member governments

17.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	119,655
CARRY OVER PL	120,000
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	59,914
Total Funds	299,569

18 Task C1: Transportation Plan Reappraisal

This task addresses periodic reviews, changes, and progress on the long range planning process to foster livable and sustainable communities and transportation systems in the CRMPO area as required by MAP-21 and the previous legislations.

18.1 Objectives

- To develop and maintain multi-modal regional Metropolitan Transportation Plan (MTP) for the CRMPO area that conforms to air quality regulations and supports the federal planning factors and is consistent with federal, state and local regulations.
- To ensure that the MTP promotes performance based approach, is consistent with local comprehensive plans and goals, and supports livable and sustainable communities.

18.2 Previous Work/Accomplishments

- Coordinated with LCF, RDA, CATS, BRCC, and local governments to develop a regional vision for promoting alternate fuels and fleets in the Capital Region.
- Coordinated with CATS and initiated efforts to develop a long term vision for public transit in the Capital Region.
- Worked with the TAC and TPC to Update the CRMPO smoothed urbanized and study area boundaries based on 2010 census. Coordinated with local governments to gather their comments on the proposed roadway functional classification map and transmitted the comments to LADOTD for their consideration..
- Developed MTP's for the CRMPO area since 1992. The current MTP and conformity were approved in 2013 and has a horizon year of 2037. Evaluated and incorporated performance measures that are consistent with federal, state and local goals in the MTP.
- Monitored and processed amendments to the MTP as needed and tracked the implementation of the proposed projects.
- Conducted agency consultation and visioning meetings, and paper based and online surveys to provide opportunities for public involvement in the development of MTP.
- Developed the 2010 base year data on population, employment, traffic counts, roadway and transit networks. Utilized local comprehensive plans, census data and commercial data sources to forecasted population and employment for horizon year 2037 and interim years 2017 and 2027. Solicited input and approval of TAC and TPC before finalizing the base year and forecasted demographics.
- Coordinated with local transit agencies, LADOTD, FHWA, FTA, local agencies and other identified stakeholders and public to identify multi-modal projects that are financially feasible, have minimal impacts on air quality, consistent with regional goals, address equity and Environmental Justice issues.
- Conducted air quality conformity analysis of the staged MTP to ensure that transportation planning is consistent with air quality planning.
- Developed a Non-Motorized Transportation Plan in 2009
- Staff attended workshops, conferences and training to improve efficiency and skills for performing this task.

Unified Planning Work Program 2017

- Published information and documents pertaining to the long range planning activities and solicited input from the public and respective committees.

18.3 Expected Work

CRPC will

- Engage and coordinate with transportation partners, local governments, non-profit organizations, businesses, and public to build consensus and a unified vision utilizing a 3C planning process for regional projects in the capital region that will:
 1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
 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 the accessibility and mobility of people and for freight.
 5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
 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.
- Disseminate information about CRMPO's Metropolitan Transportation Plan (MTP) 2037 and also about the new plan update MTP 2042 using the methodologies mentioned in Task A1.
- Track implementation of MTP 2037 and process any amendments if necessary as long as such amendments are approved by the TPC and do not jeopardize the air quality conformity determination.
- Monitor the progress and work with local transit agencies, LADOTD, FHWA, FTA and local agencies to ensure timely implementation of the projects identified in the MTP.
- Reevaluate and refine the CMP based on the real time travel and speed data. The process will include identifying and prioritizing new congested corridors and strategies.
- Develop the GIS and electronic database of the MTP projects and information and publish interactive maps on CRPC's website.
- Track, review and evaluate any new planning initiatives and activities related to transportation either directly or indirectly in the CRMPO area for consistency with the MTP.
- Review the current Non-Motorized Plan and updated it as needed.
- Continue to collect, maintain and analyze regional information on topics including but not limited to, census, land use and related data that will be used in regional demographic forecasting, transportation planning, land use planning, air quality planning, emergency planning, Title VI and economic development efforts.

18.4 Performance Measures

- Timely Implementation of projects in MTP 2037
- Coordination with various stakeholders regarding MTP 2042

18.5 Results/Products

- Regional visioning efforts/documents for MTP 2042
- Implementation of MTP 2037

18.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	59,680
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	14,920
Total Funds	74,600

19 Task D3: Technical Assistance (Highway)

The purpose of this task is to utilize the expertise and knowledge of the CRPC and LADOTD staff in providing technical support services to local governments and interested citizens on transportation planning and other requests that support the MAP-21 planning factors.

19.1 Objectives

- To provide technical assistance to various public and private entities on tasks listed in the UPWP and any other issues that supports the MAP-21 planning factors and promotes regional sustainability, livability, safe and secure multi-modal mobility, environmental quality and economic vitality.

19.2 Previous Work/Accomplishments

- Provided technical assistance to various public and private entities as explained in detail under the other UPWP tasks. The following are some of the broader technical areas of support that the MPO provides on a continuous basis.
- Travel Demand Modeling ;
- GIS Database Mapping;
- Spatial Data Analysis;
- Air Quality Modeling;
- Census/Demographic Analysis;
- Land Use/Comprehensive Planning;
- STP>200K, Enhancement, Safe Routes to School and other project submissions;
- Intermodal connectivity and planning activities;
- Travel Demand Management (TDM) activities; and
- Other tasks that support the MAP-21 planning factors
- Staff attended workshops, conferences and training to improve efficiency and skills for performing this task.

19.3 Expected Work

CRPC will

- Coordinate with LADOTD and derive current traffic data from existing assignments or actual traffic inventories for facility design purposes. Projection of future traffic assignments will be derived through the use of the regional Travel Demand Model. Blanket or ground counts of the existing traffic volumes will be used to assure accuracy of traffic assignments.
- Provide analysis of specific traffic problems upon the request of local units of government. Proposed changes to the highway network will be analyzed using the regional travel demand model. Information obtained through these analyses can be used in the update of the TSM System and Long Range Plan. CRPC staff, as a technical arm to local governments, public and private entities, will develop and implement short range planning programs/projects on an as needed basis. This task provides CRPC staff with a means to respond to local urban policy issues.

Unified Planning Work Program 2017

- Provide technical assistance to local entities to develop projects and programs under FAST Act. Where the need for a FAST Act major metropolitan transportation investment is identified, corridor or sub-area studies shall be undertaken to develop or refine the plan for design concept and scope of the project.
- Continue to provide the progress and status of emphasis areas of FAST Act, the CAA of 1990 and other mandated state and federal requirements to the TAC, TPC, and other entities. Items such as deadlines, schedules and required responses from the local governments to such requirements will be prepared by CRPC.
- Provide reliable information on current and projected usage and performance of transportation systems is critical to the ability of planning process to supply credible information to decision-makers to support preparation of plans and programs that respond to each locality's unique needs and policy issues. Staff will seek training courses on topics which are available through NTI and NHI to enhance and maintain their technical capacity.
- Provide technical assistance on various transit issues such as intermodal planning, bus rapid transit route planning.
- Provide assistance to local governments, private, non-profit and citizens on any tasks or requests that support the MAP-21 planning factors.
- Attend, if available, workshops, conferences and training to improve efficiency and skills under this work program task.
- Solicit third party professional services to implement support any of the planning tasks, if necessary.

19.4 Performance Measures

- Increased and improved technical support activities

19.5 Results/Products

- Reports/presentations with maps, tables, charts and illustrations in hard copy as well as electronic form of analyses

19.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	30,000
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	7,500
Total Funds	37,500

20 Task D4: Technical Assistance (Public Transit)

The purpose of this task is to provide technical assistance to public transit providers and local units of government in the region to create a regionally seamless transit system that improves accessibility and mobility for all citizens.

20.1 Objectives

- To provide technical assistance and foster cooperation among various transit providers to create a regionally seamless transit system.
- To function as a technical arm for CATS and assist them on all aspects of mass transit operations including but not limited to quick response type studies, revenue analyses, equity analyses and automation of all their operations.

20.2 Previous Work/Accomplishments

- Developed and maintained transit element in CRMPO's MTP's and TIP's in coordination with CATS and public transit providers in the region.
- Provided GIS maps, analysis and technical support for route optimization, route changes and identifying new routes.
- Conducted annual surveys and provided technical assistance for preparing various FTA required reports such as the Section 15, Quarterly Progress Reports, etc.
- Performed air quality analysis and developed reports to support and secure Congestion Mitigation for Air Quality (CMAQ) funds for CATS projects that reduces the overall emissions and improve regional air quality.
- Participated and assisted in Comprehensive Operations Analysis (COA) for CATS services to identify strengths and also opportunities for improvement to service.
- Conducted GPS survey, geocoded and analyzed the data to identify precise location of all the unique CATS bus stops for implementation of Automatic Vehicle Location (AVL) project. This will give transit users and operators the ability to know and view where a bus is at a specific point in time and plan the trip accordingly.
- Formed Coordinated Public Transit Human Services Transportation steering committee and working group and conducted regular meetings since 2007 to create a regionally seamless transit system that improves accessibility and mobility for all citizens.
- Provided support and technical assistance to CATS in the development of Comprehensive Transit Reform Plan.
- Performed transit equity analysis of existing routes for CATS and currently working on equity analysis for the proposed new routes.
- Staff attended workshops, conferences and training to improve efficiency and skills for performing this task.

20.3 Expected Work

CRPC will

- Consult on a daily basis with CATS on all aspects of mass transit operations. CRPC functions as the technical arm of CATS and, as such, provides numerous quick response type studies and reports for the CATS Board. Issues that appear most prominent this

Unified Planning Work Program 2017

year are revenue analyses, service adjustments, and computerization of all CATS operations.

- Continue mass transit public awareness program and expand the transit information distribution system to various activity centers along existing transit routes. These transit information centers each have a color-coded system route map, individual route schedules, and general information about the transit system and its operation in Baton Rouge.
- Improve system performance by identifying transit expansion opportunities projects.
- Enhance transit use by coordinating transit planning with sidewalk planning, bike ways and land use considerations.
- Continue to assist CATS to develop and maintain a viable DBE program in coordination with the program presently under CATS.
- Continue efforts to obtain planning data and demographic information that can be used to assess current service levels, deficiencies, and opportunities. The same effort applies to future planning activities.
- Continue preparation of grants and assistance on request for proposals and IFBs.
- Continue to provide technical assistance for preparing various FTA required reports such as the Section 15, Quarterly Progress Reports, etc.
- Provide technical assistance to community organizations, public-at-large, and private sector on any transit request for the urbanized area. This also includes the coordination of human services transportation to ensure that transportation services are seamless, comprehensive and accessible to all, especially to the disadvantaged citizens.
- Continue to collect updated GIS data and further enhance demographic data analysis capabilities to efficiently provide access to major employment centers, hospitals, shopping centers, public at large and disadvantaged citizens (Title VI/EJ/ADA).
- Continue to provide progress and status information to the local governments and CATS on the FTA programs.
- Promote and assist transit operators to enhance existing and incorporate new ITS applications to improve traveler information, safety and security for transit users. This will also assist the transit agencies and operators to provide efficient and reliable services.
- Continue to develop and maintain the transit element portion of the CRMPO's TIP. This document will list all intended transit projects for the next four to five years for the Baton Rouge Urbanized Area. The Program of Projects will also be updated on an as-needed basis.
- Attend, if available, workshops, conferences and training to improve efficiency and skills under this work program task.

20.4 Performance Measures

- Improved coordination among regional public transit providers
- Maps supporting Title VI and employment access analysis

20.5 Results/Products

- Updated transit element in MTP and TIP

Unified Planning Work Program 2017

- Reports with maps, tables, charts and illustrations in hard copy as well as electronic form of analyses of transportation with special emphasis on pedestrian, bicycle, transit and intermodal results

20.6 Funding Summary

Funding Source	Amount (\$)
FHWA PL	0
CARRY OVER PL	0
FTA 5307	163,903
FTA 5303	153,054
CMAQ	0
STP>200K	0
HISPPEN	0
Local Match	79,239
Total Funds	396,197

21 Task H1: Travel Demand Management (TDM)

The purpose of this task is to implement Travel Demand Management (TDM) strategies to influence individual travel behavior and provide expanded options to reduce the actual demand, or number of vehicles, placed on transportation facilities and incorporate practices that focuses on managing the demand side of the transportation equation rather than increasing supply by widening or building new roads.

21.1 Expected Work

CRPC intends continue the TDM efforts from previous year and will to focus on the "Commuter Travel" side of TDM for this Year's Program. To achieve this, CRPC will utilize the ideas, methods, and best practices to promote carpooling, vanpooling, and Ridesharing programs amongst large area employers.

Phase I: Data Collection

Phase II: Implementation Strategies

Phase III: Outreach Strategies (Promoting Carpooling and Vanpooling)

Phase IV: Monitoring/Reporting

Simultaneously, CRPC is currently coordinating with DOTD to develop an RFP to select a consulting firm to implement the TDM outreach on a broader scale similar to many other successful nationwide efforts. Following are the major components that will be addressed by this new proposed program.

- Develop of a Ride Share and TDM program, outreach to major employers and public, the respondents should also address the following needs in their response to this RFP:
- Specific outreach to universities and community colleges in the region.
- Long term funding and program sustainability.
- Vanpool feasibility study and recommendations on setting up vanpools in the region.
- HOT analysis and other travel time reducing strategies to provide incentives for carpooling and vanpooling.
- Guaranteed Ride Home and other ridesharing incentives.
- Transit expansion analysis including a park and ride survey and needs analysis.
- Quarterly state-wide MPO/DOTD TDM call-in learning session.

The scope of work would include the following major tasks

- Task A – Develop Ride Share Plan – Market Survey
- Task B – Develop Brand, Marketing Plan, and Marketing Templates
- Task C – Employer, Agency Outreach and Public Involvement
- Task D – Demonstration Program
- Task E – Vanpool and Transit Expansion Feasibility Study

21.2 Results/Products

- Marketing and educational materials and presentations

Unified Planning Work Program 2017

- Employee commute pattern analysis for major employers
- Web based interactive rideshare application
- TDM progress reports

21.3 Funding Summary

Funding Source	Amount (\$)
FHWA PL	0
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	160,000
STP>200K	125,000
HISPPEN	0
Local Match	0
Total Funds	285,000

22 Task H3: Regional SHSP Implementation

Louisiana's Strategic Highway Safety Plan (SHSP) is a plan to reduce traffic fatalities and injuries on Louisiana's roadways through widespread collaboration and an integrated 4E approach: engineering, education, enforcement and emergency services. The vision of the SHSP is Destination Zero Deaths and the goal is to reduce the number of fatalities by half by the year 2030.

In order to regionally implement and sustain the SHSP, it is necessary to provide funding for a regional safety coalition coordinator through the CRPC. The primary task of this sponsor/state agreement will be to implement and sustain the SHSP by bridging all gaps between DOTD District personnel, local governments, local law enforcement, the community, local civic organizations, emergency services/hospitals, school boards, and other safety partners within the region.

22.1 Expected Work

Task 1 – Plan Development, Implementation and Evaluation

Develop and sustain a data-driven plan and program to address the emphasis areas of the SHSP utilizing the 4 E approach. If emphasis areas or strategies in the plan are different than the emphasis areas or strategies in the statewide SHSP, justification through data shall be provided. Data sources shall include Louisiana State University's Highway Safety Research Group, Louisiana's official repository of crash data. If other data sources are used, the data source shall be provided. Participation on the Traffic Records Coordinating Committee is encouraged. Status reports shall be submitted to LADOTD on a monthly basis along with the invoices. Performance measures shall be established in accordance with MAP-21 and implementation progress shall be reported on a monthly basis.

Task 2 – GIS

Data compilation and analysis, DDACTS, crash data, liaison with state data office and MPO, local jurisdictions, and parishes; provide maps and graphics for the MPO, parishes, and local jurisdictions and agencies for problem identification, meetings, etc.

Task 3 – Partnerships and Advocacy

Develop partnerships with LADOTD, LHSC, LSP, local law enforcement agencies, the MPO, the parishes, emergency services, school board officials, elected officials, and other safety advocates to promote the SHSP and seek out safety related activities within the region.

Task 4 – Marketing

Participate in national campaigns developed by the National Highway Traffic Safety Administration. If applicable, participate in Louisiana's Communication Coordinating Council. Brand the regional safety coalition with the Destination Zero Deaths logo.

Task 5 – Education

Conduct education outreach efforts to inform the public about safety, particularly in the SHSP emphasis areas. Participate in national transportation safety advertising campaigns, circulate public service announcements, and publish newspaper articles and online press releases within the region. Provide additional local outreach through collaboration with law enforcement and health agencies in promoting our activities within the SHSP emphasis areas using all forms of local media. Facilitate collaborative training sessions, webinars, or events on such transportation

Unified Planning Work Program 2017

safety topics as passenger safety (i.e. Child Passenger Safety Training, Click It or Ticket Mobilization, etc.) and conduct public awareness campaigns that educate the public – pedestrians, bicyclists, motorists, and passengers about safety. Work closely with school boards to facilitate outreach and education of students within the SHSP emphasis areas.

Task 6 – Meetings and Conferences

Participate in the quarterly statewide emphasis area team meetings, incident management meetings, MPO, Parish and City Council meetings. Conduct regional safety coalition meetings on a regular basis and report progress at the bi-annual Implementation Team meeting.

Task 7 – Complete Streets

Conduct education outreach efforts for all road users, including pedestrians and bicyclists.

Task 8 – Deliverables

Performance measures shall be reported by the end of the federal fiscal year and an updated regional safety action plan shall be prepared annually. Documentation of the update process shall be provided and implementation progress shall be tracked and reported monthly with submitted invoices.

22.2 Results/Products

- CRPC SHSP Action Plan
- Meetings and Conferences
- Marketing and Education
- Annual and Monthly Reports

22.3 Funding Summary

Funding Source	Amount (\$)
FHWA PL	0
CARRY OVER PL	0
FTA 5307	0
FTA 5303	0
CMAQ	0
STP>200K	0
HISPPEN	172,106
Local Match	0
Total Funds	172,106

23 Task SP-1: Nicholson Corridor High-Capacity Transit System

23.1 Project Description

The Nicholson Corridor High Capacity Transit System Plan project will prepare for the re-establishment of public transportation along a 3.1-mile long, half-mile wide corridor that encompasses Downtown Baton Rouge, the State Capitol, the Arts and Entertainment District, the Mississippi Riverfront, Old South Baton Rouge Neighborhood, and Louisiana State University.

23.2 Project Scope

The scope of the project is to develop

1. High-Capacity Transit System Plan,
2. Project Development Planning, and
3. Project development

23.3 Project Benefits

This project will provide the benefits mentioned below

1. State of Good Repair

- Re-establishes public transit in the Corridor
- Well-funded and supported by key organizations
- Implements existing plans to achieve multiple community goals

2. Economic Competitiveness

- Creates ladders of opportunity
- Provides efficient, high-quality, affordable mobility
- Increases low-income residents' access to jobs
- Increases economic productivity of the land
- Capitalizes on current development patterns
- Incentivizes private development

3. Livability

- Improves accessibility within economically disadvantaged neighborhoods
- Enables car-free, active lifestyles
- Provides reliable access to nighttime entertainment
- Increases intermodal connectivity
- Decreases expenditures on private vehicles

4. Sustainability

- Prevents urban sprawl
- Relieves dependence on gasoline
- Reduces VMT & GHG emissions

5. Innovation

- Facilitates new public-private partnerships
- Utilizes new intelligent transportation information systems and clean energy technology

23.4 Funding Summary

Funding Source	Amount (Millions)
FTA (Tiger Grant)	1.76
Local Match	1.00
Total Funds	2.76

24 Task SP-2: Metropolitan Transportation Plan Update 2042

24.1 Project Description

In accordance with federal requirements, CRPC is initiating an update to the Metropolitan Transportation Plan (MTP), "MOVE 2042". The new MTP will be compliant with current, applicable federal planning rules as defined in 23 CFR 450.322. The new MTP including the conformity analysis and determination, will be completed before the current determination expires on July 17, 2017.

24.2 Project Scope

The scope of work will include the following outline of the tasks.

- Task 1.0 Project Schedule, Work Plan, Committee Activity
- Task 2.0 Public Involvement Plan
 - Task 2.1 – Outreach Plan, Process and Methodology
 - Task 2.2 – Develop Brand, Marketing Plan, and Marketing Templates
 - Task 2.3 – Stakeholder Outreach and Public Involvement
 - Task 2.4 – Trend Identification and Outreach Documentation
- Task 3.0 Existing Conditions Review and Base Model Update
 - Task 3.1 Roadway Collision and Safety Analysis
 - Task 3.2 Travel Demand Forecasting Model Update
 - Task 3.3 Develop E+C Network, Travel Forecasts, and Identify Deficiencies
- Task 4.0 Develop Guiding Principles, Goals, Objectives, and Performance Measures
- Task 5.0 2042 Transportation System Needs and Scenarios
 - Task 5.1 Test Existing Plan Projects and MTP 2042 Project Call
 - Task 5.2 Scenario Planning and Alternative Networks Evaluation
 - Task 5.3 Assign Future Traffic (2042) to Alternative Networks
 - Task 5.4 Alternative Network Evaluation
 - Task 5.5 Technical Memorandum No. 3
- Task 6.0 Financial Plan / Staged Improvement Plan
 - Task 6.1 Financial Assessment
 - Task 6.2 Development of Implementation Costs
 - Task 6.3 Staged Improvement Plan
 - Task 6.4 Operations and Maintenance
 - Task 6.5 Plan Network Assignment
- Task 7.0 Environmental Mitigation and Air Quality Conformity
 - Task 7.1 General Environmental Impacts
 - Task 7.2 Air Quality Conformity Analysis
- Task 8.0 Develop Travel Demand Model Custom Application
- Task 9.0 Metropolitan Transportation Plan Preparation and Printing
 - Task 9.1 Develop the Planning Elements of the MTP in Compliance with MAP-21
 - Task 9.2 Draft Report
 - Task 9.5 Final Report

24.3 Funding Summary

Funding Source	Amount (\$)
FHWA PL	33,080
CARRY OVER PL	52,320
FTA 5307	0
FTA 5303	0
CMAQ	0
SPR	413,500
STP>200K	165,400
Local Match	62,700
Total Funds	727,000

25 Appendix A – Indirect Cost Rate Allocation Plan (ICAP)