Status of Louisiana's Electric Grid Reliability

OFFICE *of* CRAIG CASTLEMAN GREENE, MD, MBA
PUBLIC SERVICE COMMISSIONER
DISTRICT 2

Infrastructure Dockets at the Commission

Pole Viability

- Enhancing the collaboration and communication among utilities so that work is more efficiently and cost effectively completed for the customer's benefit.

Operation & Maintenance

- Understand the present O&M procedures of our utilities and determine if and how O&M can be improved to ensure customer's are getting the most of what they pay in rates for utilities to operate and maintain their grid.

Resiliency Plan

- Create a statewide, unified resiliency plan to ensure we have the most effectively hardened grid, and utilize any possible external funding to offset costs of resiliency projects customers would otherwise have to pay for.

Overlap?

- Naturally, these dockets involve similar things.
- Point was to parse larger issues out for efficiency and clarity.
- Everything we do has overlap. That is a poor excuse for not doing something.

We need…

Pole owners and attachers to communicate and collaborate better.

Utilities to maintain their grid so it can better withstand our environment.

A statewide resiliency plan and access to desperately needed funding to offset customer rate increases.

Why?

Because We have a problem.

We don’t even pass the visual test.


RIVER

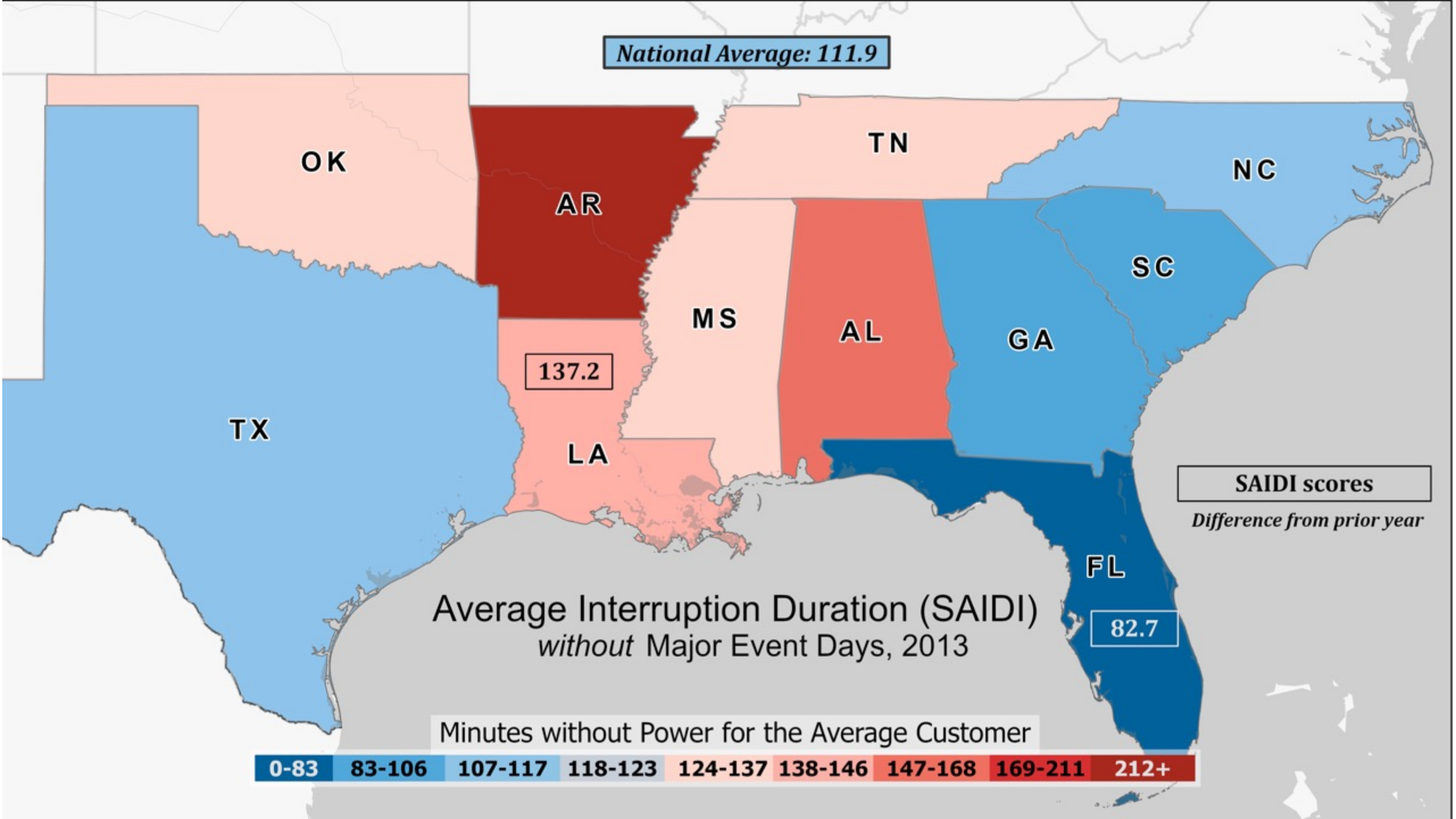
Reliability Metrics

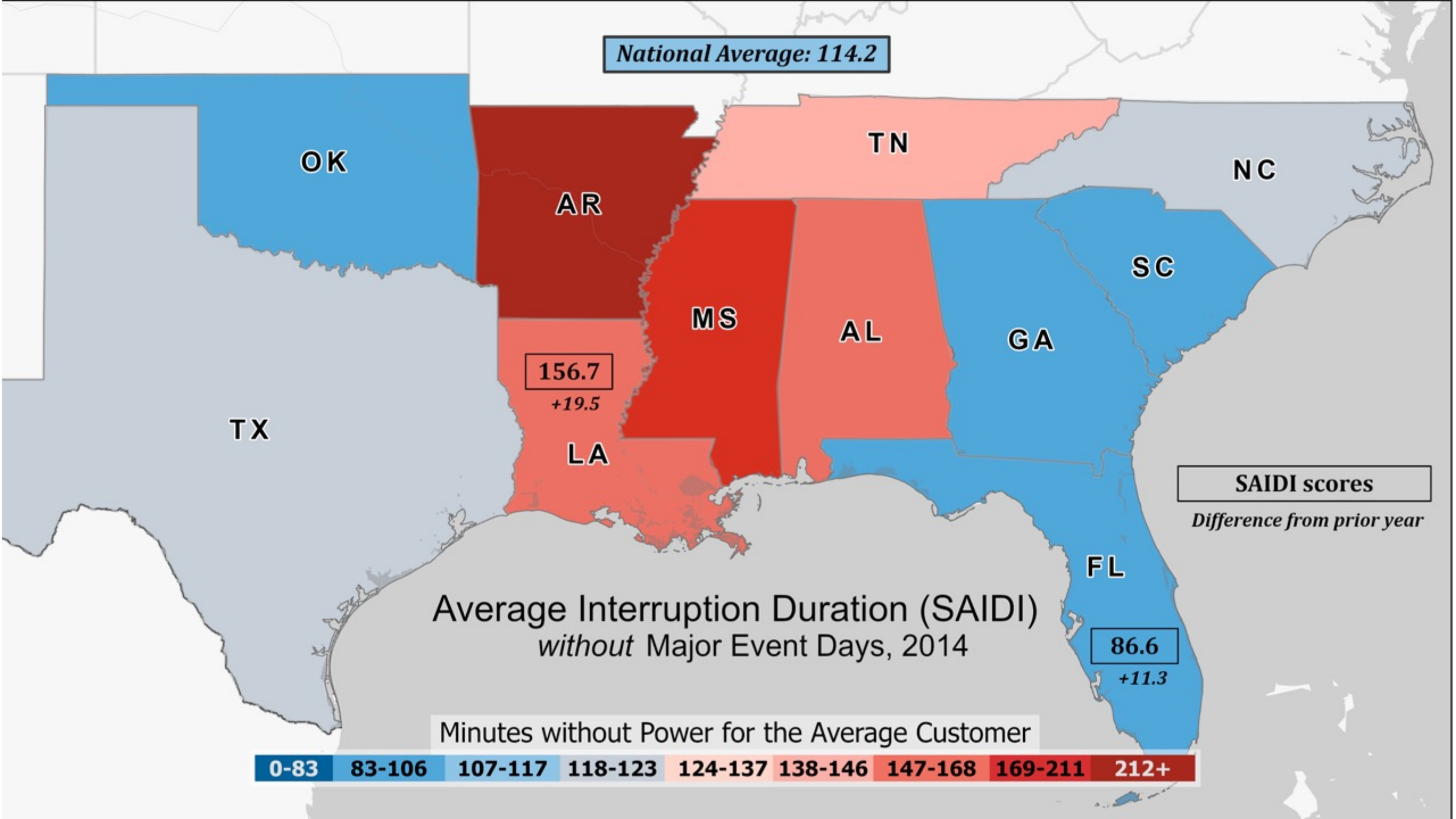
SAIDI

Measures the average length of time a customer is without power.

SAIFI

Measures how often the average customer experience a power outage.


National Average: 111.9
OK
AR
TN
NC
SC
MS
AL
GA
TX
137.2
LA
FL
82.7
SAIDI scores
Difference from prior year
Average Interruption Duration (SAIDI)
without Major Event Days, 2013
Minutes without Power for the Average Customer
0-83
83-106
107-117
118-123
124-137
138-146
147-168
169-211
212+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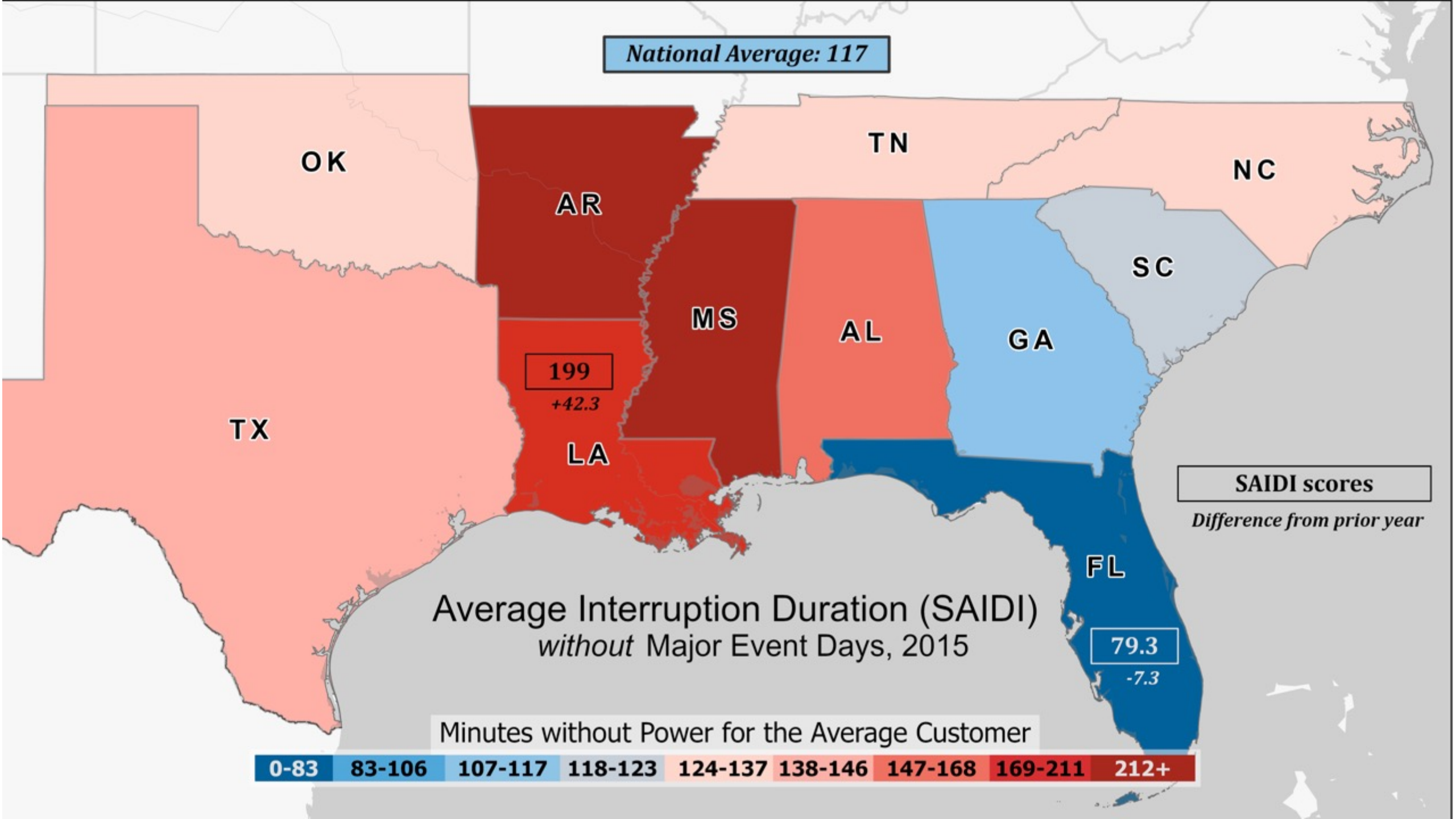
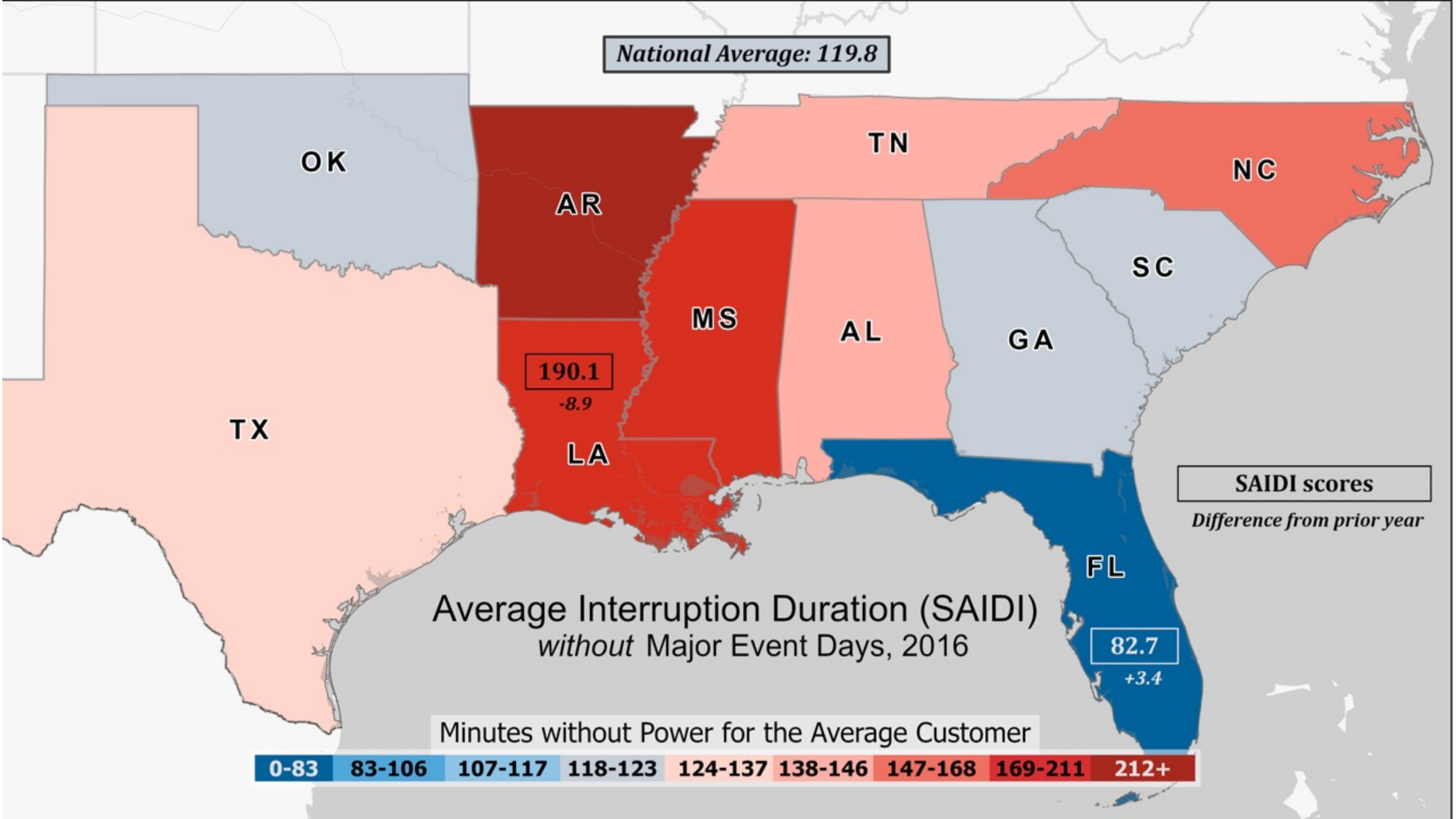
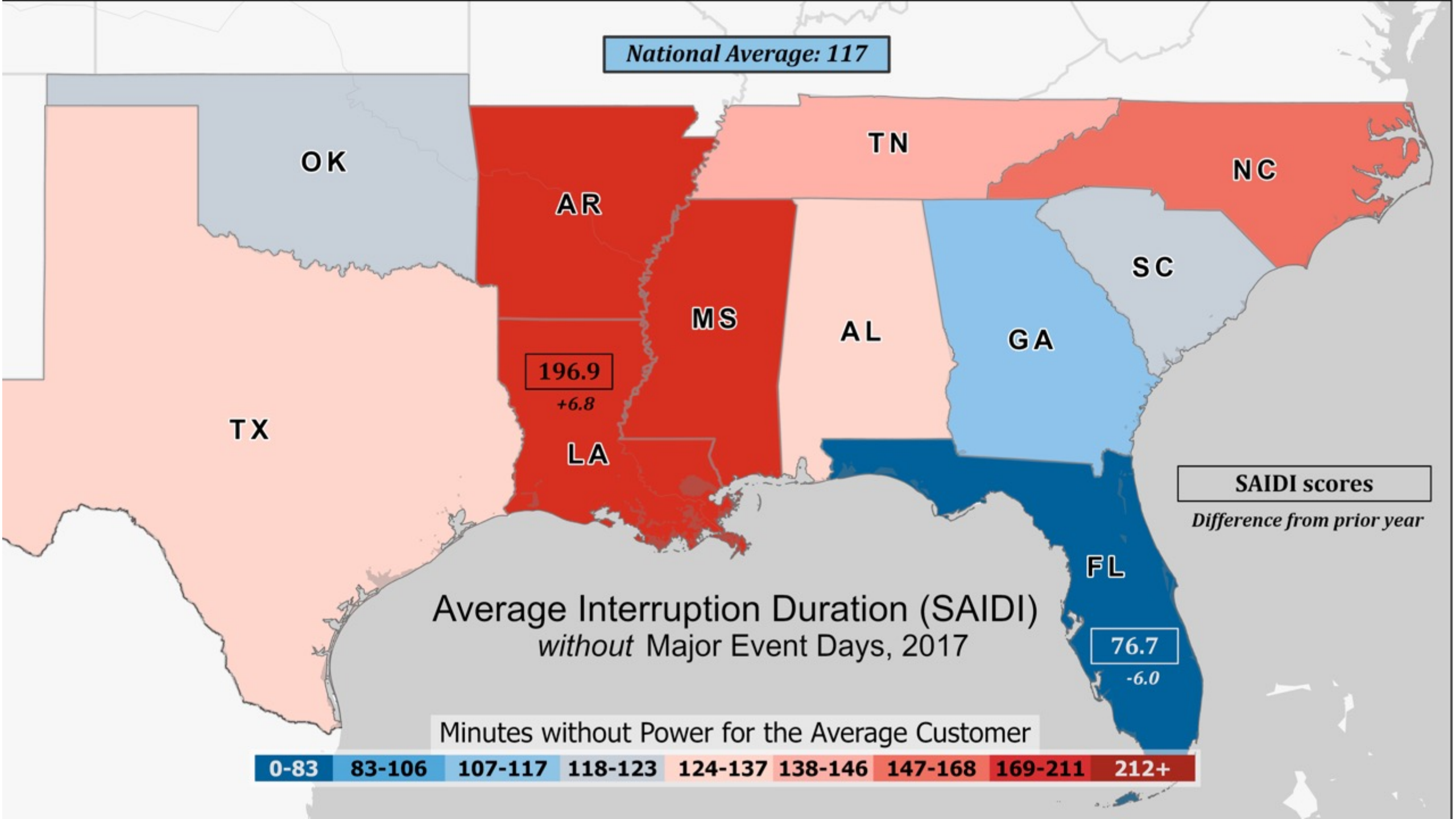
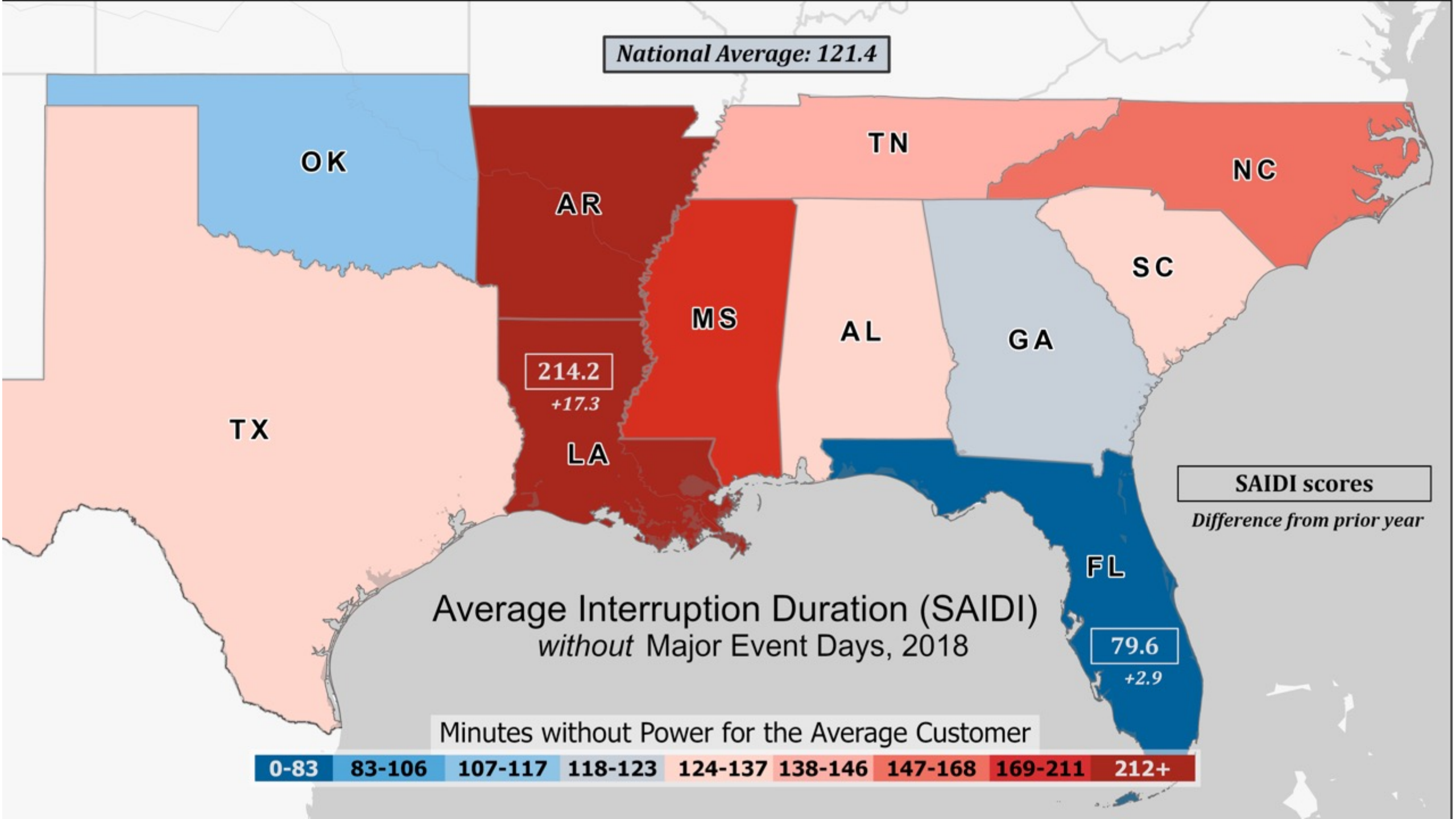
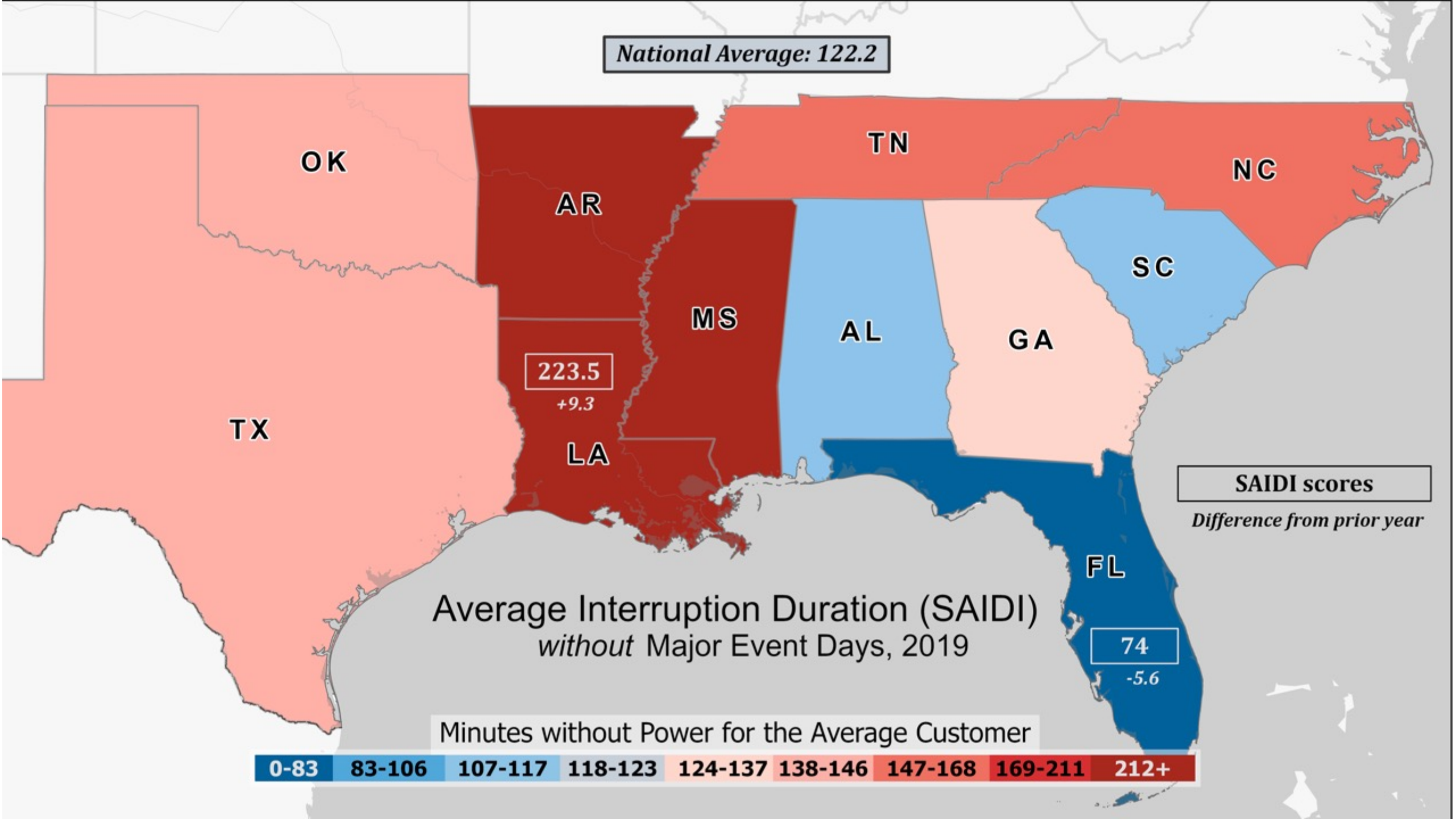
OK
AR
TN
NC
SC
MS
AL
GA
TX
156.7
+19.5
LA
FL
86.6
+11.3
SAIDI scores
Difference from prior year
Average Interruption Duration (SAIDI)
without Major Event Days, 2014
Minutes without Power for the Average Customer
0-83
83-106
107-117
118-123
124-137
138-146
147-168
169-211
212+

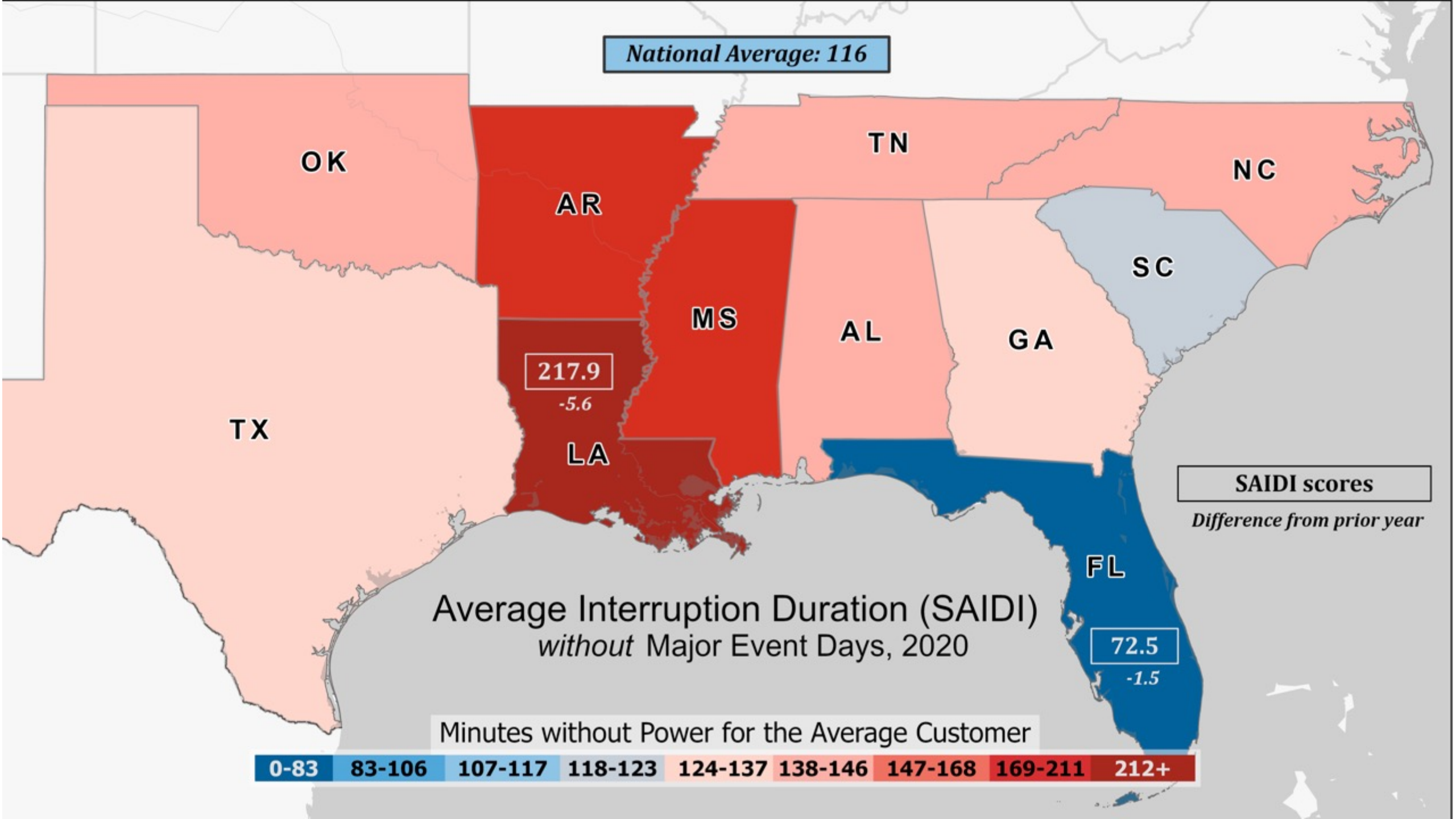

National Average: 117
OK
AR
TN
NC
SC
MS
AL
GA
TX
199
+42.3
LA
FL
79.3
-7.3
SAIDI scores
Difference from prior year
Average Interruption Duration (SAIDI)
without Major Event Days, 2015
Minutes without Power for the Average Customer
0-83
83-106
107-117
118-123
124-137
138-146
147-168
169-211
212+


National Average: 119.8
OK
AR
TN
NC
SC
MS
AL
GA
TX
190.1
-8.9
LA
FL
82.7
+3.4
SAIDI scores
Difference from prior year
Average Interruption Duration (SAIDI)
without Major Event Days, 2016
Minutes without Power for the Average Customer
0-83
83-106
107-117
118-123
124-137
138-146
147-168
169-211
212+

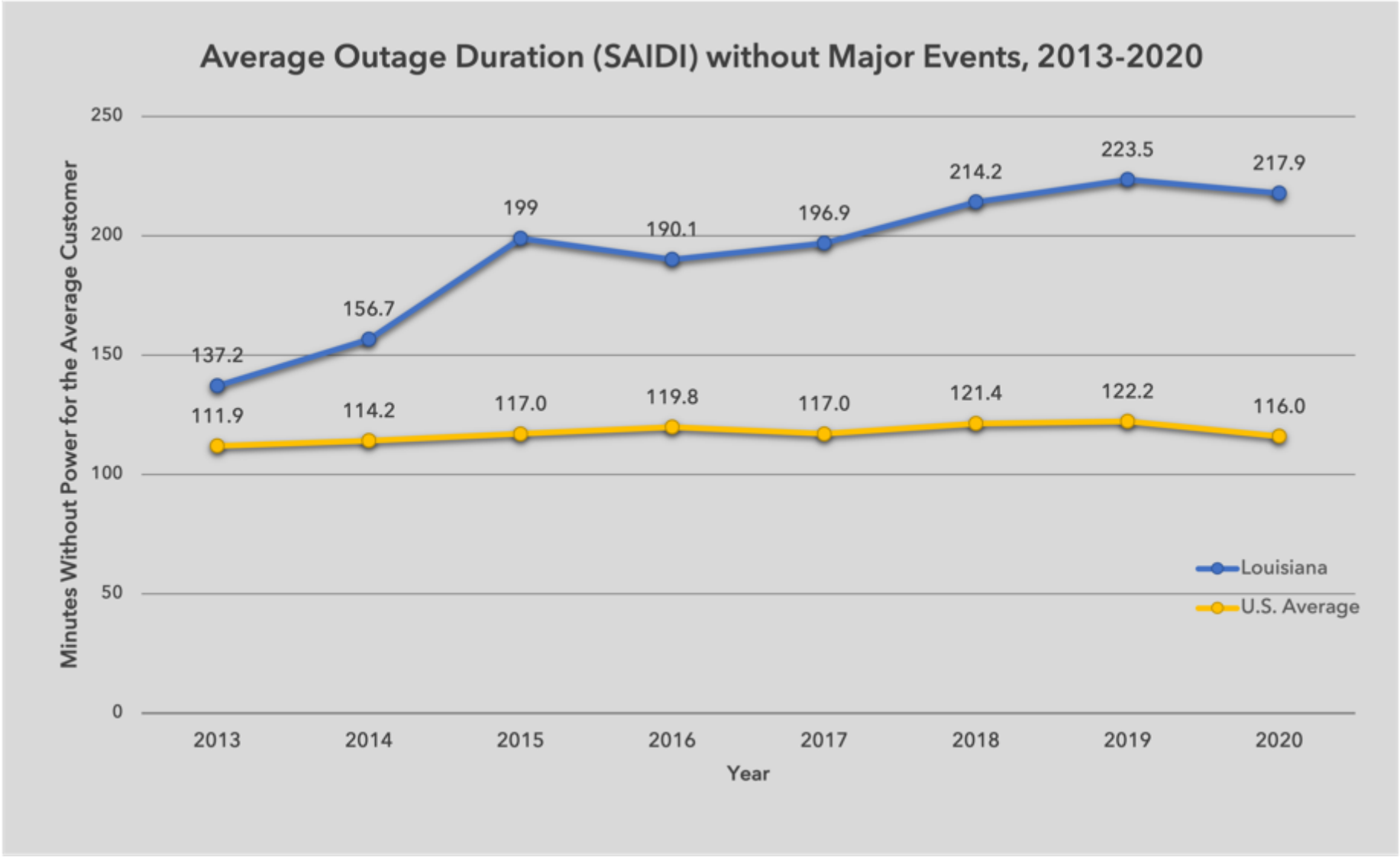

National Average: 117
OK
TX
AR
LA
MS
TN
AL
GA
SC
NC
FL
196.9
+6.8
76.7
-6.0
SAIDI scores
Difference from prior year
Average Interruption Duration (SAIDI)
without Major Event Days, 2017
Minutes without Power for the Average Customer
0-83
83-106
107-117
118-123
124-137
138-146
147-168
169-211
212+


National Average: 121.4
OK
AR
TN
NC
SC
MS
AL
GA
TX
214.2
+17.3
LA
FL
79.6
+2.9
SAIDI scores
Difference from prior year
Average Interruption Duration (SAIDI)
without Major Event Days, 2018
Minutes without Power for the Average Customer
0-83
83-106
107-117
118-123
124-137
138-146
147-168
169-211
212+

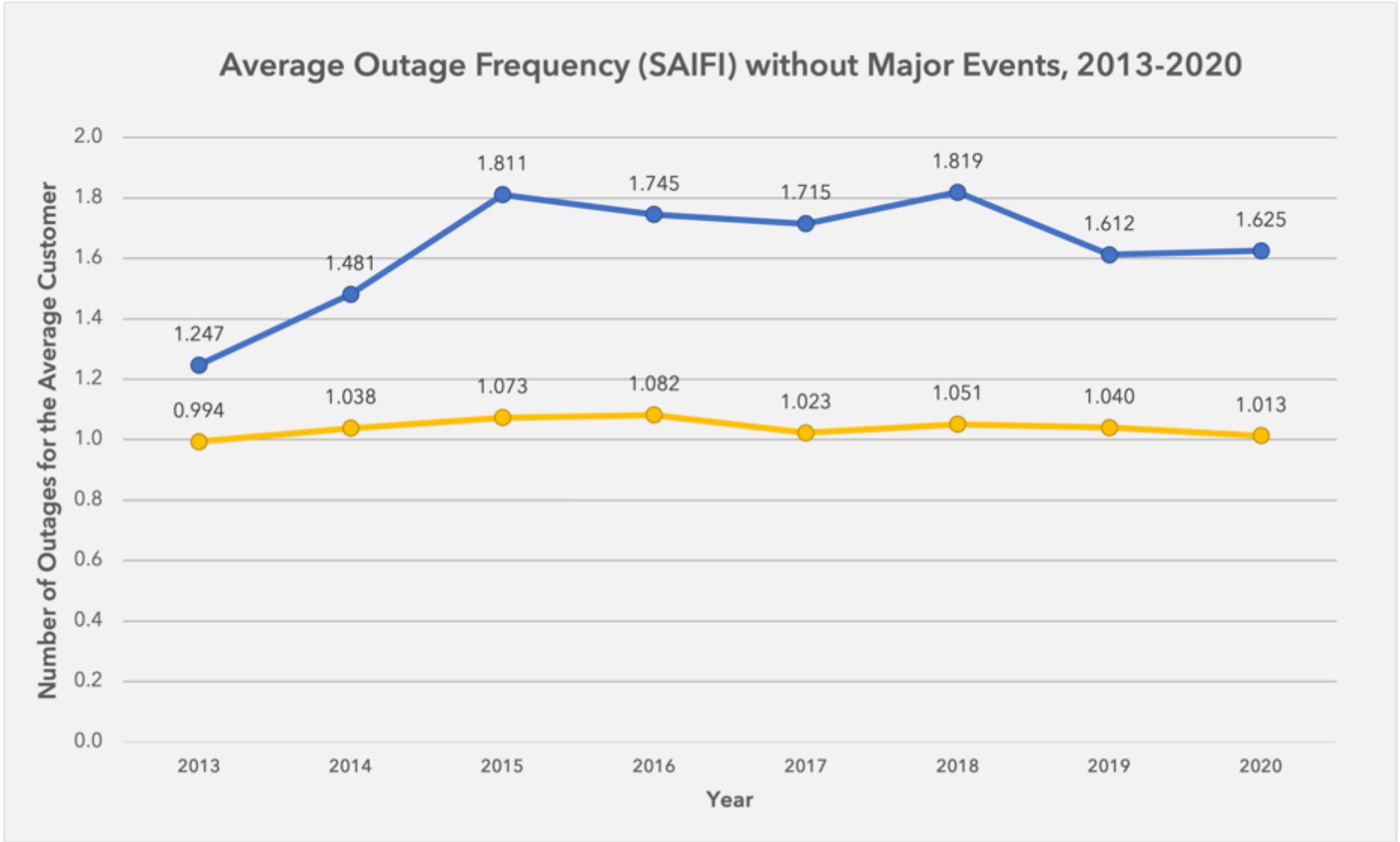

National Average: 122.2
OK
TX
AR
LA
223.5
+9.3
MS
TN
NC
SC
AL
GA
FL
74
-5.6
SAIDI scores
Difference from prior year
Average Interruption Duration (SAIDI)
without Major Event Days, 2019
Minutes without Power for the Average Customer
0-83
83-106
107-117
118-123
124-137
138-146
147-168
169-211
212+


National Average: 116
OK
AR
TN
NC
SC
MS
AL
GA
TX
217.9
-5.6
LA
FL
72.5
-1.5
SAIDI scores
Difference from prior year
Average Interruption Duration (SAIDI)
without Major Event Days, 2020
Minutes without Power for the Average Customer
0-83
83-106
107-117
118-123
124-137
138-146
147-168
169-211
212+

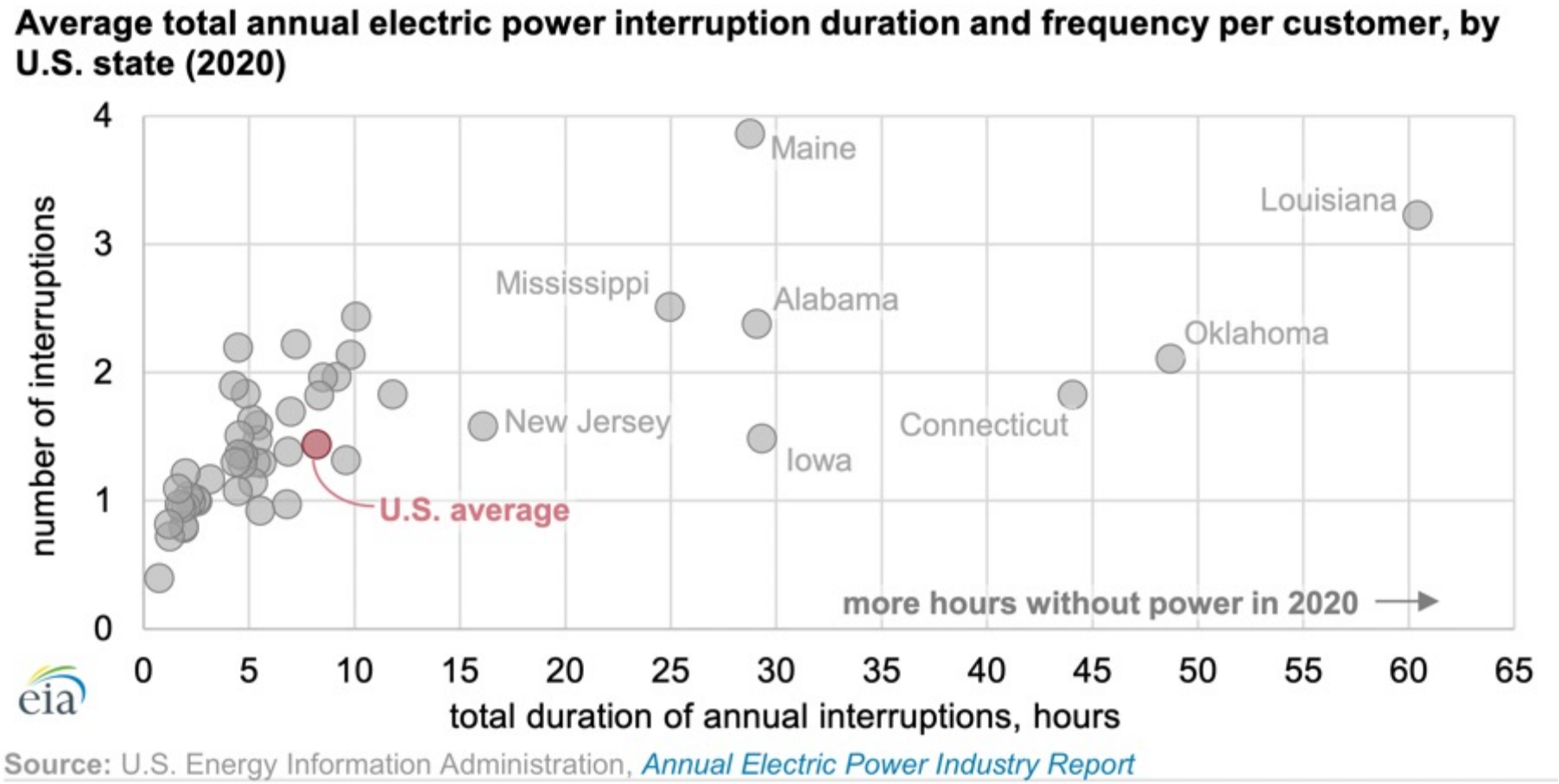
SAIDI compared to National Average



SAIFI compared to National Average



Add in storms and we are last by a mile.



Insanity

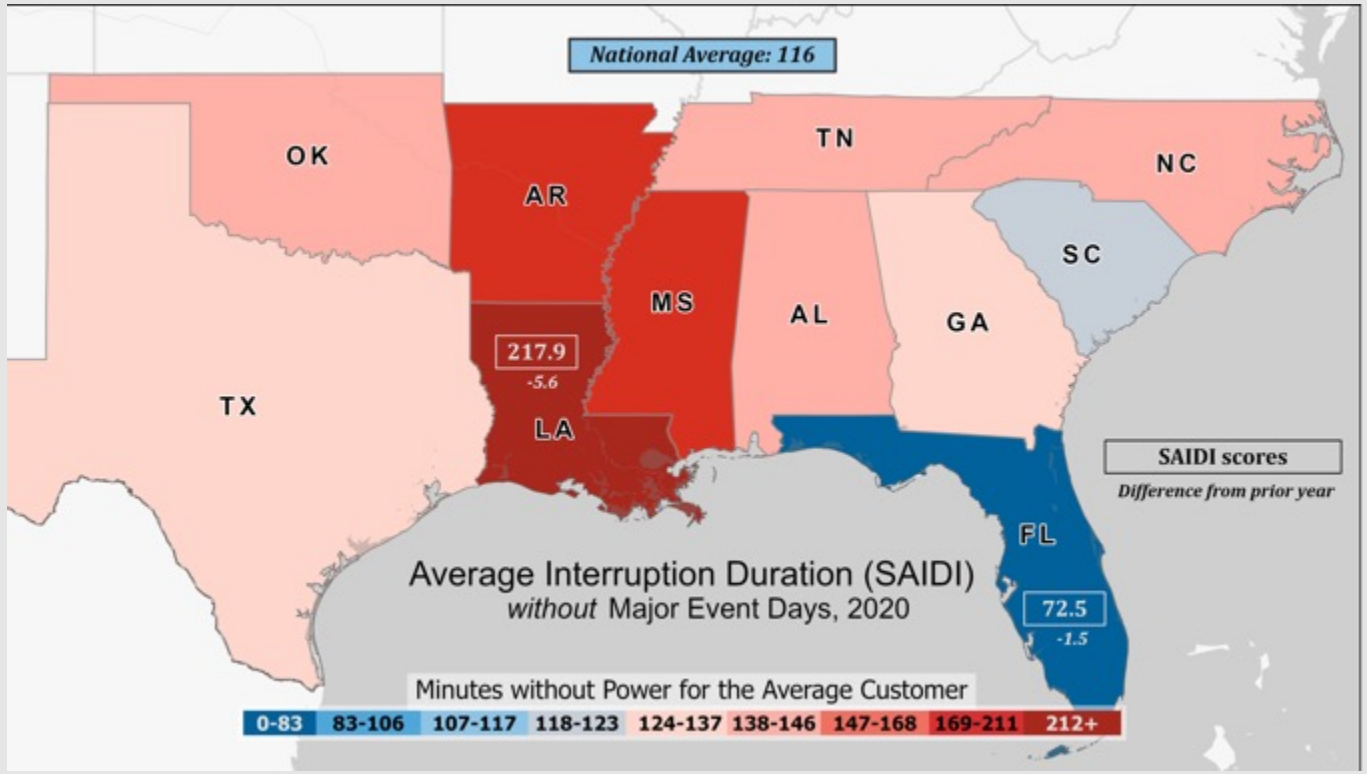
- Doing the same thing over and over and expecting a different result.
- We don’t have engineers. If we don’t hire engineers, nothing changes.
- This Commission needs to proactively serve the state.

Louisiana's Resiliency Plan

We always say Hurricanes are a *when* not an *if*. But we have no resiliency plan.

We cannot keep expecting customers to pay billions of dollars in storm damage when we won't even check the work of the utility or build a plan that could mitigate higher costs.

Resiliency Planning Works



Florida undertook this endeavor around 2005. The resilience work Florida completed reduced the amount of time power was out after hurricanes and how much money it cost customers.

5.4 days out after Cat. 3 Hurricane Wilma in 2005 down to 2.1 after Cat. 4 Hurricane Irma in 2017.

Estimated $496 Million reduction in customer storm damage costs after Hurricane Irma.

SAIDI SCORES *with MAJOR EVENTS* for LOUISIANA AND FLORIDA ‘13 to ’20

	2013	2014	2015	2016	2017	2018	2019	2020
Louisiana	560.5	499.1	411.9	442.6	423.5	285.7	521.2	4,331.9
Florida	79.3	89.4	86.1	388.2	2,693.2	305.5	88.9	200.4

Scope of Work Needed

Operation and Maintenance

- Tell us why we're last every year and how yearly operations and maintenance can be enhanced so that we are improving and no longer last.
- ***The utilities are spending the money*** – tell us why it is not working, how they should better spend the money, or if they need to do more.

Resiliency

- ***Create a statewide resiliency plan*** that includes any proposals that will make our power grid more resilient and ***help us get any applicable funding for the execution of that plan***.
- If we had all the money in the world, what could Louisiana do to strengthen and harden its grid?

This is what we know today.

1. **Louisiana is last in the country in grid reliability – 47th if you take out storms.**

2. **Louisiana does NOT have a comprehensive resiliency plan.**

3. **Customers are having to pay $4.5 Billion to put back up a grid that got knocked out of commission by 4 hurricanes (Laura, Delta, Zeta, and Ida) and a Winter Storm.**

4. **There are billions of dollars available specifically to be used to enhance resiliency.**

5. **Any dollar Louisiana can receive of those specific funds is a dollar a utility customer does not have to pay.**