BATON ROUGE AREA

CLEAN AIR ACTION REPORT

Prepared for

ADVANCE
A U.S. Environmental Protection Agency Program

EPA'S OZONE AND PM ADVANCE PROGRAM

[2017 and 2018 UPDATE]

Prepared by

Baton Rouge
CLEAN AIR COALITION

Capital Region Planning Commission
CRPC

Louisianacleanfuels

September 2019

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 a continuing cooperative effort of the Baton Rouge Clean Air Coalition, the Capital Region Planning Commission and Louisiana Clean Fuels. This report addresses the Baton Rouge area's activities undertaken in 2017 and 2018.

The original report 2013 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, details numerous voluntary emission reduction measures, past, and present, to mitigate the area's ozone levels.

For many years, air quality was a cause for concern in the Baton Rouge area. However the area is now in attainment for all of the National Ambient Air Quality Standards (NAAQS) and the state has only two nonattainment areas (Evangeline and St. Bernard Parishes) for sulphur dioxide (SO_2). The Baton Rouge area, which consists of Ascension, East Baton Rouge, Iberville, Livingston and West Baton Rouge, parishes, met the 2015 ozone standard and therefore was designated attainment. This is the first time since the inception of the Clean Air Act of 1970 and the Amendments of 1990 that the area was able to meet a standard. This accomplishment is in direct correlation to the cooperation between LDEQ, industry, businesses and private citizens.

.

SOCIOECONOMIC UPDATE

The attached Baton Rouge Area Chamber of Commerce Report details the population, opportunities and issues with the Baton Rouge area. Please follow this link to access the report – http://www.deq.louisiana.gov/assets/docs/unpublished-sonomaAQ_BRAC1029rept/https___brac.pdf

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, 2017 and January 1 through December 31, 2018" prepared for LDEQ by Sonoma Technology Inc.

Please see the following links for the 2017 and 2018 reports from Sonoma Technology. Http://www.deq.louisiana.gov/assets/docs/unpublished-sonomaAQ_BRAC1029rept/ldeq-20171.pdf for 2017 and http://www.deq.louisiana.gov/assets/docs/unpublished-sonomaAQ_BRAC1029rept/LDEQ_2018.pdf for 2018.

AIR QUALITY UPDATE

OZONE

Currently, Louisiana is designated as attainment for the 2015 Ozone NAAQS. The Baton Rouge area achieved attainment of the 2008 ozone standard in 2013 (based on 2011-2013 monitoring data) with a design value of 75 ppb (parts per billion). This achievement was two years ahead of the deadline for the federal attainment date. The area's design value continued to reduce in both 2014, to 72 ppb (based on 2012-2014 data) and in 2015 to 71 ppb (one ppb above the new 2015 standard of 70 ppb). This continued reduction in air pollution can be attributed to the cooperation between LDEQ, industry, businesses and our private citizens. The Baton Rouge area has reached attainment twice before, once for the 1-hour standard and another time for the 1997 8-hour standard. This time, the area met the more stringent 2008 8-hour ozone standard again.

In October 2015, EPA finalized a new, more stringent standard for ozone, set at 70 parts per billion (ppb). On September 29, 2016, LDEQ submitted its formal nonattainment area designation recommendations of attainment for all 64 parishes (counties) to EPA. Figures 1 and 2 below capture the annual design values for both 2017 and 2018.

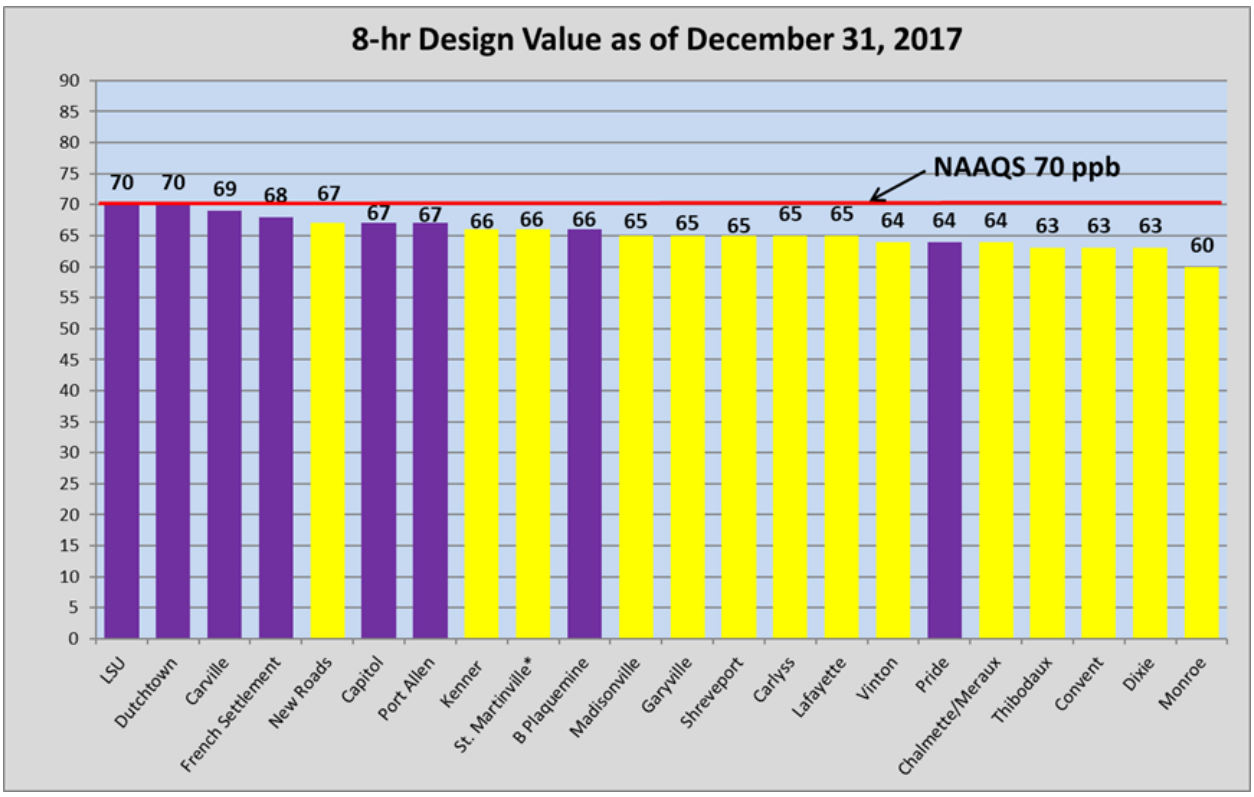


Figure 1 – Baton Rouge Area 8-hr design value add of December 31, 2017

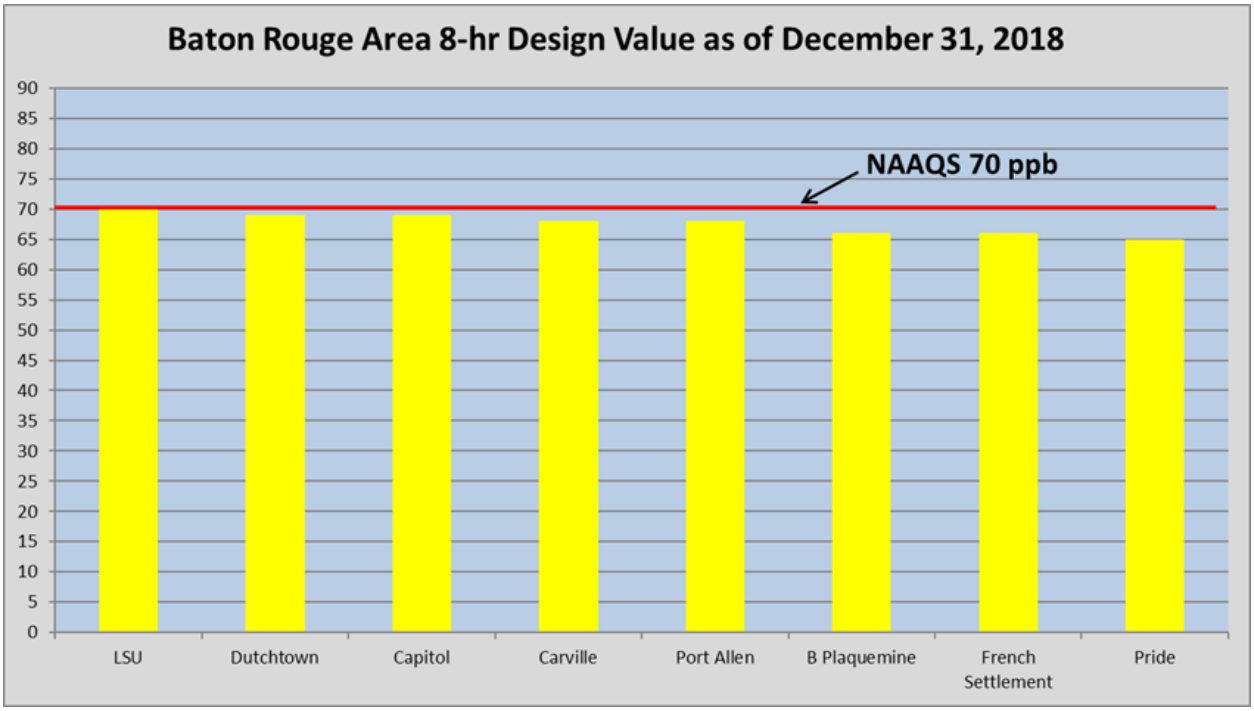
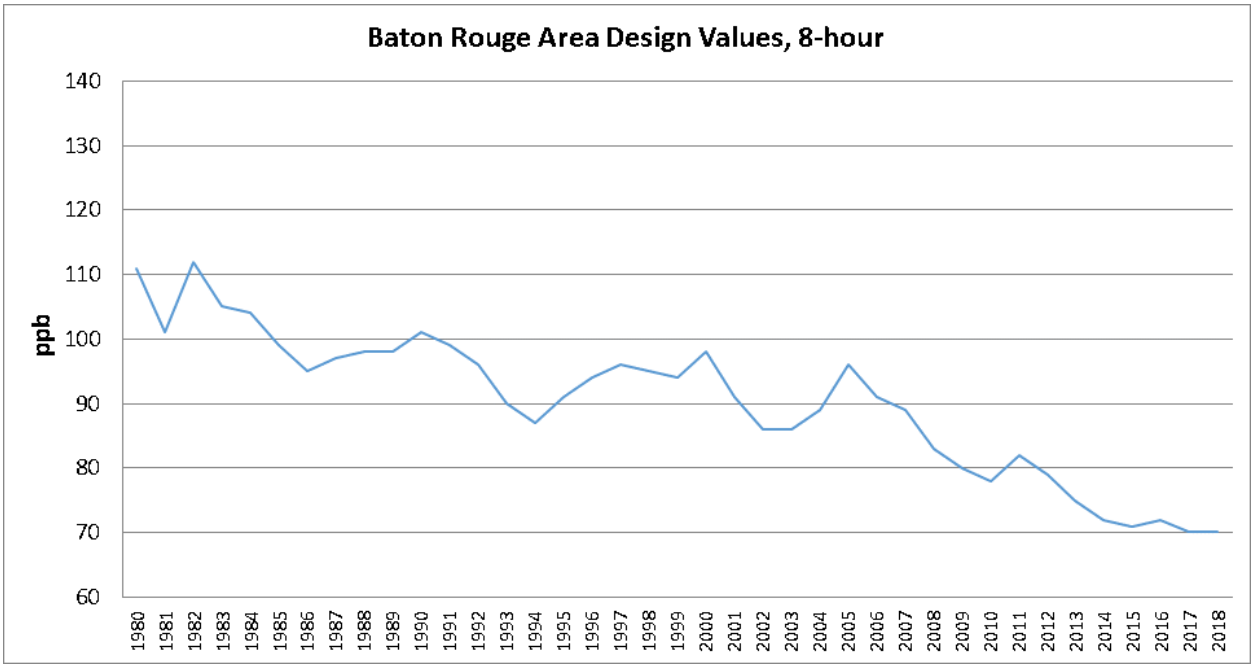


Figure 2 – Baton Rouge Area 8-hr design value as of December 31, 2018

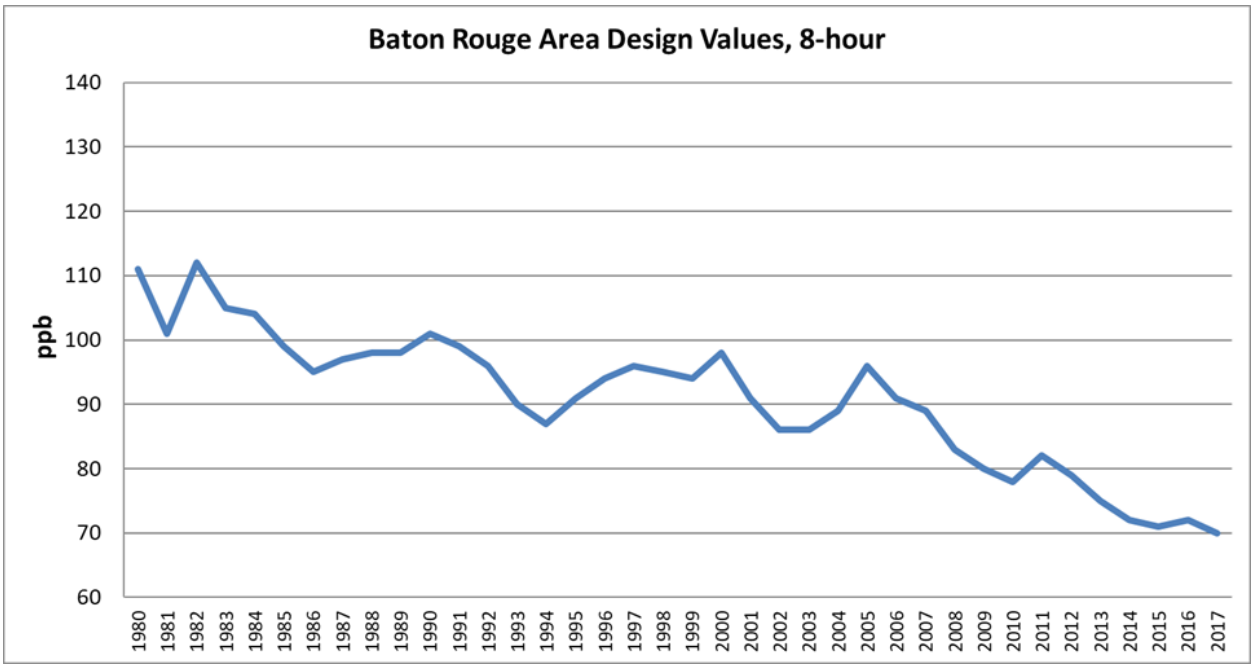
The overall downward trend in 8-hour ozone design values indicates progress, which is remarkable given the emissions challenges for the area. The area is a heavy industrial corridor, with marine commerce activity on the Mississippi River, state government offices, two major universities, an airport, and heavy interstate traffic through the center of the urban area. The expansion of the LDEQ's Emission Reduction Credits (ERC) banking system to include mobile sources of emission is anticipated to result in a substantial emission reduction projects that will lead to a decrease in ozone levels.

TRENDS



2018 Trends

Figure 3 – Baton Rouge design Values, 8-hour – 2018



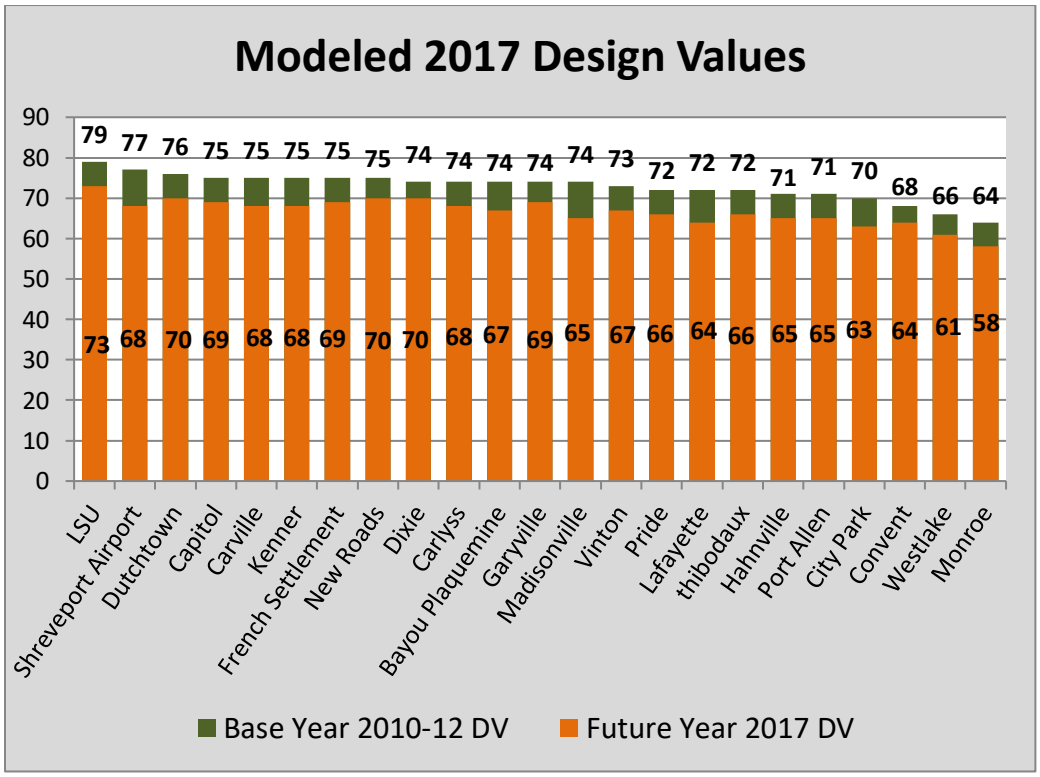
2017 TRENDS

Figure 4 – Baton Rouge Area Design Values, 8-hour - 2017

Regional Airshed Modeling

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 was also to provide capability to test various emission reduction strategies for efficacy at lowering ozone levels. A summary of the results of future year (2017) modeling are in Figure 5. These modeled projections indicated that the Baton Rouge area would likely fall into nonattainment with EPA's recent revision of the ozone NAAQS (70 ppb) because of the design value for the LSU monitor. 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 6). 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.

Figure 5 – Modeled 2017 Design Values



STATE	MONITOR	O3 DESIGN VALUE
Louisiana	***Ascension***	62
Louisiana	Bossier	64
Louisiana	Caddo	62
Louisiana	Calcasieu	66
Louisiana	***East Baton Rouge***	67
Louisiana	***Iberville***	65
Louisiana	Jefferson	64
Louisiana	Lafayette	60
Louisiana	Lafourche	61
Louisiana	***Livingston***	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	***West Baton Rouge***	59

Figure 6

FINE PARTICULATE MATTER ($PM_{2.5}$)

Annual $PM_{2.5}$ data for the Baton Rouge area shows a downward trend over the period 2005 – 2015 (Figure 7). However, given that 2016 was an extraordinarily wet year, anticipated fine particulate levels were suppressed. This appears to be the case, since 2016 AQI data for $PM_{2.5}$ show more "good" days and fewer "moderate" days than 2015. However, the Baton Rouge area had poorer AQI values for fine particulates among all Louisiana metro areas for both 2015 and 2016.

In a January 15th 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 $PM_{2.5}$ NAAQS based on 2012 monitoring data.

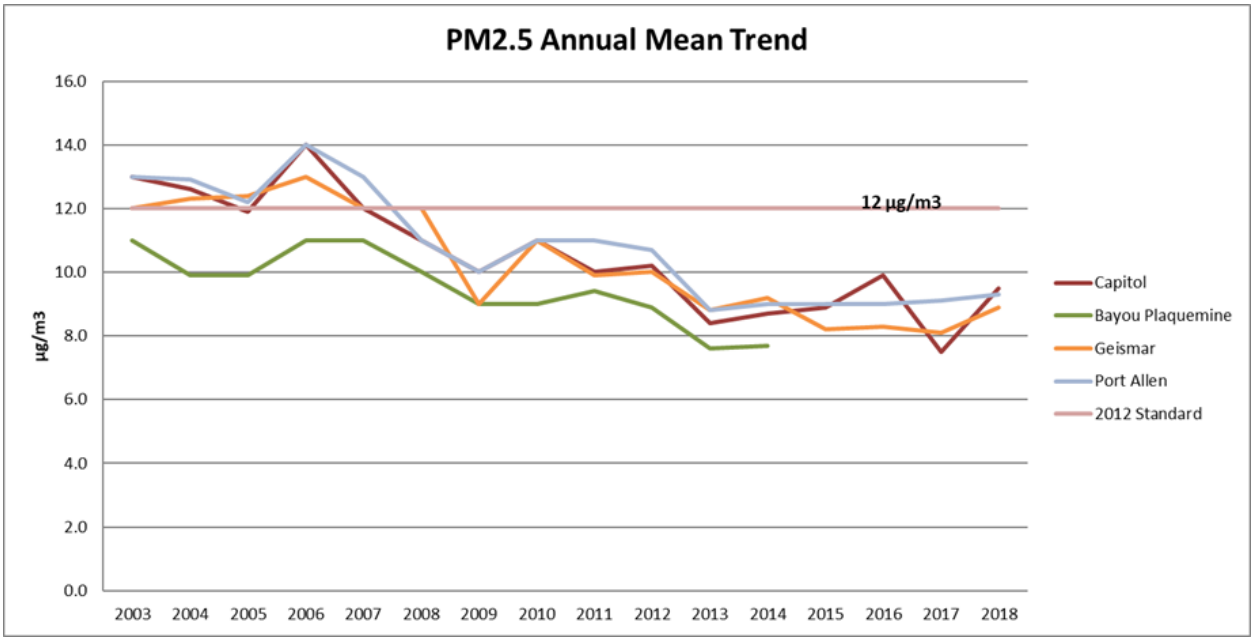


Figure 7: PM2.5 Trends through 2018

LOUISANA CLEAN FUELS (LCF)

Louisiana Clean Fuels 2017 – Annual Report – For information on Alternative Fuel and emission savings go to http://www.deq.louisiana.gov/assets/docs/unpublished-sonomaAQ_brac1029rept/cleancitiesannual2017.pdf

Louisiana Clean Fuels 2018 Annual Report – For information – http://www.deq.louisiana.gov/assets/docs/unpublished-sonomaAQ_BRAC1029rept/cleancitiesannual2018.pdf

2017 AND 2018 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 2019 as reflected in their annual report submitted to the Department of Energy (DOE). In 2018, LCF and its stakeholders reduced greenhouse gas emissions by approximately 45,000 tons and NOx by 262,000 lbs through a variety of alternative fuel and fuel efficiency projects. 81% of all greenhouse gas emission (GHG) reduction in the LCF territory can be attributed to

idle reduction and fuel economy programs. Alternative fuel use accounts for only 14% of the GHG emission reductions in our area.

Alternative Fuel Corridors

Infrastructure Availability for Alternative Fuels in Louisiana

With the designation of alternative fuel corridors, The Federal Highway Administration (FHWA) is establishing a national network of alternative fueling and charging infrastructure along national highway system corridors. FHWA intends to support the expansion of this national network through a process that:

- provides the opportunity for formal corridor designations on an annual basis;
- ensures that corridor designations are selected based on criteria that promote the "build-out" of a national network;
- develops national signage and branding to help catalyze applicant and public interest;
- encourages multi-State and regional cooperation and collaboration; and,
- brings together a consortium of stakeholders including state agencies, utilities, alternative fuel providers, and car manufacturers to promote and advance alternative fuel corridor designations in conjunction with the Department of Energy.

In March 2019, Louisiana received approval from FHWA for signage for the following fuels: CNG, Propane, and LPG on some of its interstate highways. Signs have been installed along the approved corridors as follows:

- July 2019 “begin” and “end” signs installed on I-10 at the Texas border as well as the Mississippi border.

- August 19, 2019: Remaining “begin” and “end” signs to be installed on I-20 at the Texas and Mississippi borders for I-49 at the intersection with I-10 and I-20

EV infrastructure development is slow in Louisiana when compared to other states, but 2016 saw a significant increase in infrastructure. On October 17th, 2016 the mayor of Baton Rouge unveiled a new City-Parish initiative called “Green Park Baton Rouge”, a program that lets drivers of electric cars charge their vehicles for free at 8 public parking spots in the downtown area. Currently, through VW funding, many municipalities and organizations have applied for funding for further EV infrastructure throughout the state. For example, the University of Louisiana at Lafayette, which has applied for chargers to install on their campus.

L to Right: DNR Secretary Tom Harris, DOTD Secretary Shawn Wilson, Louisiana Governor John Bel Edwards and LDEQ Secretary Chuck Carr Brown.

L to Right: DNR Secretary Tom Harris, DOTD Secretary Shawn Wilson, Louisiana Governor John Bel Edwards and LDEQ Secretary Chuck Carr Brown.

2 Transit Fleets win funding for 100% Electric Buses:

Capital Area Transit System (CATS)
On Monday, October 17th, 2016 the Capital Area Transit System (CATS), announced the purchase of three electric buses to add to the existing fleet. CATS was awarded more than $2.3 million by the Louisiana Department of Transportation and Development through the federal Congestion Mitigation and Air Quality Improvement (CMAQ) Program to purchase three electric buses and charging systems to support them. CATS covered 20 percent of the total cost of the project, which cost more than $2.8 million. The three new buses have just been put in service as of August 2019 and will eventually, support a planned Bus Rapid Transit line on Florida Boulevard.

Sportran

The city of Shreveport received a $3.9 million federal grant to bring six electric buses into SporTran's fleet by summer of 2017 to purchase six zero-emission electric buses, three depot chargers and an enroute fast charger. These buses are now all incorporated into their fleet with three more electric buses on order.

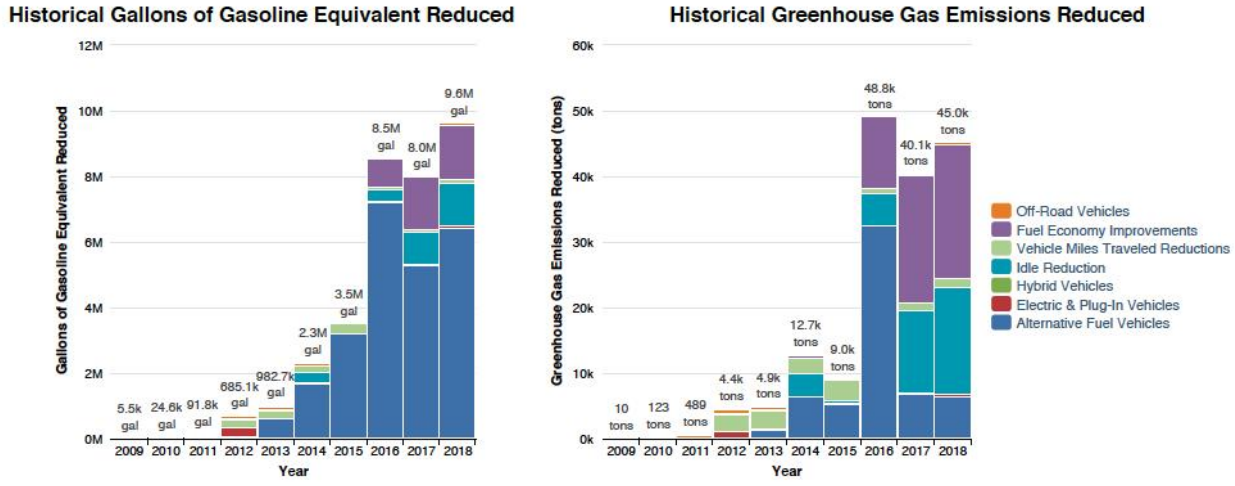
Alternative Fuel and Advanced Technology Vehicles in Louisiana

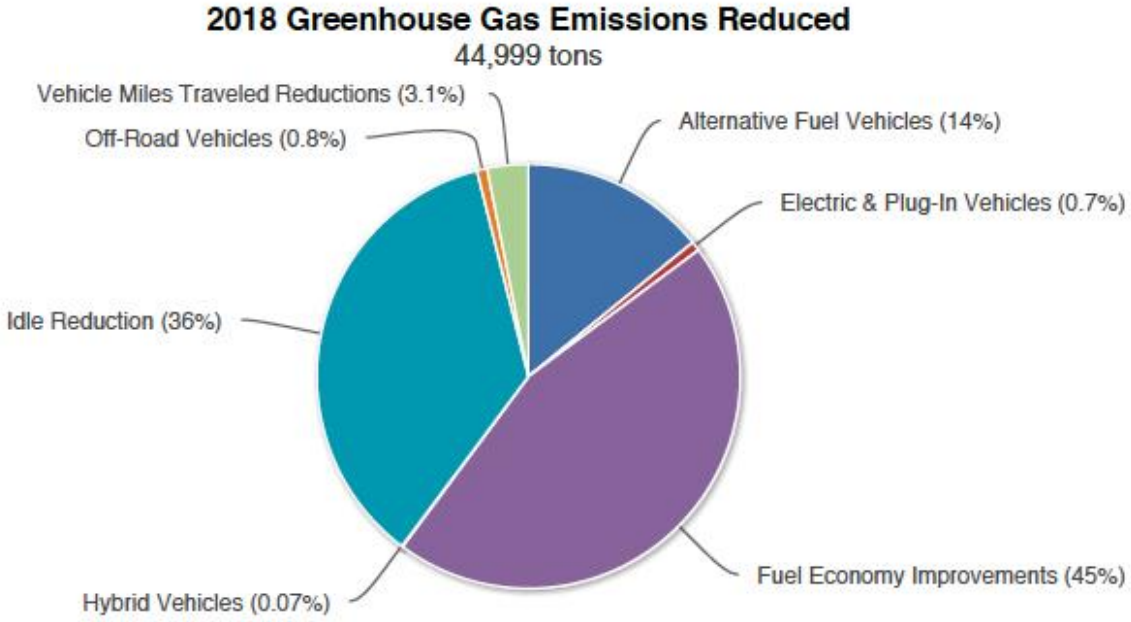
The LCF Annual report collects information on approximately 3,000 AFVs in the LCF territory and extrapolates the GHG emission reduction and NOx reductions for each fuel and fuel reduction strategy. Once again, the alternative fuel usage in Louisiana remains dominated by CNG, which accounts for 80% of GGE reduction in the state with propane coming in 2nd at 12%.

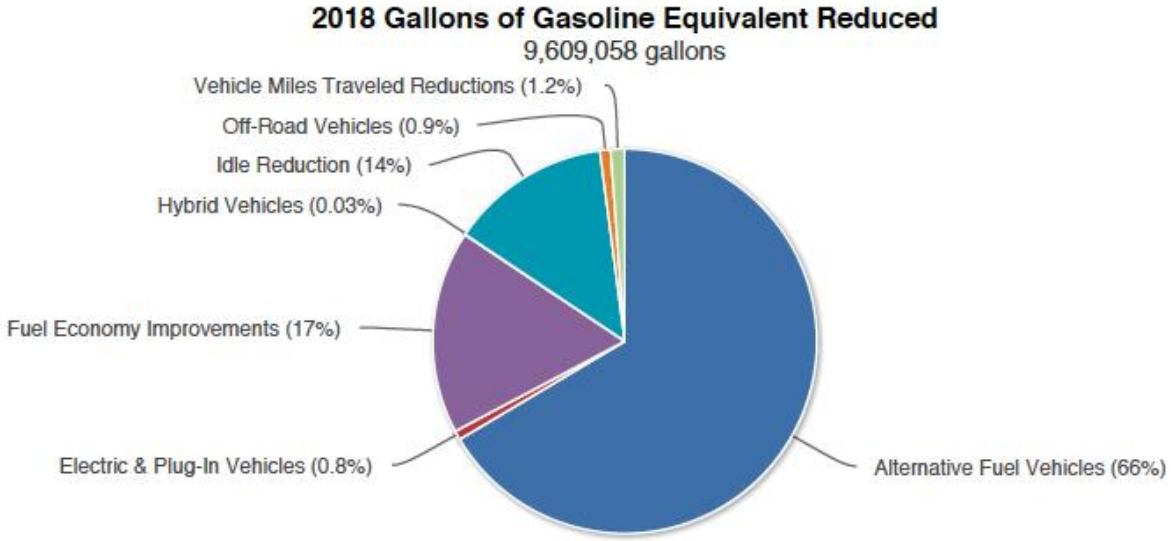
St. Landry Solid Waste increased their RNG production capacity with an expansion to their facility in 2015. St. Landry is fueling 10 Waste Connections haulers on 100% renewable natural gas. RNG accounts for 1.2% of all the alternative fuel used in the LCF territory.

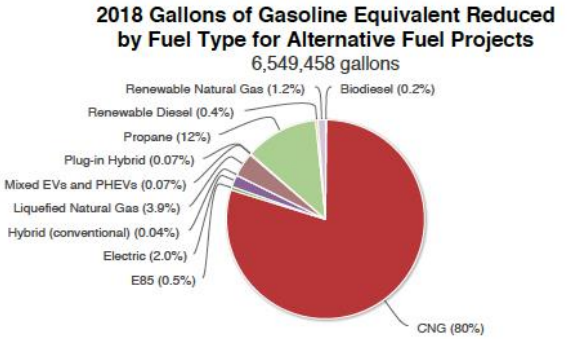
Through VW funding, several schools are transitioning their bus fleets to propane buses. Ascension, Bossier, Vernon, Winn, Lafayette, and East Baton Rouge Parish have all applied for, and have received approval for, VW funding for propane buses in round one or round two. Propane usage is increasing in our state and will likely continue to rise as these school districts purchase their propane buses and put them into service.

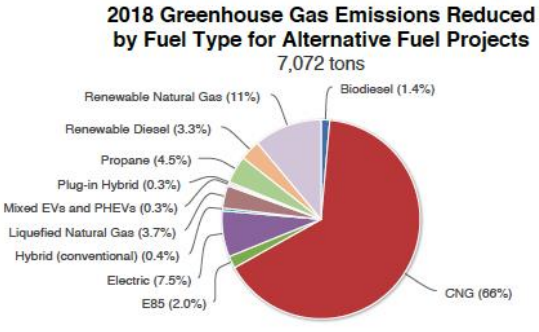
With their “Green Initiative,” Stone Oil has taken a multi-pronged approach to reduce fuel use and emissions. Repowering the majority of their engines and generators to run on biodiesel and using shore power for their shipping vessels, Stone Oil offset 861,456 gasoline-gallon equivalents of petroleum and reduced greenhouse gas emissions by 10,640.5 tons in 2018. LCF awarded Stone Oil their “Rising Star” award for the 2018 Clean Fuel Leader Awards to recognize their work.




2018 Greenhouse Gas Emissions Reduced
44,999 tons
Vehicle Miles Traveled Reductions (3.1%)
Off-Road Vehicles (0.8%)
Alternative Fuel Vehicles (14%)
Electric & Plug-In Vehicles (0.7%)
Idle Reduction (36%)
Hybrid Vehicles (0.07%)
Fuel Economy Improvements (45%)


2018 Gallons of Gasoline Equivalent Reduced
9,609,058 gallons
Vehicle Miles Traveled Reductions (1.2%)
Off-Road Vehicles (0.9%)
Idle Reduction (14%)
Hybrid Vehicles (0.03%)
Fuel Economy Improvements (17%)
Electric & Plug-In Vehicles (0.8%)
Alternative Fuel Vehicles (66%)


2018 Gallons of Gasoline Equivalent Reduced
by Fuel Type for Alternative Fuel Projects
6,549,458 gallons
Renewable Natural Gas (1.2%)
Biodiesel (0.2%)
Renewable Diesel (0.4%)
Propane (12%)
Plug-in Hybrid (0.07%)
Mixed EVs and PHEVs (0.07%)
Liquefied Natural Gas (3.9%)
Hybrid (conventional) (0.04%)
Electric (2.0%)
E85 (0.5%)
CNG (80%)


2018 Greenhouse Gas Emissions Reduced
by Fuel Type for Alternative Fuel Projects
7,072 tons
Renewable Natural Gas (11%)
Biodiesel (1.4%)
Renewable Diesel (3.3%)
Propane (4.5%)
Plug-in Hybrid (0.3%)
Mixed EVs and PHEVs (0.3%)
Liquefied Natural Gas (3.7%)
Hybrid (conventional) (0.4%)
Electric (7.5%)
E85 (2.0%)
CNG (66%)

EPISODIC CONTROLS

All of the episodic controls described in the 2013 Advance Report and 2014, 2015 and 2016 have continued through 2018. These include Air Quality Action Days, EnviroFlash, and Industry Ozone Action Days.

Local industries have agreed to continue to work with the DEQ to maintain the Industry Ozone Action Day program even though the area is in attainment with the ozone and $PM_{2.5}$ standards. As the "trigger" level for calling an Action Day is a "projected" 90% of the standard, this remains a very aggressive concession by industry to do its part to continue its commitment towards air quality standard compliance for the area.

CAPITAL REGION PLANNING COMMISSION

Congestion Mitigation for Air Quality (CMAQ) Projects:

CMAQ projects implemented between 2016 and 2018 are shown below

FY 2016 – FY 2018

NICHOLSON @ BRIGHTSIDE LANE
LA 431 @ LA 934 INTERSECTION IMPROVEMENT
MULTI-USE TRAILS, PHASE I-B (WBR)
LA 30: TURN LANES@S.PURPERA & S. HODGESON
BRMPO TRAVEL DEMAND MANAGEMENT PRGM

CMAQ projects scheduled to be implemented between 2019 and 2021 are shown below

FY 2018 – FY 2021

QUAIL DR: TURN LANE AT PERKINS (LA 427 - 2019
EBR COMPUTERIZED TRAFFIC SIGNAL, PH VB – 2020
SCOTLANDVILLE PKWY TO DWTN BR TRAIL-PH 1 – 2020
LEE DR AT HYACINTH AVE ROUNDABOUT - 2021
TRAFFIC SIGNAL COORD & SYNCH PH VI (EBR) - 2021
TRAFFIC SIGNAL COORD & SYNCH PH VII (EBR) - 2021

Public Transit

As Regional Transit Authority (RTA) for the Capital Region, Capital Area Transit System (CATS) is gradually moving towards converting some of its fleet to cleaner electric fleet. The table below shows listing of various funding sources that were approved for procurement of electric buses.

Grant	Total Amount	Federal Share	Local Share	Fiscal Year	Comments
CMAQ	2.90 M	2.32 M	0.58 M	Federal FY 17	CATS placed order and received delivery of **3** electric buses and accessories in 2019.
BTR Earmark	1.19 M	1.01 M	0.18 M	Federal FY 17	The purpose pf this project is to procure 1 electric bus, charging equipment, and farebox.
Urban Transit	1.59 M	1.35 M	0.24 M	State FY 18 - 19	Front loading three years of Urban Transit funds for **2** Electric buses and charging stations.
STP/STBG>200K	2.89 M	2.31 M	0.58 M	Federal FY 22	Funding approved for 3 electric buses and accessories in 2022. Could possibly be advanced if any other STBG project programmed in earlier years is not ready for authorization as planned.
Total	**8.57 M**	**6.99 M**	**1.38 M**		**9 electric buses Plus**

Travel Demand Management Program:

The Capital Region Planning Commission (CRPC) will develop and implement a three-year (2017 – 2019) region-wide Transportation Demand Management program in the Capital Region. A consultant team has been selected to help implement this project. Following are some of the tasks that will be accomplished during this period.

TASK 1.0 OUTREACH

Under this task, the Consultant and CRPC will develop a methodology for public outreach, including outreach to employers, agencies, institutions and the general public. This task is to involve and inform key stakeholders and decision-makers of the TDM strategy/plan development, progress, analysis and findings. This task also includes significant marketing and public outreach/awareness about TDM activities. Outreach to employers is included in

this task to engage them in the TDM activities and participation. This task will include development and administering of a TDM Market Demand Survey to guide further outreach activities and identify an array of incentives that the community supports. This task also includes specific stakeholder interviews, focus group meetings, public outreach events all geared toward educating the public and area employers about the benefits of TDM and Ride Sharing. This will also include education about federal tax incentives/benefits associated with TDM programs.

TASK 2.0 RIDESHARE/TDM PLAN DEVELOPMENT

Under this task, a framework plan for Rideshare and TDM will be developed. This plan will include key industries/businesses/educational institutions that should be approached for inclusion in the TDM program. In development of the plan, the CRPC staff and Consultant Team will analyze commute patterns, regional employers and employment locations, demographic information and relative socioeconomic data to prioritize employer outreach and how to appropriately educate and incentivize public participation. The plan will also consider: park and ride survey and needs analysis as it relates to carpooling and vanpooling; long term funding and program sustainability; HOT analysis and other travel time reducing strategies to provide incentives for carpooling and vanpooling; guaranteed ride home and other ridesharing incentives; the array of TDM strategies such as compressed work weeks, alternate work schedules, flexible work schedules, and teleworking.

TASK 3.0 DEVELOP BRAND, MARKETING PLAN AND MARKETING TEMPLATES

Primary tasks include the early development of a cohesive branding strategy including a logo, title slogan, taglines and visuals for the Ride Share and TDM program which will be developed through engagement of the MPO Technical and Policy committees as well as input from key stakeholders.

Development and implementation of a marketing plan includes identification of communication goals, message development, web, social media, broadcast, video, and print components. Consultant will prepare templates for outreach materials to be used at events and meetings.

Development of public outreach materials such as, (but not limited to): newsletters, email blasts, social media presence and presentation are included in this task.

TASK 4.0 DEMONSTRATION PROGRAM, LONG TERM STRATEGY DEVELOPMENT, SOFTWARE ANALYSIS

This task will explore ways for the CRPC MPO to continue operating the TDM program at the close of the consultant contract. The Consultant will deliver a long term staffing plan and budget, marketing and outreach materials and any other materials recommended to achieve this goal.

Additionally, a replicable program should be created such that it can be shared among the MPOs throughout the state. The Consultant will develop strategies that they may be tailored to other MPOs in a way that allows them to establish successful regional programs. As each MPO region is currently working on various TDM programs, the Consultant will develop recommendations that can be implemented by all MPO regions with regard to successful TDM programs. This will include quarterly learning sessions throughout the contract duration where all MPOs can ask questions and take advantage of the technical assistance provided under this contract. The Consultant will develop topical discussion sessions in conjunction with LADOTD and the MPOs to provide maximum technical assistance.

The Consultant will also research and develop legislative recommendations requiring TDM measures for large employers, if deemed appropriate or beneficial for the region. Work under this task will include development of a White Paper outlining benefits and drawbacks of legislating TDM. The paper will include examples of successful states that have legislated TDM requirements as well as areas with successful TDM programs where it is not mandated. The paper will also outline ways in which TDM is funded when adherence is voluntary.

Finally, the selected consultant will review the ride match software utilized by the Capital Region MPO and provide recommendations on other software that should be considered by the Capital Region MPO and/or other MPOs throughout the state.

TASK 5.0 VANPOOL FEASIBILITY STUDY

The main objectives of this task are to determine the feasibility of vanpooling in the region, long term funding strategies for vanpooling, vanpool structure, and identifying the best entity for establishing and operating a vanpool. Principal tasks should *include but not be limited to*:

- Establishing and facilitating a working group that includes area employers, government representatives, the transit agency and other interested stakeholders.
- Assessment of the region's physical, corporate and socioeconomic conditions relative to vanpools.

- Identification of the most beneficial vanpool routes or commute distances
- Evaluation of commuter trip patterns and coordination with neighboring MPOs if needed.
- Develop vanpool ridership projections for the first five years with strategies to grow vanpool riders (i.e. seat subsidies)
- Review alternative operating models and present a preferred alternative.
- Identify appropriate metrics for measuring performance within the preferred alternative operational model.

The progress to date of all the above tasks is shown in the table below.

Task #	Task Name	% Complete	Work Undertaken
1	PROJECT MANAGEMENT, WORK PLAN MONITORING, REVIEW OF DELIVERABLES	75%	Five of Six MPO Technical and Policy committee meetings completed.
2	OUTREACH		
2.1	Initial Outreach	99%	Initial Market Assessment
2.2	Worksite Outreach	65%	Visits and calls to new and prospective partners
2.3	General Audience	76%	Direct, general outreach including Earth Day
3	RIDESHARE/TDM PLAN DEVELOPMENT	53%	Comparative Program Report is complete
			Long Term Program Strategy will evolve over time
			HOT Lane Analysis scheduled for 2019
4	DEVELOP BRAND, MARKETING PLAN AND MARKETING TEMPLATES	93%	Branding strategy and various versions completed, but more will be added over time
			Marketing Plan finalized and in execution
			Support for outreach campaigns ongoing
5	DEMONSTRATION PROGRAM, LONG TERM STRATEGY DEVELOPMENT, SOFTWARE ANALYSIS	45%	State-wide learning session prep for May
			An assessment of the Greenride software completed, to be revisited after working with DOTD
			A TDM Program guidebook will evolve over time, some pieces being completed
6	VANPOOL FEASIBILITY STUDY	99%	Draft Vanpool Feasibility Report has been started, completion in 2019

The following are the statistics of the number of people signed up in the rideshare database by year for 2017 and 2018. The table also lists potential target for 2019.

Ridepro (database) accounts open by year:

Date Range	GOAL for Registrants	Actual Registrants	Notes
Up to Autumn of **2017**	NA	160	Registrants in previous database: GeauxRide, prior to establishment of Commuter Krewe
9/1/2017 - 12/31/**2017**	NA	24	Imported from previous program (GeauxRide)
1/1/2018 - 12/31/**2018**	1,000	1,330	Driven by event sign ups, online sign ups, referrals
1/1/2019 – 12/31/**2019**	2,000	TBD	Event sign ups, online sign ups, referrals

In addition to the aforementioned tasks, CRPC has been working on the development of a web-based Information Resources Center to support BRCAC and LDEQ in the implementation of the new strategy to expand the LDEQ emission reductions banking program to mobile sources. This website became active for review and further development early in 2017 and can be found at http://www.laerc.com/. The website provides background on the revised LDEQ ERC banking program; list projects, service providers, and helpful resources; and maintains a real time summary of emission reduction credits in LDEQ's banking system.

BATON ROUGE AREA INDUSTRY ACTIVITIES

PM 2.5

Sulfur Dioxide is a recognized precursor to atmospheric PM 2.5 concentrations. To comply with the EPA's SO2 1-hour ambient air standard implementation guidance, industry entities teamed with the LDEQ to perform the necessary modeling, monitoring site selection and installation of two new monitors to facilitate compliance. In addition to purchasing the monitors, the industry entities paid for the operation of the monitoring stations until the start of the next LDEQ fiscal year beginning July 1, 2017. In addition, all the industry associations agreed to a fee increase in the 2016 Louisiana Legislative Session for a fee increase to support the continued maintenance of the entire LDEQ's air quality monitoring network. This increase went into effect July 1, 2017.

Though driven by regulatory requirements, the collaborative between industry and the LDEQ on this issue demonstrates the joint commitment to air quality and clearly demonstrates the ideals of the advance program.

Baton Rouge Industry continued to respond to early notification of possible ozone days by putting into effect their ozone action day procedures.

"Hybrid" Air Permitting Program

The Baton Rouge area achieved ozone attainment status on March 21, 2017. As such, the Clean Air Act allows the area to revert to the Prevention of Significant Deterioration (PSD) air permitting program. The PSD program allows for certain de minimis air emission increases from point sources without "offsetting" these emissions.

Several years ago (though it was slightly modified recently), LDEQ and industry agreed on a "hybrid" air permitting rule when the Baton Rouge area achieved attainment status. While this was originally intended for a "short duration" period during two ozone ambient air quality standards, it will now be the Baton Rouge area permitting requirements for the foreseeable future.

The hybrid program mixes the concepts of PSD and the Non-Attainment New Source Review (NNSR) permitting programs. While the hybrid relaxes some of the "thresholds" in the NNSR program, it retains "offset" requirements to minimize gross emission increases.

This is an excellent example of how industry has worked with the agency to further the "long-term" betterment of air quality in the Baton Rouge area.

The Clean Air Coalition began discussions on a series of regulatory actions that will continue to allow industrial growth in Baton Rouge while simultaneously improving air quality. The three regulatory actions (two adopted in late 2015 and the last adopted May 20, 2017) all center on the expansion of the flexibility of the emission reduction credit banking program needed for Nonattainment New Source Review Permitting.

The driving impetus for these rules is based on the current drivers of the area's ozone formation. In the early 1980's, the area required a VOC-reduction strategy. The area is now in a NOx-reduction strategy. Due to the aggressive approach to reduce VOC emissions, the ability to create excess VOC reductions for the emission bank has become more difficult and expensive.

The first rule (identified as AQ354) allowed for the "interpollutant" trading of NOx and VOC emissions. While primarily intended to assist industry to generate credits for nonattainment permitting, it does encourage industry to voluntarily reduce the more impactful NOx emissions to ozone formation to offset the "typical" VOC increases from the petrochemical industry expansions.

The second rule (AQ353) allowed for the continuation of the emission reduction credit bank as the Baton Rouge area moved in and out of the various ozone standards. This rule encourages industry to continue to make early voluntary emission reductions without fear that these reductions confiscation due to a temporary period of attainment designation.

The final rule (AQ365), and maybe most important to maintaining ozone compliance, will allow emission reduction credits to be obtained by controlling "mobile" sources. . As this rule opens multiple opportunities in a large, industrial, heavily trafficked (intersection of I-10 and I-12) an major port city; the opportunities for mobile emission reduction emissions are virtually unlimited. As the reductions achieved will be traded on a greater than "one-to-one" basis (i.e. greater emission reductions from mobile sources are needed to offset projected point source increases), the overall air quality in Baton Rouge benefits from this rule.

On January 26, 2017, the LDEQ, with its partners, hosted a workshop on the rule and the potential opportunities available to create these emission reductions. Over 100 people attended cementing the interest of this concept for the Baton Rouge area.

In summary, while this triumvirate of rules helps industry grow in the area, the area benefits greatly from their implementation as well as Advance Program goal promotion by their adoption.

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 the 2017 and 2018 updates.

BRCAC

BRCAC continued to maintain its Facebook page and continued its program sharing information with its stakeholders on developments at the local, state, and federal level related to air quality. BRCAC is also actively involved in public education/outreach associated with the LDEQ revision to the ERC banking rule to include mobile sources. BRCAC and LDEQ organized and jointly sponsored a conference in January 2017, providing information concerning implementation of the new rule.

LCF

LCF outreach activities includes their stakeholder meetings, outreach events featuring alternate fuels and AF fleets reaching an estimated audience of 712,338 individuals in Louisiana. They also continued their public information and outreach activities through their online newsletter, social media accounts and their website. – LCF has been instrumental in creating Alternative Fuels corridors.

LDEQ

DEQ scheduled interviews around the state for Air Quality Awareness month and promotes air quality awareness at events like Earth Day, conferences, school and more. DEQ has set up a notification system that the public can access to get notification when a monitor has an exceedance of Ozone, SO2 and/or PM2.5.LDEQ worked with communities involved in Advance Program and helped with the formation of the New Orleans Clean Air coalition.
LDEQ Secretary Chuck Carr Brown had many speaking engagements about air quality and other environmental issues. The LDEQ monthly newsletter DiscoverDEQ continues coverage of air issues, air accomplishments and tips.

LDEQ, LCF and the Louisiana Department of Transportation and Development started working on a project with other partners to establish Alternative Fuels Corridors in the state fot CNG, LNG, Propane and electric infrastructure for motorists.

Governor John Bel Edwards named LDEQ, (along with the Department of Natural Resources and the Department of Transportation and Development) as the beneficiary for the Volkswagen Mitigation Trust Settlement and began work towards disbursing approximately $19 million dollars toward the replacement of older, more polluting diesel school buses with newer clean diesel buses or alternatively fueled buses. Further, the LDEQ is funding infrastructure for electric vehicles in areas around the state to fill the gaps along the Alternative Fuels Corridor. So far, the fund has replaced 83 buses around the state.

LDNR

The Louisiana Department of Natural Resources continued its outreach activities associated with their agency responsibilities for promoting energy efficiency and alternate fuels. DNR iss collaborating with LDEQ, LCF, the Department of Transportation and Development and national partners to accomplish this.

OTHER

BRCAC has backed LDEQ's effort to build on the anti-idling signs idea by submitting an application for a region-wide program for possible beneficial environmental project (BEP) funding through LDEQ's enforcement program.

Revision of LDEQ's ERC Banking Rule to Include Mobile Sources

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 initial rulemaking was proposed in September, 2016 and re-proposed with substantive revisions in March of 2017. The rule AQ365 became final in May of 2017.

Implementing this new ERC strategy will help mitigate air quality and economic development constraints of the current "point source only" banking system and provide a number of valuable benefits for the Baton Rouge area such as:

- Allow for continued economic and transportation development (increased availability and lower costs for ERCs, which are now scarce and costly)
- New ERC projects can start reducing emissions and improving air quality in a relatively short period of time (which is a goal of EPA's Advance Program in which we participate)
- Provide for overall ratcheting down of emissions in the nonattainment area through the emission offsets required for permits for new sources of pollutants
- Reduce emissions from important ozone precursor sources not easily regulated by DEQ (e.g. on-road and off-road mobiles sources)
- Facilitate overall emissions reductions in pursuit of attainment and maintenance of ozone and $PM^{2.5}$ NAAQS
- Provide funding opportunities for those with emission reduction projects they would like to pursue, but have no funding
- Substantially further interest in clean diesel

The Baton Rouge Clean Air Coalition sees implementation of AQ365 as a valuable tool in helping the Baton Rouge area achieve and maintain attainment of national air quality standards

2017 - 18 PLANS

All of the Baton Rouge Advance participants (BRCAC, LCF, and CRPC) plan to continue with their ongoing activities into 2017 and 2018.

One major effort all three organizations in 2017 is the completion and implementation of the new strategy to grant emission reduction credits for mobile and area sources as well as point source projects. This will involve further development of ERC Information Resources Center website being maintained by CRPC and public education and outreach in the Baton Rouge area for promulgation and then implementation of the final rule.

Another important initiative for 2018 is the completion of Alternative Fuels Corridors within the state for CNG, LPG, LNG and Electric vehicles to encourage the public to consider, use and purchase alternative fuel vehicles to further reduce emissions. The corridors indicate, with road signs, where these vehicles can fuel.