



Alternative Fuels and Air Quality

“How these projects will impact air quality planning”

Points to Cover

- The National Ambient Air Quality Standards
 - 2008 Ozone Standard
 - PM_{2.5} Standard
- Why should Louisiana be concerned?
 - Impacts of nonattainment
- How these projects fit with our local planning efforts
 - Advance Program
 - Current activities to remain in attainment

The Clean Air Act

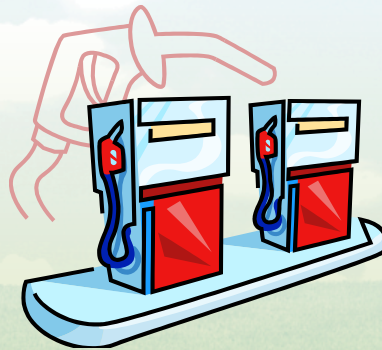
- Requires EPA to set National Ambient Air Quality Standards (Standards) for 6 Criteria Pollutants;
- These standards are reviewed every 5 years and revised if necessary to protect health and welfare;
- Two types of standards
 - Primary – protects public health
 - Secondary – protects public welfare;
- The 6 pollutants are: Carbon Monoxide, Lead, Nitrogen Dioxide, Ozone, Particulate Matter and Sulfur Dioxide

What is Ozone ?

- Ozone is commonly referred to as smog.
- It is not emitted, but forms in the atmosphere under certain conditions
- Volatile Organic Compounds (VOC) + Nitrogen Oxides (NO_x) + Sunlight = Ozone
- In other words, emissions from people+ industry + cars + sunshine = ozone
- Stratospheric ozone layer is good & protects us from UV rays, ground level ozone is a pollutant

Sources of NO_x and VOCs

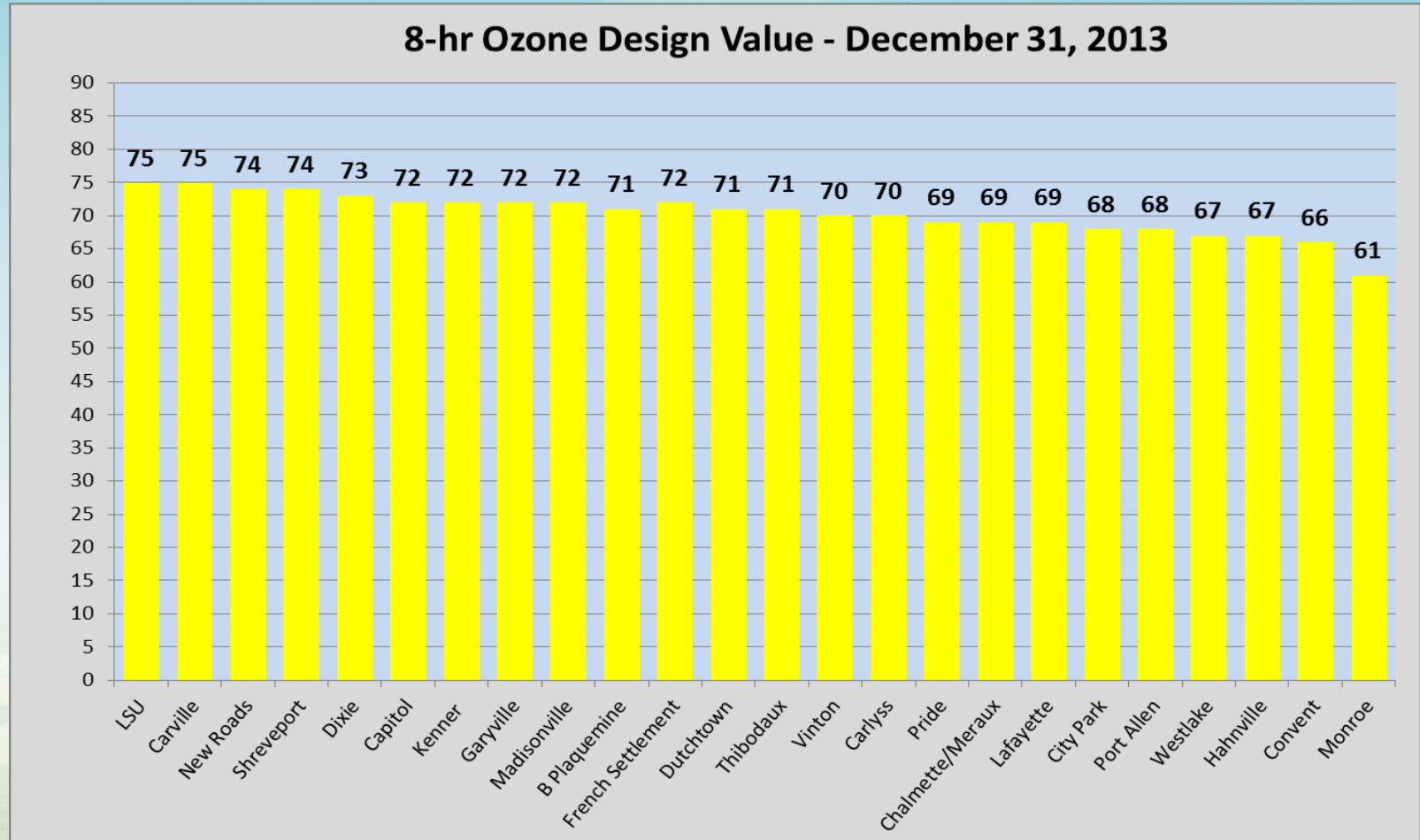
- NO_x forms quickly from combustion sources such as automobiles, power plants and large construction equipment.
- VOCs come from paints, solvents and fuels and evaporate quickly into the atmosphere.



Designation, Classification, and Design Value

- Designation refers to whether or not an area is above or below the standard
- Classification categories are determined based on an area's design value.
- Design Value – the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentration measured at each monitor within an area.

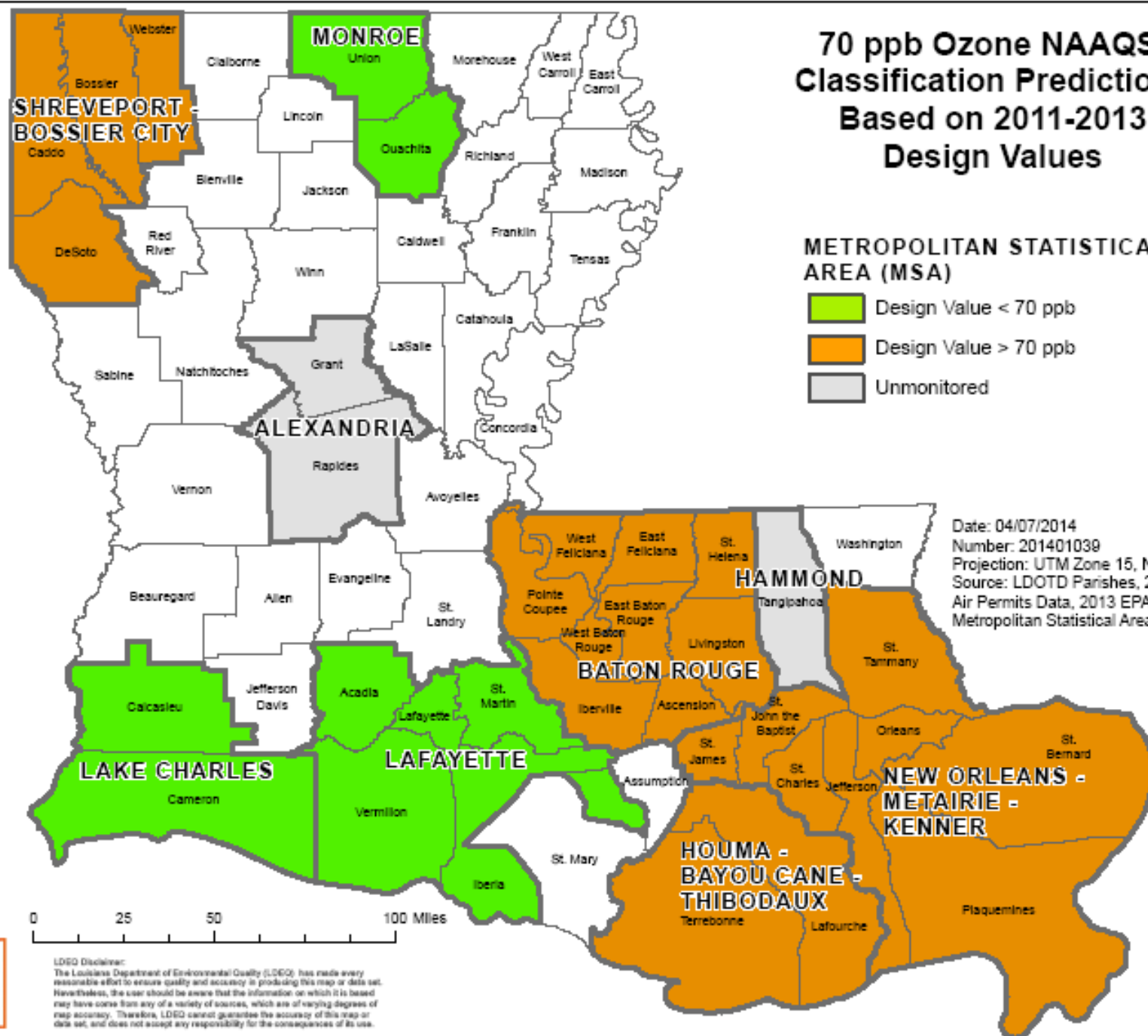
2011- 2013 Was A Good Period!



70 ppb Ozone NAAQS Classification Predictions Based on 2011-2013 Design Values

METROPOLITAN STATISTICAL AREA (MSA)

- Design Value < 70 ppb
- Design Value > 70 ppb
- Unmonitored



Date: 04/07/2014
 Number: 201401039
 Projection: UTM Zone 15, NAD 83
 Source: LDOTD Parishes, 2009 LDEQ OEA
 Air Permits Data, 2013 EPA
 Metropolitan Statistical Areas (MSA)

LDOTD Disclaimer:
 The Louisiana Department of Environmental Quality (LDEQ) has made every reasonable effort to ensure quality and accuracy in producing this map or data set. Nevertheless, the user should be aware that the information on which it is based may have come from any of a variety of sources, which are of varying degrees of map accuracy. Therefore, LDEQ cannot guarantee the accuracy of this map or data set, and does not accept any responsibility for the consequences of its use.

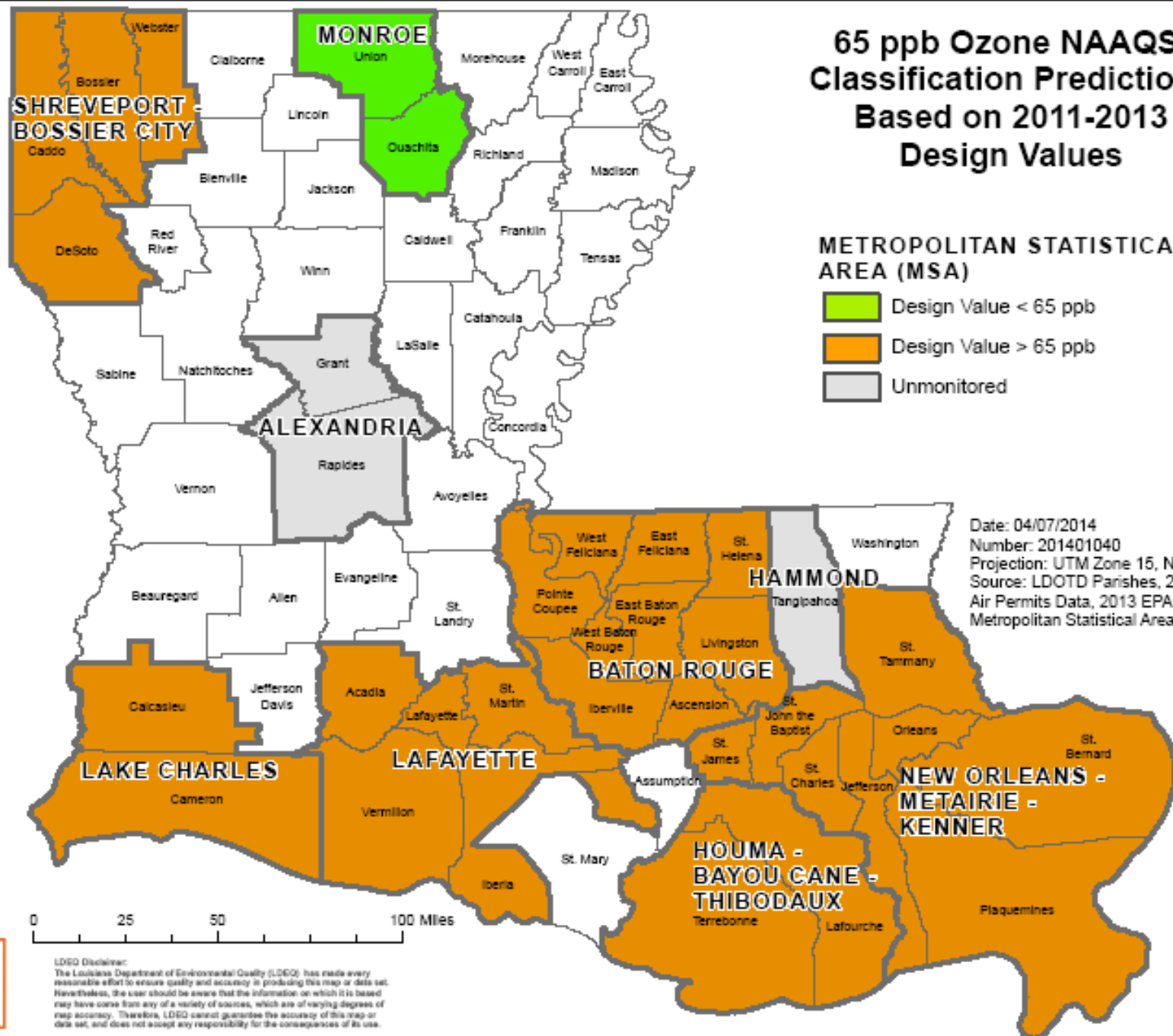


65 ppb Ozone NAAQS Classification Predictions Based on 2011-2013 Design Values

METROPOLITAN STATISTICAL AREA (MSA)

- Design Value < 65 ppb
- Design Value > 65 ppb
- Unmonitored

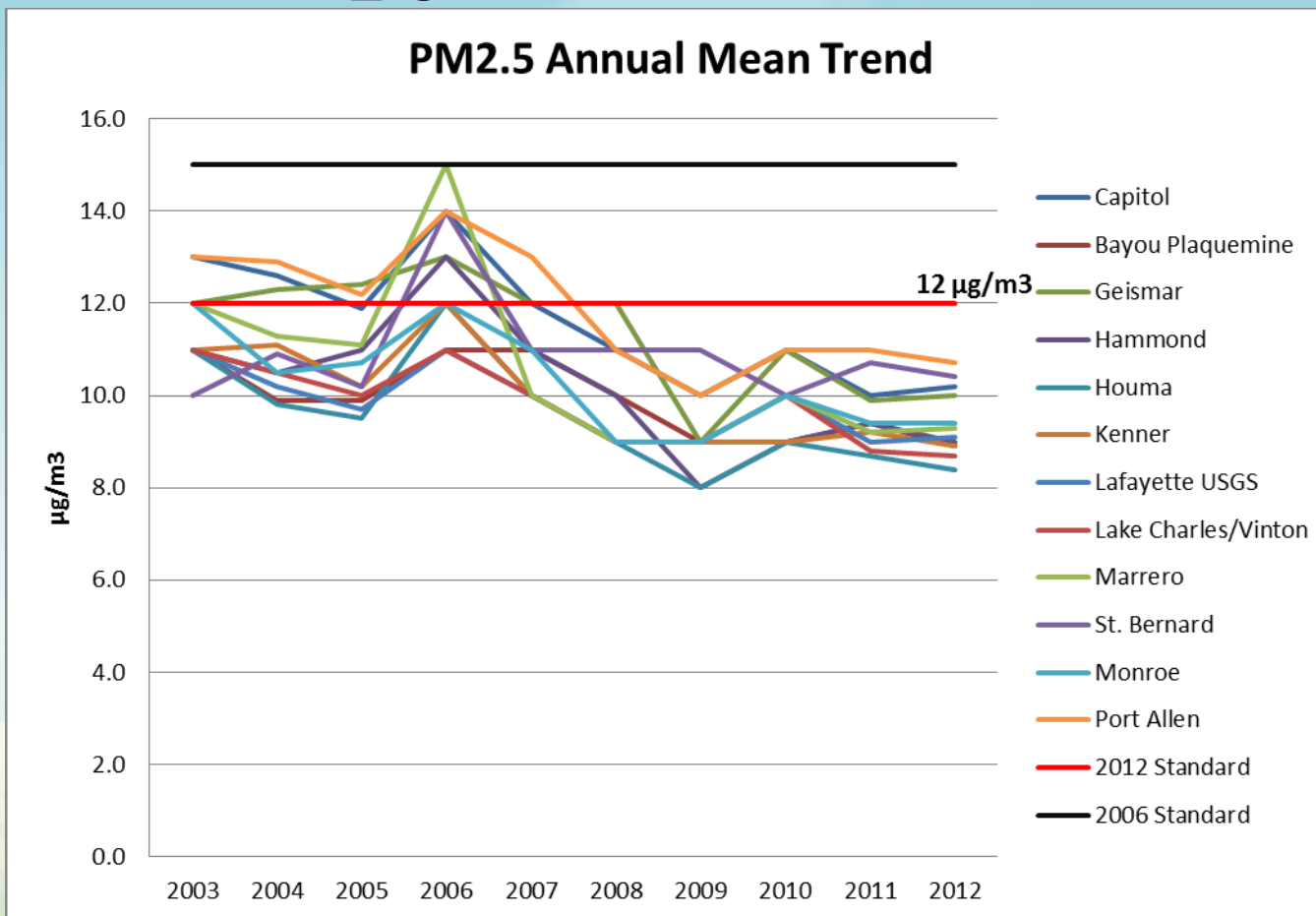
Date: 04/07/2014
Number: 201401040
Projection: UTM Zone 15, NAD 83
Source: LDOTD Parishes, 2009 LDEQ OEA
Air Permits Data, 2013 EPA
Metropolitan Statistical Areas (MSA)



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PM_{2.5} Annual Mean Trend



Example Timeline – Assume EPA Proposes Standard 12/1/2014

- EPA has 1 year to make the standard final 12/1/2015
- State has 1 year from final standard to recommend designations 12/1/2016
- Once Final, EPA has 2 years to complete designations 12/1/2017
 - EPA can request a 1 year extension – 12/1/2018
 - Within the 2 years, EPA has to give State 120 days to rebut their proposed designations before they go final
- DEQ monitoring data to be used for recommendation 2013-2015 (data certified to EPA by May 1, 2016)
 - If EPA gets more time, DEQ could make an updated recommendation request to use 2014-2016 data if it were better than 2013-2015.
- Advance Program important because ongoing projects can be considered in making recommendations.

Tying it all Together

- Being determined to be nonattainment has serious economic ramifications
- Continued voluntary emissions reductions are a necessity across the state
- Every little bit helps
- Increased local awareness is important
- Connect Projects with local Advance Partners

Who is in Advance Program and What are They Doing Now?

- Regional Planning Commission (New Orleans)
 - Working to establish a coalition with business and industry to perform additional modeling projects designed to identify the reductions necessary to stay in attainment
- BR Clean Air Coalition (Baton Rouge)
 - Active coalition that is continuing efforts to identify additional reduction projects. One just completed is the Truck Stop Electrification project in Port Allen to reduce NO_x
- South Central Planning & Development (Houma-Thibodaux)
 - Also working to establish a coalition. They have been undertaking outreach and education to get the public more aware. Their next step is to connect with business and industry.

Who is in Advance Program and What are They Doing Now?

- Lafayette Consolidated Parish Government
 - In the best shape Design Value wise, they are doing a lot of transportation related projects like CNG fueling stations, CNG city bus fleet. They also need to bring business to the table to work on area sources.
- Cities of Shreveport & Bossier City
 - Actively contracting for additional modeling to give them specific emission reduction goals. This area does a lot with energy efficiency projects and has a good education and awareness program.
- Imperial Calcasieu Regional Planning District (Lake Charles)
 - This group is working to educate and should be pursuing additional modeling projects later this year. The IMCAL office is leading the efforts and they have a good website presence

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Thank You!

