

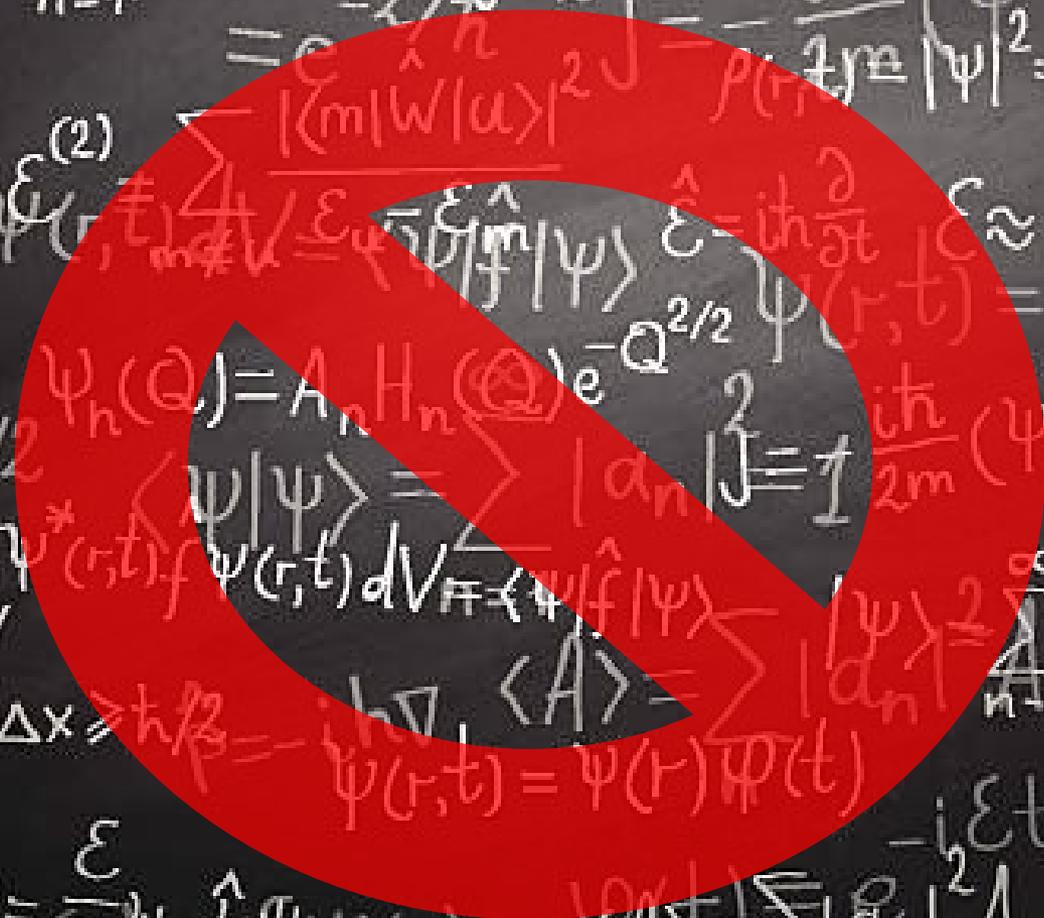
Texas' First Modular Roundabout

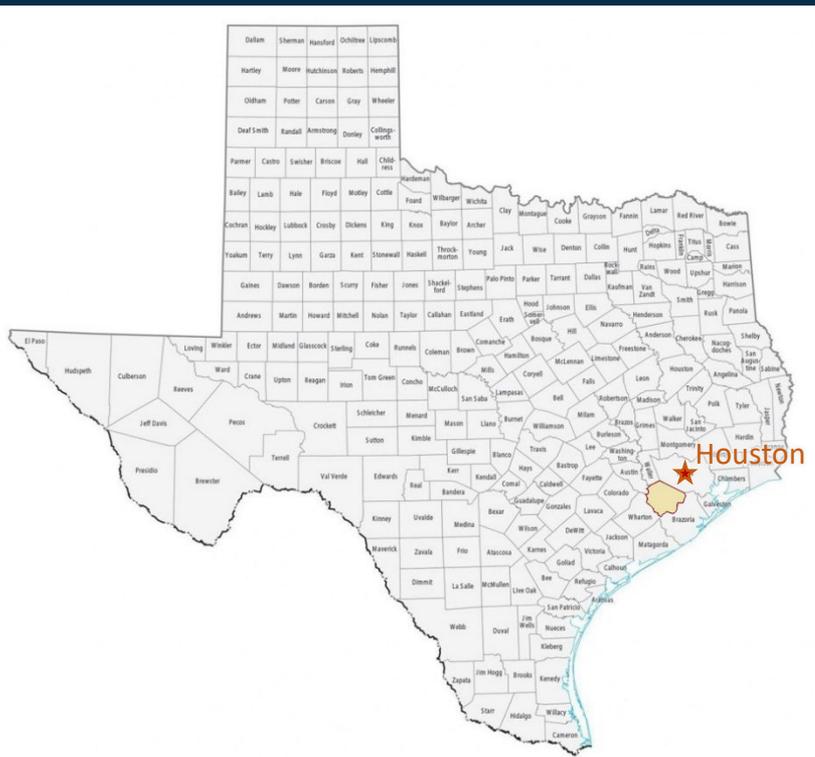
(As a matter of fact, it **IS** our first rodeo!)

Chris Debaillon, PE, PTOE
Assistant County Engineer - Traffic

September 2025

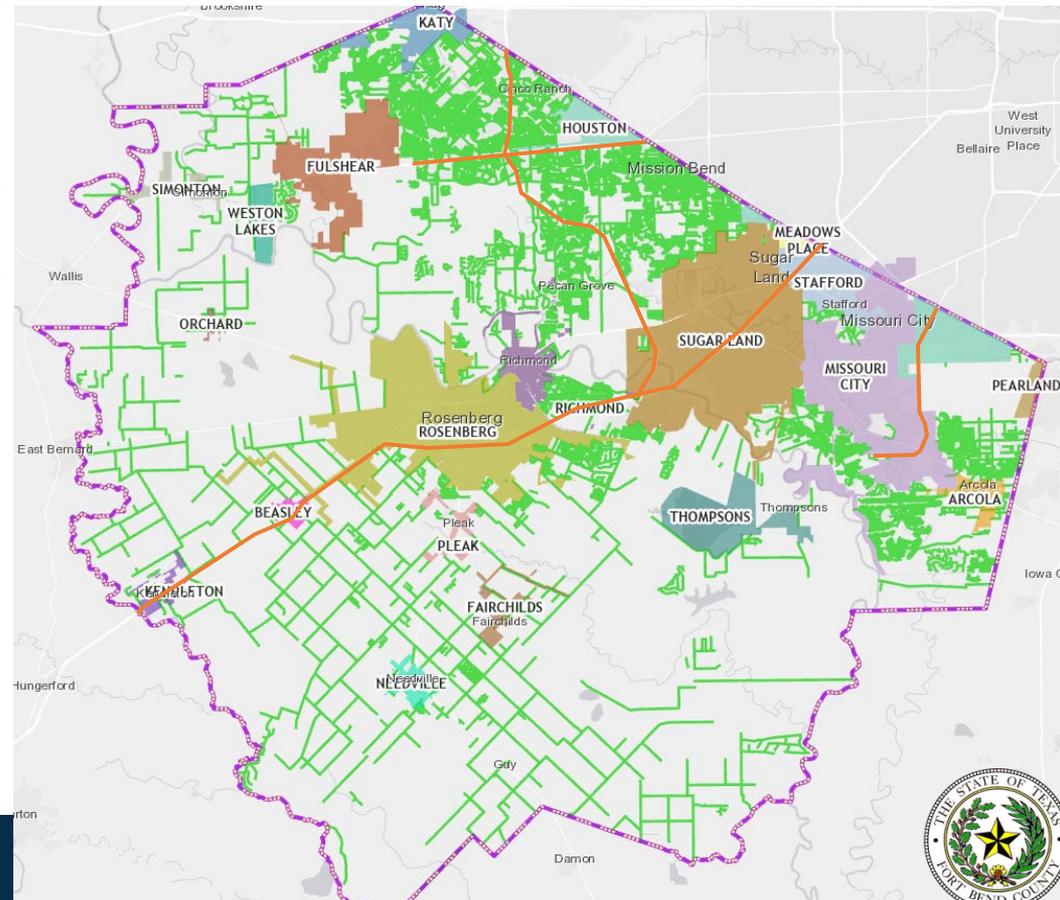
An Equation-Free Experience





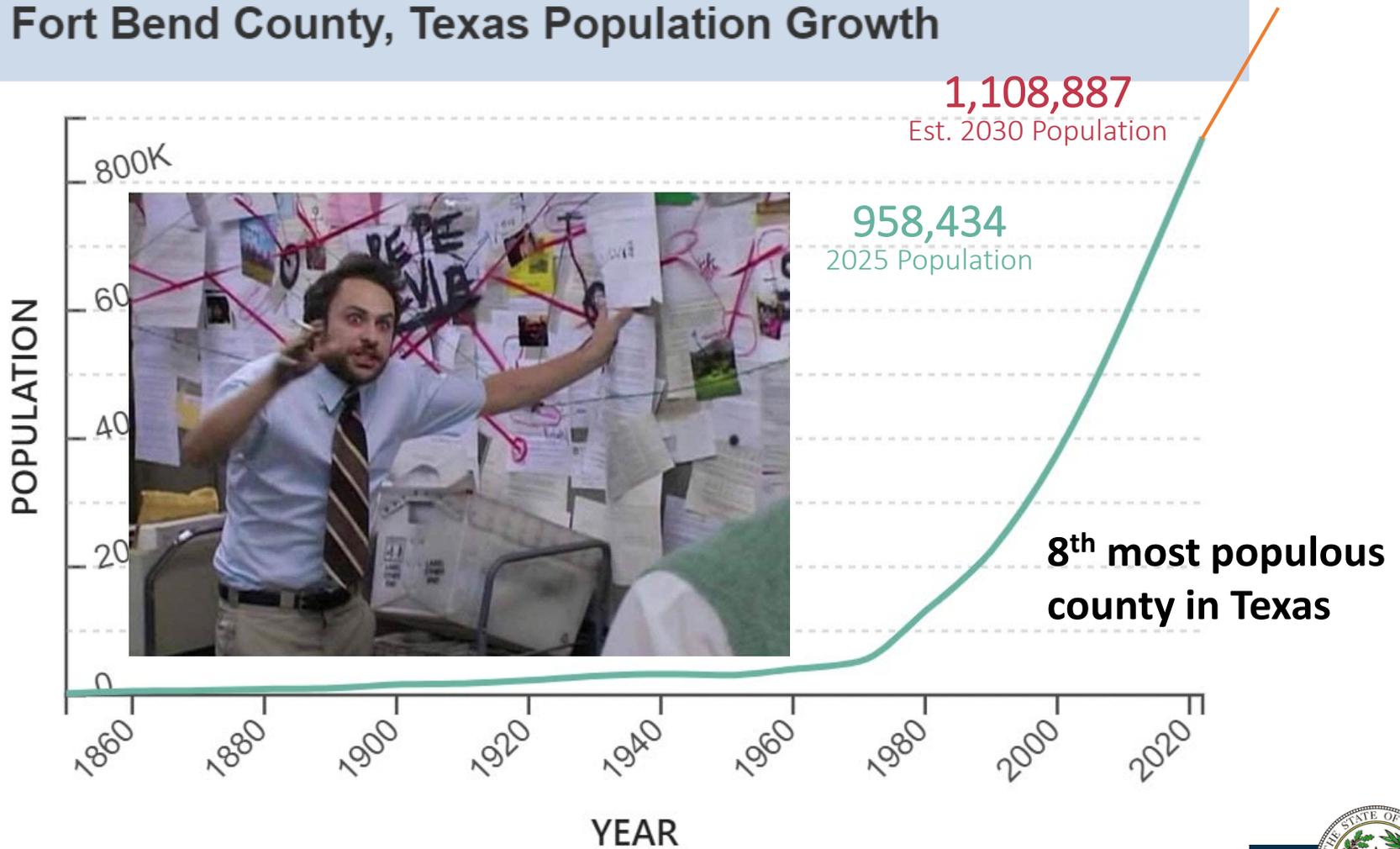
Fort Bend County Facts

- 79% unincorporated
- 20 cities & 21 ETJs
- 885 square miles
- 2,122 miles of County maintained public roads

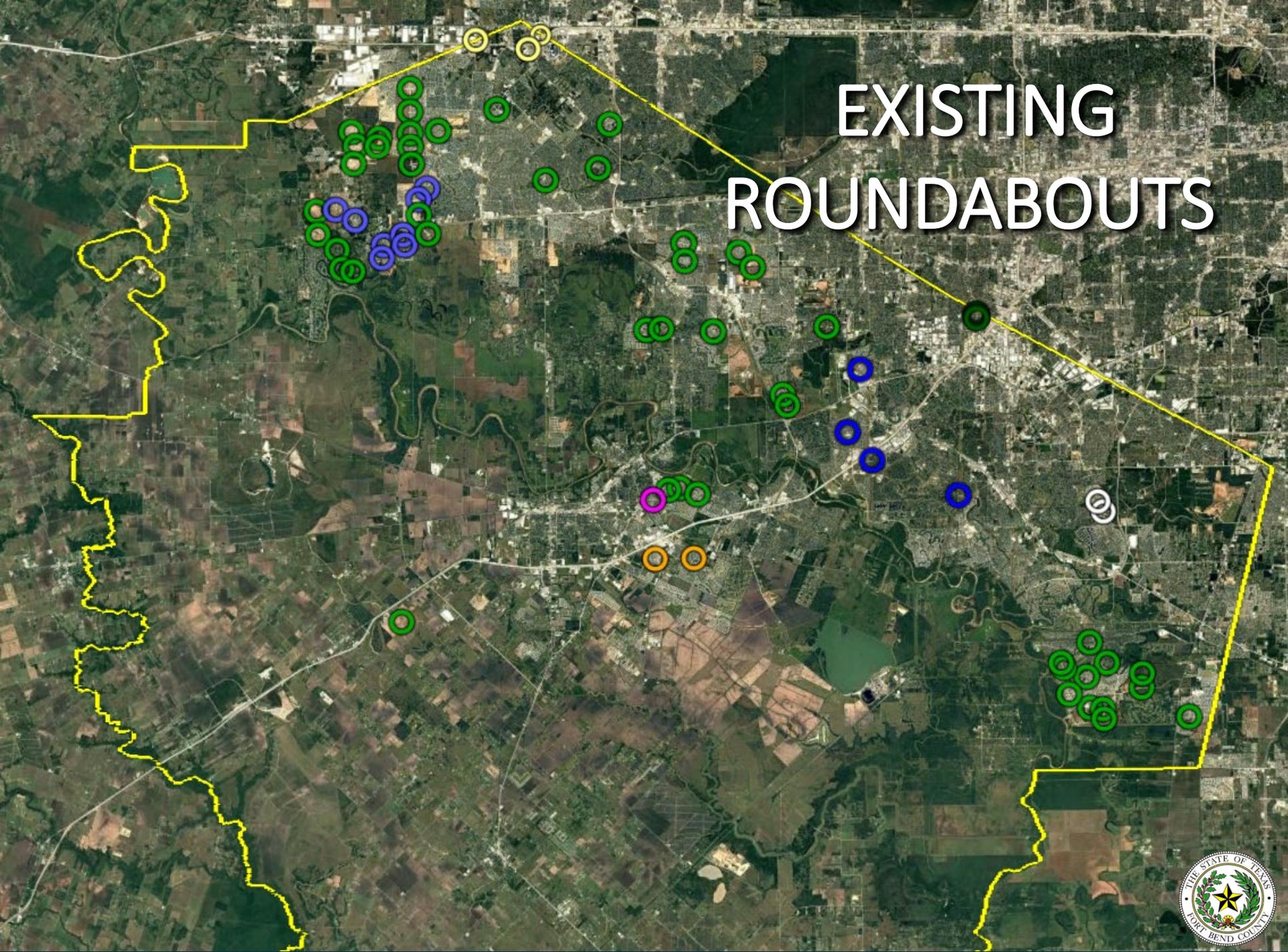


POPULATION GROWTH

Fort Bend County, Texas Population Growth

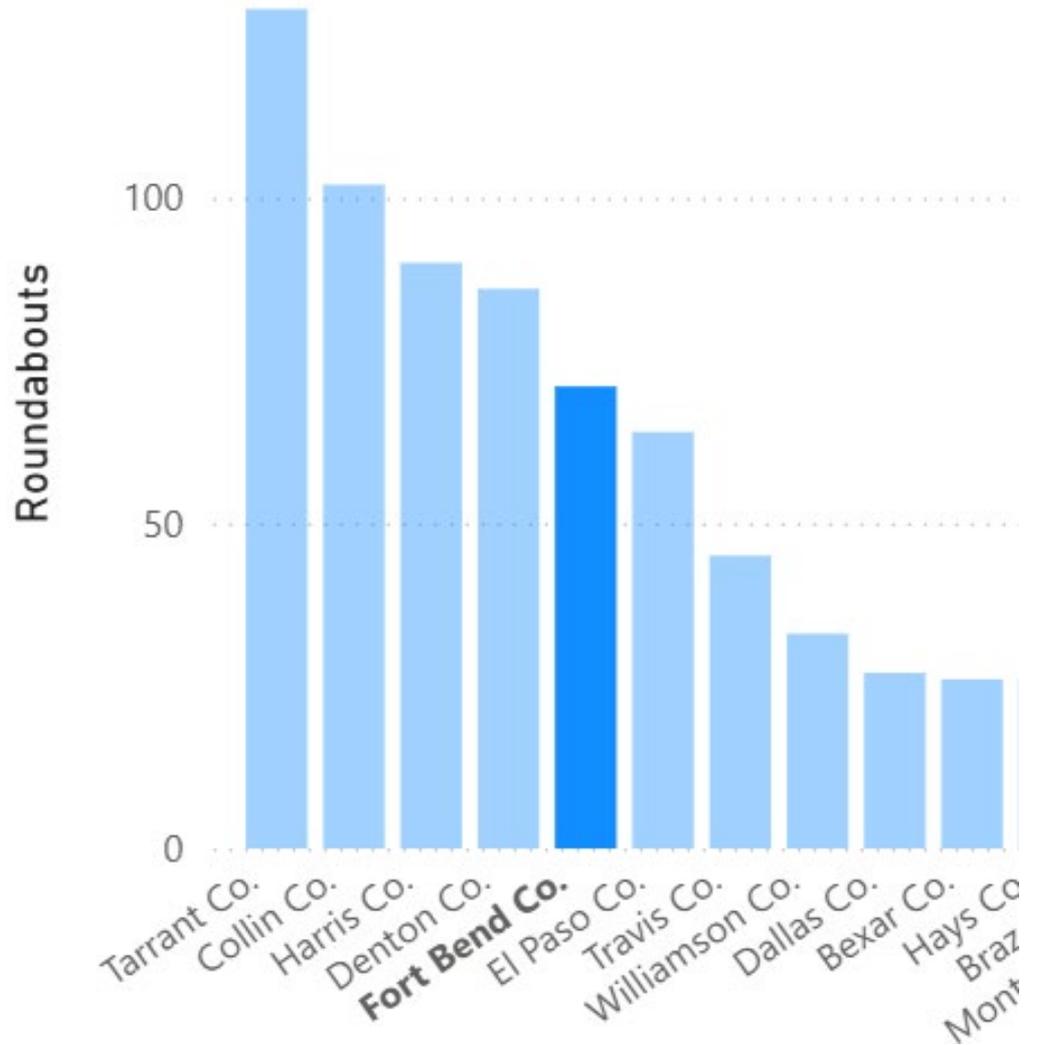


EXISTING ROUNDBABOUTS



EXISTING ROUNDABOUTS

- 12 roundabouts in 2010
- 72 roundabouts in 2024
 - 48 on County roads
 - 24 on City streets
 - 0 on TxDOT system
- 40 proposed on County roads





PROPOSED ROUNDBOUTS



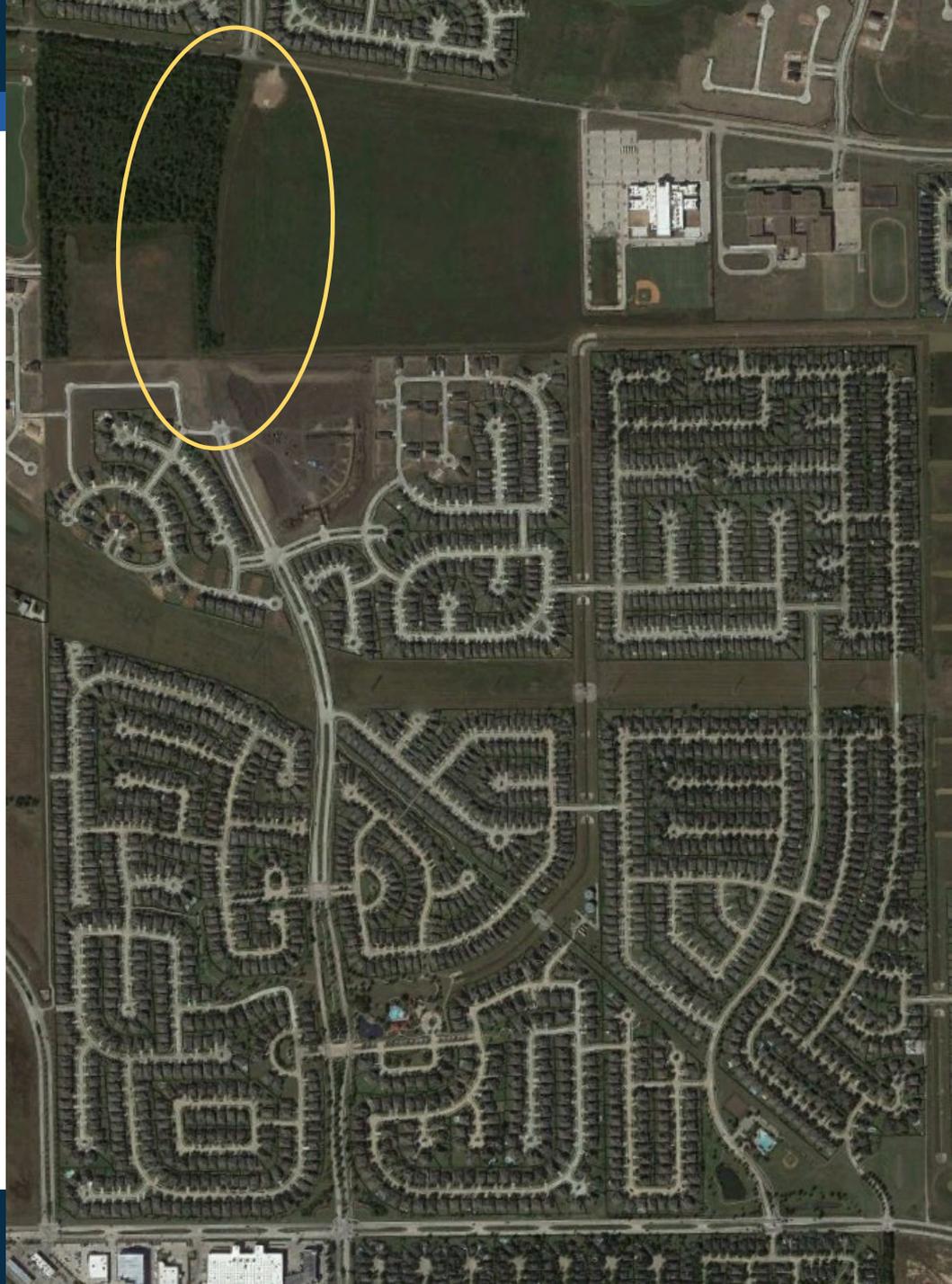
MASON ROAD

GAP



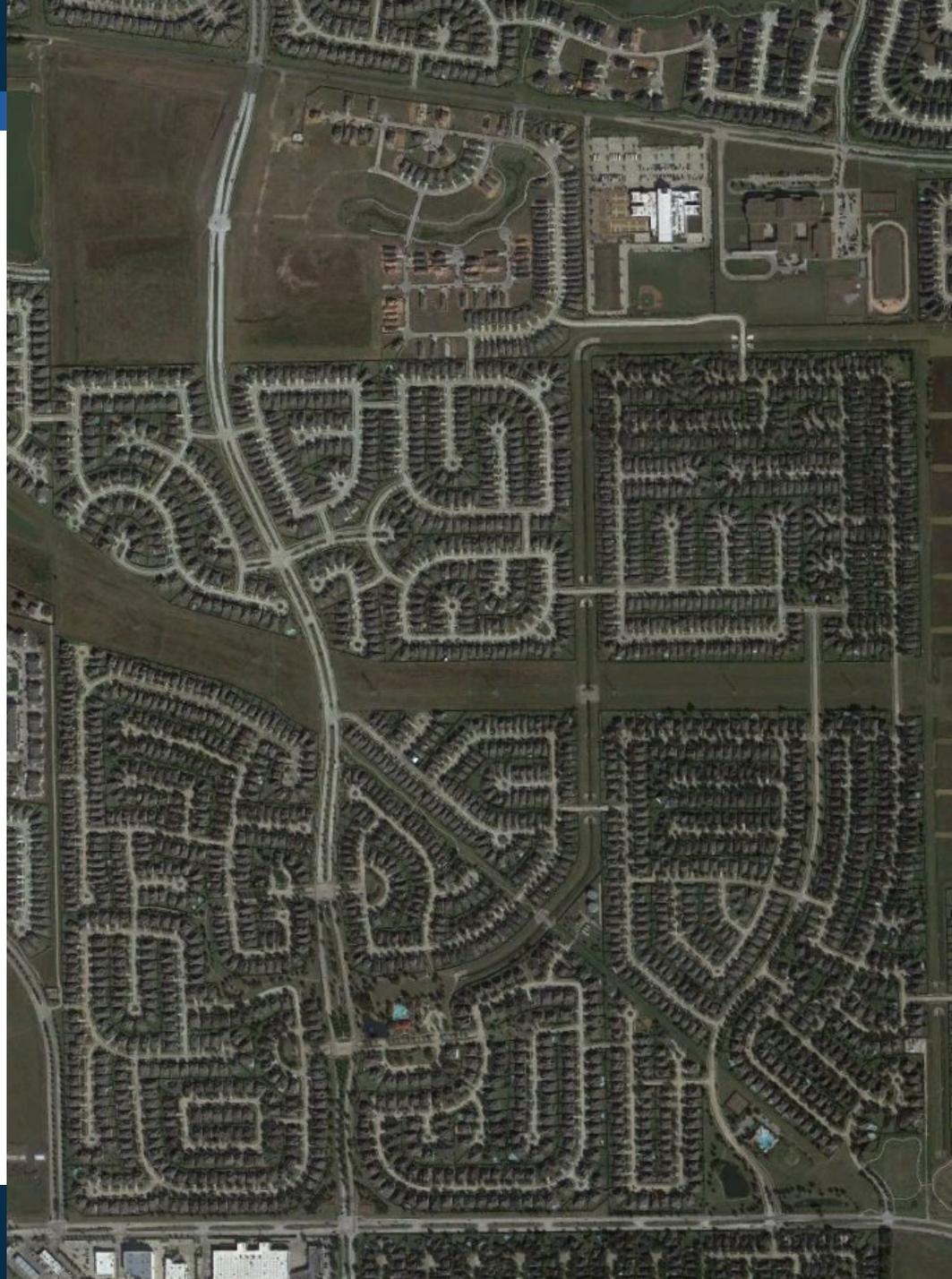
FIELDSTONE COMMUNITY

Gap in Mason Road in 2017



FIELDSTONE COMMUNITY

Mason Road completed in 2020





**MASON RD AT
VICTORIA BAY**

A wide, paved residential street with a dashed center line, utility poles, and houses in the background. The road is flanked by grassy areas and sidewalks. The sky is blue with scattered clouds.

***What does this
road tell the
driver?***

SPEED MANAGEMENT



imgflip.com



VORTEX MODULAR ROUNDAABOUT

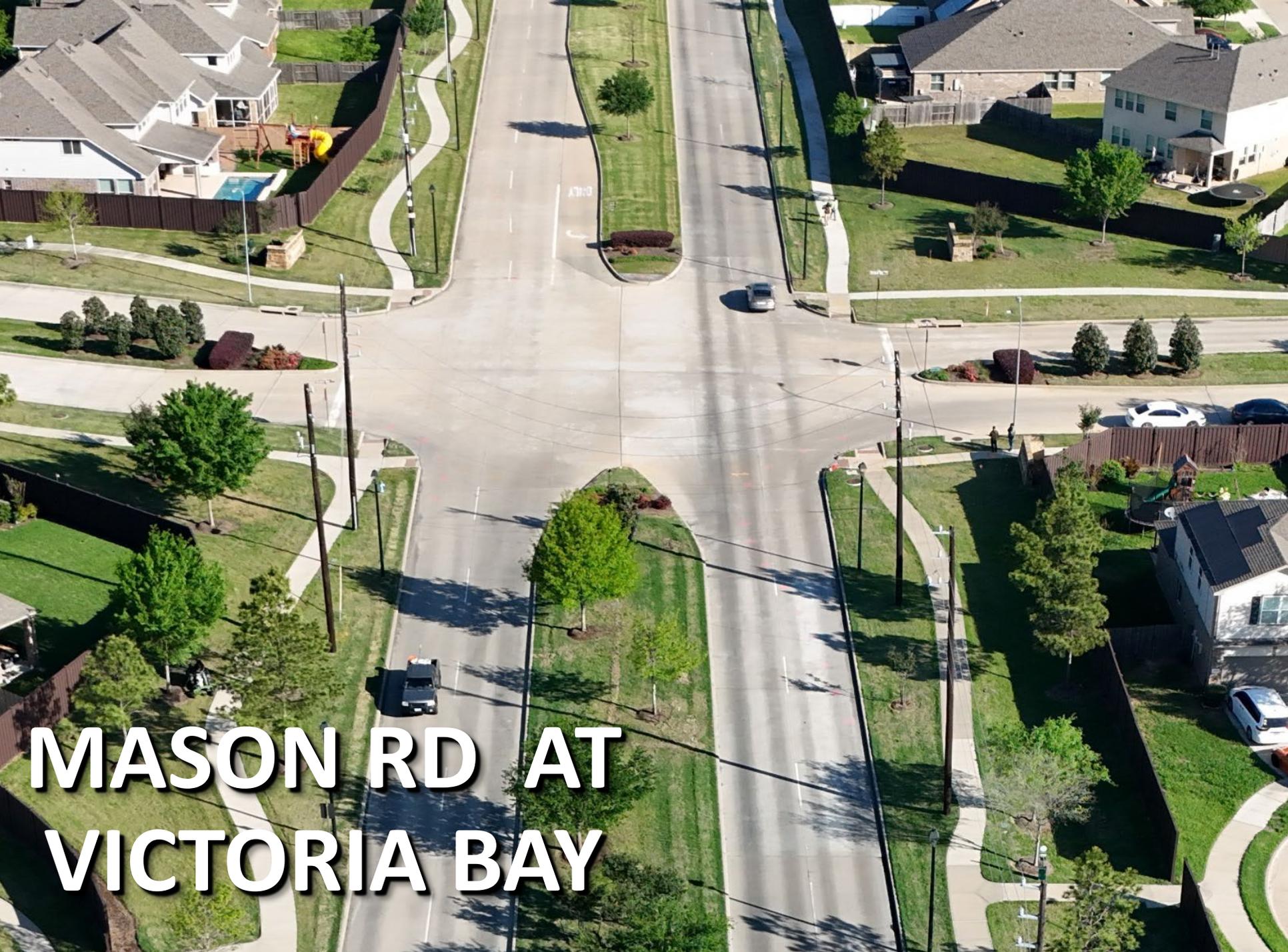


INSTALLATION PROCESS – ANNANDALE, VA





**ANNANDALE, VA
COMPLETED 2019**



**MASON RD AT
VICTORIA BAY**

Mason at Victoria Bay



VORTEX MATERIALS





INITIAL SETUP



**FINISHED
PRODUCT**

Lessons Learned



1. Vendors do not lack for optimism

Lessons Learned



1. Vendors do not lack for optimism

2. Concrete is harder than asphalt





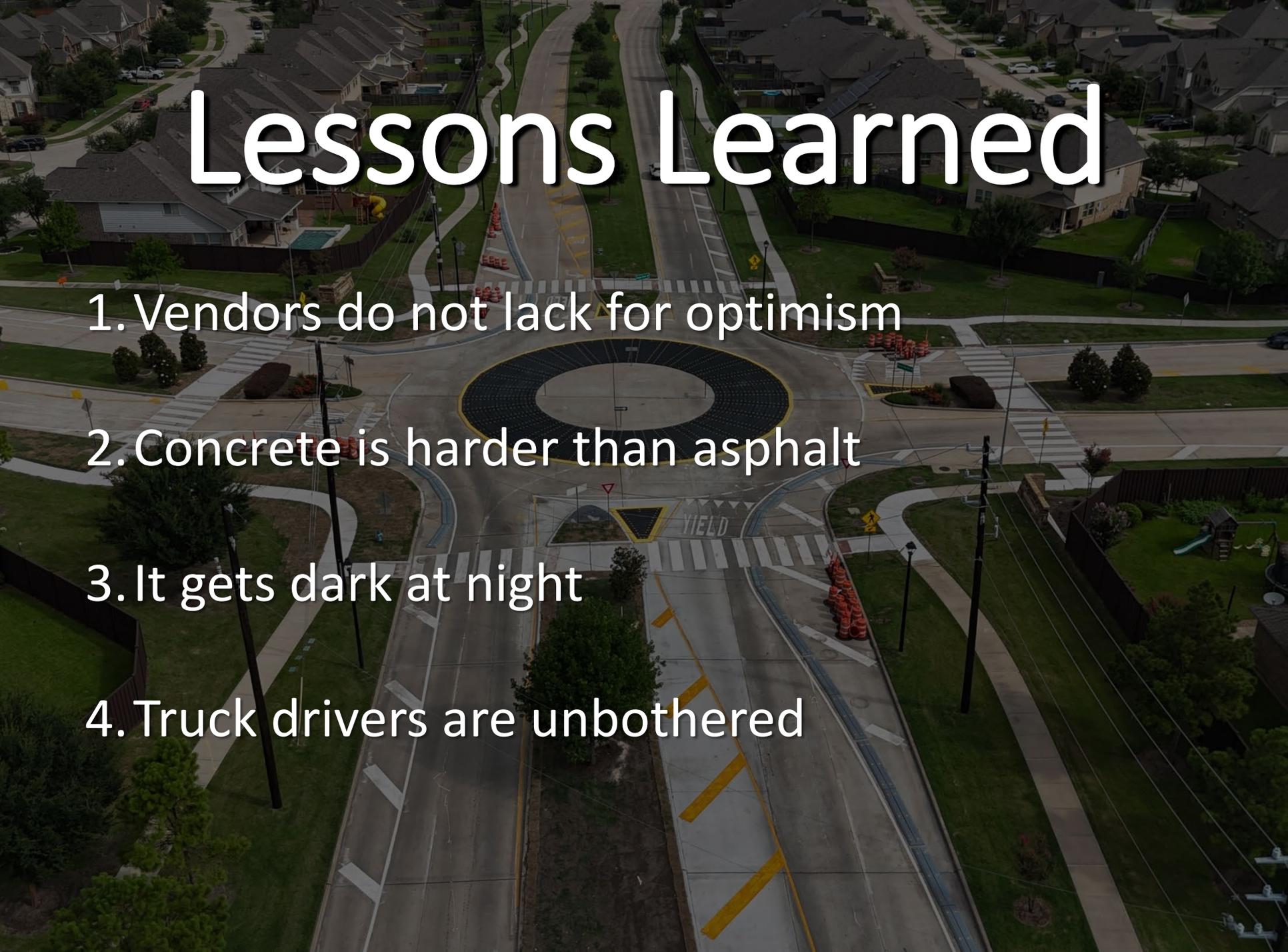
Lessons Learned

1. Vendors do not lack for optimism

2. Concrete is harder than asphalt

3. It gets dark at night

Lessons Learned



1. Vendors do not lack for optimism

2. Concrete is harder than asphalt

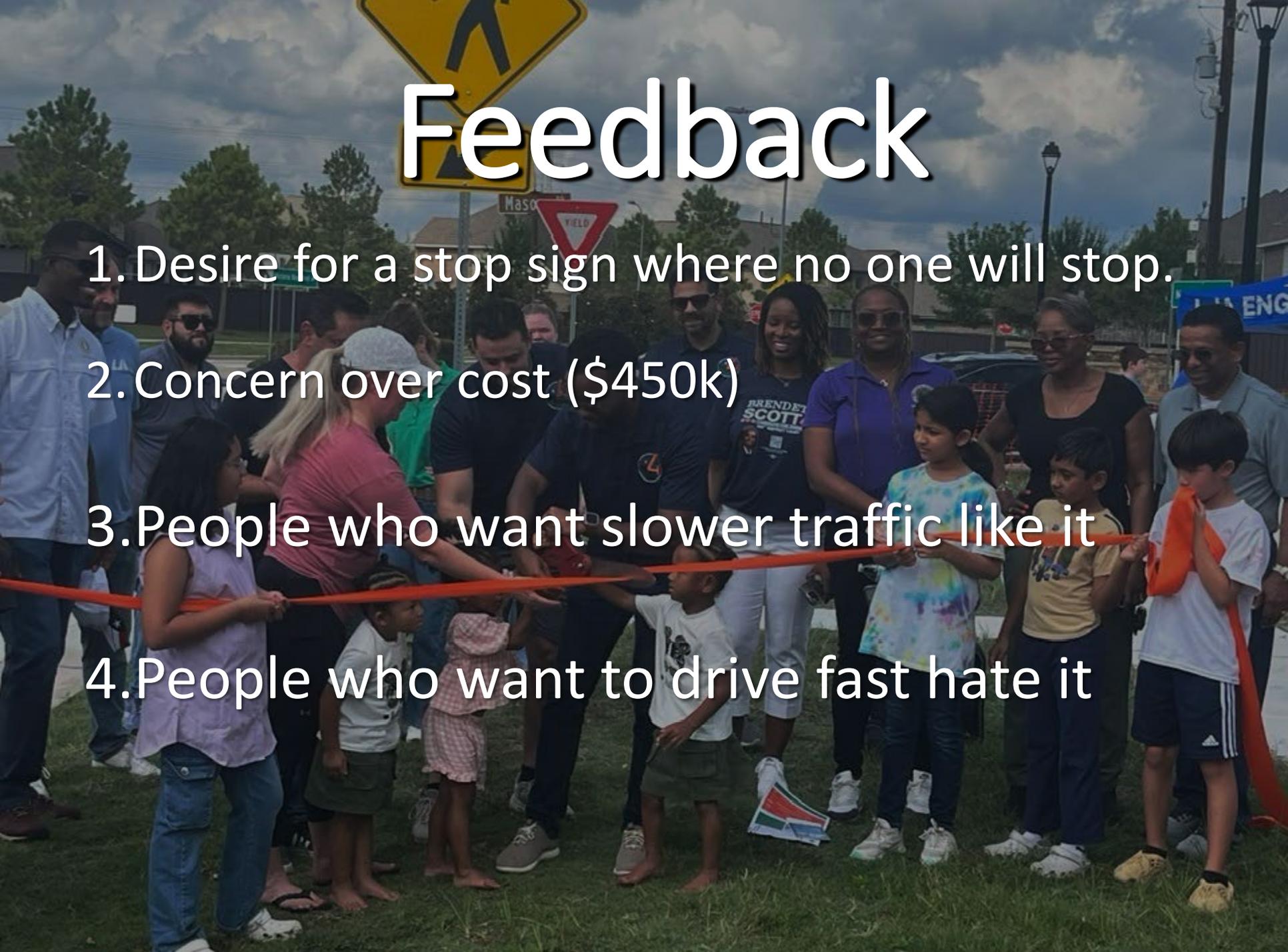
3. It gets dark at night

4. Truck drivers are unbothered

Sign Adjustment



Feedback



1. Desire for a stop sign where no one will stop.
2. Concern over cost (\$450k)
3. People who want slower traffic like it
4. People who want to drive fast hate it



Chris Debaillon, PE, PTOE - Fort Bend County
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