

March 9, 2022



# Regional Safety Strategy

*In Association with:* 

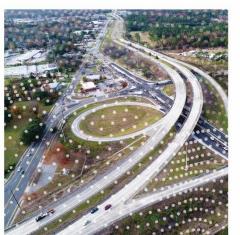
























### Project Team

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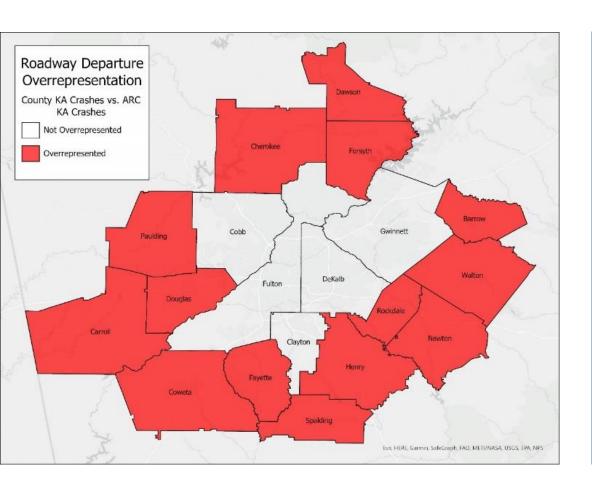


### Recap of Increasing Program Effectiveness

- Focus on fatal and serious injury crashes
- Focus on crash types
  - Intersection
  - Roadway Departure
  - Pedestrian
  - Bicycle
- **Focus** on facility types
- **Focus** on risk factors

Potential Focus Crash Types [Georgia SHSP Emphasis Areas]	Average Fatalities (per year)	Average Serious Injuries (per year)		
Intersection Related	325	1744		
Roadway Departure Related	175	645		
Pedestrian and Bicycle Related	138	250		
Older Driver Related	98	406		
Motorcycle Related	74	325		
Impaired Driving	57	226		
Young Driver Related	51	378		
Aggressive Driving	34	106		
Distracted Driving	11	30		

## Roadway Departure Focus Facilities



Facility ID	Area Type	Owner	Functional Class	Lanes
1	Urban	GDOT	Interstate	6+
2	Urban	GDOT	Minor arterial	2
3	Urban	County	Minor arterial	2
4	Urban	County	Major collector	2

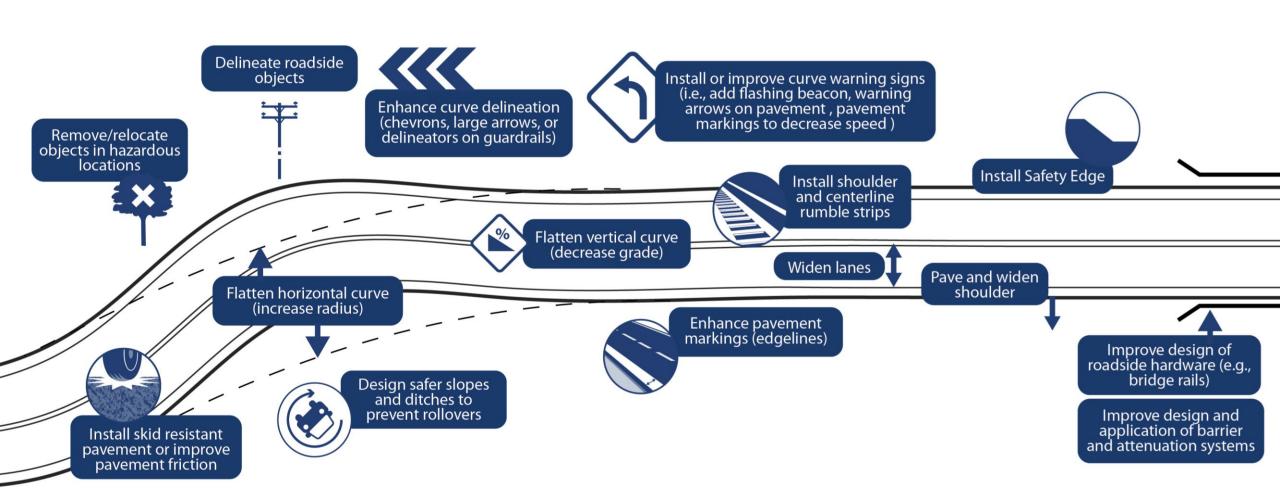
## Roadway Departure Risk Factors

Input	All Key Facilities	Arterials Only
Segment length (mi)	+++	+++
Segment is an interstate	+++	n/a
AADT over 30,000	+++	n/a
AADT between 5,000 and 15,000	n/a	++
4 or more thru lanes	++	n/a
GDOT Owned	+++	n/a
Posted speed limit 45 mph or above	+++	+++

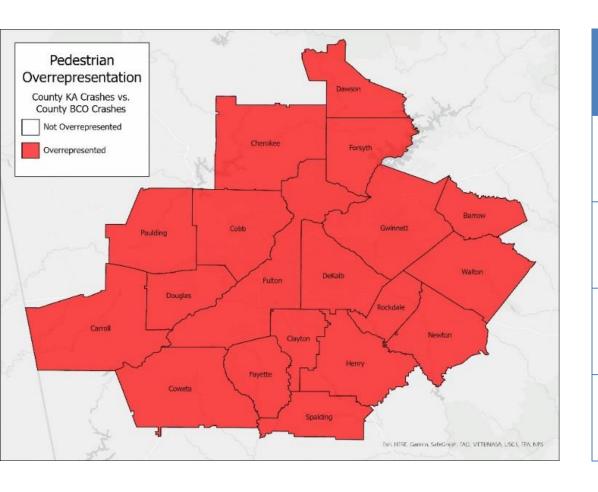
#### Risk of severe roadway departure crash increases as:

- Traffic volume increases
- Number of lanes increases
- Posted speed increases
- Shoulder width decreases
- Median width decreases

## Roadway Departure Countermeasures



### Pedestrian Focus Facilities



Facility ID	Area Type	Owner	Functional Class	Lanes
1	Urban	GDOT	Other principal arterials	6+
2	Urban	GDOT	Other principal arterials	4
3	Urban	GDOT	Minor arterial	4
4	Urban	County	Minor arterial	4

### Pedestrian Risk Factors

Input	Other Principal Arterials	Minor Arterials
Segment length (mi)	+++	+++
AADT over 9,000	+	+++
4 or more thru lanes	+	+++
GDOT Owned	+++	+
Posted speed limit 35 mph and under	-	-
Bus stop within 100 ft (2021)	+++	+++
High frequency bus service (3/4 Qtr Mi; 2015)	+++	n/a

### Risk of severe pedestrian crash increases as:

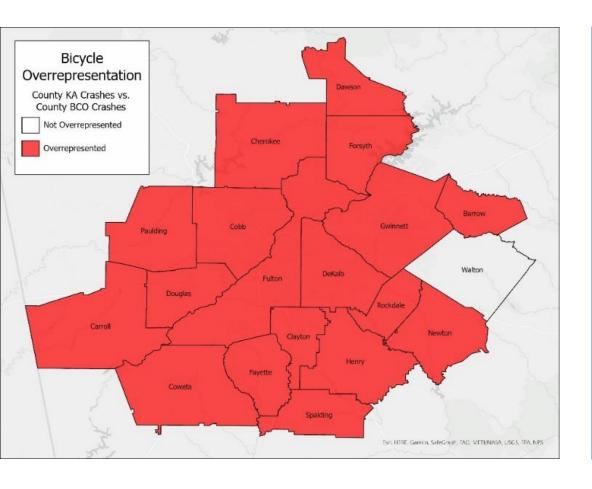
- Higher traffic volumes
- More lanes of traffic
- Higher speeds
- Areas with higher pedestrian activity

### Probe Speed Data

- What was the average vehicle speed at the time of the crash?
- Compared average speed in:
  - Lower severity crashes (BCO); left bar
  - Higher severity crashes (KA); right bar
- Takeaways:
  - Speeds are notably higher in severe crashes
  - Speeds are increasing over time
  - "25 Alive" research holds



## Bicycle Focus Facilities



Facility ID	Area Type	Owner	Functional Class	Lanes
1	Urban	GDOT	Other principal arterials	4
2	Urban	GDOT	Minor arterial	4
3	Urban	GDOT	Minor arterial	2
4	Urban	City	Major collector	2

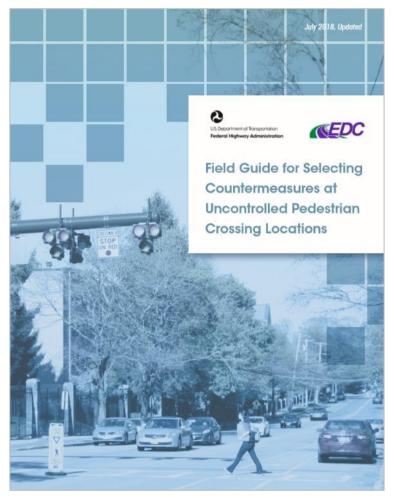
## Bicycle Risk Factors

Input	Minor Arterials & Major Collectors
Segment length (mi)	+++
AADT over 20,000	+++
4 or more thru lanes	++
GDOT Owned	+
Bus stop within 100 ft (2021)	+++
High frequency bus service (3/4 Qtr Mi; 2015)	+
Bicycle lane (non-separated)	+++
Multi-use path within 100 feet	+++

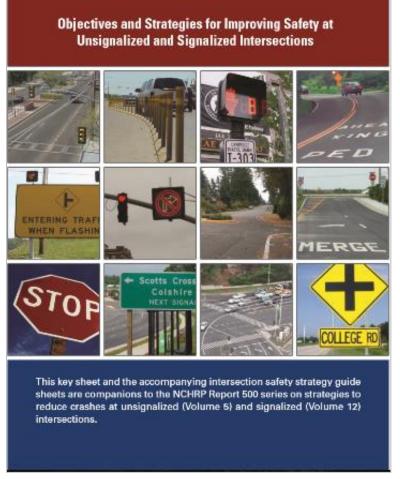
#### Risk of severe bicycle crash increases as:

- Higher traffic volumes
- More lanes of traffic
- Areas with higher bicycle activity

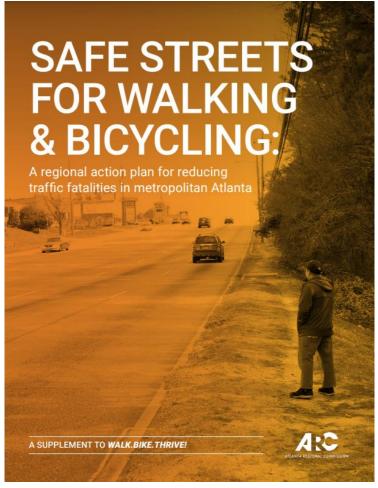
### Pedestrian and Bicycle Countermeasures



https://www.fhwa.dot.gov/innovation/every daycounts/edc\_4/STEP-field-guide.pdf



https://safety.fhwa.dot.gov/intersection/other topics/fhwasa08008/inter\_guide\_key.pdf



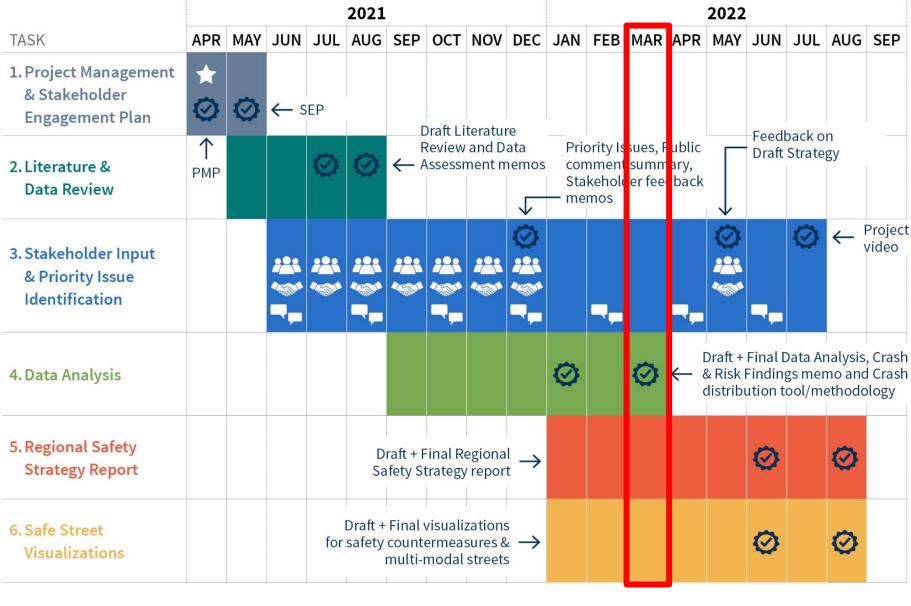
https://cdn.atlantaregional.org/wpcontent/uploads/arc-safe-streets-webviewrevjan20.pdf

	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000-15,000			Vehicle AADT >15,000		
<b>Roadway Configuration</b>	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
2 lanes (1 lane in each direction)									
3 lanes with raised median (1 lane in each direction)			Medians and lestrian Crossing Islands	Pedestrian Beaco	•	Road Diet	Sidew	valks	
3 lanes w/o raised median (1 lane in each direction with a two-way left-turn lane)			SPEED LIMIT ?	A sed lines Re					
4+ lanes with raised median (2 or more lanes in each direction)		(	hanging Speed Limits	Leading Per Interv		ectangular Rapid		•	
4+ lanes w/o raised median (2 or more lanes in each direction)		s	Street Lighting	Separated Lane	s	Neighborhood Greenway/ Bike Boulevard	Traffic C	Calming	
Refer to Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations									

Refer to Field Guide for Selecting Countermeasures at **Uncontrolled Pedestrian Crossing Locations**<a href="https://www.fhwa.dot.gov/innovation/everydaycounts/edc\_4/STEP-field-guide.pdf">https://www.fhwa.dot.gov/innovation/everydaycounts/edc\_4/STEP-field-guide.pdf</a>

### How Does This Influence Decisions?

- TIP / funding decisions
  - RSS will support project prioritization and funding allocation
  - Higher risk could equate to higher priority
- Project development decisions
  - RSS will identify key risk factors and related countermeasures
  - Opportunity to be proactive in planning and design







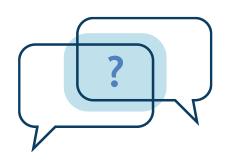


Groups





# Questions









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