



Texas Strategic Highway Safety Plan Update

2nd Emphasis Area Team Meeting

Roadway (and Lane) Departure

3/16/2017

Austin, TX

Agenda

- Welcome and introductions (roll call)
- Review revised strategies
- Review new data runs
- Finalize strategies
- Discuss countermeasures

Team Members

Commitment	Responsible Person	Due Date
Contact Josh Mason (Texas Ranger) about joining the EA team	Rebecca Wells	Next meeting
Reach out to EMS contact about joining EA team	Robert Wunderlich	Next meeting
Contact someone involved with air flight rescue	Paul Causey	Next meeting

Revised Strategies

- Improve data systems for targeting locations at high risk for roadway departure by road (city street, arterial, connectors, etc.), vehicle (passenger vehicle, motorcycle, bicycle, etc.), and location (rural, urban, suburban) type.
 - Provide positive guidance on curves and straight aways.
 - Identify and address locations subject to wet weather ROW crashes.

Revised Strategies

- Examine safety data to identify contributing crash factor in ROW crashes.
- Implement countermeasures to reduce nighttime crash countermeasures.
- Use the new safety methodologies (e.g. HSM and systemic approaches) to address ROR crashes.

Revised Strategies

- Identify and address behavioral characteristics associated with roadway departure.
- Develop and implement strategies to encourage drivers to adjust speeds appropriately.

Revised Strategies

- Provide information on route risk with regard to lane departure crashes.
- Mitigate the consequences of vehicles leaving the road by implementing barriers and forgiving roadside countermeasures.

Roadway & Lane Departure Crashes

Percent of K & A Crashes



36%

Lighting conditions (K & A crashes 2012-2016)

Urban 39%	Rural 61%
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Urban

Daylight 43%	Dark –Lighted 36%	Dark 21%
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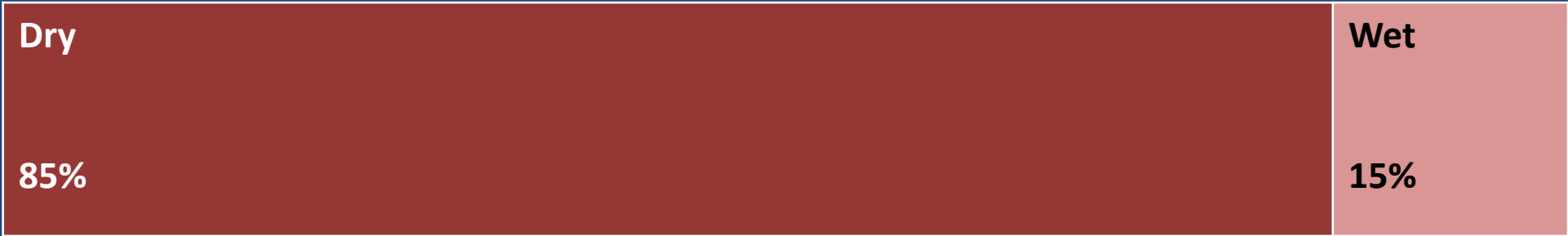
Rural

Daylight 53%	Dark - Lighted 4%	Dark 43%
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Surface conditions (K & A crashes 2012-2016)



Urban



Rural



Other Factors in Lane Departures



Speed, Impaired, Lane Keeping, Distraction, Faulty Evasion, Fatigued or Asleep
131%

Other Factors
23%

Speed (failed to control, unsafe, over limit) 44%



35%
Failed to Control

Impaired
29%



Lane Keeping
20%



Distraction
15%



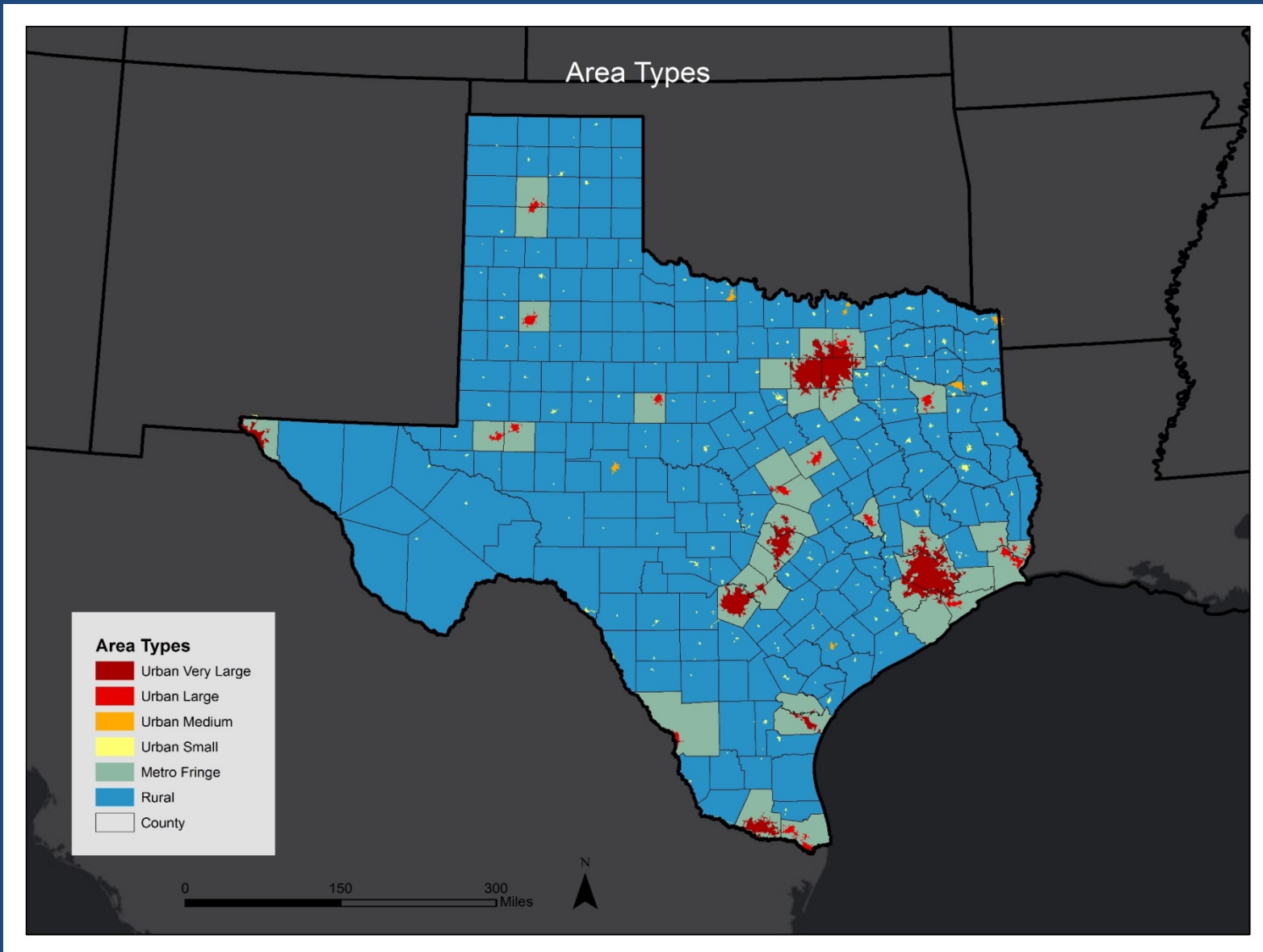
Faulty Evasion
14%



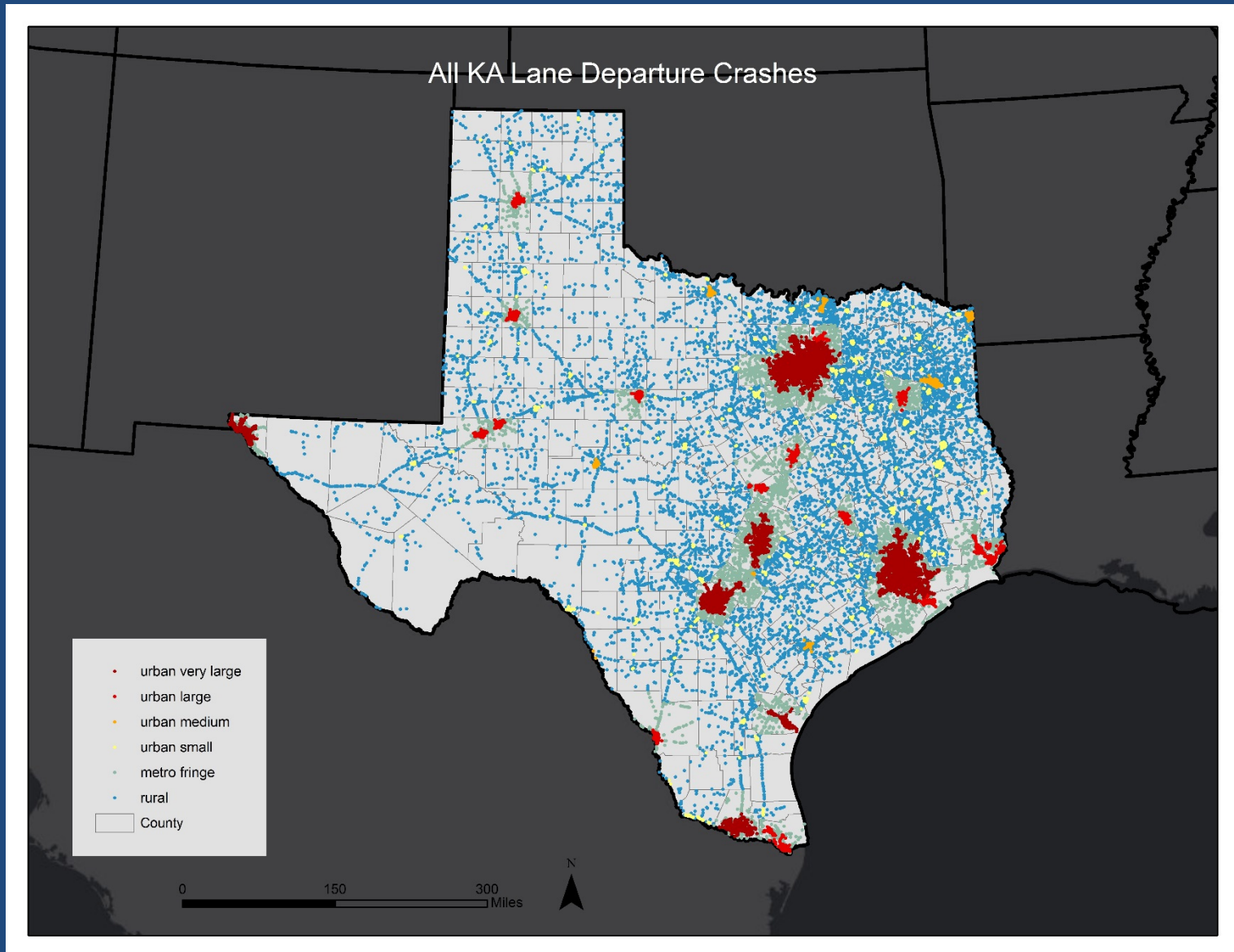
Fatigued or Asleep
9%



Area Type Classification



Roadway Departure Crashes



Roadway Departure K & A Crashes by System and Area Type

State System 68%	Off System 32%
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State System

Urban Area > 100K Pop.	<1 00 K	Fringe	Rural
27%	4 %	20%	49%

Off System

Urban Area > 100K Pop.	< 10 0 K	Fringe	Rural
60%	4 %	18%	18%

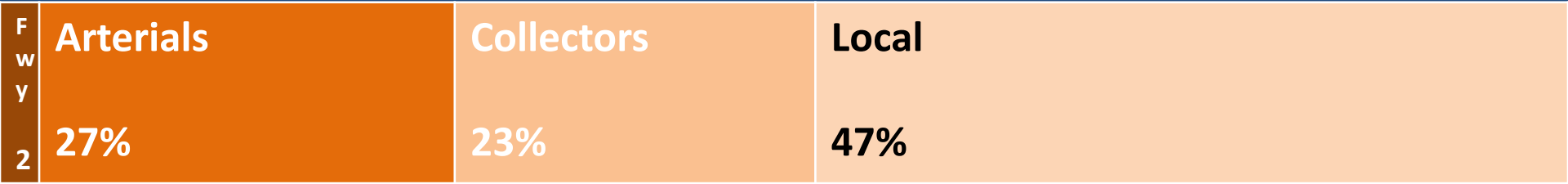
Roadway Departure K & A Crashes by System and Functional Class



State System



Off System



Functional Class & 1st harmful event: Urban State System

Freeways

Fixed Obj.	Overturned	Pk Car	Ped & Trotter	Head On
74%	16%	5%	2%	3%

Arterial

Fixed Obj	Overturned	Pk Car	Ped / Trotter	Head On
56%	13%	2%	3%	25%

Collector/Local

Fixed Obj.	Overturned	Pk Car	Ped / Trotter	Head On
52%	17%	2%	2%	27%

Functional Class & 1st harmful event: Rural State System

Freeways

Fixed Obj.	Overtuned	Pk Car	Ped & other	Head On
49%	39%	4%	1%	6%

Arterial

Fixed Obj	Overtuned	Pk Car	Ped / Oth	Head On
41%	27%	2%	< 2%	28%

Collector/Local

Fixed Obj.	Overtuned	Pk Car	Ped / Oth	Head On
47%	34%	< 1%	< 2%	17%

COUNTERMEASURES

A Word on Countermeasures

Effectiveness (history, current, new measures)

Impact (history, priorities)

Feasibility (policies, resources, expertise, sponsors, public acceptance)

Summary and Adjourn

- Review action items
- Summarize additional needs requested by the EA team members prior to the next meeting
- Next meeting: March 24; 9:30-11:00am
- Adjourn