

HIGHWAY SAFETY RESEARCH GROUP

Contributing to LA's **Green** Reporting



Sara Graham
&
Jeff Dickey



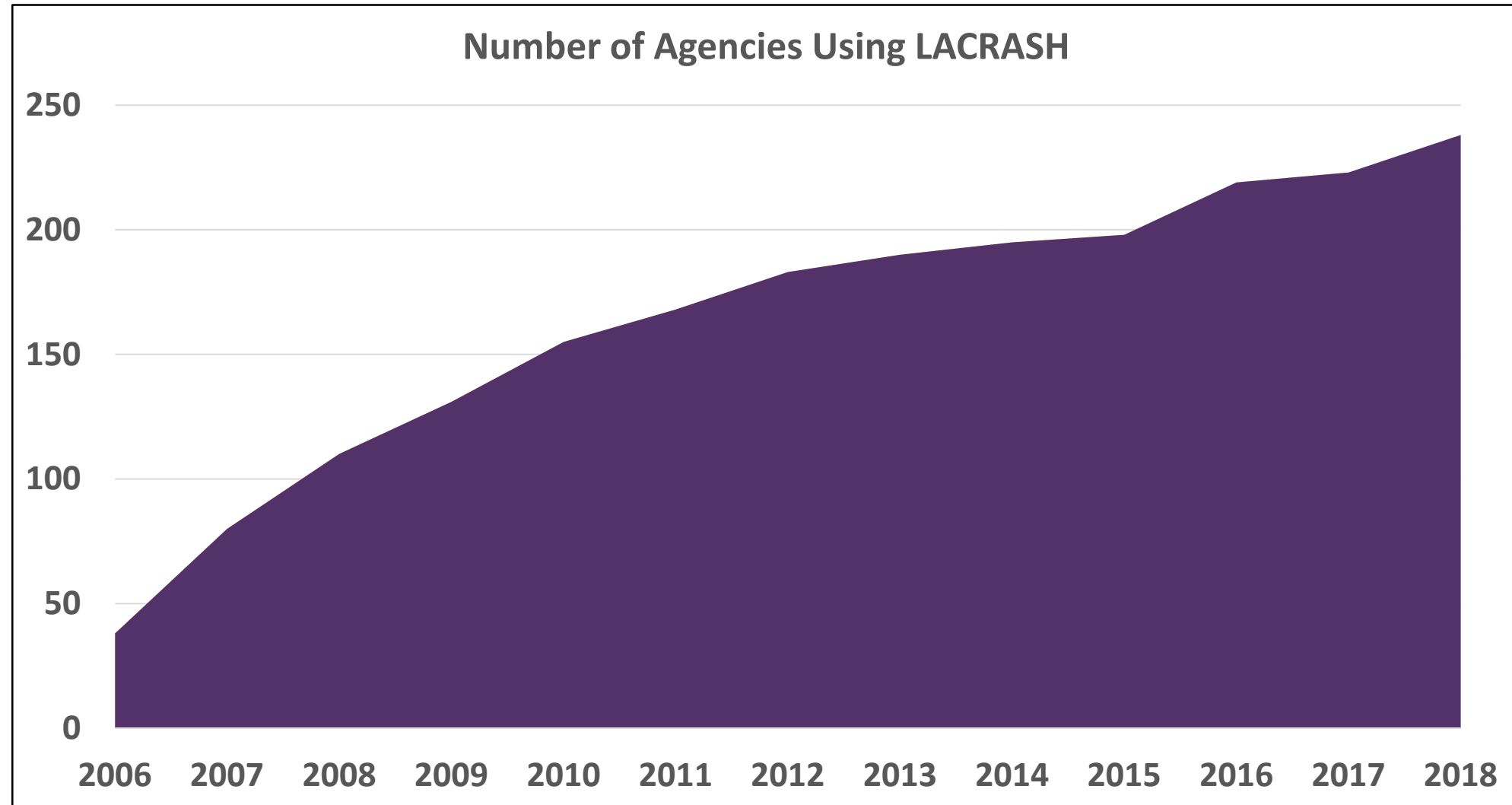
Overview

- About the HSRG
- Electronic Reporting
- Collaboration
- Location
- On-going – Data Quality

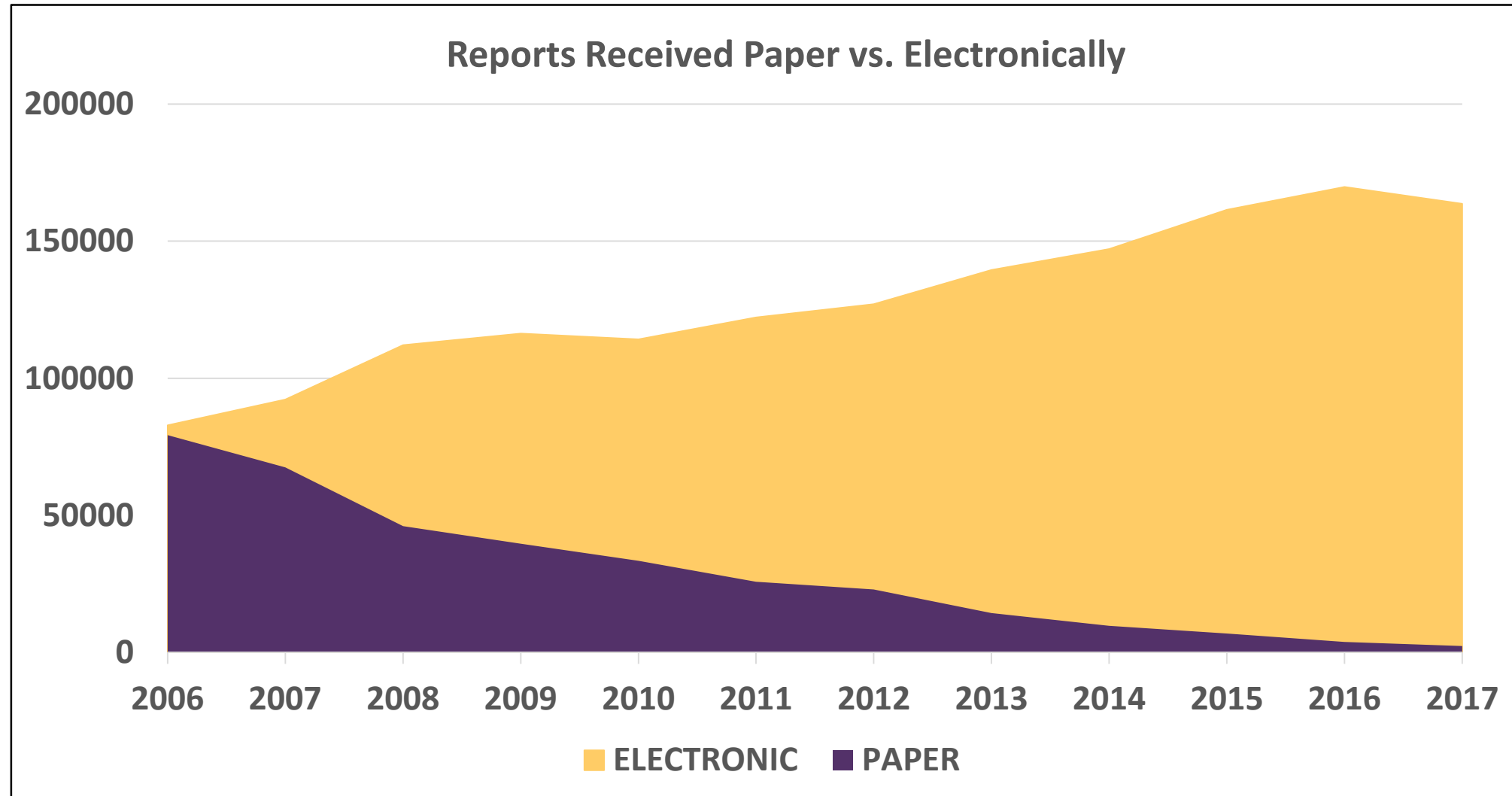
About the HSRG

- HSRG formed in 2002 to collect, enter, and store Louisiana's crash data – in partnership with the LA DOTD
- 3 full-time staff members in 2004
- HSRG released LACRASH software in 2005 to assist agencies in electronic reporting
- 20 full-time positions in 2019
 - Still collect, enter, and store
 - Data Quality, GIS, Infrastructure, Data Analysis, Business Analytics, Research

Electronic Reporting



Electronic Reporting



Electronic Reporting - Timeliness

YEAR	WITHIN 30 DAYS	WITHIN 60 DAYS	WITHIN 90 DAYS	AVERAGE NUMBER OF DAYS
2006	39 %	41 %	44 %	121
2007	48 %	53 %	64 %	71
2008	64 %	74 %	83 %	41
2009	66 %	70 %	75 %	47
2010	70 %	72 %	77 %	44
2011	75 %	84 %	89 %	32
2012	79 %	84 %	88 %	26
2013	85 %	91 %	93 %	19
2014	88 %	91 %	95 %	16
2015	92 %	95 %	98 %	11
2016	93 %	96 %	97 %	10
2017	96 %	98 %	99 %	7

Electronic Reporting - Timeliness of CMV Reporting

YEAR	WITHIN 30 DAYS	WITHIN 60 DAYS	WITHIN 90 DAYS	AVERAGE NUMBER OF DAYS
2006	58 %	67 %	72 %	74
2007	70 %	80 %	85 %	40
2008	77 %	86 %	92 %	29
2009	82 %	88 %	91 %	23
2010	86 %	93 %	95 %	17
2011	87 %	94 %	96 %	17
2012	87 %	93 %	96 %	15
2013	88 %	94 %	97 %	14
2014	92 %	96 %	98 %	11
2015	92 %	96 %	98 %	11
2016	93 %	96 %	98 %	11
2017	95 %	98 %	99 %	9

Electronic Reporting

- Increased the number of **identified** CMV crashes
 - 2001 – 2,047
 - 2004 – 2,628
 - 2005 – 4,260
 - 2017 – 4,030

Collaboration

- HSRG staff worked with LA DPS and FMCSA to clarify what should be reported and when
- Conducted continuous testing to reduce errors on reportable CMV crashes
- Worked closely with FARS team to match MCMIS and FARS numbers
 - Research differences
 - Make corrections to either database, when needed

Location

- HSRG began locating crashes in 2010
- All local road crashes and a subset of problematic state road crashes
- Assumed responsibility for all crashes in 2017
- 170,000 crashes per year

Location

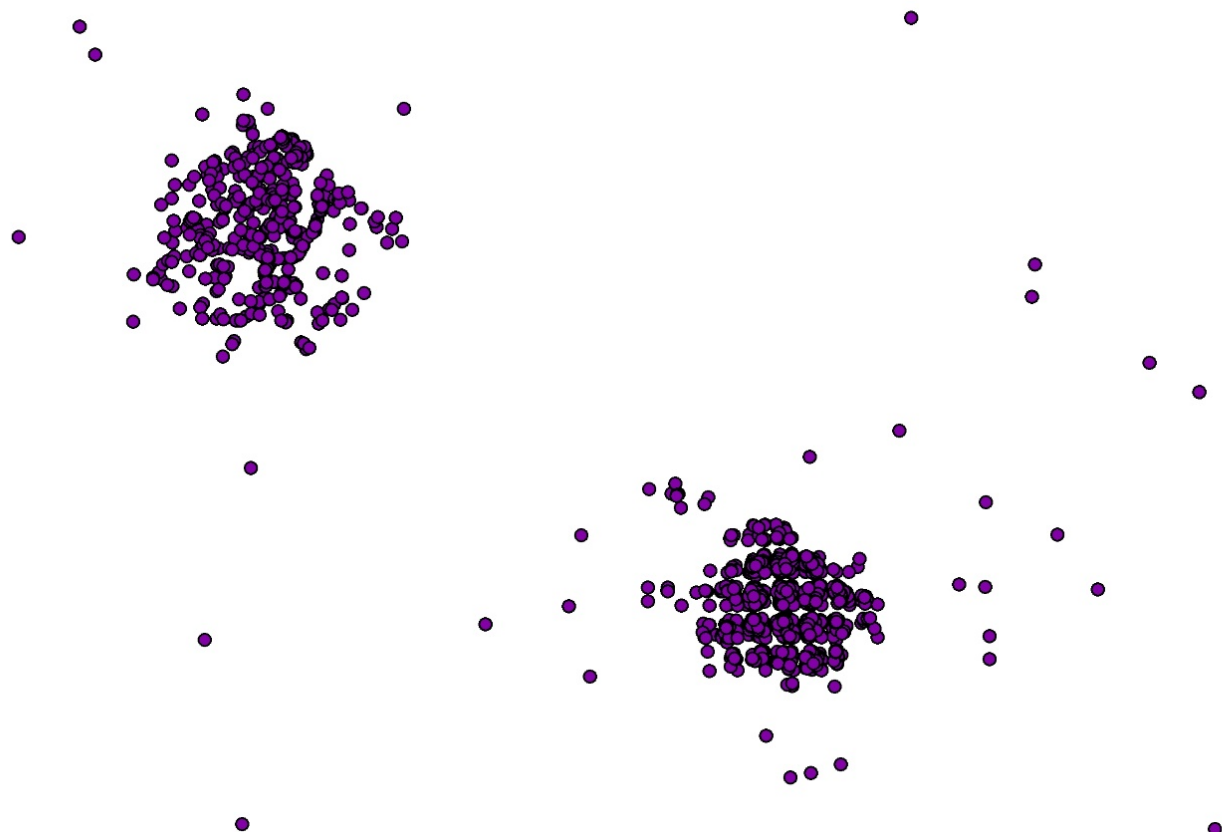
- Automatically locate and validate 60% of crashes
- Manually locate remaining crashes using
 - Specially**
 - Trained**
 - Undergraduate**
 - Data**
 - ENtry**
 - Technicians**

Location

- Locate 90-95% of crashes
- Assign control section and logmile
- Link to roadway data for analysis

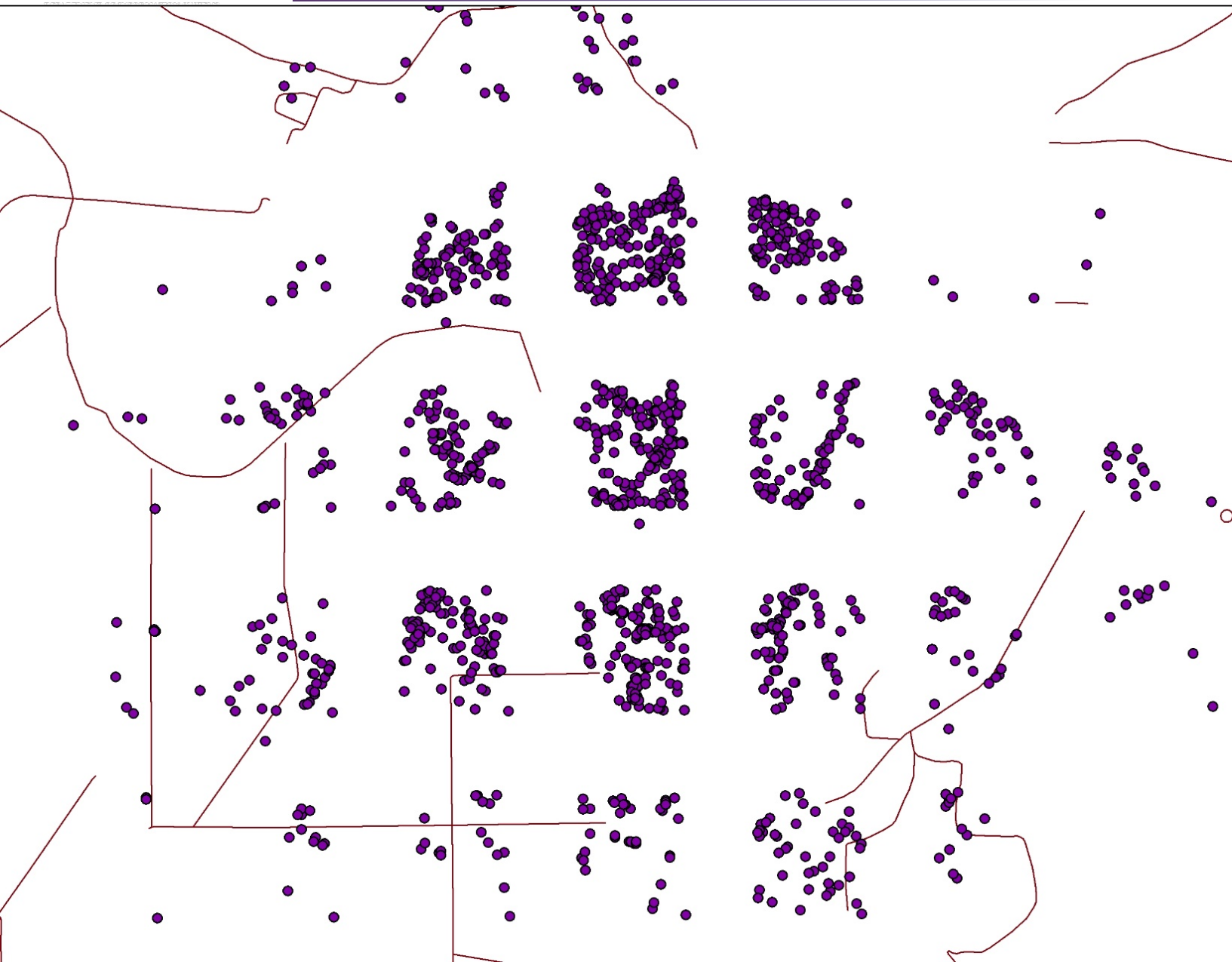
Location – Common Issues

- No latitude/longitude
- Wrong latitude/longitude
- Missing/misspelled street names
- Conflict between data and narrative



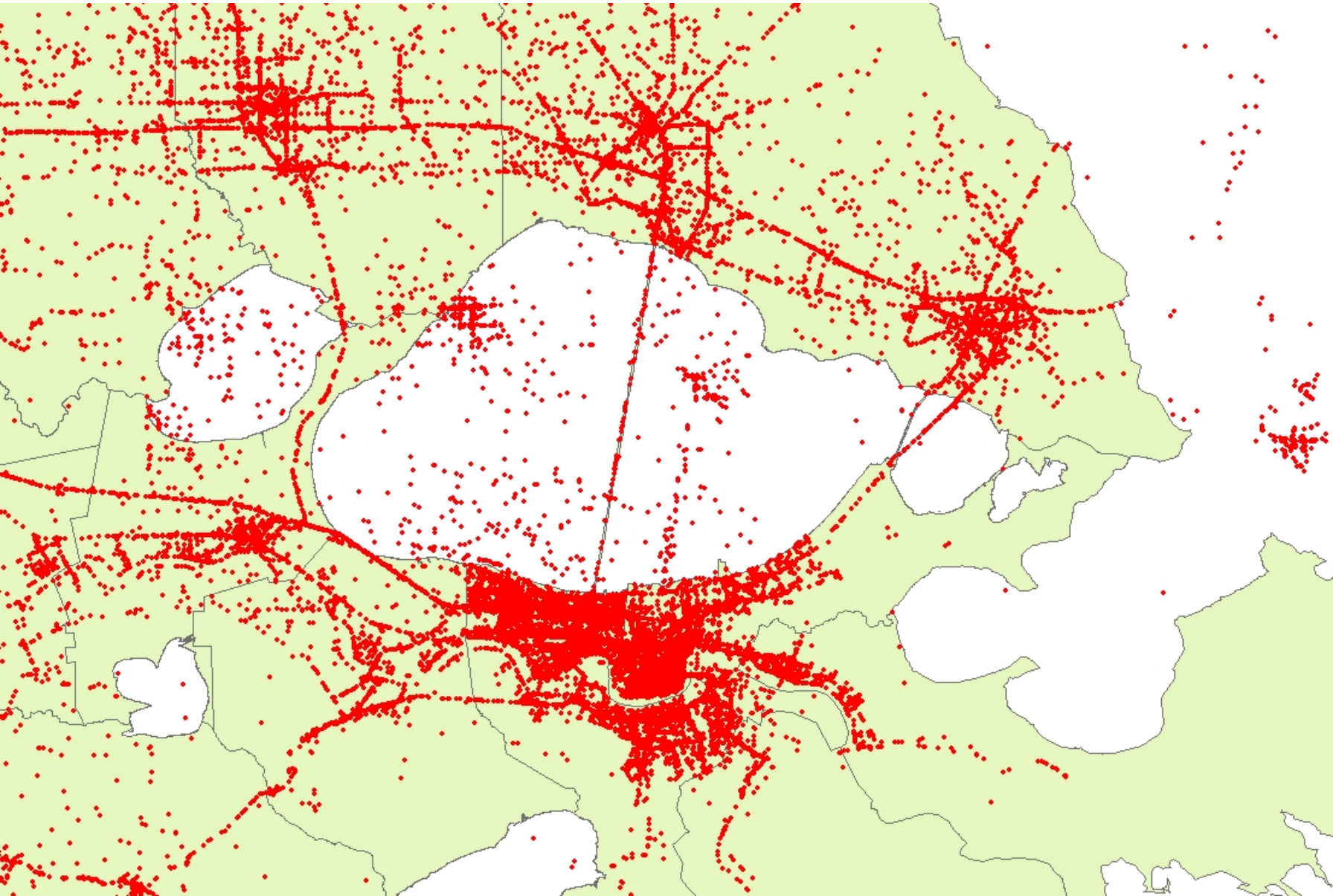
A Tale of Two Cities?

Or is something
wrong?

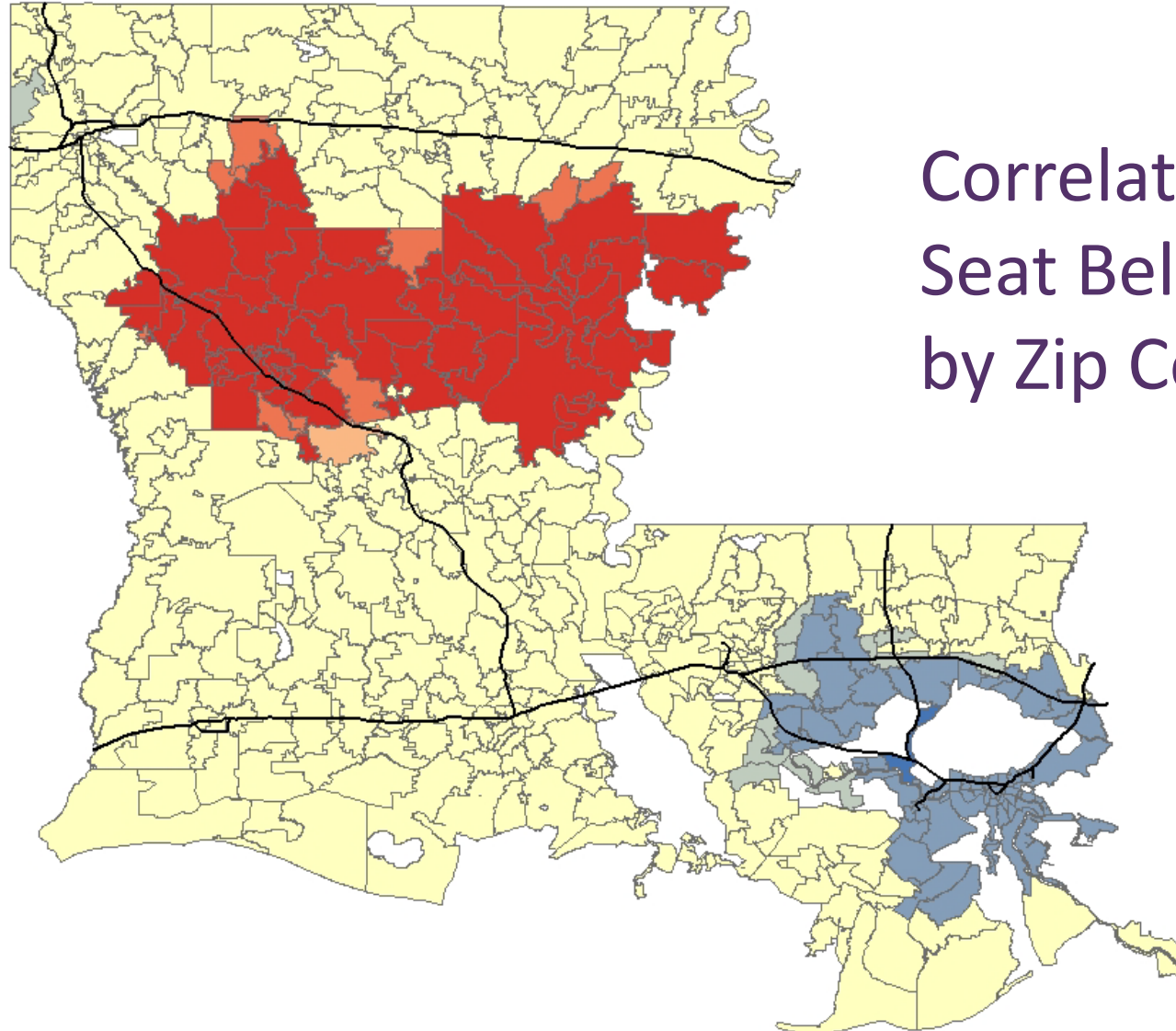


Pattern does not
match city streets

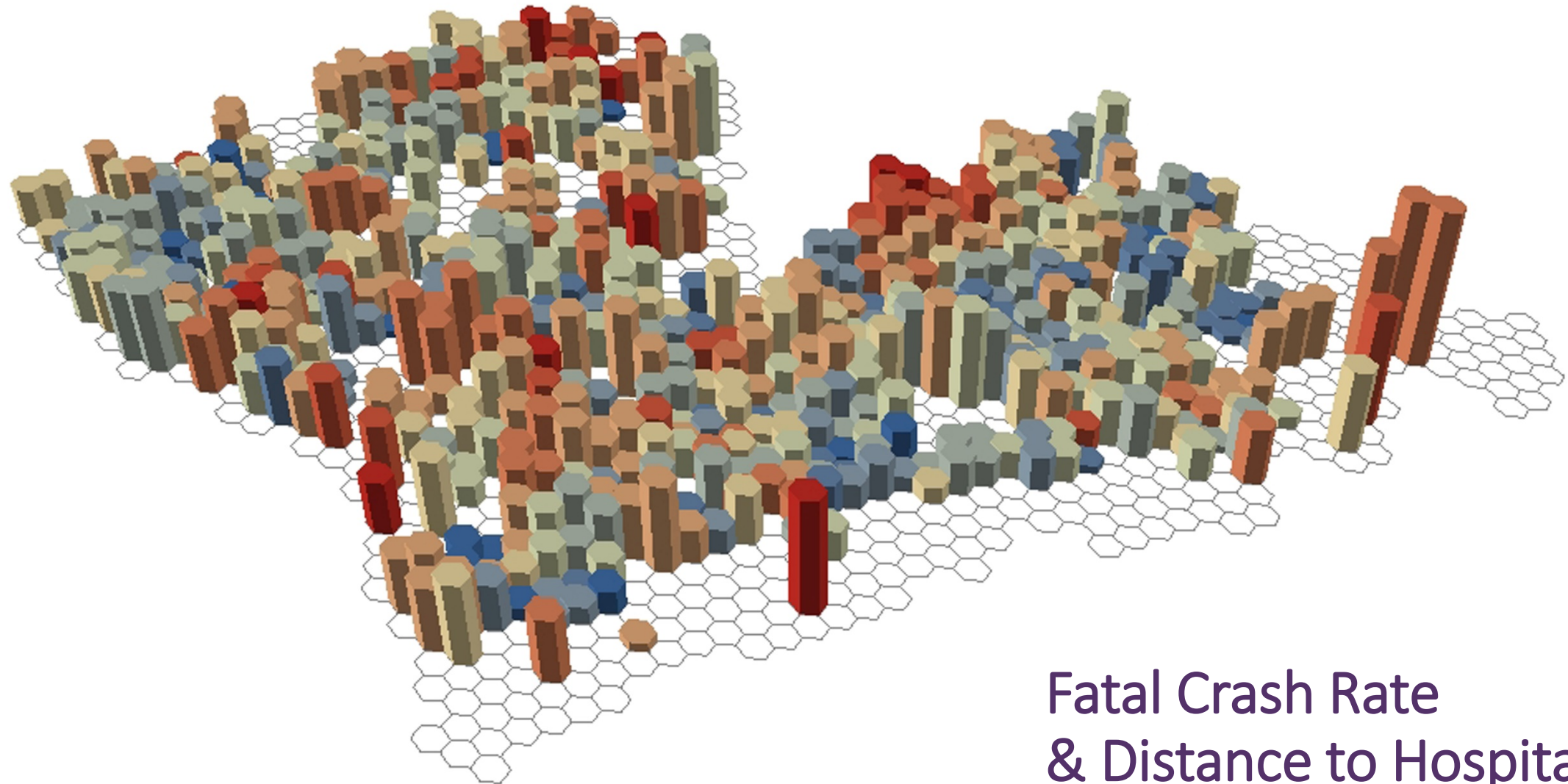
Degree minute
seconds recorded
as decimal degrees



Crashes
in
Lake
Pontchartrain



Correlation of
Seat Belt Use
by Zip Code



Fatal Crash Rate
& Distance to Hospital (Z)

On-going Data Quality

- Regularly monitor crashes for completeness of driver and vehicle fields required for SafetyNet
- Reports with missing data are pulled and investigated weekly
- Identifies agencies regularly reporting incomplete data to make contact and offer training

Sara Graham
sgraha2@lsu.edu

Jeff Dickey, Ph.D.
jdickey@lsu.edu

THANK YOU