



Ohio's Regional Transportation Safety Plans

OTEC Conference
October 30, 2019

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Today's Presentation



- Transportation Safety Planning
 - Statewide Efforts
 - Regional/Local Efforts
 - The Planning Process
- Elements of the Planning Process
 - Creating buy-in
 - Engaging stakeholders
 - Establishing a framework
 - Identifying safety priorities
 - Creating a roadmap





EVERY MOVE YOU MAKE

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**TOWARD
ZERO DEATHS**

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Saving Lives

TZD and Transportation Safety Planning

Crash Events



Response: Maintenance, design, construction of bridges systematically improved

Response: 737 MAX 8 aircrafts remain grounded



Response: Seems less catastrophic and doesn't earn systems level change or "outraged" response

State Safety Context



**How many individuals
died on Ohio's roadways
in 2018?**

1,068

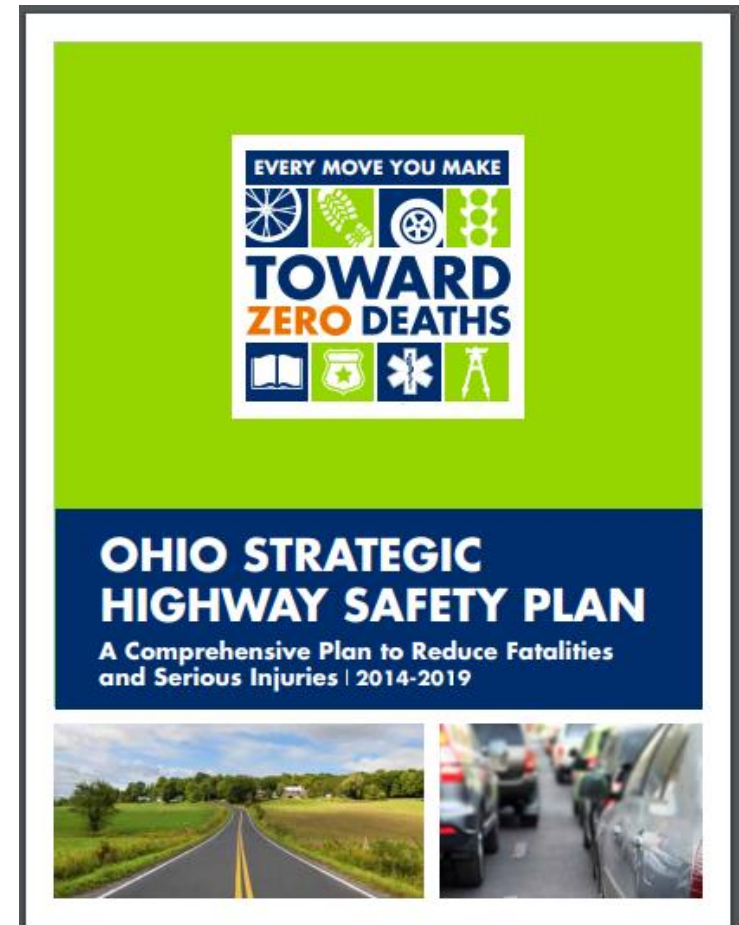
Strategic Highway Safety Plan

WHAT IS IT?

- Coordinated framework for reducing deaths and serious injuries
- Data-Driven Safety Priorities
- Identifies and tracks multi-agency strategies

WHY IS IT IMPORTANT?

- Leverages resources
- What's identified in the plan is eligible for funding
 - ODOT's HSP - \$102M



Local Safety Context



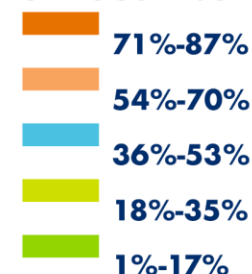
**How many individuals
died on Ohio's local
roadways in 2018?**

443

Local Safety

Emphasis Area	Types of Local Roads			Local vs. State Roads		Total Fatalities and Serious Injuries
	County	City	Township	Local	State	
Young Driver	18%	38%	7%	63%	37%	21,005
Roadway Departure	24%	22%	9%	55%	45%	20,900
Intersection	11%	56%	3%	70%	30%	19,985
Speed	19%	35%	9%	63%	37%	13,139
Restraints	21%	30%	9%	60%	40%	10,512
Alcohol Related	21%	36%	9%	66%	34%	10,046
OlderDriver Involvement	14%	42%	3%	59%	41%	8,618
Motorcycle Operator/Passenger	19%	37%	7%	63%	37%	6,740
Rear End	8%	45%	1%	54%	46%	6,504
CMV	9%	28%	2%	39%	61%	4,410
Pedestrian Involvement	7%	72%	4%	83%	17%	3,139
Distracted	15%	33%	5%	53%	47%	2,447
Bicycle Involvement	9%	72%	6%	87%	13%	1,193

FATALITIES AND SERIOUS INJURIES



Regional Transportation Safety Plans



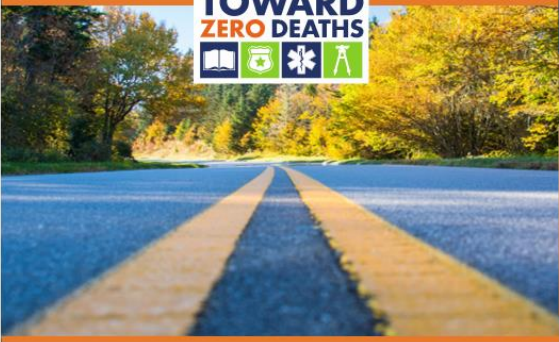
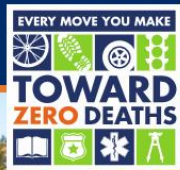
A SOLUTION – ROAD SAFETY PLAN

ODOT recognizes the need to address crash statistics and is encouraging the development of Regional Transportation Safety Plans to reduce them.

Each plan provides a framework for identifying, analyzing and prioritizing roadway safety improvements.

Upon completion, local stakeholders will have a prioritized list of strategies and projects that will be eligible for ODOT safety funding.

Proactive Change



CHAMPAIGN COUNTY SAFETY PLAN

September 2019

SAFER ROAD USERS



SAFER INFRASTRUCTURE



SAFER ENVIRONMENTS



Multidisciplinary Approach

- Was the person involved in this crash:
 - Speeding?
 - Distracted?
 - Drinking?
 - Not wearing a seat belt?
 - Inexperienced?
 - In need of an infrastructure assist?
- Probably some or all of the above
- All have different skill sets, authority, funding, that are needed to “solve” transportation-related crashes



Regional Planning Process



PROMOTE
SAFETY



ENGAGE
STAKEHOLDERS



ANALYZE
DATA



STRATEGY AND
ACTIONS



PLAN
DEVELOPMENT

The regional transportation safety plans provide a framework for organizing stakeholders to identify, analyze, and prioritize safety improvements on local roads.

Process Timeline



- **Kickoff with Planning Agency:** Month 1
- **Promote Safety:** Months 1 and 2
 - Marketing Document
 - Engage Stakeholders
- **Crash Analysis Round 1:** Month 2
- **Stakeholder Meeting #1:** Month 3
- **Crash Analysis Round 2:** Month 4
- **Stakeholder Meeting #2:** Month 5
- **Action Plan:** Month 6
- **Develop and Finalize Plan:** Months 7 and 8

Other Potential Project Steps



SYSTEMIC SAFETY IMPROVEMENTS:

Our team can help local partners develop a systemic safety project and secure resources for implementation.



ROAD SAFETY AUDITS & SAFETY STUDIES:

Our team can help local partners complete a road safety audit or safety study, identify countermeasures and apply for HSIP funds.

ODOT's Highway Safety Program is providing free consultant assistance to local agencies and regional planning organizations to assist with safety project development and funding applications.

https://ODOT.formstack.com/forms/local_safety_assistance_request



EVERY MOVE YOU MAKE

			
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**TOWARD
ZERO DEATHS**

			
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Transportation Safety Plans

Approach and Outcomes

Creating Buy-In

Eliminating Transportation-Related Fatalities and Serious Injuries

No one wants to lose a loved one. More importantly, no one wants to lose a loved one to something preventable, like a transportation-related crash. To reduce the likelihood of these events, Ohio has committed to the goal of Toward Zero Deaths, meaning even one death on the transportation network is too many.

Achieving progress toward this goal is not impossible—the Ohio Department of Transportation (ODOT) and other transportation and safety stakeholders regularly analyze crash data to reveal the top contributors to severe crashes and identify solutions. However, to actually make it to zero, everyone in Ohio needs to play a role.

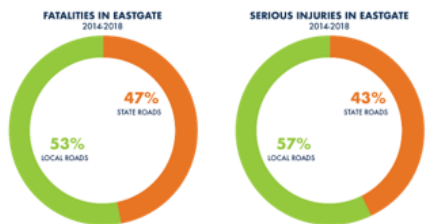


Between 2009 and 2018, the Eastgate Regional Council of Governments (Eastgate) planning area experienced an average of 40 fatalities and 301 serious injuries per year. The development of a safety plan for the region will help local stakeholders identify the key needs, develop implementable solutions and ultimately contribute toward that zero goal.



The Safety of Ohio's Local Roads

Ohio has 121,000 miles of road, of which 83 percent are considered local roads and are not maintained by ODOT, but by cities and villages, townships and counties. From 2012 - 2016, 53 percent of all fatalities and 62 percent of all serious injuries in Ohio occurred on the locally-maintained system. In the Eastgate planning area, 53 percent of the fatalities and 57 percent of the serious injuries occurred on local roads.



A Solution – Regional Road Safety Plan

ODOT recognizes the need to address these statistics and is encouraging the development of Regional Safety Plans to reduce them. The Eastgate plan will provide a framework for identifying, analyzing and prioritizing roadway safety improvements. Upon completion, local stakeholders will have a prioritized list of strategies and projects that will be eligible for ODOT safety funding.

Safety Challenges in the Eastgate Region

A major component of the Eastgate Regional Safety Plan will be understanding the most critical safety needs to be able to allocate time, resources and funding.

How do we get to zero?



What are the predominant crash types?



What are the major safety concerns?



Creating Buy-In

Where are crashes occurring?

MAHONING & TRUMBULL COUNTIES



Safety Solutions in the Eastgate Region

Motor vehicle-related crashes can be prevented. In some instances, roadway features can be improved to limit the severity of crashes; in others, stopping people from engaging in unsafe behaviors is key; but in most cases, it's both. To reduce crashes related to infrastructure and driver error, local stakeholders from an array of disciplines will be asked to identify proven strategies, actions, programs and projects. These will be included in the Eastgate Safety Plan, outlining an implementation approach to fewer fatalities and serious injuries.

Types of Solutions



Get Engaged

Stakeholder input will be critical to identifying the safety needs in the region, but more importantly, the solutions. Two meetings will be held over the course of plan development to inform:



Join us to Get Involved

Stakeholder Meeting #1

Wednesday, May 8th, 2019 from 10AM-12PM

Eastgate Regional Council of Governments, 100 E Federal St., #1000, Youngstown, OH 44503

Engaging Stakeholders

Meeting #1

- Purpose of Plan
- Review crash data
 - Develop safety vision, goal, and objectives
 - Select emphasis areas
- Review crash locations and identify possible priorities

Meeting #2

- Review crash data
 - Identify proven strategies and actions to reduce severe crashes by emphasis area
- Finalize priority crash locations



Establishing a Framework



VISION

A safer Champaign County



GOAL

Reduce fatalities and serious injuries through improved infrastructure and driver behavior.



OBJECTIVE

Reduce fatalities and serious injuries by 1 percent per year.

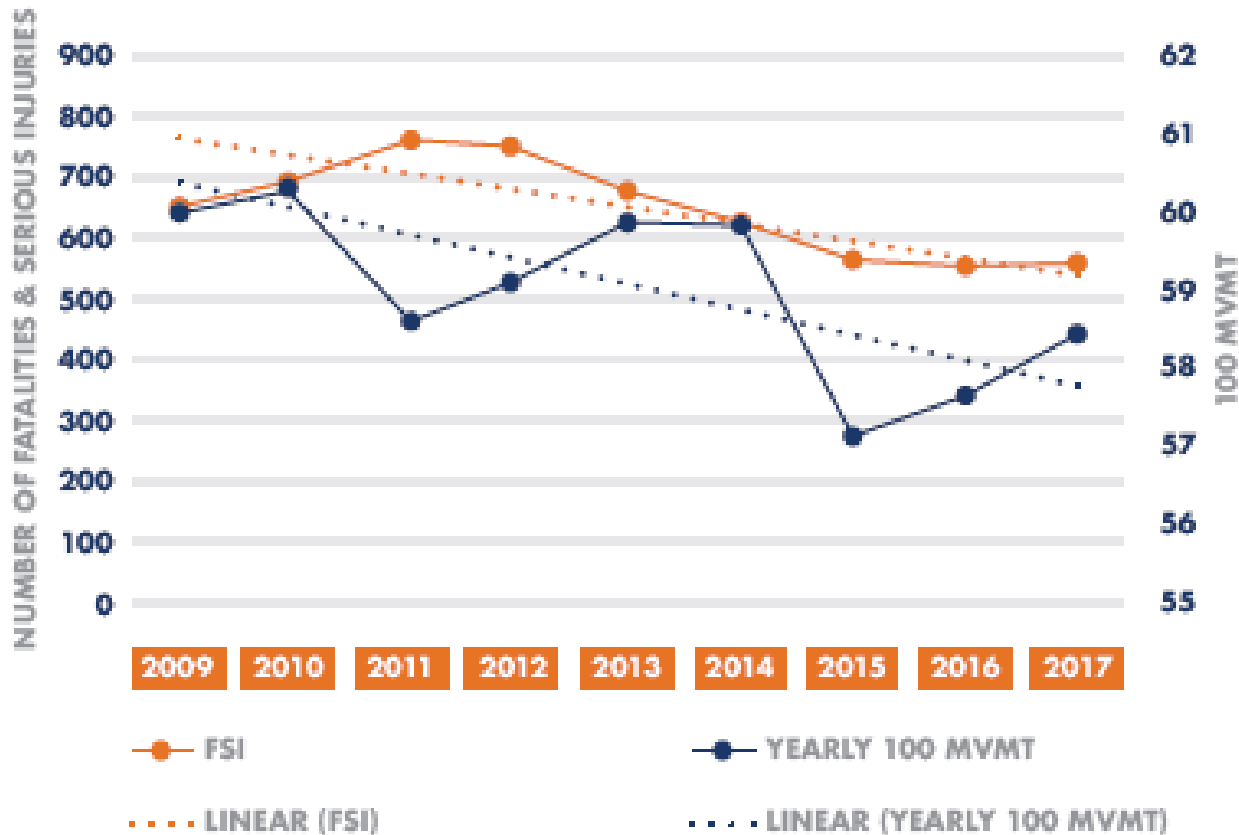
POLICIES PROGRAMS PROJECTS



Identifying Safety Priorities

Crash Analysis	
Context Setting	Crash Types by Jurisdiction
Regional Crash Trends	Crash Type by Maintaining Authority
Regional Safety Performance and Targets	Contributing Factors to Crashes
Crash Trends by Jurisdiction	Emphasis Area Analysis
Crash Trends by Maintaining Authority	Crash Density Maps
Regional Crash Types	Priority Location Lists

Context Setting



Crash Trends



YEAR	FATAL CRASHES	INJURY CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES
2014	51	4,451	12,092	16,594
2015	55	4,877	13,253	18,185
2016	47	5,092	13,610	18,749
2017	57	4,613	13,111	17,781
2018	47	4,484	12,832	17,363
5-YEAR TOTAL	257	23,517	64,898	88,672
ANNUAL AVERAGE	51	4,703	12,980	17,734

YEAR WITH THE HIGHEST VALUE FOR EACH RESPECTIVE COLUMN



Occupant Statistics



YEAR	FATALITIES	SERIOUS INJURIES	MINOR INJURIES	NO INJURIES	TOTAL PEOPLE INVOLVED
2014	56	566	6,096	31,254	37,972
2015	63	505	6,733	34,907	42,208
2016	48	505	7,256	36,310	44,119
2017	65	500	6,406	34,950	41,921
2018	53	398	6,214	34,531	41,196
5-YEAR TOTAL	285	2,474	32,705	171,952	207,416
ANNUAL AVERAGE	57	495	6,541	34,390	41,483

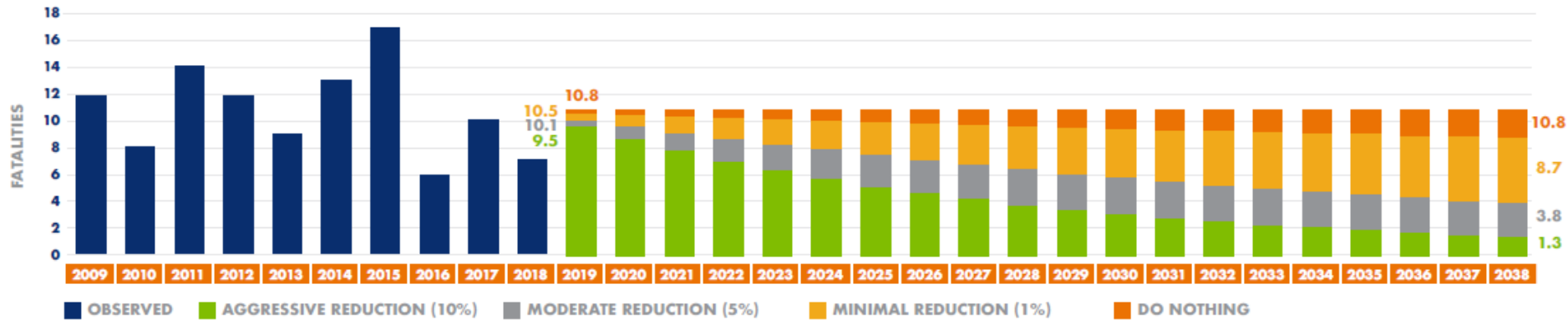
YEAR WITH THE HIGHEST VALUE FOR EACH RESPECTIVE COLUMN



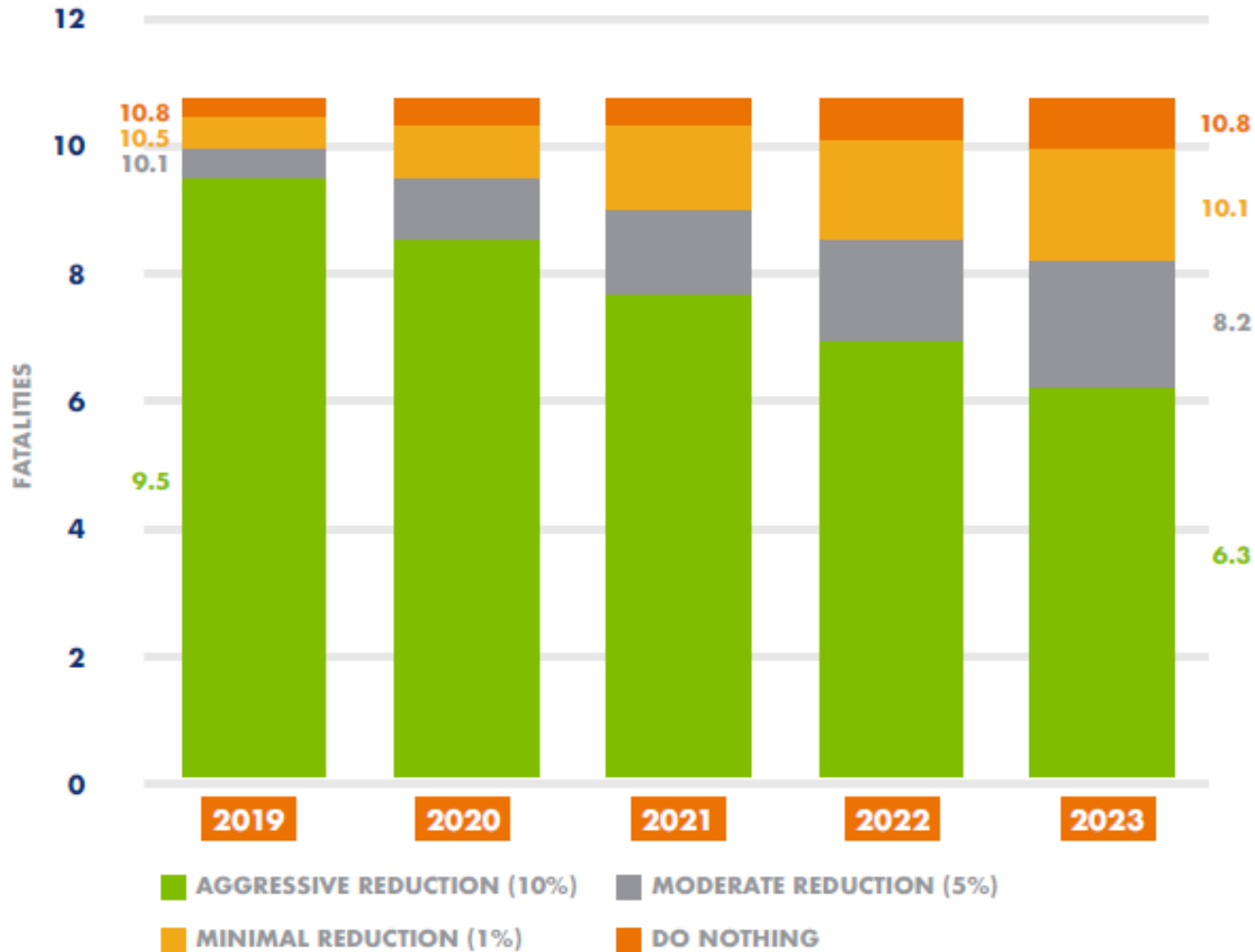
Safety Performance



PROJECTED FORECAST FATALITIES



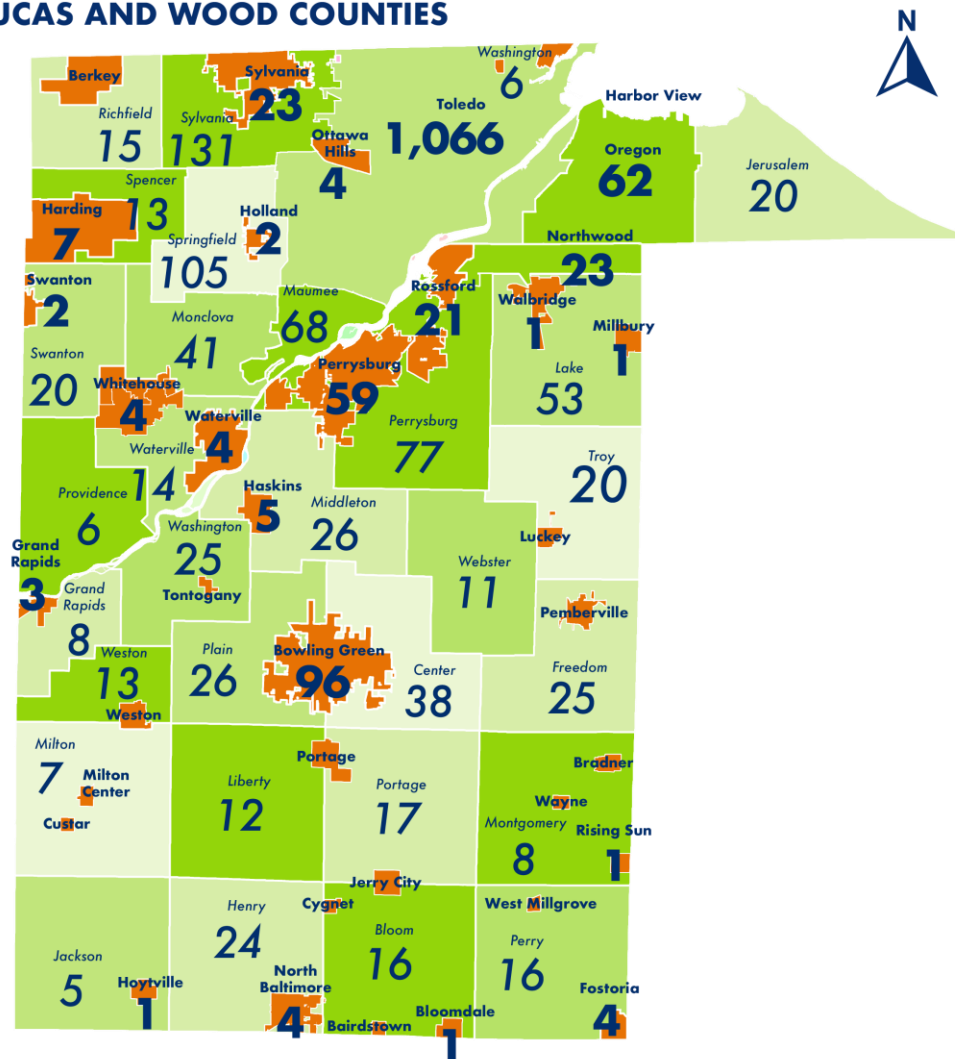
Safety Performance



Crashes by Jurisdiction



LUCAS AND WOOD COUNTIES



Crashes by Maintaining Authority



	FATAL INJURY	SERIOUS INJURY	VISIBLE INJURY	POSSIBLE INJURY	NO INJURY	GRAND TOTAL
STATE HIGHWAY AGENCY	83	563	2,009	2,365	14,465	19,485
STATE TOLL AUTHORITY	3	21	125	75	987	1,211
COUNTY HIGHWAY AGENCY	26	191	702	610	3,389	4,918
CITY OR MUNICIPAL HIGHWAY AGENCY	132	1,130	5,081	9,720	42,117	58,180
TOWN OR TOWNSHIP HIGHWAY AGENCY	11	74	244	222	1,871	2,422
OTHER/UNCLASSIFIED	2	34	147	204	2,069	2,456
GRAND TOTAL	257	2,013	8,308	13,196	64,898	88,672



Crash Types



COUNTYWIDE CRASH TYPES, 2008–2017

	GRAND TOTAL	FATAL INJURY	SERIOUS INJURY	FSI RATE
REAR END	26,276	15	356	1.4%
SIDESWIPE - PASSING	12,868	4	125	1.0%
FIXED OBJECT	11,276	74	398	4.2%
LEFT TURN	9,781	24	285	3.2%
ANGLE	8,562	41	320	4.2%
PARKED VEHICLE	4,361	3	36	0.9%
BACKING	3,689	0	9	0.2%
ANIMAL	3,682	1	14	0.4%
RIGHT TURN	2,823	1	30	1.1%
HEAD ON	1,232	25	108	10.8%
PEDESTRIAN	754	41	155	26.0%
OTHER OBJECT	736	2	6	1.1%
SIDESWIPE - MEETING	730	5	25	4.1%
PEDALCYCLES	581	7	54	10.5%
OTHER NON-COLLISION	572	1	17	3.1%
OVERTURNING	531	11	68	14.9%
UNKNOWN	167	0	4	2.4%
TRAIN	50	2	3	10.0%
OTHER NON-VEHICLE	1	0	0	0.0%
GRAND TOTAL	88,672	257	2,013	

Crash Types by Jurisdiction



	FIXED OBJECT	REAR END	ANIMAL	ANGLE
ADAMS TOWNSHIP	37%	5%	34%	3%
CHRISTIANBURG	10%	10%	0%	10%
CONCORD TOWNSHIP	46%	3%	25%	8%
GOSHEN TOWNSHIP	41%	5%	29%	5%
HARRISON TOWNSHIP	50%	5%	23%	6%
JACKSON TOWNSHIP	42%	9%	11%	15%
JOHNSON TOWNSHIP	30%	15%	26%	4%
MAD RIVER TOWNSHIP	38%	9%	20%	10%
MECHANICSBURG	9%	16%	3%	10%
MUTUAL	0%	0%	100%	0%
NORTH LEWISBURG	28%	12%	0%	13%
RUSH TOWNSHIP	45%	5%	19%	8%
SAINT PARIS	13%	24%	4%	7%
SALEM TOWNSHIP	37%	13%	18%	7%
UNION TOWNSHIP	42%	7%	24%	7%
URBANA	10%	27%	4%	13%
URBANA TOWNSHIP	30%	16%	19%	10%
WAYNE TOWNSHIP	42%	6%	29%	5%
WOODSTOCK	60%	0%	20%	0%
COUNTYWIDE	28%	16%	16%	9%

■ Above Regional Average
■ Below Regional Average

■ ABOVE COUNTYWIDE AVERAGE ■ BELOW COUNTYWIDE AVERAGE



Crash Types by Maintaining Authority



	STATE	COUNTY HIGHWAY	CITY/VILLAGE HIGHWAY	TOWNSHIP HIGHWAY	GRAND TOTAL
FIXED OBJECT	876	516	350	363	2,105
REAR END	383	42	742	14	1,181
ANIMAL	679	237	147	111	1,174
ANGLE	246	78	360	26	710
SIDESWIPE-PASSING	119	29	293	12	453
LEFT TURN	134	35	264	15	448
PARKED VEHICLE	21	21	311	10	363
BACKING	30	19	201	23	273
OVERTURNING	75	40	10	37	162
RIGHT TURN	26	15	107	5	153
HEAD ON	73	26	33	12	144
OTHER NON-COLLISION	64	25	21	17	127
SIDESWIPE MEETING	50	19	21	14	104
PEDALCYCLES	3	3	41	0	47
PEDESTRIAN	1	4	37	5	47
OTHER OBJECT	23	2	11	4	41
UNKNOWN	16	5	14	3	38
TRAIN	0	2	1	0	3
GRAND TOTAL	2,819	1,119	2,264	671	7,573



Crash Type Analysis

TMACOG

SIDESWIPE PASSING-RELATED FATAL AND INJURY CRASHES CRASH TREE DIAGRAM — ALL ROADS 2009 - 2018



Contributing Factors



	STATEWIDE	TMACOG REGION	TMACOG REGION - LOCAL ROADS ONLY
ROADWAY DEPARTURE	37.6%	26.6%	23.1%
INTERSECTION	36.6%	51.5%	59.5%
RAILROAD CROSSING	0.3%	0.2%	0.3%
ALCOHOL RELATED INVOLVEMENT	17.1%	13.7%	14.3%
RESTRAINTS NOT USED DRIVER/ OCCUPANTS	19.3%	19.8%	18.4%
SPEED RELATED INVOLVEMENT	23.9%	15.8%	14.1%
YOUNG DRIVER INVOLVEMENT (15-25)	37.3%	40.7%	42.0%
OLDER DRIVER INVOLVEMENT (65+)	17.4%	18.3%	17.6%
DISTRACTED DRIVERS	2.8%	5.6%	4.8%
MOTORCYCLE DRIVER/PASSENGER	8.6%	10.4%	9.9%
PEDESTRIAN INVOLVEMENT	11.4%	6.9%	8.6%
BICYCLE INVOLVEMENT	6.4%	2.5%	3.4%
WORK ZONE RELATED	2.1%	3.6%	1.7%
DRUG RELATED INVOLVEMENT	1.6%	5.1%	4.3%
REAR END	7.4%	16.8%	14.8%

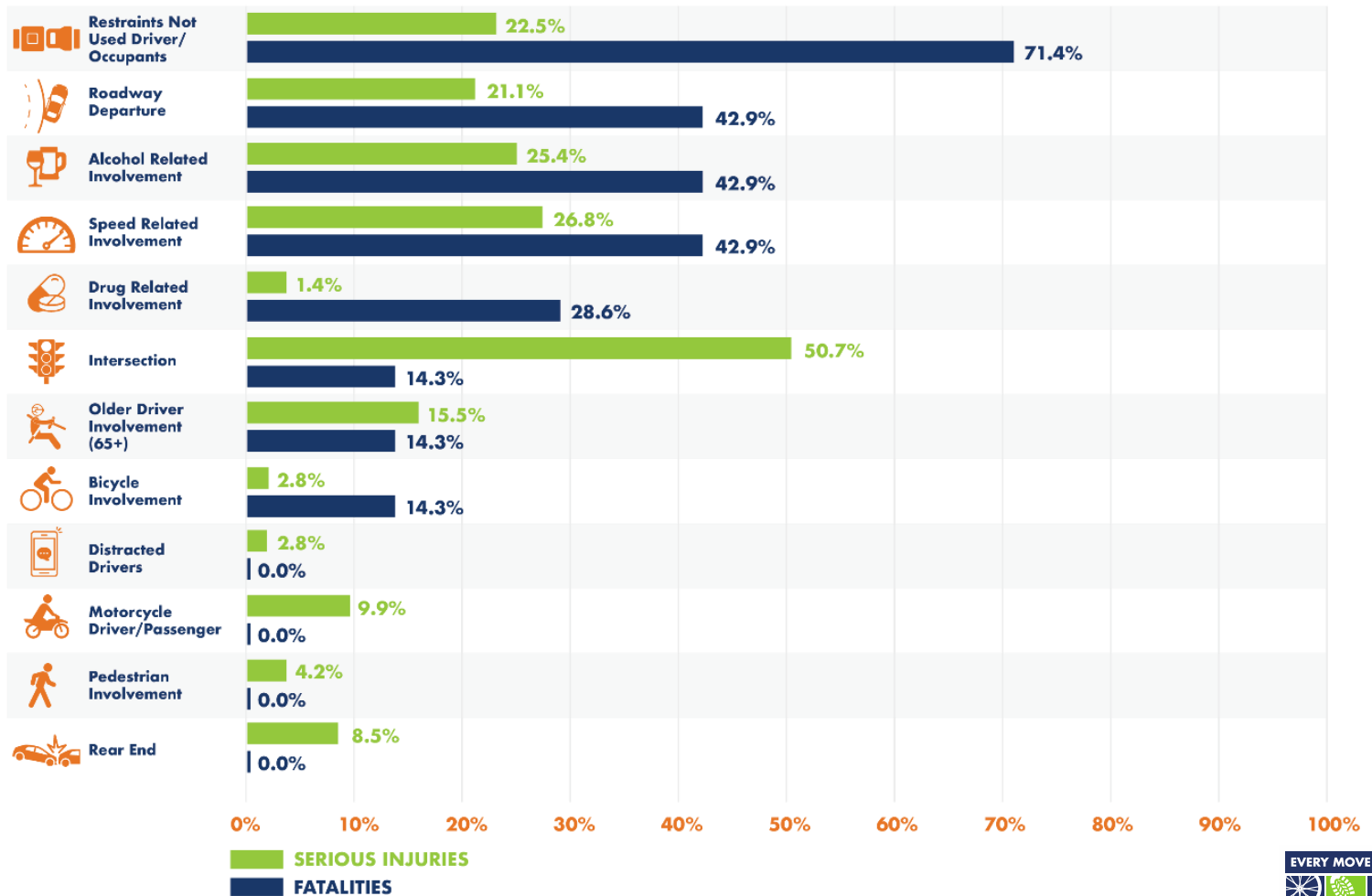
■ Above Statewide Average
 ■ Below Statewide Average



Emphasis Areas



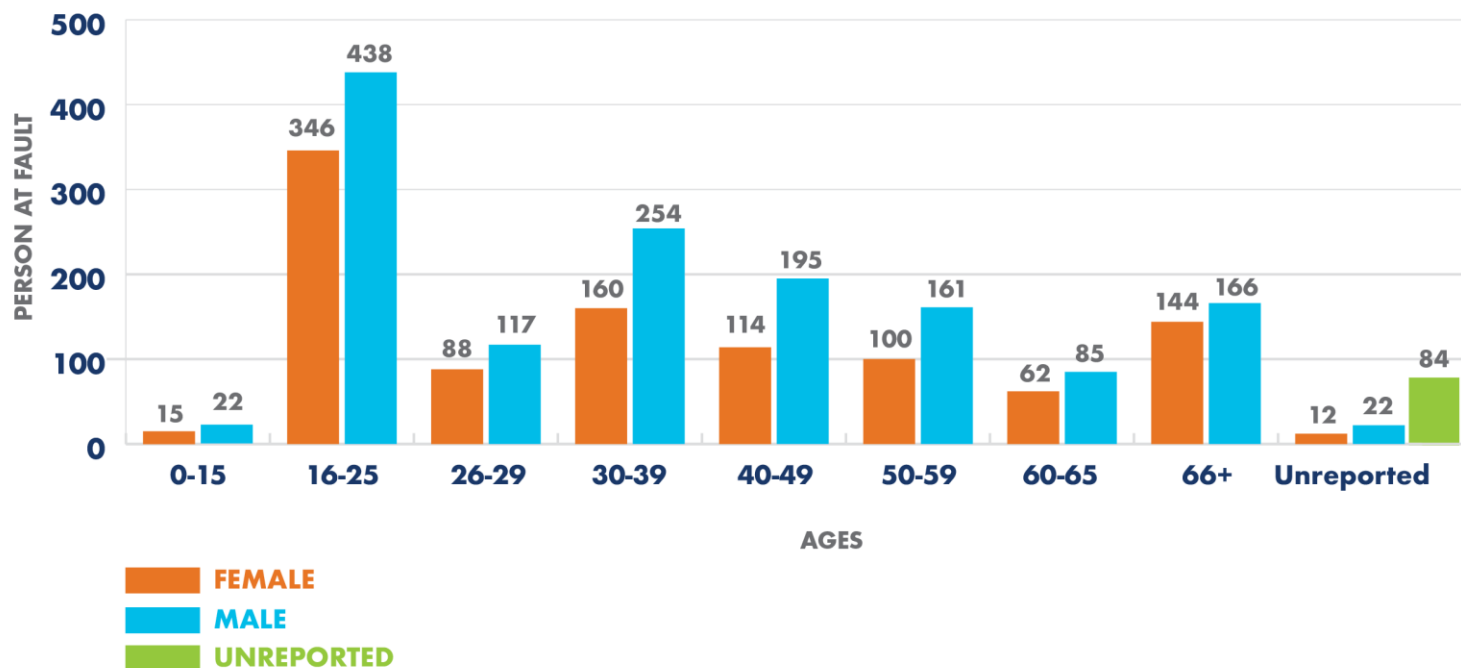
YOUNG DRIVER



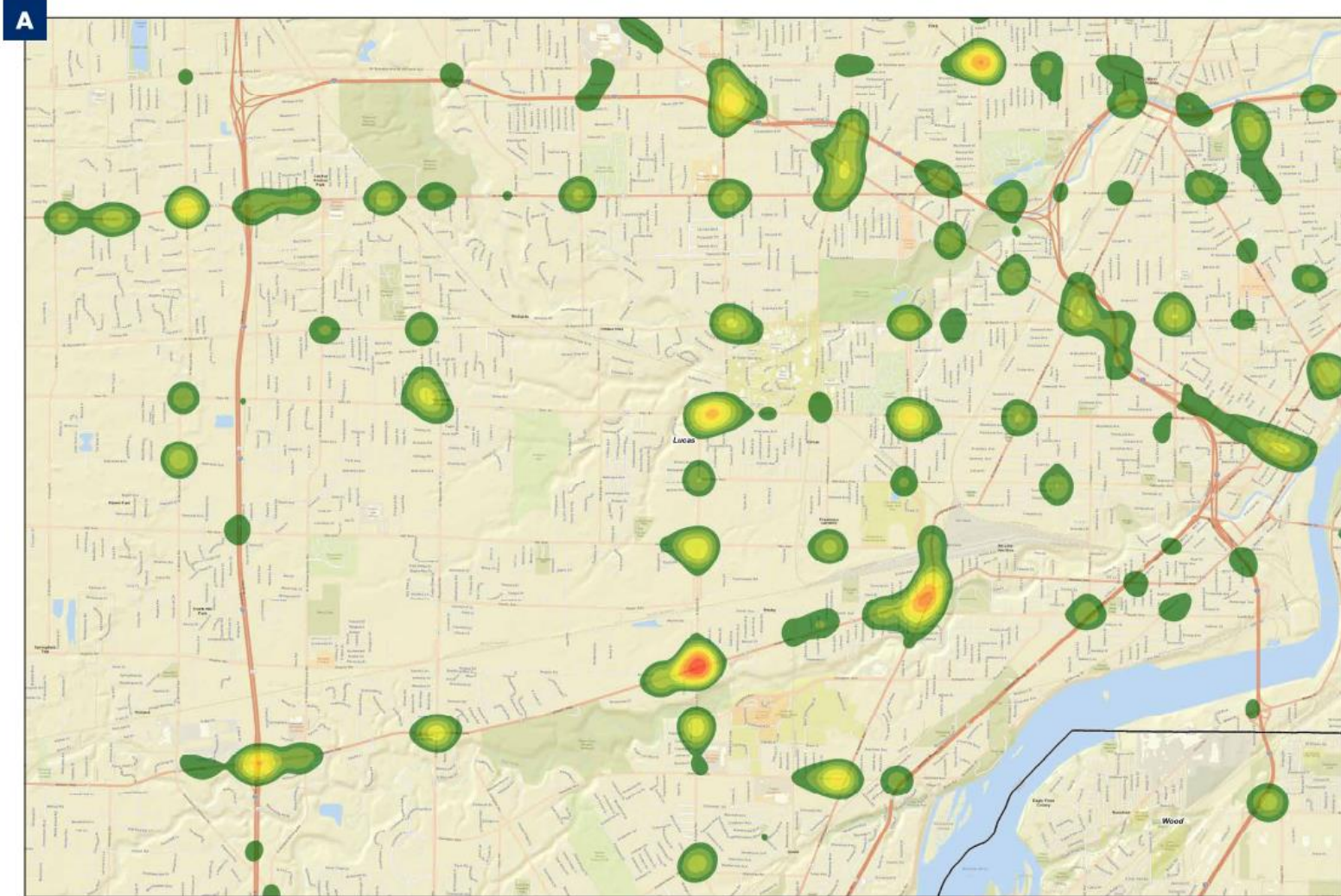
Emphasis Area Analysis

TMACOG

INTERSECTION-RELATED FATAL AND INJURY CRASHES AGE/GENDER — ALL ROADS 2009 - 2018



Crash Maps



Creating a Roadmap



INTERSECTIONS



EDUCATION STRATEGIES AND ACTIONS



Strategy 1: Conduct enforcement and public outreach at selected locations with a significant number of intersection crashes.

Timeline: 0-2 years

Leaders	Description	Performance Measure
Jurisdiction Engineers	Prioritize intersections for combined education and enforcement efforts. Overlay impaired driver, unbelted and young driver crash data on top 20 intersections to further prioritize and select locations.	Map overlays completed
Urbana Daily Citizen	Highlight major intersection safety concerns through media outlets to raise awareness and encourage behavioral changes.	# of media messages shared

Strategy 2: Focus education on issues related to sight distances approaching and at, intersections.

Timeline: 0-2 years

Leaders	Description	Performance Measure
Jurisdiction engineers	Educate property owners through mailers or another mechanism about proper landscape maintenance near intersections.	Educational content developed
Jurisdiction engineers	Coordinate with the Farm Bureau to educate farmers about sight distance obstructions (high crops) near intersections.	Coordination meeting with Farm Bureau

SEAT BELTS



Strategy 3: Coordinate safety belt messages developed by multi-agency communication committee.

Timeline: Annually, during campaign

Leaders	Description	Performance Measure
Highway Safety Office/ Champaign County	Coordinate marketing and outreach locally during the Ohio statewide Click-It-Or-Ticket events.	# of agencies sharing materials

INFRASTRUCTURE STRATEGIES AND ACTIONS



Strategy 1: Utilize infrastructure approaches to minimize the impacts of unbelted crashes.

Timeline: Ongoing

Leaders	Description	Performance Measure
Jurisdiction engineers	Provide clear zones to remove obstructions and limit vehicle ejections.	# of clear zones established

ENFORCEMENT STRATEGIES AND ACTIONS



Strategy 1: Support law enforcement in their role educating citizens about seat belt use and enforcing laws.

Timeline: Ongoing

Leaders	Description	Performance Measure
Champaign County	Provide crash maps to local police departments showing unbelted	Crash maps developed and disseminated



Creating a Roadmap

Name of Location	Local Rank	State Rank	Maintaining Authority	# Fatal Crashes	# Injury Crashes	# Total Crashes	Corridor Hot Spot Correlation	Emphasis Area Overlap
Ludlow (SR 814) & US 36	1	--	ODOT	1	6	15	--	I
Main (US 68) & Court/Scioto (US 36)/Market/Water	2	--	City of Urbana	0	29	169	1	A, I, U, Y
Jefferson & Scioto (US 36)/Court	3	401	City of Urbana	0	18	75	--	A, I, U, Y
Valley Pike & Storms Creek/County Line	4	--	Champaign County	1	3	12	--	I
US 68 & Urbana	5	--	ODOT	0	7	11	--	A, I, U, Y
Ames & US 36/SR 29	6	--	City of Urbana	0	8	17	1	A, I, U, Y
SR 560 & US 36	7	111	ODOT	0	4	11	--	I
Springfield & Main (US 36)	8	248	City of Saint Paris	0	2	13	2	I, U
Oakland (SR 29) & Miami (US 36)	9	--	City of Urbana	0	6	13	1	A, I, U, Y
SR 559 & US 36	10	--	ODOT	1	3	9	--	A, I
Three Mile & SR 29	11	133	ODOT	0	6	10	--	A, I, U, Y
SR 4 & SR 161	12	--	ODOT	0	3	11	--	I
High/Russell & Miami (US 36)/Court/Market	13	--	City of Urbana	0	4	18	1	A, I, U, Y
East Lawn & Scioto (US 36)	14	--	City of Urbana	0	2	16	1	A, I, U, Y
Oakland (SR 29) & Light	15	--	City of Urbana	1	1	10	1	A, I, U, Y
Kenton & Court/Scioto (US 36)/Market/Water	16	--	City of Urbana	0	3	21	1	A, I, U, Y





QUESTIONS?

EVERY MOVE YOU MAKE



TOWARD
ZERO DEATHS



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