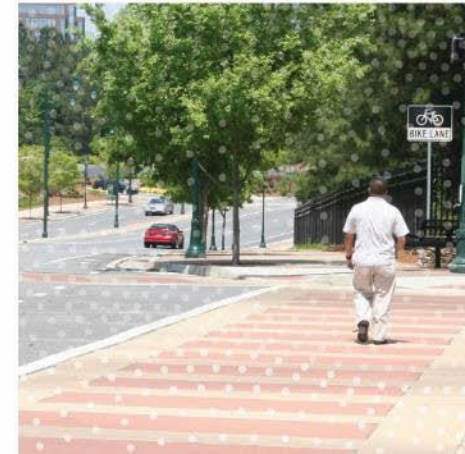


ARC's Regional Safety Strategy

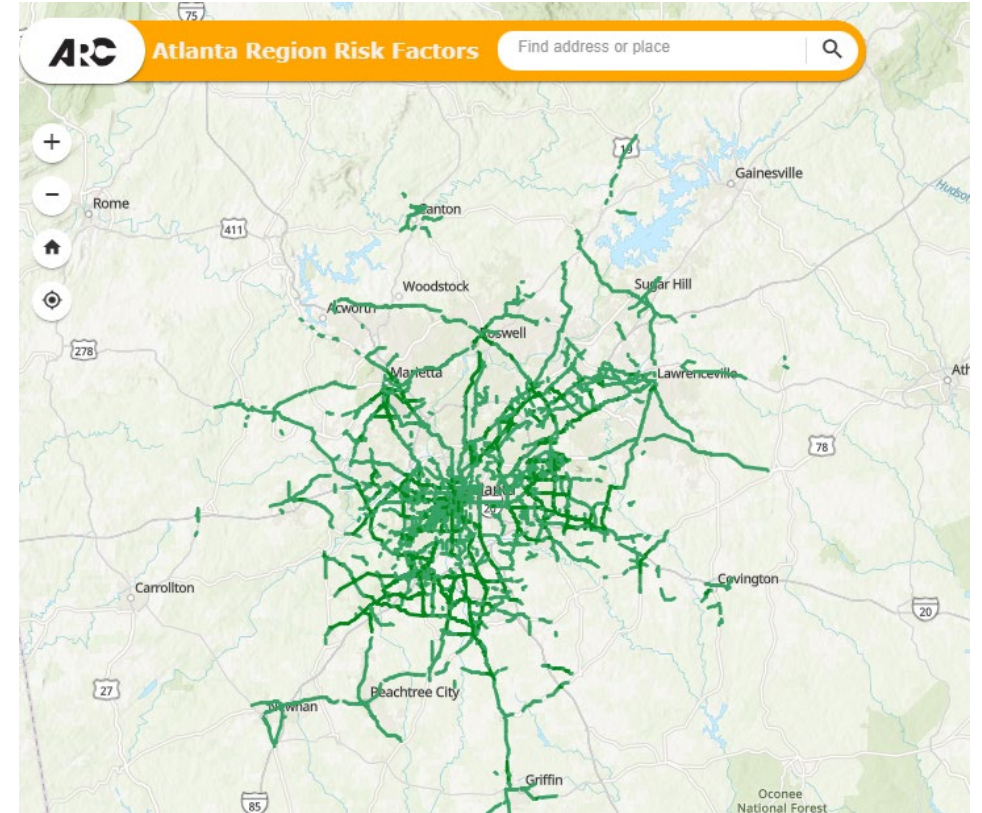
December 8, 2022



Links to Documents



[Final Regional Safety Strategy Report](#)

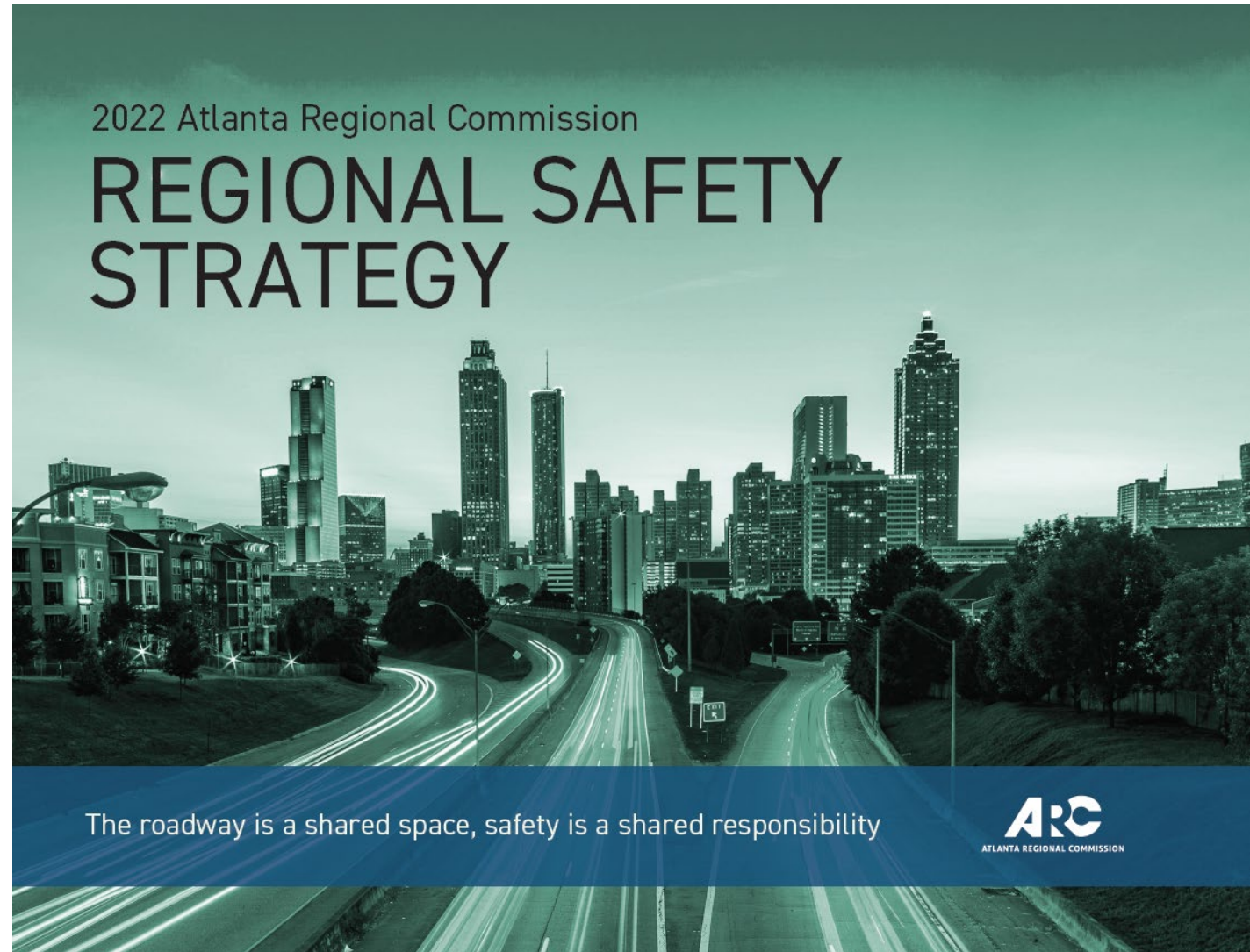


[Risk Factors web map](#)

What is the Regional Safety Strategy?

Regional safety plan to help ARC and its partners proactively achieve safety goals and build a safe transportation system for all users in the Atlanta region:

- Advances safety in a unified way
- Shifts towards more proactive approach, rather than reacting to past trends
- Address rising severe crash trends, fatalities & serious injuries, and maximize impact of funding



Key Engagement Takeaways

Safety & mobility,
competing or
complimentary?

Context is key

Equity is not
inherent in
countermeasures

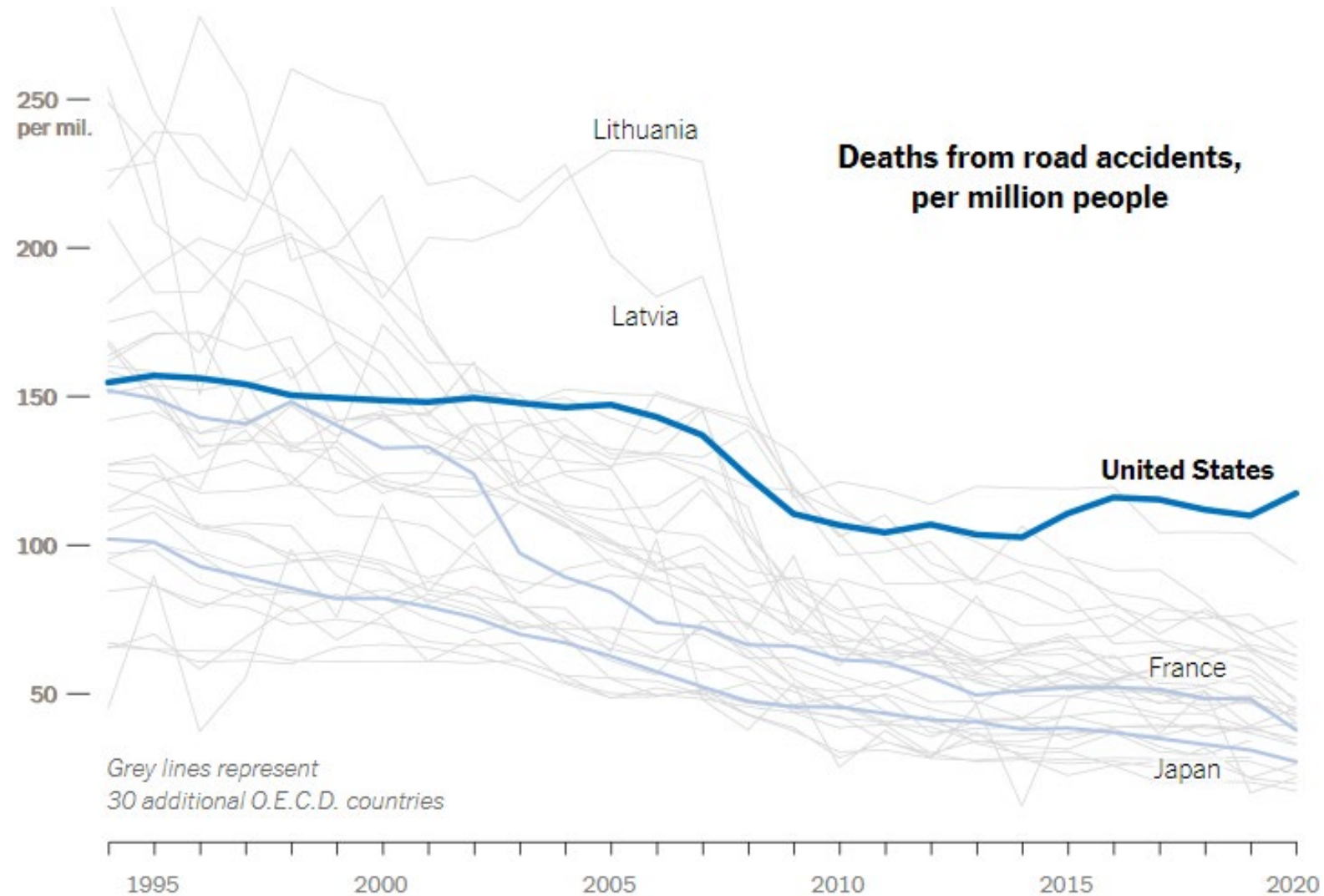
Education is
essential

Funding & process
are major challenges

Coordination is
needed among
practitioners, public,
and policy makers

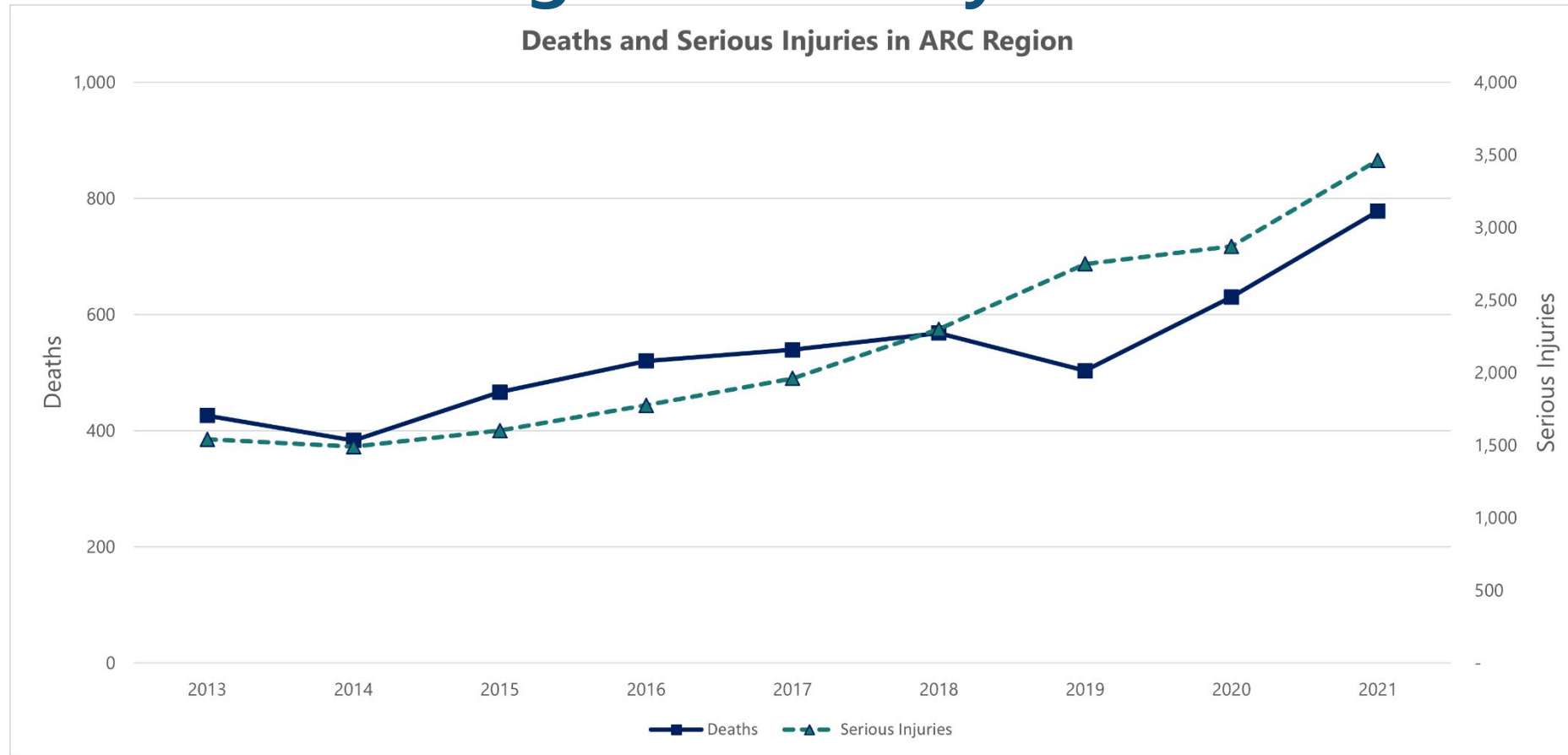
ARC's role: provide
guidance, data and
technical expertise,
advocacy

United States in Context



Source: OECD | NYT

What are the Regional Safety Issues?



- There are 230,000+ total crashes in the Atlanta region every year! Roughly 600 people die and more than 2,600 people are seriously injured.

The goal is **ZERO deaths** and **serious injuries** on public roads in the Atlanta region.

Vision Zero Goals

- Reaffirmation of Vision Zero goal
- ARC will adopt a 5% reduction goal each year for all safety targets.



A comprehensive,
data-informed
approach.

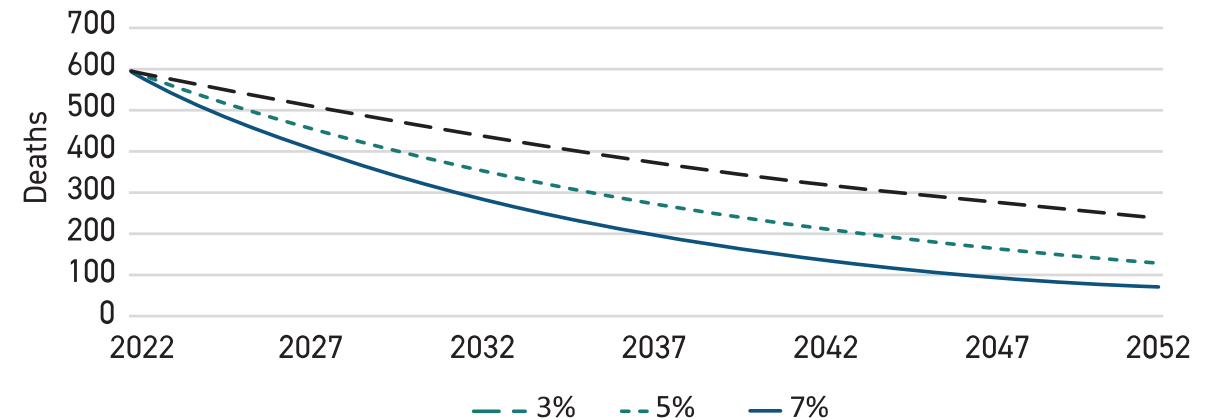


Steady incremental
investments guided
by Safe System
principles.



Targeted and
coordinated efforts
from all safety
stakeholders
throughout the
region.

Vision Zero Projections: Deaths

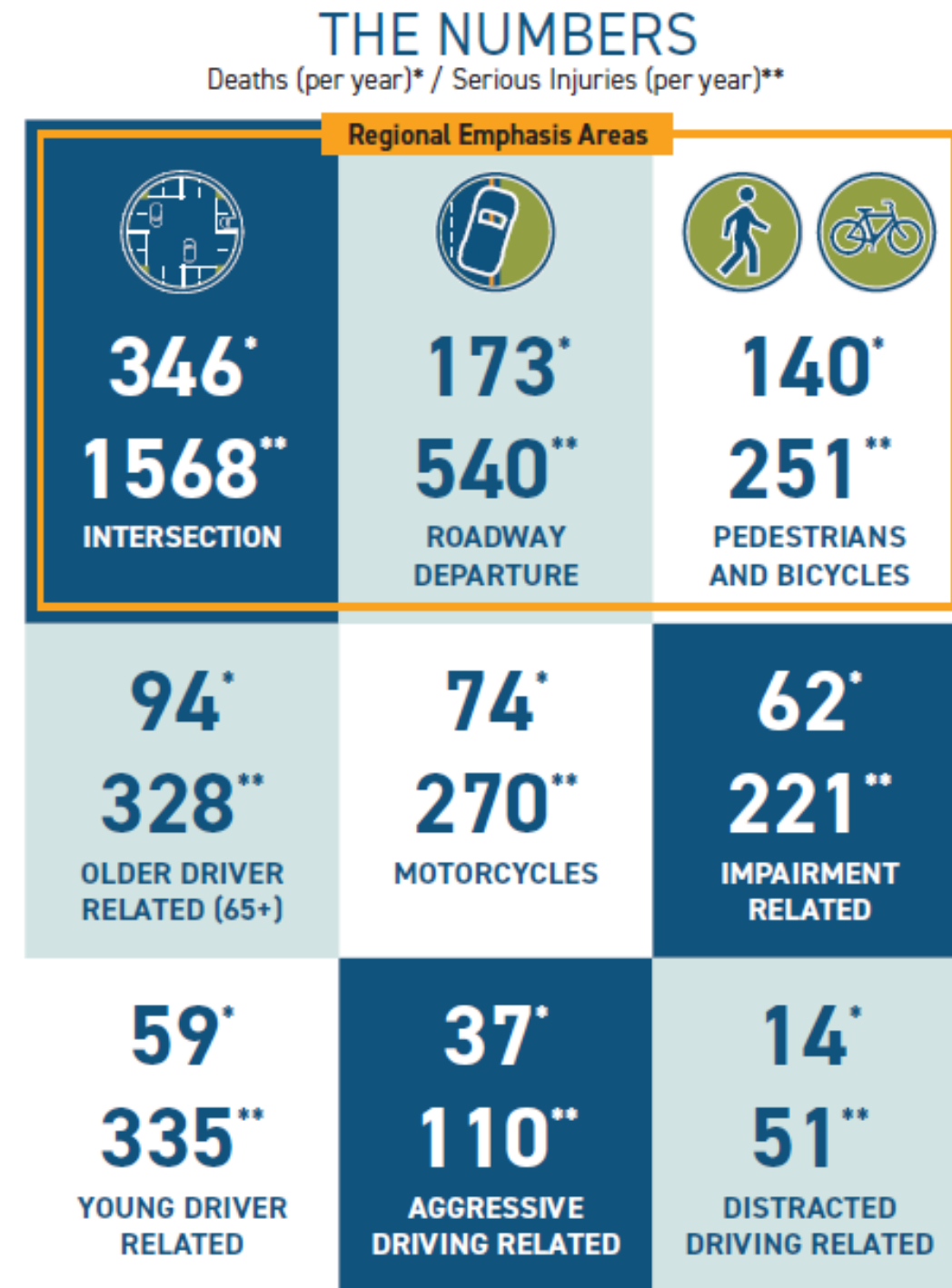


The road is a **shared space**; safety is a **shared responsibility**.

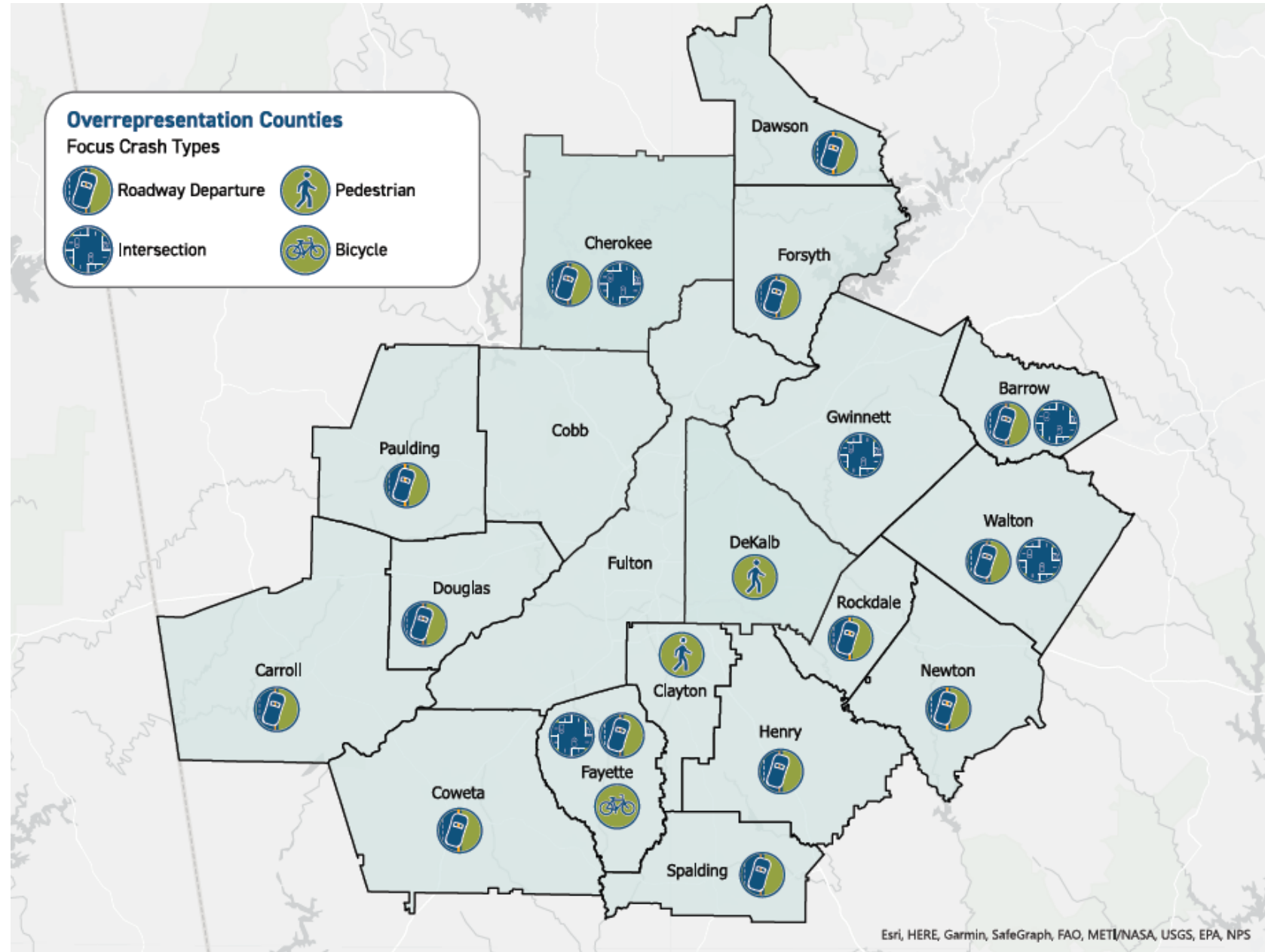
Intentional, targeted, and coordinated action is needed to move toward zero deaths and serious injuries.

What are the Regional Safety Issues?

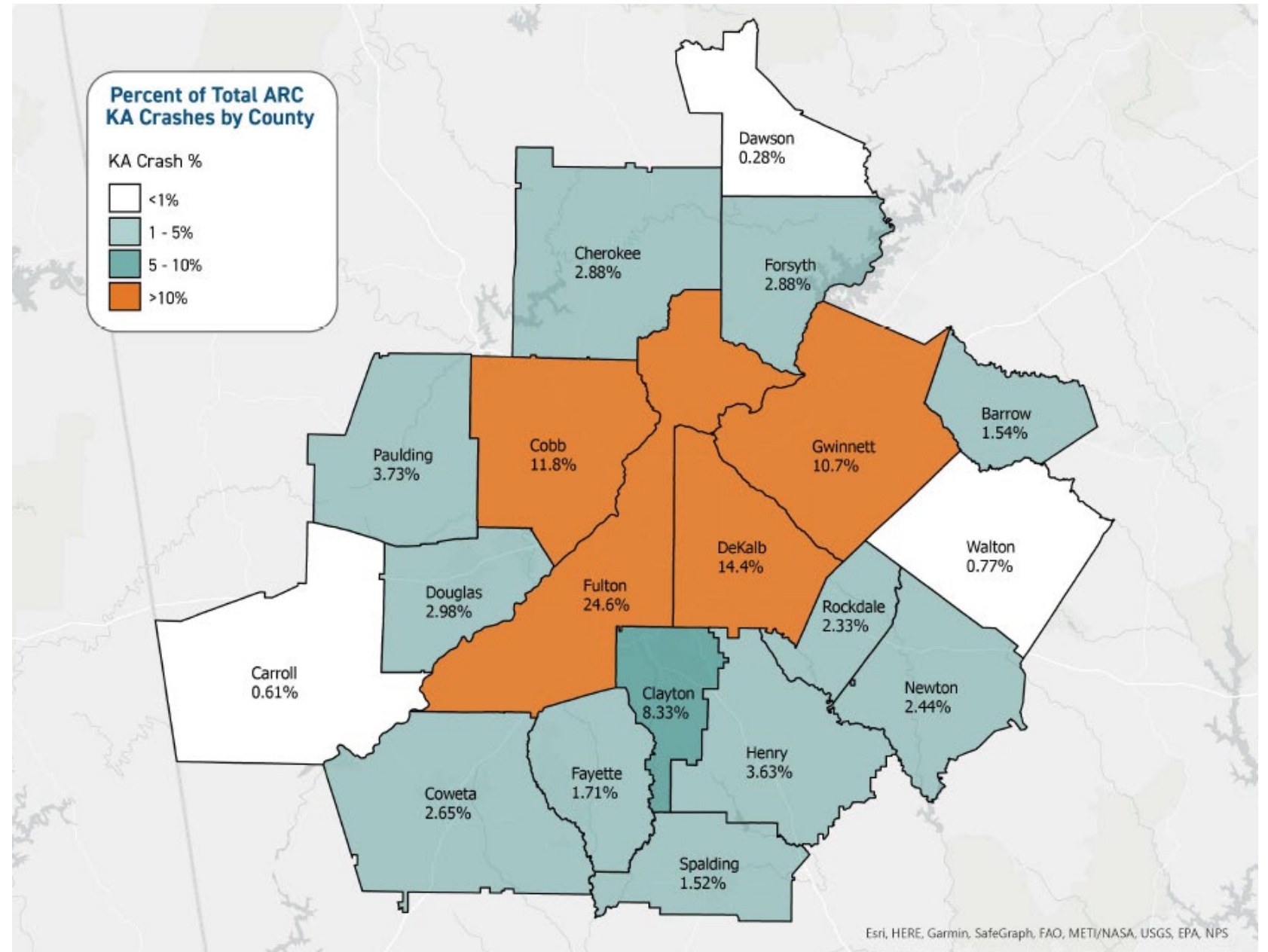
- **Focus crash types:** what crash types are most prevalent in severe crashes?
- **Focus facility types:** where are severe crashes most prevalent?
- **Risk factors:** what characteristics are over-represented in severe crashes?



Where are the Regional Safety Issues?



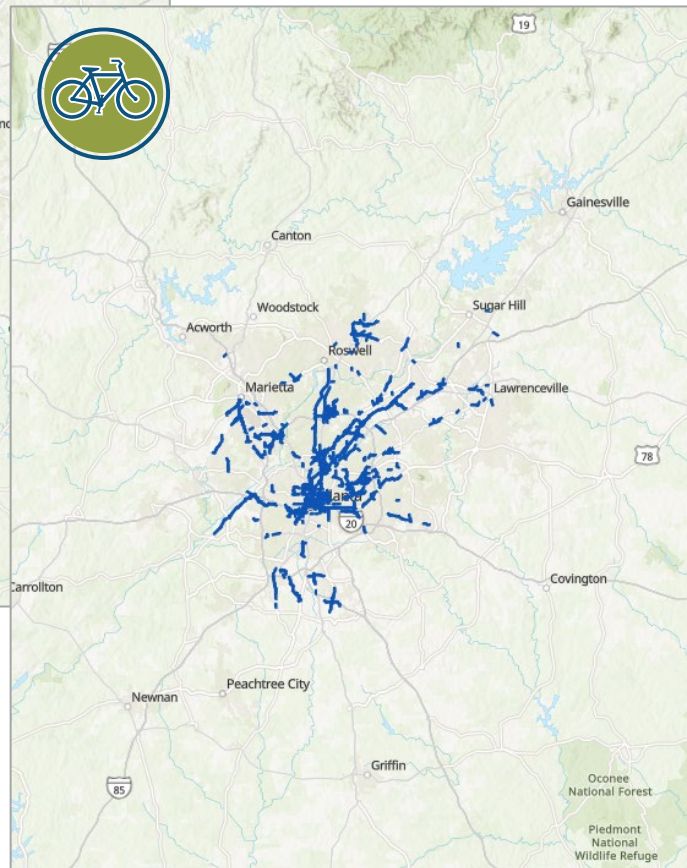
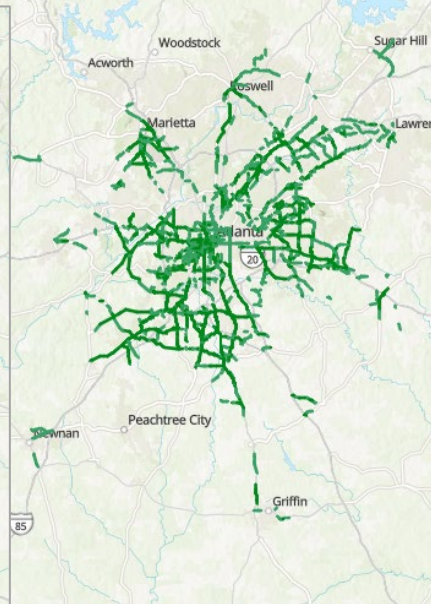
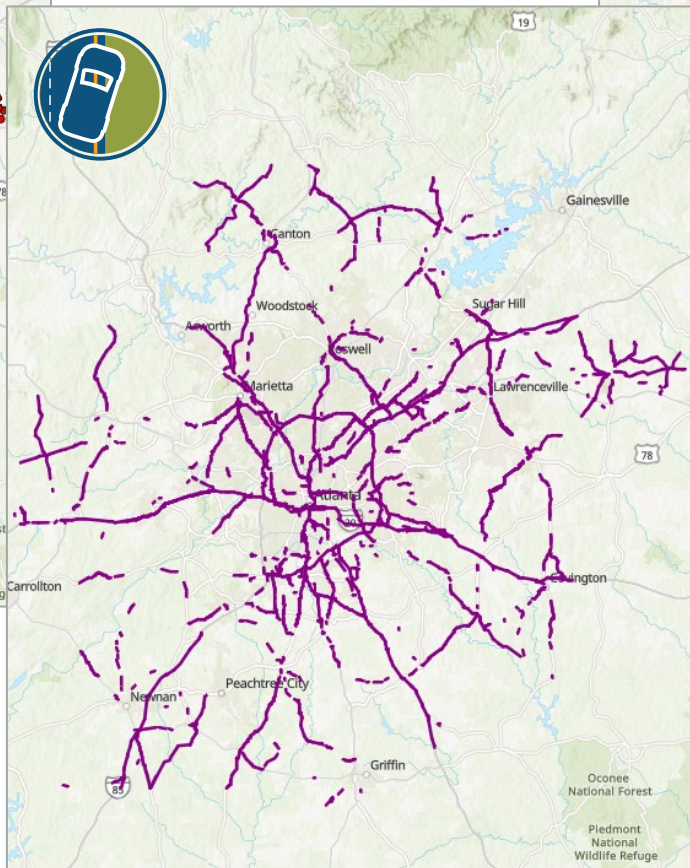
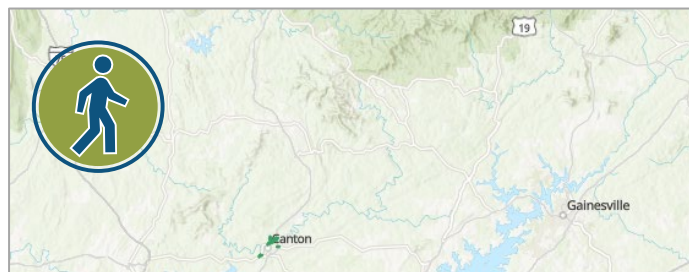
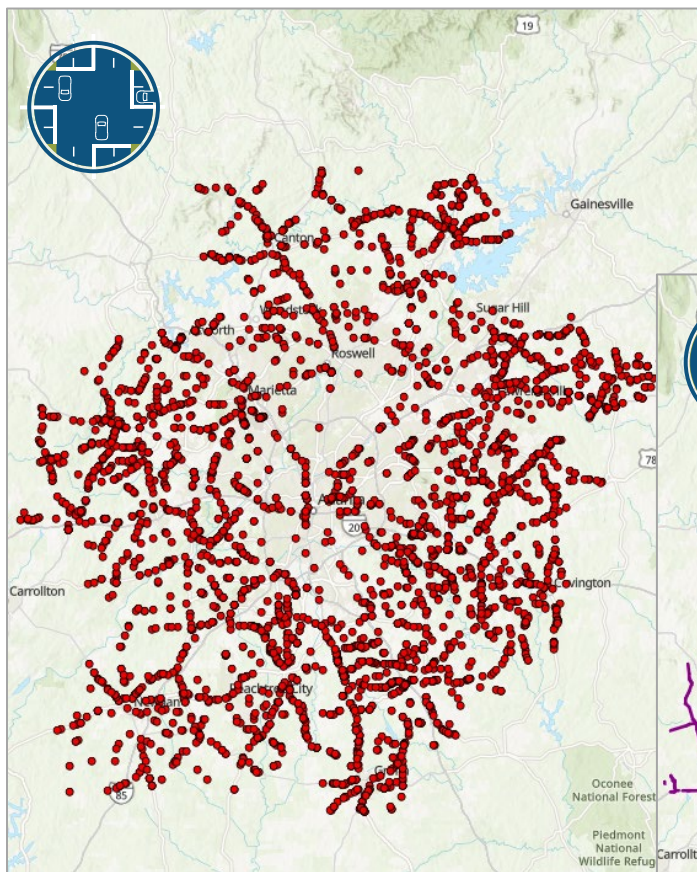
Where are the Regional Safety Issues?



What are the Regional Safety Issues?

	Intersections	Roadway Departure	Pedestrians	Bicycles
Functional Class	Urban principal arterials Urban minor arterials Urban major collectors			
Ownership	GDOT			
Traffic Volume		5,000 – 15,000 vehicles/day	9,000+ vehicles/day	20k+ vehicles/day (arterials)
Number of Lanes			4+ lanes	2-lane city and county roads 2- or 4-lane GDOT arterials
Operating Speed	35+ mph arterial streets 30+ mph collector/local	45+ mph on arterial streets 35+ mph on collector roads		
Community Context	Lower-intensity development	Rural areas and lower-intensity development	Urbanized areas, high densities, higher-intensity development, high-frequency bus service	Urbanized areas, high densities, higher-intensity development, high-frequency bus service
Traffic Control	Signalized on principal arterials / Uncontrolled on minor arterials and major collectors			
Socioeconomic Status			Lower average income / Higher minority and non-white race and ethnicity	Bottom 20% incomes / Higher incomes in tracts with a high population density

Where are the Regional Safety Issues?



Regional Focus vs. Local Focus

Regional components

serve as coordinated approach for ARC and partners to:

- Shift to proactive approach
- Develop regional goals/plans
- Establish/monitor safety performance targets
- Evaluate/prioritize projects
- Allocate funds



Local components serve as guidance for local agencies to:

- Improve safety in their communities
- Integrate safety in project planning and development
- Identify safety issues proactively
- Address safety issues with proven safety countermeasures
- Prioritize projects and strategies for funding and implementation

Roadway Analysis Updates

- Roadway Expansion and TSM&O projects have the most potential to positively or negatively affect safety.
- A safety Benefit-Cost analysis will be conducted during TIP project evaluations.

CRASH SEVERITY	CRASH COST
K: fatal	\$16,374,467
A: suspected serious injury	\$988,918
B: suspected minor injury	\$326,938
C: possible injury	\$184,435
O: property damage only	\$18,816

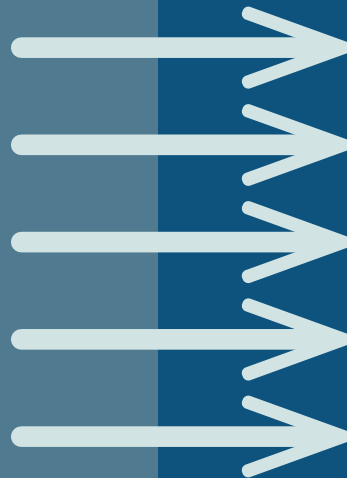
778 deaths in 2021 = \$12.7 billion



Changing our Processes and Practices

Traditional approach

Prevent crashes
Improve human behavior
Control speeding
Individuals are responsible
React based on crash history



Safe System approach

Prevent death and serious injuries
Design for human mistakes/limitations
Reduce system kinetic energy
Share responsibility
Proactively identify and address risks

Roadway Safety Management Process

A comprehensive approach to safety includes both reactive and proactive components

- **Site-specific (crash-based) is reactive**
 - Addresses sites based on crashes
 - Crash history
 - Predicted future crashes
- **Systemic (risk-based) is proactive**
 - Addresses sites based on risk factors
 - Roadway characteristics
 - Community context



PLANNING

Identify problems: collect, manage, and analyze data to identify opportunities to improve safety.

Develop countermeasures: develop targeted strategies to address crash contributing factors.

Prioritize projects: develop a balanced portfolio of projects that maximizes return on investment.



IMPLEMENTATION

Implement safety projects: design projects, identify funding sources, allocate resources, program projects, and develop a plan to evaluate investments.

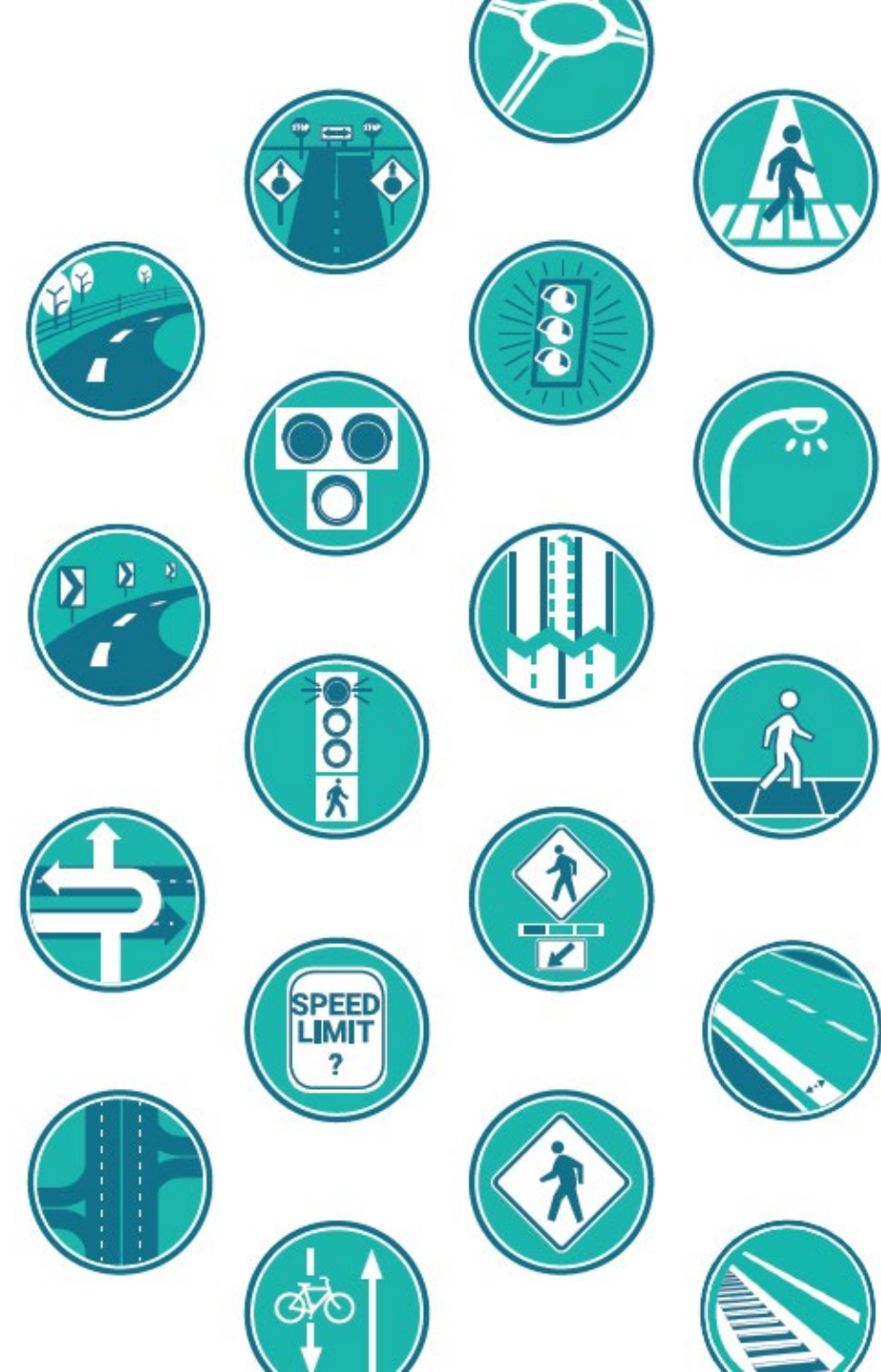


EVALUATION

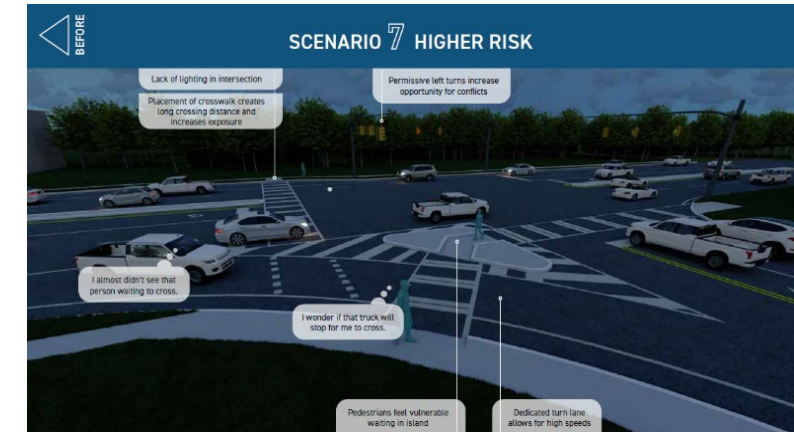
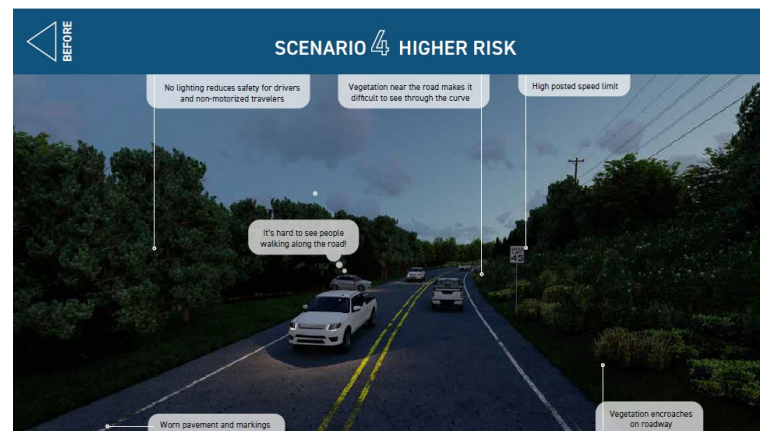
Estimate effectiveness of projects and programs: perform project-, countermeasure-, and program-level evaluations to understand the safety performance and cost-effectiveness of investments and to inform future decisions.

Proven Safety Countermeasures

- ARC promotes FHWA's Proven Safety Countermeasures to enhance safety for all road users
- Local agencies can:
 - Implement proven safety countermeasures to address site-specific safety issues
 - Incorporate proven safety countermeasures in projects to proactively address systemic safety issues
- Keys to countermeasure selection:
 - Target underlying crash patterns and risk factors
 - Recognize diverse issues and unique community needs
 - Consider equity and community feedback



- **High-risk** scenarios
 - Used risk factors to identify specific locations
 - Created generic visualization of high-risk scenarios
- **Low-risk** scenarios
 - Identified proven safety countermeasures
 - Focus on select countermeasures in each scenario



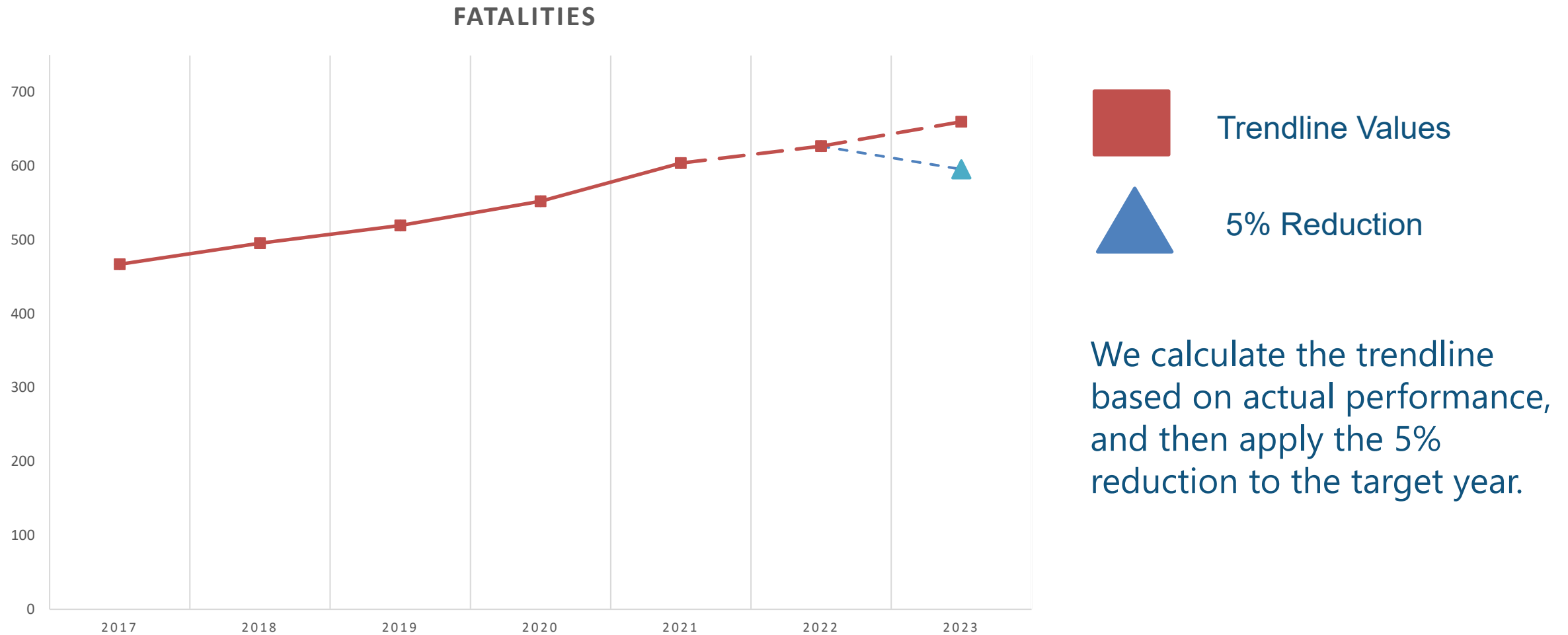
2023 Safety Targets

Performance Criteria	2023 Statewide Target	2023 ARC Target
Fatalities	1,680	595
Serious Injuries	8,966	2,719
Fatality Rate	1.360	0.998
Serious Injury Rate	7.697	4.557
Non-Motorized Fatalities and Serious Injuries	802	393

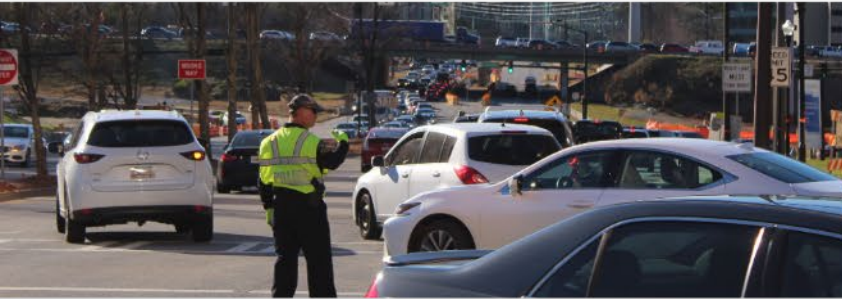
*These ARC targets represent:

- Crash & traffic data from just MPO region
- 5% reduction across the line from previous year

Fatality Target Example



Questions



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