



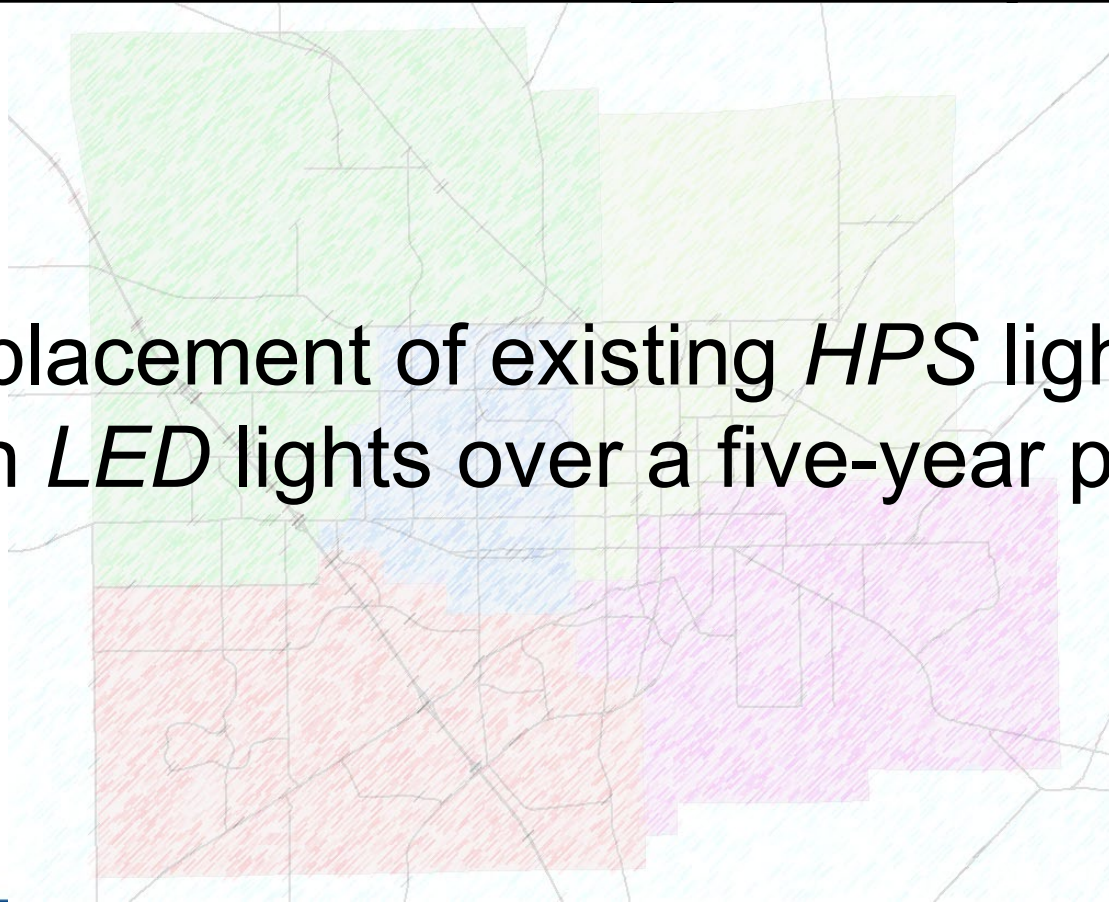
LED Mass Change Out

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LED Mass Change Out (MCO)

- Replacement of existing *HPS* lights with *LED* lights over a five-year period.



Why LED Public Lighting in Gainesville?

- On Oct. 1, 2017, the Gainesville City Commission passed an ordinance and directed Gainesville Regional Utilities to replace all streetlights with Light Emitting Diode (LED) fixtures.

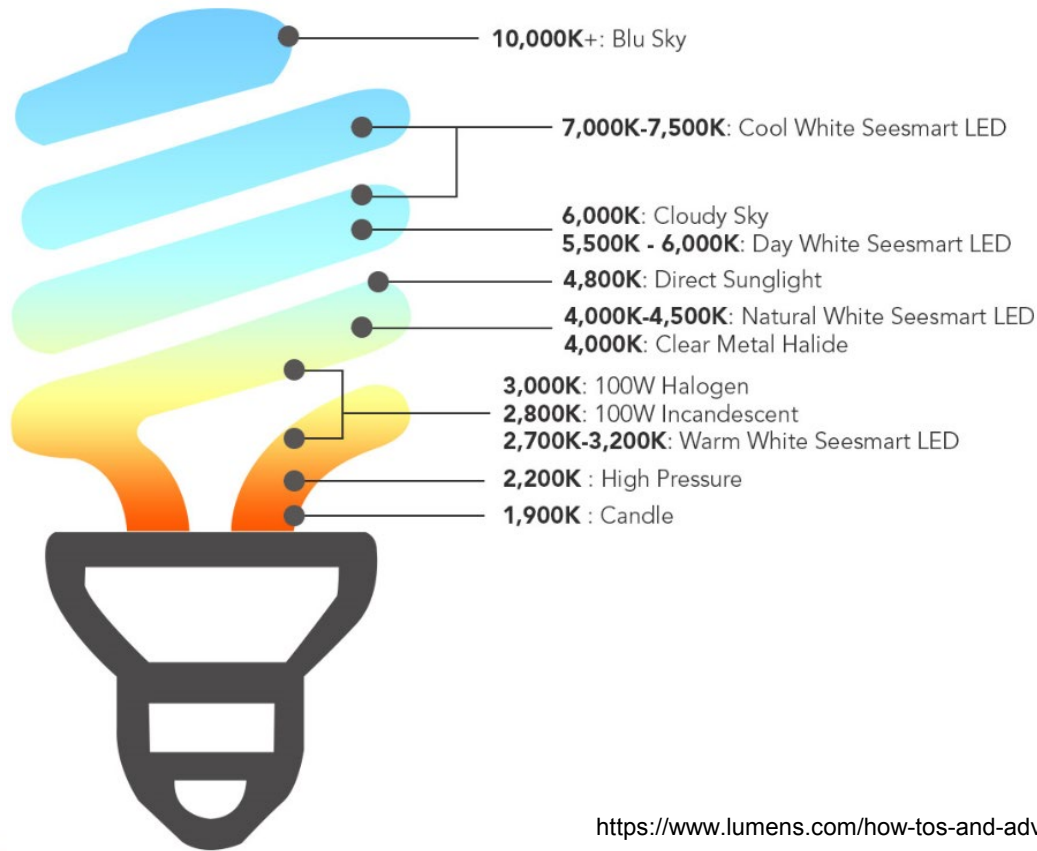
Why LED Public Lighting in Gainesville? (Cont.)

- LED lights use **63% less energy** than traditional High Pressure Sodium (HPS)
- LED lights last **2-3 times longer** than HPS lights (10-15 years).
- Light **rate reduction**. LED Lights replaced during the MCO are subject to a lower rate.

Color Temperature

- The *Dark Sky Association* and the *American Medical Association*(AMA)
 - **Recommends** utilizing a color temperature of less than or equal to **3000K**.
- GRU adopted the recommended LED light specifications per PWD request.

Color Temperature Chart



<https://www.lumens.com/how-to-and-advice/kelvin-color-temperature.html>

Color Temperature

- After the AMA's report PWD chose 3000K



LED 1 4000K



LED 1 3000K

Lumens

- GRU presented three options of LED light alternatives to PWD.

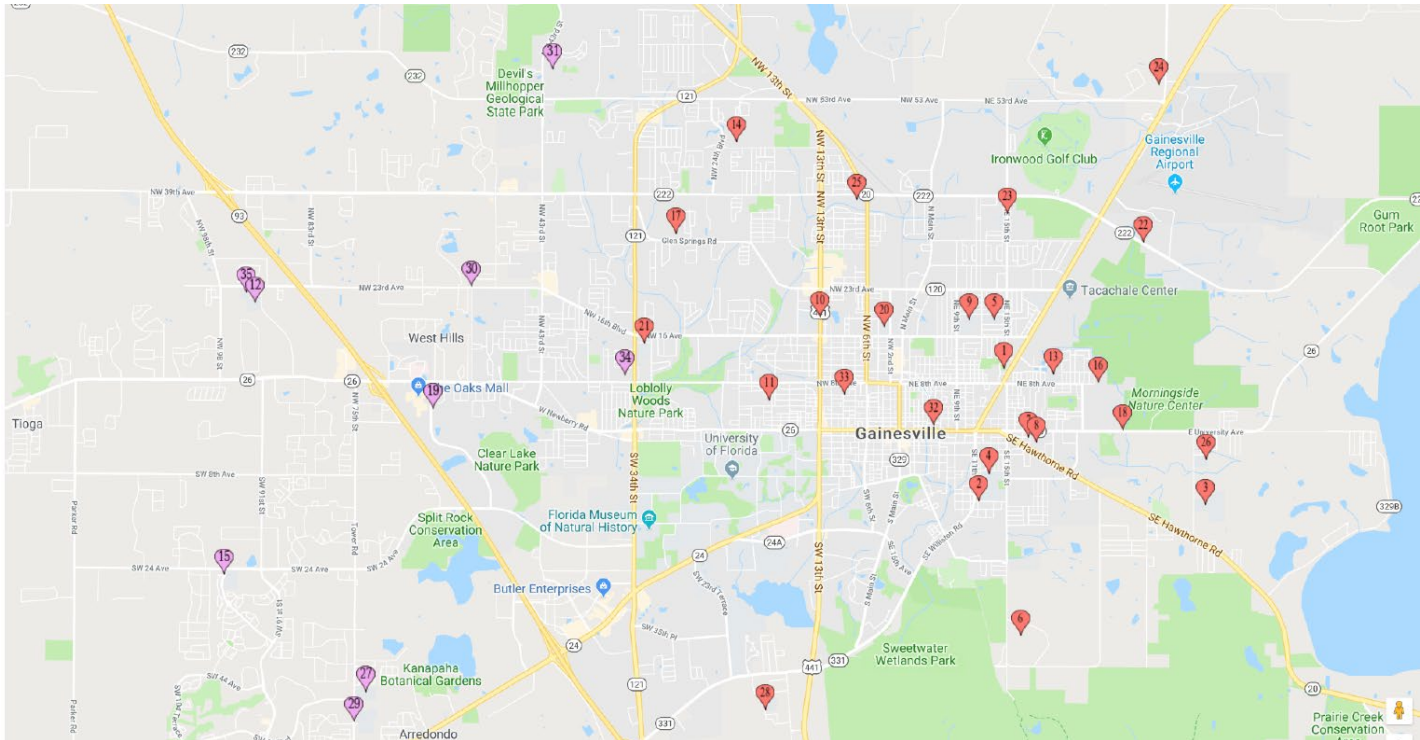
GRU Lumens Alternatives

GRU(Std.)	GRU(alt 1)	GRU(alt 2)
3,700	3,700	4,806
4,806	7,000	8,224
13,100	11,700	13,100
17,400	19,200	21,000

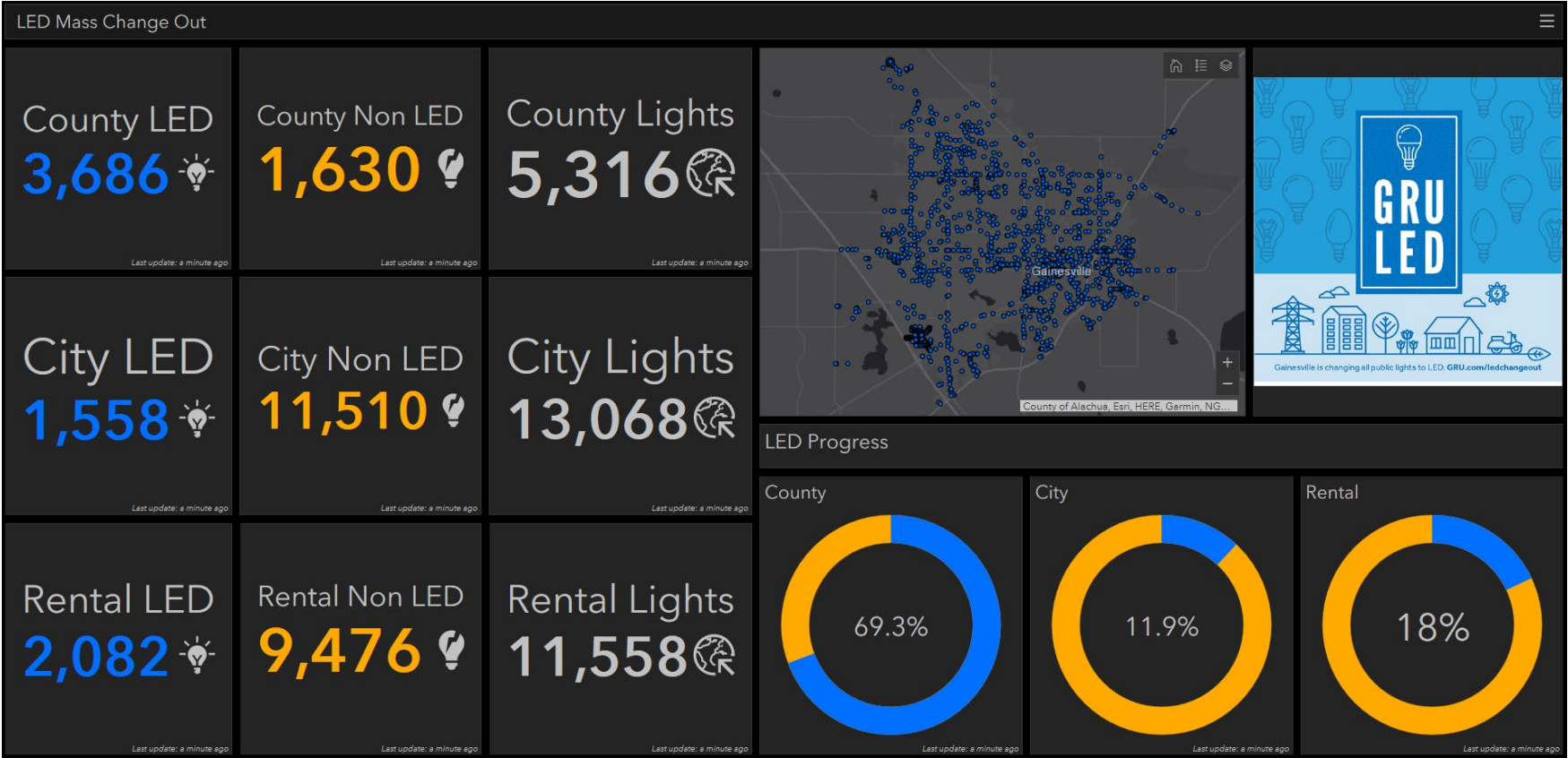
- PWD selected the option with the greater output of lumens.

Alachua County School Board

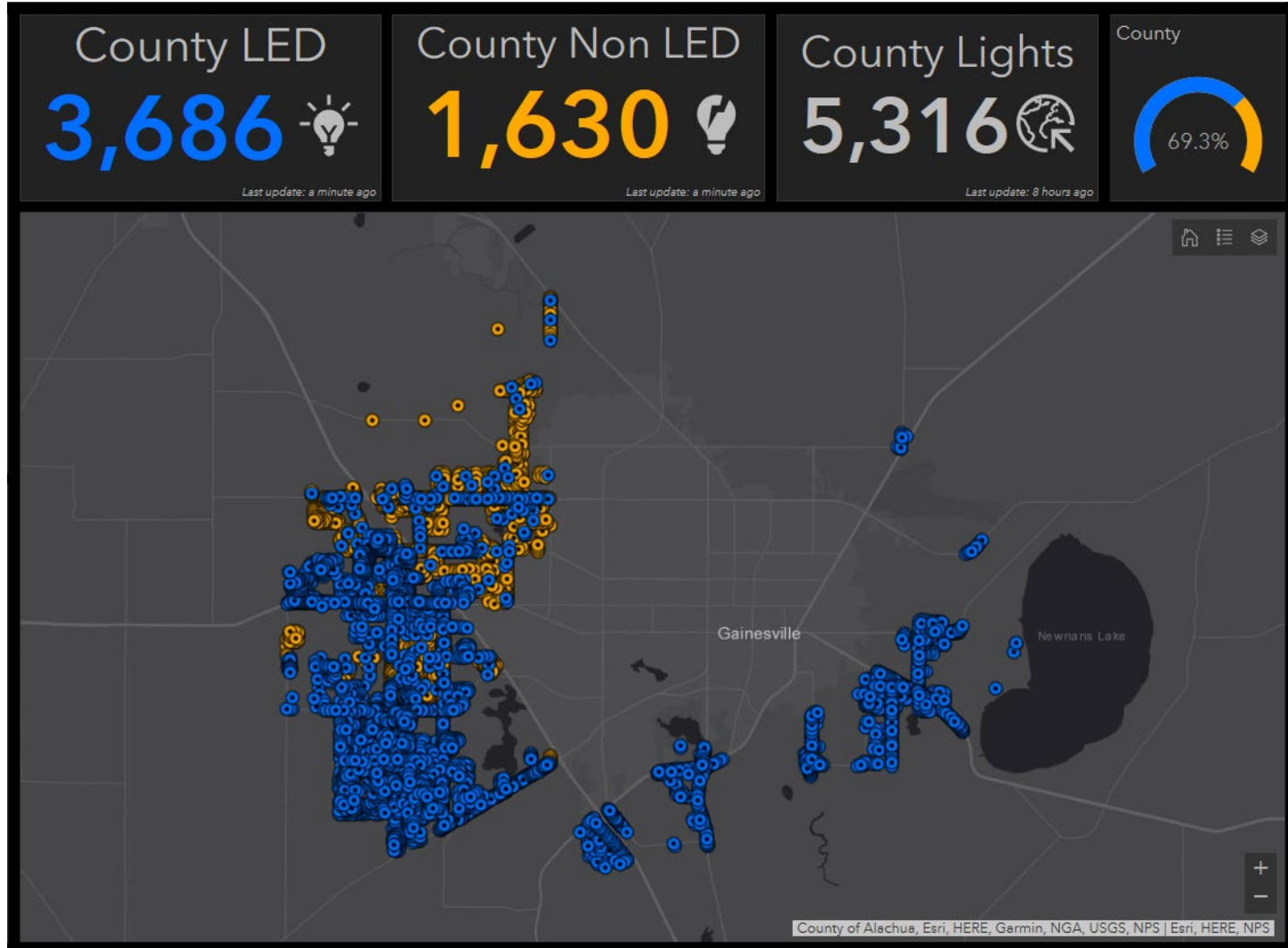
- Completed before 8/1/2018



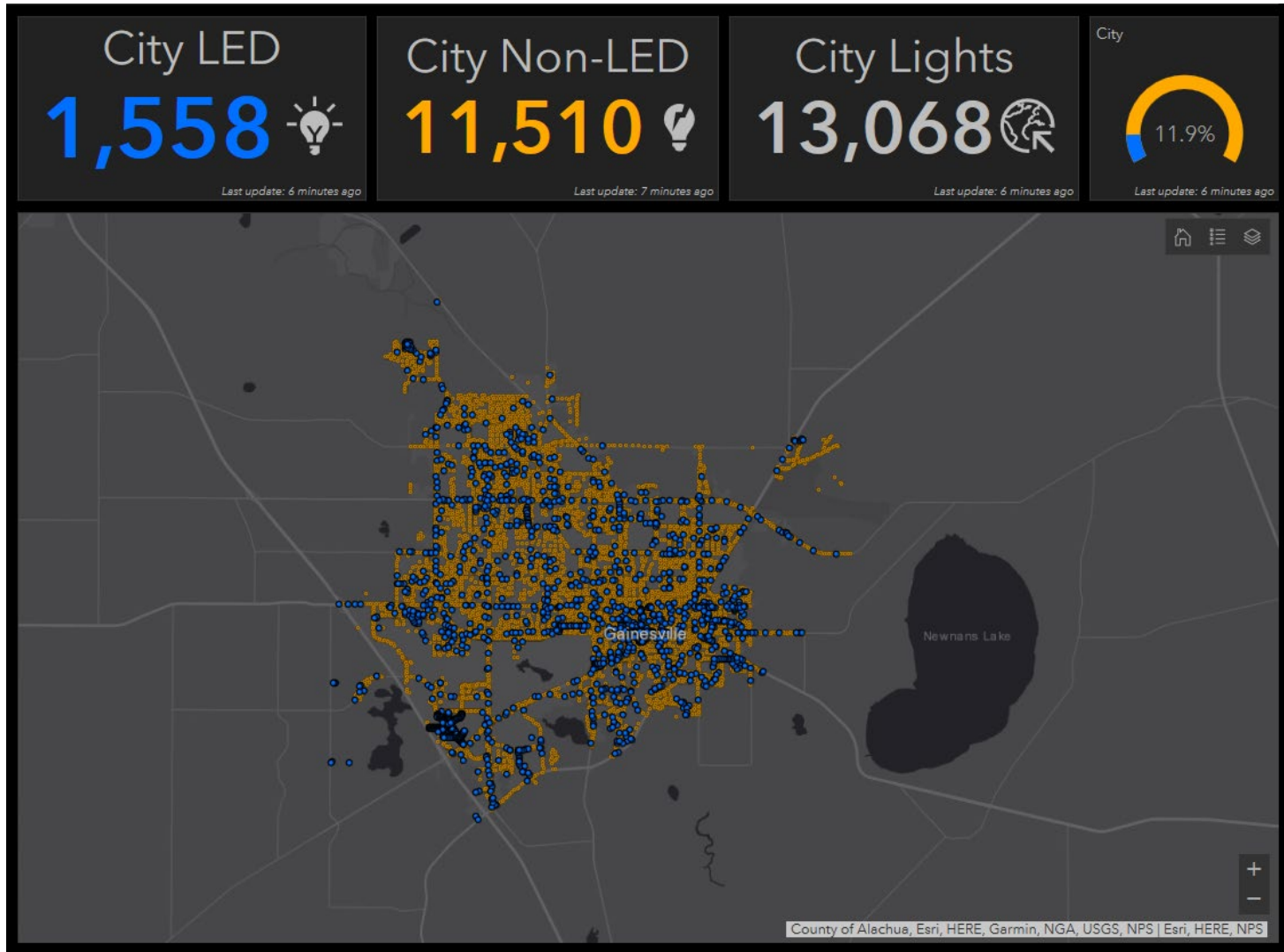
Status of the MCO project



County



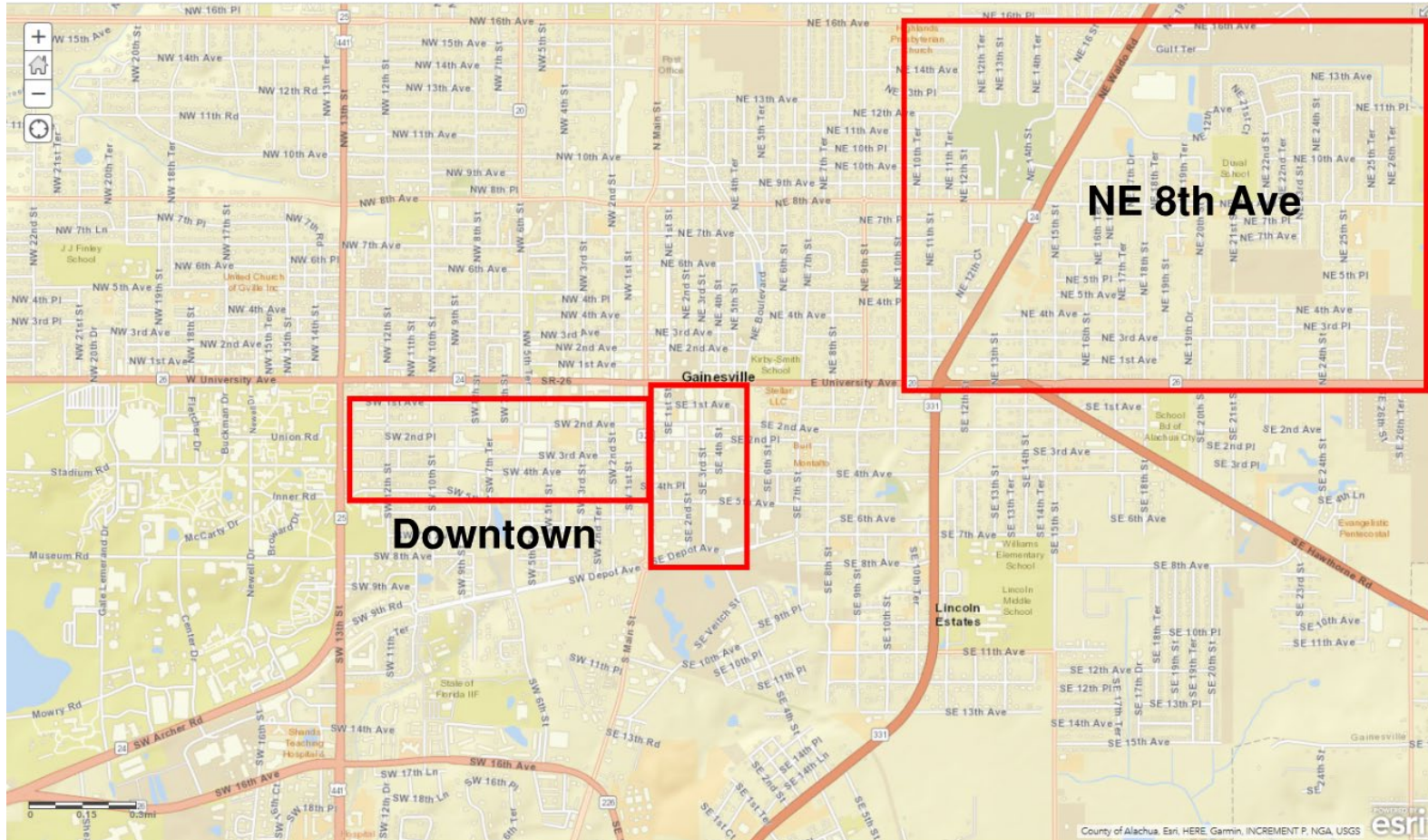
City



Future Work

- City Smart Lighting
 - City's Department of Technology will identify areas to deploy smart modules.
 - Smart modules will be under the control of the City's Department of Technology
 - GRU will coordinate to install lights with smart modules during the MCO.

Preliminarily Identified Priority Areas



Smart Module Advanced Control

- End of life correction
- Self-reporting outage
- Uplighting and dimming
- Metering consumption
- Gunshot detection
- Traffic control