

# BATON ROUGE AREA CLEAN AIR ACTION REPORT



Prepared for



EPA'S OZONE AND PM ADVANCE PROGRAM  
[2015 UPDATE]

Prepared by



Baton Rouge  
**CLEAN AIR COALITION**



April, 2016

## INTRODUCTION

This document has been prepared to satisfy the annual “Path Forward Plan” requirement for the Baton Rouge area under EPA’s Advance Program. As with the original report prepared in 2013 and updated last year (2014), this report has been prepared as a cooperative effort of the Baton Rouge Clean Air Coalition, the Capital Region Planning Commission, and Louisiana Clean Fuels.

This report is a second update to the original and more exhaustive 2013 report. The 2013 report provided extensive background information on the Baton Rouge area including physiography, land use, climate, economy, transportation, and air quality. It also served to chronicle ozone attainment history and detail numerous voluntary emission reduction measures that have been or are being taken to mitigate the area’s ozone levels. The 2013 report can be accessed at <http://epa.gov/ozonepadvance/pdfs/20131220batonrouge.pdf>. The 2014 report was a simple update of the 2013 report chronicling Advance Program efforts undertaken in 2014 and expected for 2015. It can be accessed at <https://www3.epa.gov/ozoneadvance/pdfs/2015batonrougeupdate.pdf>. This report addresses Advance Program activities undertaken in 2015 and those planned for 2016.

## SOCIO-ECONOMIC UPDATE

### POPULATION

According to the U.S. Census Bureau American Community Survey (ACS), the Baton Rouge MSA had a population of 825,478 with 228,909 individuals residing in the City of Baton Rouge. The population of the metropolitan area experienced 4.9% growth between the 2009 and 2014 ACS. Local population growth is projected to continue with 16,000 to 21,000 new residents expected by 2017.

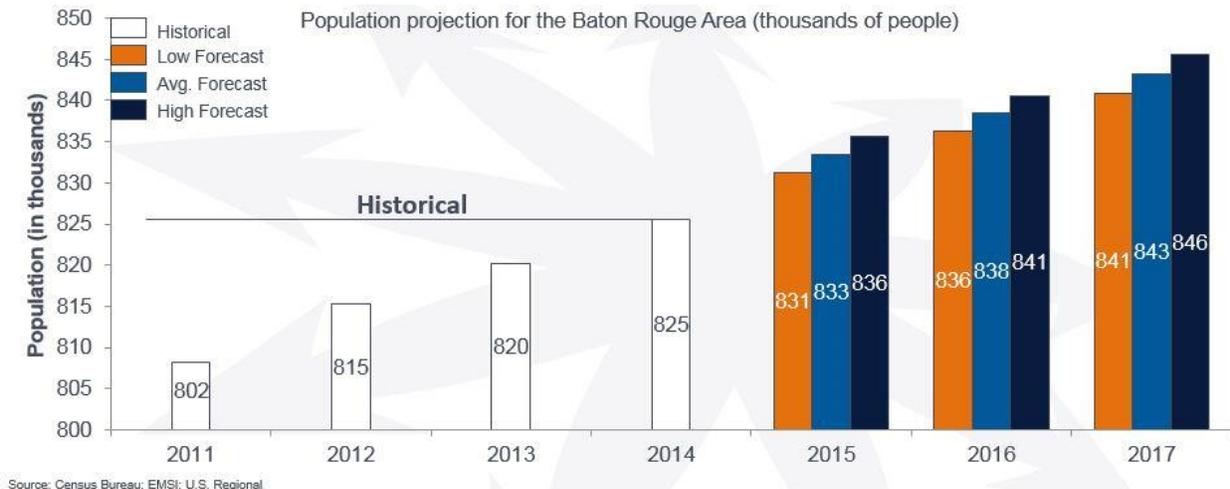


Figure 1. Population projection for the Baton Rouge area.

## ECONOMY

The Baton Rouge metro area has experienced a 3.3% growth rate in employment with 410,400 total employment as of December 2015. The unemployment rate for the region has been trending downward from 5.9% to 4.2% (December 2014 to December 2015), driven significantly by tremendous growth in the construction and manufacturing industries.

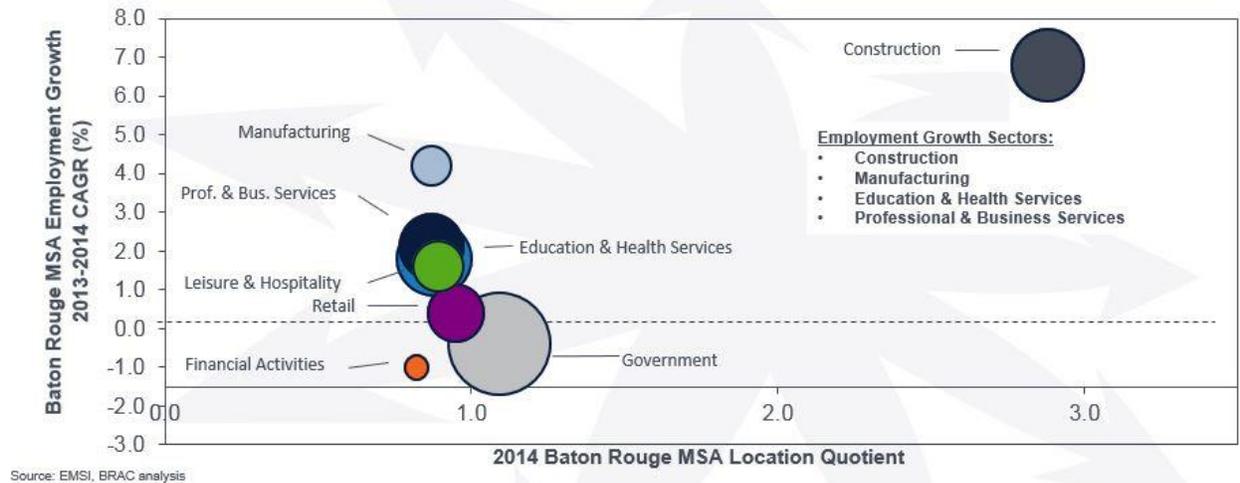


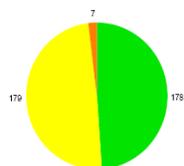
Figure 2. Employment growth in the Baton Rouge area.

Continued growth is projected in these industries for 2016. The forecasted growth for construction in 2016 ranges from 1,538 to 2,209 net new jobs (2.9-4.0% growth). In manufacturing, the forecast indicates potential growth ranging from 328 to 790 net new jobs (1.1-2.7% growth).

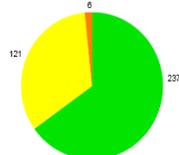
## **OVERVIEW OF AIR QUALITY AND METEROLOGICAL CONDITIONS**

This overview of air quality and meteorological conditions was taken from, “Louisiana Air Quality Summary – January 1 through December 31, 2015” prepared for DEQ by Sonoma Technology Inc.

2015 Baton Rouge AQI Days



2012-2014 Baton Rouge Annual Average

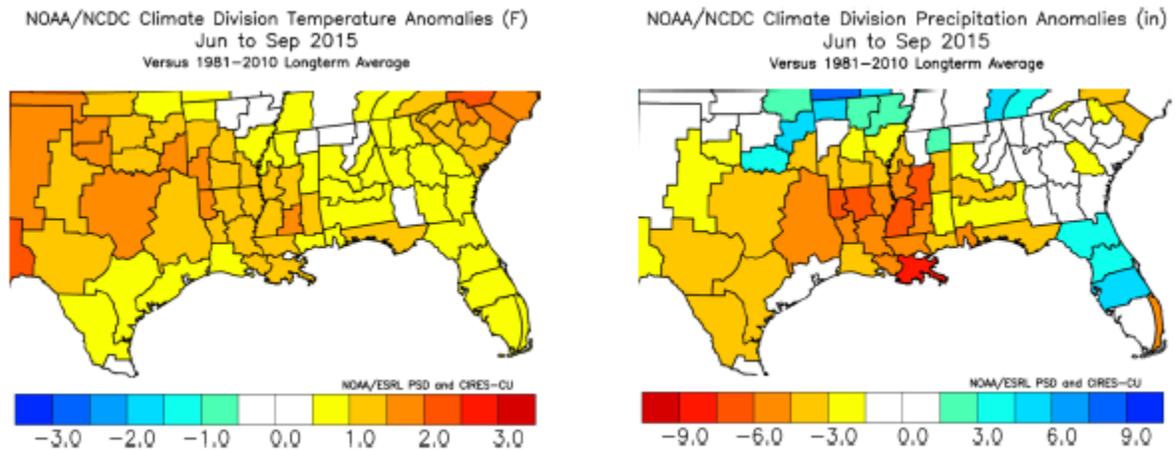


Overall air quality conditions in Louisiana during 2015 were worse than average when compared to previous years. Baton Rouge and Lake Charles both experienced Unhealthy for Sensitive Groups (USG) levels on the Air Quality Index (AQI). Baton Rouge recorded seven USG days (one more than the previous three year average), and Lake Charles reported two USG days (one more than the previous three year average). All USG days that occurred during 2015 were due to high ozone levels.

The number of days with Moderate and above AQI levels in 2015 was higher than the 2012-2014 average for all cities. For example, Baton Rouge recorded 179 such days, compared with a 2012-2014 average of 121. Lake Charles had 119 days at or above Moderate AQI

levels, which is 42 more days than the 2012-2014 average. New Orleans had 144 days at Moderate AQI levels, which is 32 more days than the 2012-2014 average.

Both temperature and precipitation in Louisiana were above normal for the year compared to the 1981-2010 average. All of the USG days in 2015 occurred between June and October. Ozone levels are typically highest during these months because warm temperatures and sunlight enhance the formation of ground-level ozone. From June through September 2015, temperatures averaged 1-3°F above average, and precipitation across the state was up to seven inches below average (see images below). This combination of warmer temperatures and less rainfall contributed to the high AQI levels seen during these months.



## AIR QUALITY UPDATE

### OZONE

Ozone levels in the Baton Rouge area have continued to improve. The area achieved attainment with the 2008 standard in 2013 (based on 2011-2013 monitoring data) with a design value of 75 ppb (parts per billion). This design value was equal to the existing 2008 8-hour ozone standard. This standard was the third one that the area has met. This achievement was also two years ahead of the federal attainment date for the area. In 2014, the area's design value declined further to 72 ppb (based on 2012-2014 data) and in 2015 further declined to 71 ppb (one ppb above the new 2015 standard of 70 ppb). In 2015 there were eight exceedance days in the Baton Rouge area. The LSU and Carville monitors registered the most exceedance days with three each. The usual ozone season for the area (May-September) was extended in 2015 with unusual exceedances in April (22<sup>nd</sup>-New Roads monitor) and October (16<sup>th</sup>-Carville and Dutchtown monitors).

The 2015 ozone design values for Baton Rouge area monitors compared to all state monitors is shown in Figure 3. The LSU monitor is the only one in the state that exceeds the new 2015 ozone standard, and that by only one ppb.

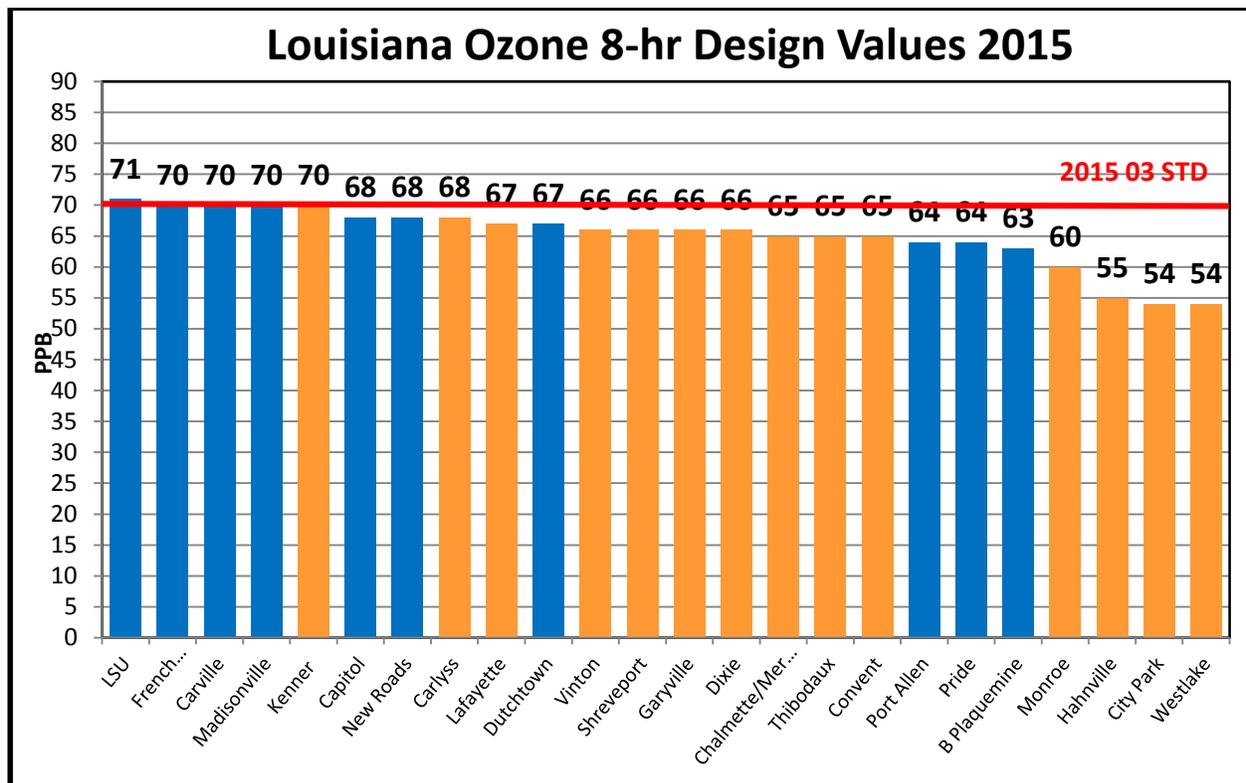


Figure 3. 2015 ozone design values for Louisiana (Baton Rouge NAA monitors in blue).

The overall downward trend in 8-hour ozone design values for the Baton Rouge area is presented in Figure 4. This progress in bringing the local ozone levels down is remarkable given the emissions challenges for the area such as a heavy industrial corridor, marine commerce activity on the Mississippi River, two major universities, an airport, and heavy interstate traffic through the center of the urban area.

Ozone-based AQI readings for the Baton Rouge area are shown compared to some other Louisiana metro areas in Figure 5 below. In 2015, the Baton Rouge area had more than three times the “Unhealthy for Sensitive Groups” and twice the number of “Moderate” days as any other metro area in the state. It also had the fewest number of “Good” days of any Louisiana metro area.

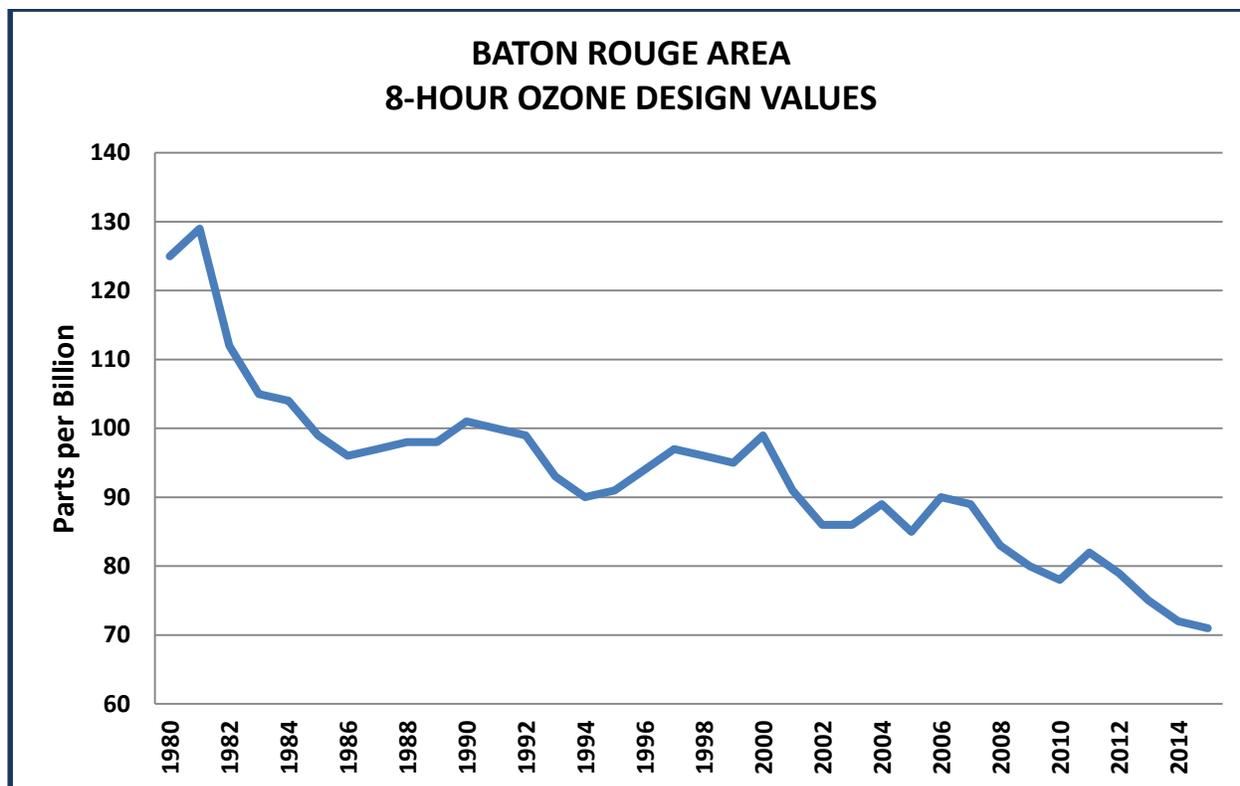


Figure 4. Ozone progress in the Baton Rouge Ozone Nonattainment Area.

Ozone Only

AQI Category	Baton Rouge	Lafayette	Lake Charles	Monroe	New Orleans	Shreveport	Thibodaux
Good	307	342	337	330	340	348	346
Moderate	50	16	25	6	24	16	10
USG	7	0	2	0	0	0	0
Unhealthy	0	0	0	0	0	0	0
Missing <sup>b</sup>	1	7	1	29	1	1	9

<sup>b</sup> Valid ozone data were missing on one or more days in each city.

Figure 5. Distribution of ozone-based AQI readings for Louisiana metro areas (Source: DEQ).

**FINE PARTICULATE MATTER (PM<sub>2.5</sub>)**

Annual PM<sub>2.5</sub> data for the Baton Rouge area shows a downward trend over the past twelve years (Figure 6). The Bayou Plaquemine monitor was discontinued with EPA approval and as requested in DEQ’s 2014 Annual Network Assessment.

In a January 15<sup>th</sup> 2015 Federal Register announcement, EPA reported that all areas of Louisiana including the 5-parish Baton Rouge ozone nonattainment area are classified as either unclassifiable or attainment for the annual PM<sub>2.5</sub> NAAQS based on 2012 monitoring data.

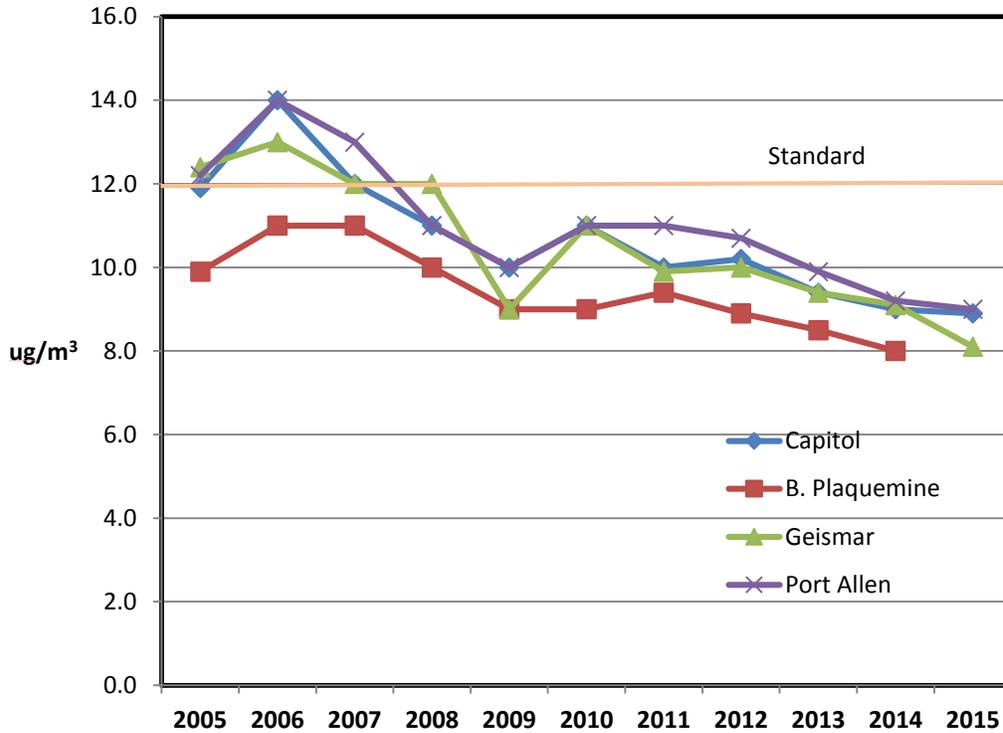


Figure 6. PM<sub>2.5</sub> annual mean value trend chart for the four Baton Rouge area monitors.

PM<sub>2.5</sub> – based AQI values measured during 2015 for the Baton Rouge area show fewer “Good” days and a higher number of “Moderate” days than the other metro areas within the state (Figure 7).

**PM<sub>2.5</sub> Only**

AQI Category	Baton Rouge	Lafayette	Lake Charles	New Orleans	Shreveport	Thibodaux
Good	185	237	242	229	243	334
Moderate	178	100	110	135	75	30
USG	0	0	0	0	0	0
Unhealthy	0	0	0	0	0	0
Missing <sup>c</sup>	2	28	13	1	47	1

<sup>c</sup> Valid PM<sub>2.5</sub> data were missing on a significant number of days in Shreveport, Lafayette, and Lake Charles. Monroe does not report PM<sub>2.5</sub> data.

Figure 7. Distribution of PM<sub>2.5</sub>-based AQI readings for Louisiana metro areas for 2015 (source: DEQ).

## EXPECTATIONS FOR EPA'S REVISED OZONE STANDARDS

Although the Baton Rouge area achieved attainment with the 2008 8-hour ozone standard in 2013, we are still working to receive formal designation to attainment by EPA. The 2008 Ozone Redesignation and Maintenance Plan was proposed by DEQ in June 2015. Based upon comments pertaining to the emissions inventory and the Motor Vehicle Emissions Budget (MVEB), the document was then revised. The revisions to the emissions inventory were substantive changes, requiring that the document be placed on public notice in the Louisiana Register. This proposal was published March 20, 2016. Following the comment period, the document will be submitted to EPA in the late spring 2016.

In October 2015, EPA announced a new, more stringent standard for ozone. This new standard was set at 70 parts per billion (ppb). In Louisiana, the historical Baton Rouge 5-Parish Nonattainment Area is the only area not meeting the standard at this time (Figure 8). As can be seen in Figure 3, the area has one monitor that is above the standard's threshold at 71 ppb and two monitors that are at the standard. There are also two monitors in the New Orleans MSA that are at the standard. These monitors will be watched closely throughout the 2016 ozone season and designation recommendations will be made accordingly in October 2016 by the governor.

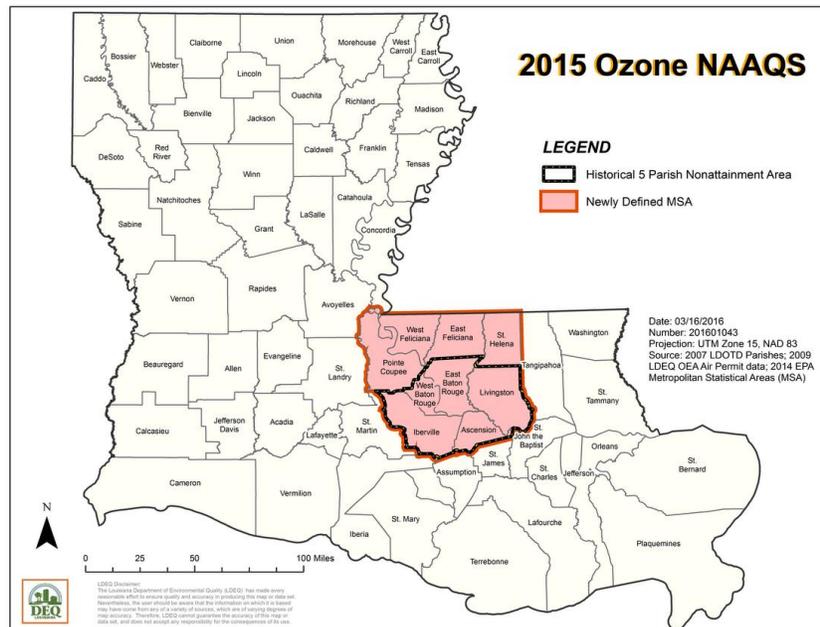


Figure 8. Expected nonattainment parishes under the new 2015 ozone standard. (It is not known at this time if the recently added parishes to the Baton Rouge MSA will be designated non-attainment.)

The state will recommend areas for designation in October 2016. Based on monitored values at that time, the state may ask for an extension so that all 4 quarters will be included in the data. Following this recommendation as well as the 2017 design values, EPA will finalize the designations in October 2017. Once the final designation process has been completed, Louisiana will have 3 years within which to submit an attainment plan. The attainment date based upon an expected “marginal” classification would be October 2020.

## **2015 VOLUNTARY EMISSION REDUCTION ACTIVITIES**

### **ALTERNATIVE ENERGY**

Because of its basic mission, Louisiana Clean Fuels (LCF) has been the most involved of the three Baton Rouge area Advance Program partners with advancing alternative fuels as a strategy for improving local air quality. The following includes some discussions of their efforts during 2015 as reflected in their annual report submitted to the Department of Energy (DOE).

#### **Infrastructure Availability for Alternative Fuels in Louisiana**

While our local CNG infrastructure improved slightly during 2014, 2015 had some challenges. Sparq Natural Gas purchased two CNG fueling stations in 2015. One was the contaminated station at the EBR Metropolitan Airport. This rehab is on hold with no scheduled open date. The other station in Baton Rouge kept one of the dispensers open while the others were upgraded, resulting in approximately 6 months of spotty service in the Baton Rouge area. This station is now operational and is serving heavy duty and medium duty fleets such as Republic Service and AT&T. The remaining public station in Baton Rouge, which was operated by Entergy Gas and owned by Lavigne Oil Company, has been closed and put up for sale.

EV infrastructure development is slow in Louisiana when compared to other states, but 2015 has seen a significant increase in sales and infrastructure:

- Tesla Superchargers were installed in Baton Rouge and Lake Charles—both boast 6 charging ports per location. The company plans to open 3 more supercharger locations in Louisiana before the end of 2015 in Alexandria, Shreveport, and Monroe.
- Three new public EV chargers were installed at an outlet mall in Gonzales, near the I-10 interstate.
- Louisiana State University (LSU) installed a new EV charging station available to faculty, staff, and students at their new “Green” dorm on campus. In total, the campus hosts 3 charging stations.

To further the EV interest in Louisiana, LCF started the Plugin Louisiana campaign, which promotes EVs and available charging stations as well as the DOE Workplace Charging Challenge and the addition of EV charging infrastructure around the state. Looking forward, we have at

least 3 more entities that are interested in installing EV chargers under the Workplace Charging Challenge. This combined with a National Parks Initiative grant proposal we are submitting could make 2016 the most successful year yet in regards to EV infrastructure.

LCF has continuously reached out to the General Service Administration (GSA) and the state fleet administrators to conduct statewide infrastructure planning for CNG, propane, and EVs for over a year. The current administration in Louisiana was not receptive to any discussion on infrastructure planning or fleet analysis. The state fleet manager and other state departments' fleet representatives have asked us to wait until new administration to proceed with plans to analyze the state fleet. We feel confident that we will be able to make significant progress with the state and the GSA to develop public/private partnerships to share fueling and improve our infrastructure to support our AFV fleets once elections are over.

### **Alternative Fuel and Advanced Technology Vehicles in Louisiana**

The alternative fuels market in Louisiana is still dominated by CNG. However, UPS has made a huge impact on the mix of fuels use in our state by utilizing biodiesel in many of their trucks and adding propane vehicles to their fleet in 2014 and CNG vehicles in 2015. Additionally, St. Landry Solid Waste has increased their RNG production capacity with an expansion to their facility in 2015. By 2016, St. Landry plans to fuel 10 Progressive Waste haulers on 100% renewable natural gas.

We are also seeing growth in sales of electric vehicles to individuals. According to ChargePoint, a national EV infrastructure company, EV registrations in Louisiana have increased from 655 in July 2014 to 762 in December 2014. The previous year, we saw an increase of 161% from July 2013 to July 2014.

Refuse haulers, beverage and food distribution trucks, and fixed route delivery trucks have great alternative fuel adoption potential in Louisiana for 2016. Recently, law enforcement (state and municipal) fleets have been showing strong interest in idle reduction technologies and AFVs. With the improvements in dual-fuel technologies and fuel availability, we foresee an increase in first responder AFV adoption.

### **Key Partners: Private AFV Fleets**

In 2014, three National Partner fleets announced significant conversion plans for their vehicles in Louisiana: Republic Services, Waste Management, and UPS. In March 2014, UPS purchased 1,000 propane-fueled trucks to deliver packages in Louisiana and Oklahoma with other states pending, along with the installation of 50 fueling stations initially at UPS locations. This

translated into 12 Louisiana cities getting propane delivery trucks with private fueling. Waste Management announced their intentions to purchase 40 CNG haulers in 2014, but had some delays with their implementation and just recently held a ribbon cutting at their CNG fueling facility for their Livingston Parish fleet.

In 2015, these National Partner fleets continued to expand their use of alternative fuels. This summer, UPS began their CNG fleet expansion and has opened numerous private CNG fueling locations around the state. UPS has become an active stakeholder with LCF with one of their corporate leaders accepting nomination to serve on the LCF Board of Directors. UPS also won the 2015 Louisiana Clean Fuel Champion of the Year award at our 15th Anniversary celebration for the company's total greenhouse gas (GHG) offsets of 3,989 tons for their propane and bio-diesel usage in 2014.

Republic Service has become an active stakeholder and supporter of LCF. The refuse hauler was awarded the LCF Fleet of the Year in 2015 for their 2014 petroleum offsets. This year, Republic Services expanded their fueling station to accommodate 18 additional trucks in 2015, and have orders for an additional 17 trucks in 2016. Their fueling station will be expanded in the spring of 2016 to accommodate these new trucks. By spring of 2016, Republic Services expects their CNG fleet will comprise 75 vehicles.

A new stakeholder for 2015, Waste Management, is in the process of replacing 40 diesel-powered trucks in its Baton Rouge area fleet with CNG vehicles. Waste Management has purchased 22 CNG refuse vehicles and has installed slow-fill fueling on site for up to 40 trucks. The company has stated that it is open to a private business or public agency operating a public fueling station next to its facility.

### **Key Partners – Public AFV Fleets**

West Baton Rouge (WBR) Parish applied for and was awarded CMAQ funding of almost \$800,000 with \$500,000 of those funds being allocated to the construction of the CNG station. WBR Parish has published an RFP with the goal of entering into a Public/Private Partnership for conversion of 30 of its Department of Public Works (DPW) fleet vehicles to CNG, and for a construction of a public 1,000,000 GGE annual capacity of CNG fueling facility located immediately adjacent to I-10 in Port Allen, LA. The facility will be the first Heavy-Duty CNG station on Louisiana's interstate system.

On September 20, 2013, the Baton Rouge city-parish advertised a request for proposal (RFP) for alternative fuel vehicles and fueling facility providers to evaluate the DPW and city police fleet of over 1,500 vehicles to operate on energy efficient fuels, (i.e. CNG, propane and/or electric vehicles) as well as a program for the implementation on their vehicle fleets. The proposed contract would be based on an Energy Efficiency Performance Contract format, in which the proposers must provide a guaranteed savings to pay for the overall program for up to a 20-year contract period. LCF has learned that the project is on hold due to "the low price of gasoline and diesel." The LCF board and staff members assisted in pulling this program together in its

early stages, and posted the RFP on the LCF website to assist in the outreach to potential proposers. Prior to this RFP, LCF worked with the East Baton Rouge Parish DPW to facilitate AT&T's utilization of the DPW's existing CNG fueling station which AT&T needed due to its growing CNG vehicle fleet. However, the current DPW facility only fills tanks to three-fourth capacity, and is in need of repair. A new director of fleet services has recently been hired, and LCF is conducting outreach to work with the parish once again.

Some of Louisiana Clean Fuels' greatest resources for fundraising, technical support, and promotional efforts are EPACT regulated utilities in the area which include: Entergy, Atmos, and CenterPoint Energy. Entergy Gas Distribution currently has 10 NGVs in their Baton Rouge and New Orleans location, but the utility is not planning on converting their light-duty replacement vehicles in 2015 due to lack of service support in the area. Entergy provides CNG at one public site in Baton Rouge, and operates 3 private stations at their existing service centers.

Louisiana Clean Fuels (LCF) reported that within their covered area, which includes Baton Rouge area parishes, over 1.6 million gallons of gasoline equivalents and 10,000 tons of greenhouse gas emissions had been reduced mainly through their 2014 activities. The 2015 report has not yet been released, but it is expected that even larger reductions will be reported for their activities in 2015.

### **ENERGY EFFICIENCY**

According to the Louisiana Department of Natural Resources there has been little change in their energy efficiency programs from those described in our 2014 Update Report.

### **EPISODIC CONTROLS**

All of the episodic controls described in the 2013 Advance Report and 2014 Update have continued through 2015. These include Ozone Action Days, EnviroFlash, and Industry Ozone Action Days.

### **URBAN HEAT ISLAND**

Baton Rouge Green's urban forestry program, NeighborWoods, continues to be active in the Baton Rouge area, with an estimated 35,000 trees planted in the urban environment by the organization's volunteers and supporters. These trees help produce shade and keep ambient temperatures down thereby lowering ozone levels. The organization also has a number of other programs that are a benefit to our area including:

- Living Roadway sites, where sponsors make an annual tax deductible contribution, for which they receive recognition, if desired, on a sign at the sponsored site.

Sponsorship funds are used to pay for weed control, fertilizing, pruning, and mulching of the trees.

- City Citrus which provides local sources of public fruit by planting Satsuma and other citrus trees on maintained, but underused urban spaces.
- i-Tree Inventory. Through geospatial “cloud” technology along with the U.S. Forest Service’s i-Tree analysis, this inventory of our urban canopy will quantify environmental and economic benefits to our community.

## **RESEARCH/APPLICATION OF NEW TECHNOLOGIES**

### *Regional Airshed Modeling*

With a “marginal” ozone classification, the Baton Rouge nonattainment area was not required by federal regulations to conduct regional ozone modeling for its recent state implementation plan (SIP). However, in 2013, LDEQ with the support of major stakeholders committed to a new round of very sophisticated statewide ozone modeling. The modeling was completed in 2014 and was expected facilitate intelligent choices in ozone mitigation measures among the state’s major urban areas to help prevent these areas into falling from attainment into nonattainment with the current ozone standard. It was also expected to provide a look into possible future circumstances should the ozone standard be lowered, which it was. The modeling also provides capability to test various emission reduction strategies for efficacy at lowering ozone levels. The results of future year (2017) modeling are summarized in Figure 9. These modeled projections indicate that the Baton Rouge area would be in compliance with the 2008 ozone NAAQS (75 ppb), but would likely fall into nonattainment with EPA’s recent revision of the ozone NAAQS (70 ppb). The area’s 2015 ozone data shows the area to be doing better than the modeled projections.

EPA-modeled ozone levels projected for 2025 accompanying the release of the new 2015 ozone standard show that all Baton Rouge area monitors will be in compliance by 2025 (Figure 10). According to EPA, the 2025 projections include the impacts of on-the-books rules as well as emissions reductions necessary to meet the 2008 ozone NAAQS of 75 ppb.

## **PUBLIC OUTREACH AND EDUCATION**

The Baton Rouge Clean Air Coalition, Capital Region Planning Commission, Louisiana Clean Fuels, LDEQ, and LDNR are all continuing public outreach and education activities as described in our 2013 Advance Report and 2014 Update.

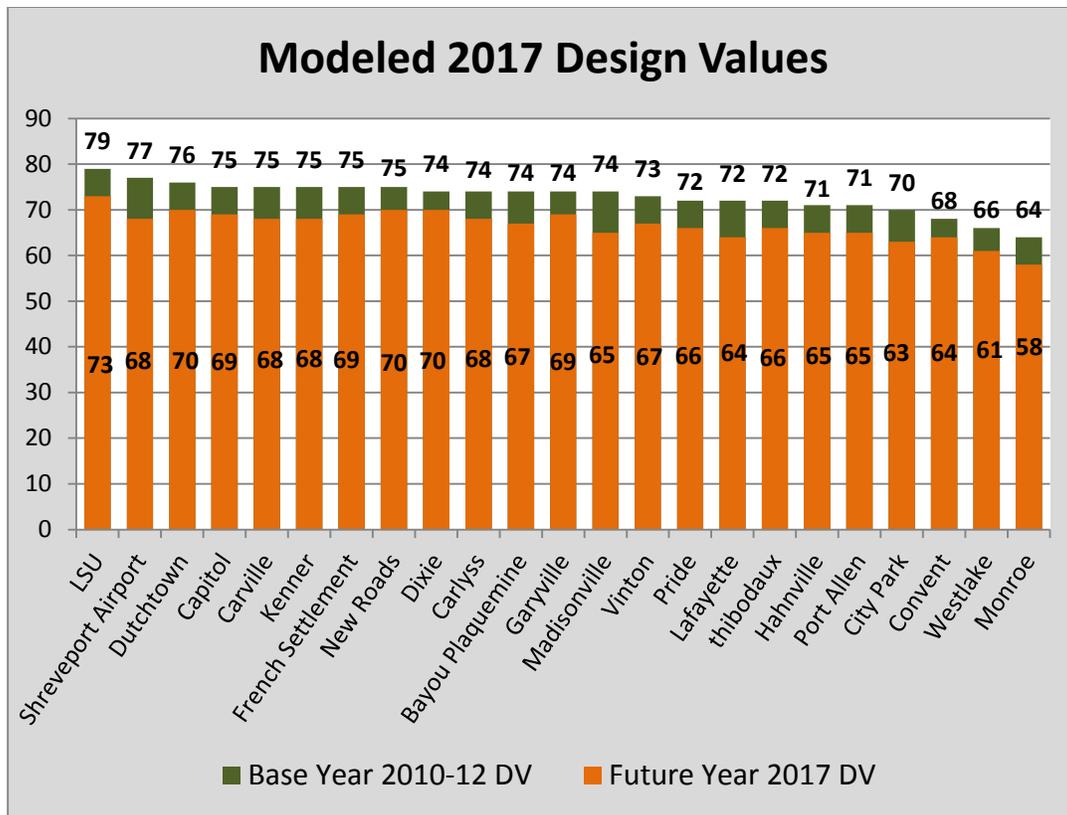


Figure 9. Regional Airshed-modeled 2017 8-hour ozone design values for Louisiana.

STATE	MONITOR	O3 DESIGN VALUE
Louisiana	<i>Ascension</i>	62
Louisiana	Bossier	64
Louisiana	Caddo	62
Louisiana	Calcasieu	66
Louisiana	<i>East Baton Rouge</i>	67
Louisiana	<i>Iberville</i>	65
Louisiana	Jefferson	64
Louisiana	Lafayette	60
Louisiana	Lafourche	61
Louisiana	<i>Livingston</i>	62
Louisiana	Orleans	59
Louisiana	Ouachita	55
Louisiana	Pointe Coupee	62
Louisiana	St. Bernard	58
Louisiana	St. Charles	60
Louisiana	St. James	58
Louisiana	St. John the Baptist	62
Louisiana	St. Tammany	62
Louisiana	<i>West Baton Rouge</i>	59

Figure 10. EPA 2025 modeling projections for Louisiana monitors (EPA, 2015).

## ***BRCAC***

BRCAC continued to maintain its Facebook page and website and continued its program sharing information with its stakeholders on developments at the local, state, and federal level related to air quality.

## ***LCF***

LCF outreach activities for 2015 were documented in their 2014 Transportation Technology Deployment Report completed in April 2015. Outside of their stakeholder meetings, they reported 30 outreach events featuring alternate fuels and AF fleets. They also continued their public information and outreach activities through their online newsletter.

## ***LDEQ***

LDEQ continued its usual outreach activities as described in the 2013 and 2014 reports.

LDEQ was involved again in 2015 in a broad effort for public outreach and education during its Air Quality Awareness Month including TV and radio interviews around the state of Louisiana.

Although activities have diminished somewhat as the program matured, the agency continued their EPA Advance Program activities with communications and meetings around the state and continued efforts to build new Advance programs in new areas of the state.

## ***CRPC***

CRPC, with LCF assistance ramped up their public outreach activities associated with the new GeauxRide Program they began implementing in early 2015. Descriptions of the program and its benefits were included in several local newspaper articles and featured in numerous presentations about CRPC air quality activities.

CRPC and LDEQ are continuing to work with the EPA School Flag program, especially with the ones in the non-attainment parishes, to create public awareness of outdoor air quality conditions so that children can continue to exercise while protecting their health when air quality is in unhealthy ranges.

## ***LDNR***

The Louisiana Department of Natural Resources continued its outreach activities associated with their agency responsibilities for promoting energy efficiency and alternate fuels.

## **OTHER**

### *GeauxRide*

CRPC completed setting up the GeauxRide ride sharing website. As part of the initial roll out, portals were established for three state agencies: Louisiana Department of Transportation and Development (LDOTD), Louisiana Department of Environmental Quality (LDEQ), and Louisiana Department of Natural Resources (LDNR).

CRPC partnered with LDEQ and LCF to successfully conduct a GeauxRide Launch event. This event was covered by news media and newspaper which helped promote the new ridesharing site to the general public. CRPC in coordination with LDEQ and LCF is working on setting up more portals for larger employers in the region.

To further expand on this CRPC in coordination with LDOTD is working on an RFP to bring in experts/consultants to pilot an outreach campaign in the Capital Region. In addition to the development of a Ride Share and TDM program, outreach to major employers and public, the selected firm should also address the following needs:

- 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.

### *Bike Racks in Downtown Baton Rouge and at Southern University*

CRPC completed installing 71 bike racks in downtown Baton Rouge and is currently working on installing another 71 at Southern University.

### *EPA Bikeshare Planning Grant.*

CRPC assisted the Baton Rouge Downtown Development District is a successful grant application to EPA for a bikeshare planning grant.

EPA visited Baton Rouge in July 2015 to host a two-day workshop to assess the feasibility of the project. EPA worked with the Mayor President's Office, DDD, CRPC, CPEX, BRAF, and Bike BR, to host a Bike Share Information and Visioning Session.

CRPC along with other stakeholders went on a field trip to Birmingham, AL to get a better understanding regarding implementation of Bike Share program in Baton Rouge. Efforts are underway to pilot Bike Share program in downtown Baton Rouge.

#### *DOTD Advanced Traveler Information System (ATIS)*

DOTD plans to issue an RFP for a project to modernize the existing Advanced Traveler Information System (ATIS) in the State and also in the Baton Rouge non-attainment region. The purpose of this project is to reduce congestion by providing accurate information about traffic conditions and also alternative options to travelers.

#### *Regional Traffic and Vehicle Classification Counts*

CRPC is initiating a regional traffic counting project. Vehicle classification counts will also be collected by functional classification. This data will help for better calibration of travel demand models that reflect the actual travel conditions. Also having local vehicle classification data by functional class will help generate better input files for EPA's MOVES model. This will result in estimating realistic emissions from on-road sources.

#### *EPA School Flag and Anti-Idling Programs*

CRPC in partnership with LCF will continue to promote and signup model schools to participate in EPA's school flag program. Simultaneous efforts and outreach will also be made to reducing idling near schools. The goal of this project is educate children on air quality issues and also improve air quality in school zones.

We were impressed to learn that one local school had undertaken a project on its own to protect students from vehicle emissions by posting anti-idling messages for student drop-off and pick-up areas of the school (see figure 11).



Figure 11. Anti-idling signs posted at a local school.

### *New Strategy for Emission Reductions*

In 2014, BRCAC proposed a new strategy for the generation of emission reduction credits to further local emission reductions and provide a new means of obtaining much-needed emission reduction credits for local projects development. This strategy essentially involved opening up eligibility for emission reduction credits to mobile and area sources. This proposal was well received by all stakeholders and work began on further defining particulars of the strategy. The strategy and its development are described in detail in the 2014 Baton Rouge Advance Program Update Report.

On June 18, 2015 BRCAC and LDEQ hosted a conference call with EPA Region 6 to describe and discuss the new strategy. At that time, EPA was supportive of proceeding with the strategy development. LDEQ then began writing rules necessary for implementation of the strategy.

To support the new ERC strategy and the new 2015 ozone standard, LDEQ worked on three new rules with relevance to improving Baton Rouge air quality.

#### **1. Interpollutant Trading**

In order to construct a new major stationary source or major modification in a nonattainment area, the Clean Air Act requires the owner/operator to offset the increase in emissions of the nonattainment pollutant(s) resulting from the new construction or modification. Typically, for all regulated pollutants other than PM<sub>2.5</sub>, emission reductions claimed as offset credit must be from decreases of the same regulated pollutant or pollutant class (e.g., VOC) for which the offset is required. For example, increases in NO<sub>x</sub> emissions must be offset with decreases in NO<sub>x</sub> emissions; increases in VOC emissions must be offset with decreases in VOC emissions.

However, in ozone nonattainment areas, both NO<sub>x</sub> and VOC are regulated as precursors to ozone. Accordingly, when a project triggers NNSR for NO<sub>x</sub> or VOC, reductions in either NO<sub>x</sub> or VOC emissions can satisfy the requirement that offsets provide a net air quality benefit with respect to ozone, so long as they are applied at the proper ratio as determined by a photochemical model such as the Comprehensive Air Quality Model with Extensions (CAMx).

This rulemaking, identified as AQ354 and promulgated October 20, 2015, allowed for increases of one ozone precursor (NO<sub>x</sub> or VOC) to be offset with decreases of the other ozone precursor at the ratio dictated by photochemical modeling, subject to approval of LDEQ and EPA. EPA supported this rule revision.

## **2. Banking in Attainment Areas Not Meeting a New or Revised NAAQS**

Previously, LAC 33:III.Chapter 6 (Regulations on Control of Emissions through the Use of Emissions Reduction Credits (ERC) Banking) precluded sources located in attainment areas from participating in the emissions banking program. On November 20, 2015, LDEQ amended Chapter 6 (via AQ353) to allow owners/operators of stationary sources located in attainment areas that are not compliant with a new or revised NAAQS to bank creditable reductions achieved on or after the new or revised NAAQS is promulgated.

## **3. Expansion of the ERC Banking Program Beyond Stationary Sources**

As previously mentioned, a third rulemaking intended to facilitate NO<sub>x</sub> and VOC reductions is now under development and will be proposed in the coming months. Currently, only stationary point sources are eligible to participate in the emissions banking program. This rulemaking will expand the types of sources that may bank emission reductions to certain mobile sources (e.g., cars, trucks, and motorcycles) and nonroad sources (e.g., marine vessels, locomotives, nonroad engines). The resultant ERC will be able to be used by stationary sources as offsets.

## **2016 PLANS**

All of the Baton Rouge Advance participants (BRCAC, LCF, and CRPC) plan to continue with their ongoing activities into 2016.

One major effort all three organizations will be participating in for 2016 is the completion and implementation of a new strategy to grant emission reduction credits for mobile and area sources as well as point source projects. LDEQ is currently drafting rules for this strategy and expects the rules will be in place by late summer or early fall. To support this strategy, the organizations will also be working on the architecture (structure and function) of a web-based Information Resources Center to facilitate ERC generation and tracking activities in the Baton Rouge area.