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TRB Webinar: Gender- Inclusive Transportation Safety

October 2, 2024

12:00 – 1:30 PM



AICP Credit Information

1.5 American Institute of Certified Planners Certification Maintenance Credits

You must attend the entire webinar

Log into the American Planning Association website to claim your credits

Contact AICP, not TRB, with questions

Purpose Statement

This webinar will explore the intersection of gender and safety in transportation. Presenters will discuss the unique safety challenges faced by different genders in various modes of transportation, examining factors and discussing potential avenues for improvement.

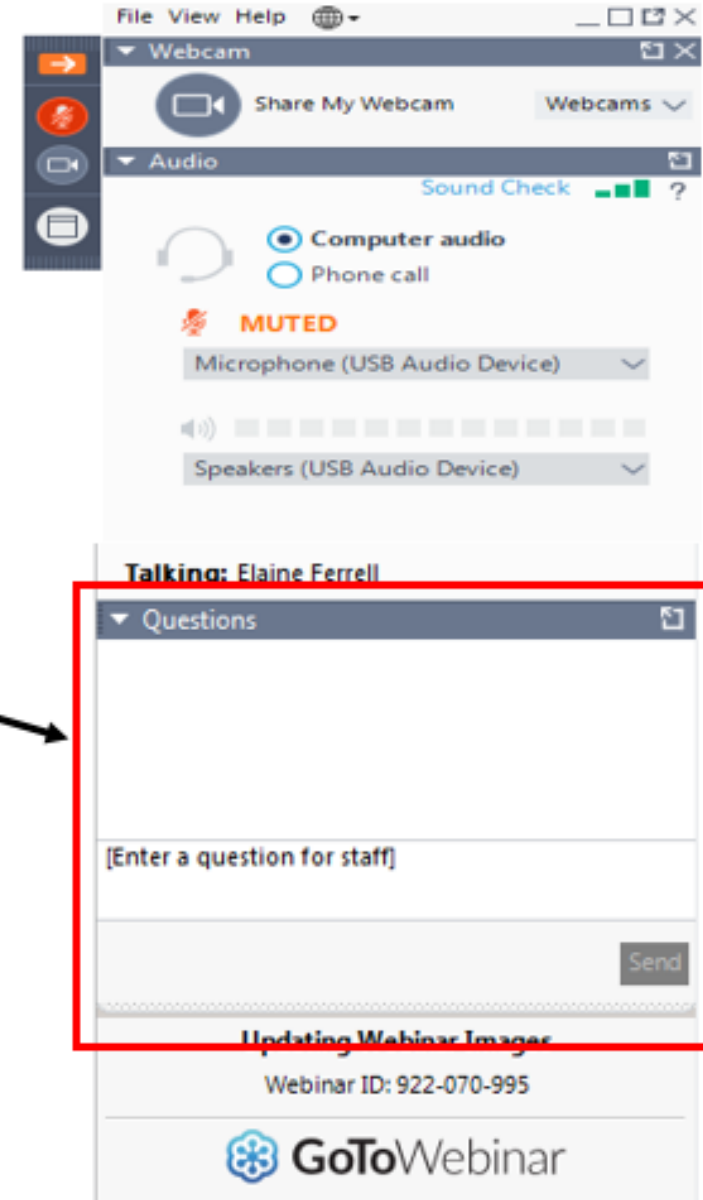
Learning Objectives

At the end of this webinar, you will be able to:

- (1) Provide insights into the gender dynamics shaping transportation safety
- (2) Explore strategies for promoting awareness, advocacy, and community engagement in regard to gender safety
- (3) Identify potential research opportunities to advance gender-inclusive safety measures in transportation

Questions and Answers

- Please type your questions into your webinar control panel
- We will read your questions out loud, and answer as many as time allows



Today's presenters



Alyssa Ryan
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TEXAS A&M UNIVERSITY
Landscape Architecture
& Urban Planning



Katie Harmon
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2 OCT 2024

Gender-Inclusive Transportation Safety

***Walking the talk and talking the walk: Bringing gender
and safety into our daily work***

Tara Goddard, PhD

Associate Professor



TEXAS A&M UNIVERSITY

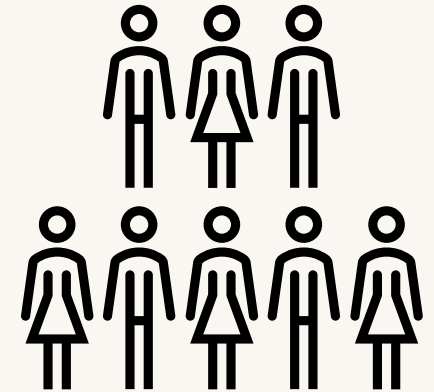
Landscape Architecture
& Urban Planning

Women and gender in transportation safety

- “Why some road safety problems are more difficult to solve than others” (Elvik 2010) – documented persistent road safety issues shared by all motorized countries
- Gender differences did not make his list - and it does vary by country and context
- Well-documented disparities – studied by transportation professionals for half a century at least
- First “Women’s Travel Issues” conferences hosted by TRB in 1978, 1996
- TRB Women and Gender in Transportation Conference (formerly: (Women’s Issues in Transportation): 2004, 2009, 2014, 2019, 2024

Why care about sex and gender?

- **Sex: “Women are not small men”**
- Not a binary. Biological, physical, hormonal differences that may be important to safety
- Examples: Crash-test dummies; pregnancy and seat belts
- **Gender: “Who you are/want to be in the world”**
- Also not a binary. Constructed, chosen, dynamic, perceived, also important to safety
- Examples: Cultural roles like responsibility for childcare and household-serving trips; Personal security on transit or ride-hail; Street harassment while bicycling



Expansive inclusion of sex and gender

- Many of these issues faced by women (including trans women) are also experienced by femme, nonbinary, and/or gender non-conforming individuals
- Identities and group membership like race, disability, and income may have stronger intersectional effects for women than men

Women and gender: specific challenges

(examples)

- Personal safety and security: gendered harassment and violence
- Traffic safety: greater sensitivity to risks from drivers
- Gender roles: caretaking and trip-chaining for HH maintenance
- Gender norms: workplace norms around dress and appearance

Women and gender: specific challenges

(examples)

- Labor roles: women (and BIPOC and immigrants) more likely to be essential workers
- Mode access and skill/knowledge/efficacy: car access; bike skills
- Data issues: how and what we collect; not just a throwaway independent variable

A large, spreading tree with a white text box overlaid. The tree has a thick, gnarled trunk and many thick, horizontal branches that spread out in all directions. The leaves are green and dense. The background shows a grassy area and some buildings in the distance. The text box is white with a dark red border and contains the text "Talking the walk" in a dark red, italicized font.

Talking the walk

Talking the walk on safety - the problem and the evidence

"But if thought corrupts language, language can also corrupt thought." - George Orwell (1946)

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A Crash is Not an Accident

EDITORS AND CORRESPONDENTS

A crash is not an accident.

Changing the way we think about events and the words we use to describe them affects the way we behave. Motor vehicle crashes occur "when a link or several links in the chain" are broken. Continued use of the word "accident" implies that these events are outside human influence or control. In reality, they are predictable results of specific actions.

Since we can identify the causes of crashes, we can take action to alter the effect and avoid collisions. These are not Acts of God but predictable results of the laws of physics.

The concept of "accident" works against bringing all appropriate resources to bear on the enormous problem of highway collisions. Use of "accident" fosters the idea that the resulting damage and injuries are unavoidable.

"Crash," "collision," and "injury" are more appropriate terms, and we encourage their use as substitutes for "accident."

Along with the Department's Research and Special Programs Administration, the Federal Highway Administration has joined the National Highway Traffic Safety Administration in declaring that the word "accident" will no longer be used in materials we publish, in speeches or other statements, or in communications with the media and others.

Sincerely yours,
George L. Reagle
Associate Administrator for Motor Carriers

Last updated: Thursday, September 18, 1997

Carlton Reid  @carltonreid · Nov 17, 2019

Crash Not Accident: Better Road-Safety Reporting Could Save Lives, Show Researchers. By me, in [@forbes forbes.com/sites/carltonr...](#) [@KMRalph](#) [@cgthigpen](#) [@EvanIacobucci](#) [@DrTaraGoddard](#) [@Grammarly](#) [@APStylebook](#) [@RoadPeace](#) [@DroptheAword](#) [@TransportAlt](#)



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Talking the walk on safety - positive shifts in policy and practice

“Attention *creates* no idea; an idea must already be there before we can attend to it” – William James (1890)

Multnomah County Health Department training will focus on traffic crash framing

February 11, 2022 by Taylor Griggs (Staff Writer)

Choices Influence Perceived Blame⁽¹⁾

Crashes that involved a pedestrian or a bicyclist were more likely to be framed as accidents than crashes that involved a car or a truck. This suggests that the public tends to use passive voice, victim-blaming language, and subtle changes in text about larger trends in traffic crashes.

Key messages:

Focus on the driver will reduce the blame and increase the drivers' support for safety measures.



Road Collision Reporting Guidelines

VISION ZERO TEXAS HB 3325
WE CAN END TRAFFIC DEATHS IN TEXAS

Crash Not Accident

For over 20 years, Texas hasn't seen a day without a traffic fatality. In 2020 alone, 1,331,250 people were involved in vehicle crashes in Texas, killing 3,939 and severely injuring another 14,976.

Almost 1,500 times a day people are in a crash somewhere in Texas; put another way, that's a crash every minute. A normal day last year saw an average of 11 traffic deaths and another 40 people left with serious, life-changing injuries, like brain damage or loss of a limb.

But calling these "accidents," instead of crashes, has kept us from actually understanding the underlying causes of crashes. Even as far back as 1997 the National Highway Traffic Safety Administration (NHTSA) recognized the use of the term "accident" took the focus away from understanding the true nature of traffic crashes.

Referring to crashes as "accidents" makes it seem as if accidents are inevitable, hiding responsibility from the decisions of individuals, as well as decisions we as a society make through our transportation decision-making system, such as how we design streets and

roads and whether we condone dangerous behavior like driving while using a phone.

Professor Tara Goddard at Texas A&M has looked at this issue directly through a series of research papers, showing "that efforts to change public perceptions of road safety should include a focus on improving editorial patterns in traffic crash reporting."

She found using the term "accident" has shifted the sense of responsibility onto crash victims. The report concludes that to save lives and prevent further injuries, the intentional use of "crash" is an ethical imperative.

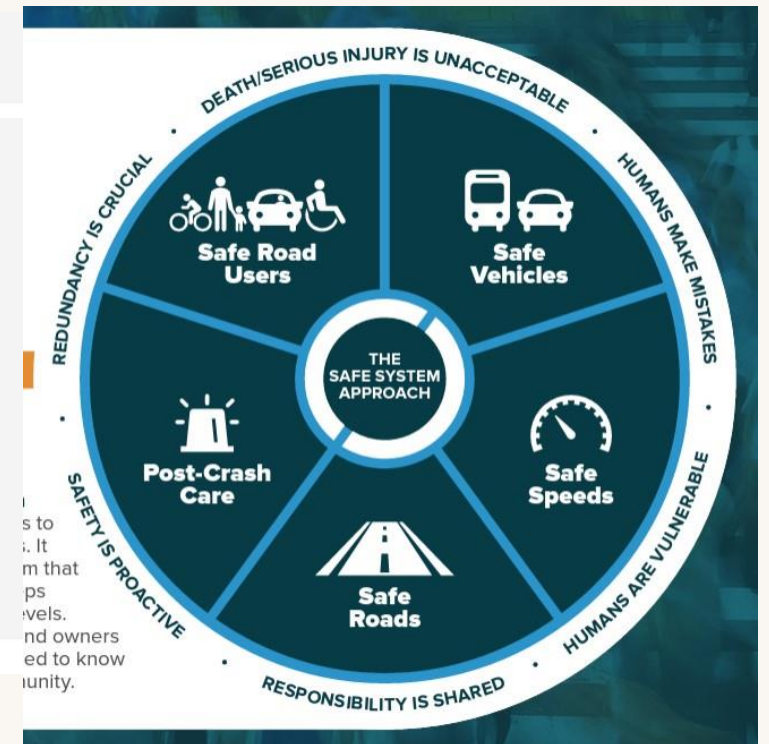
That imperative has been echoed by a particular group of advocates: mothers and fathers of children who were killed in traffic crashes. These Families for Safe Streets groups have not only advocated for the use of Crash Not Accident, but in 2016 they successfully campaigned for an update to the Associated Press style guide, to encourage journalists to use crash instead of accident.

What would this bill do?

This bill would simply change every instance of the term "accident" in the Texas transportation code to "crash."

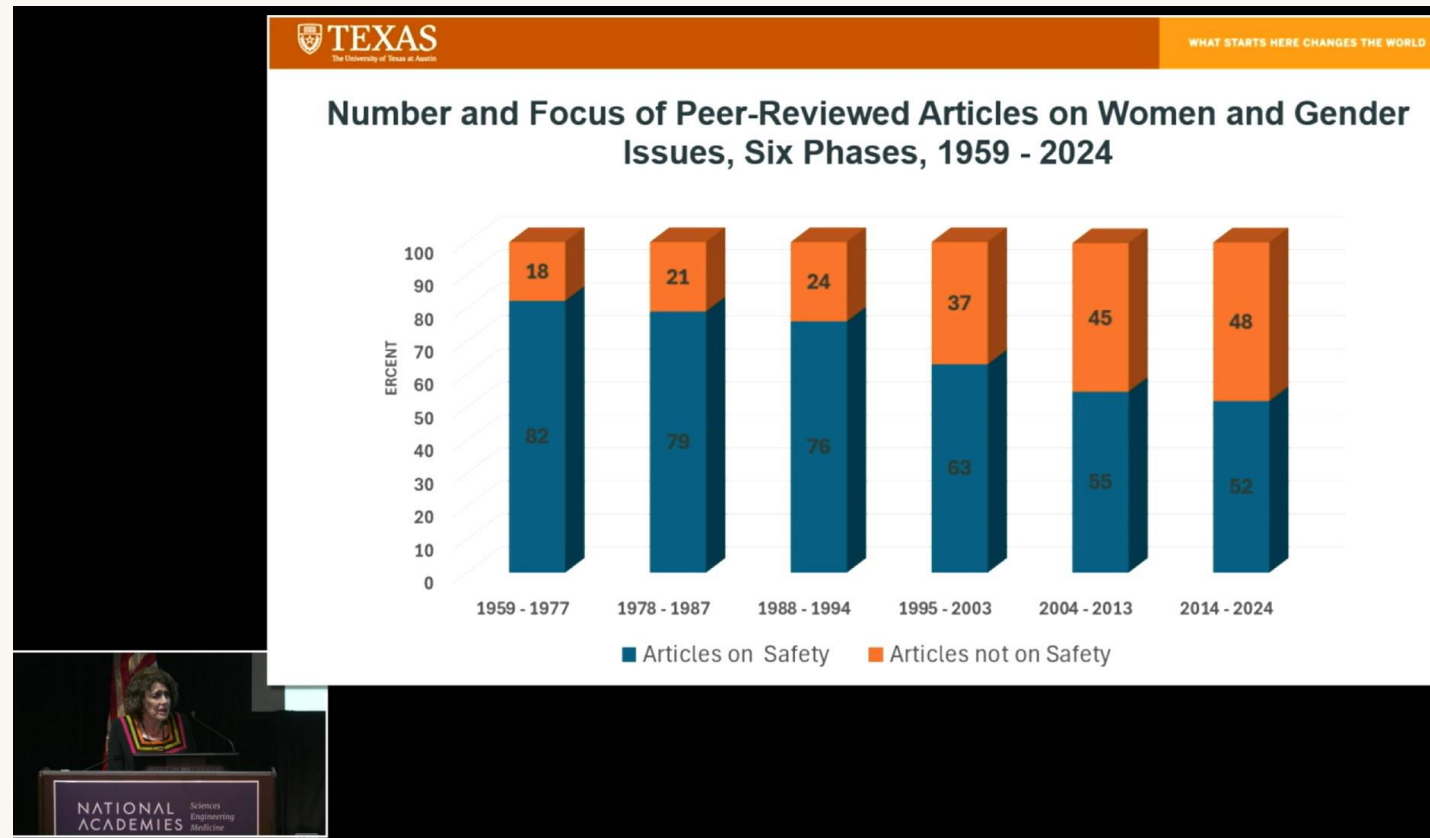
VISION ZERO TEXAS is a project of **Farm&City**, a 501(c)(3) nonpartisan nonprofit think tank dedicated to high quality urban and rural human habitat in Texas in perpetuity. Find out more at VisionZeroTexas.org or contact Jay Blazek Crossley at jay@farmandcity.org

Providing best practice reporting guidance for road collisions.



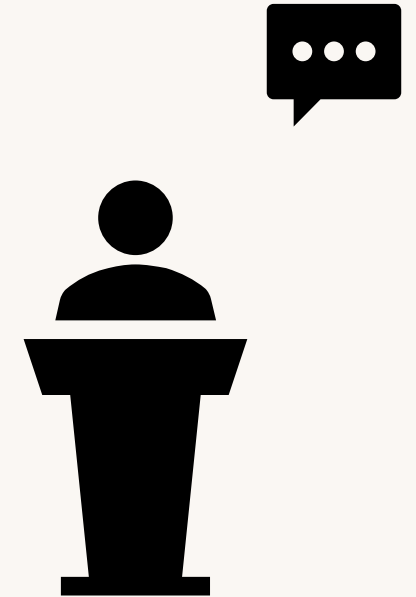
Talking the walk on gender?

“Changing the habit requires an effort of attention” –
William James (1890)



Abracadabra – I will create as I speak

- **Know that the way we speak and act both reflects and shapes traffic safety culture**
- **Use specific, accurate language to help shift mental models and focus on the real issues**
- **Be reflective about the ways we all internalize, and reproduce, current systems**



A large, spreading tree with a white text box overlaid. The tree has a thick, gnarled trunk and many thick, horizontal branches that spread out in all directions. The leaves are green and dense. The tree is set in a grassy area with a paved path or road in the foreground. The background shows more trees and a building in the distance.

Walking the talk

Changing the system

- What is the social problem or challenge we are committed to making change on?
- How might systems be “holding the problem in place”?
- What are potential strategies and who should be involved to achieve the desired changes?

Changing our workplace culture

- **Internal Assessment:**
 - We all contribute to the reinforcement or change of the systems in which we are working
 - What might need to change in our own mental models and behaviors, and those practices at work, to better support our external goals for zero serious injuries and fatalities?
- **Get real, and be willing to “find the joy in being wrong”**
 - How have your personal actions contributed to “holding the problem in place?”
 - How are workplace practices or culture holding back progress?

Walking the talk on gender

There are great resources available, and people doing the work! More like this, please!

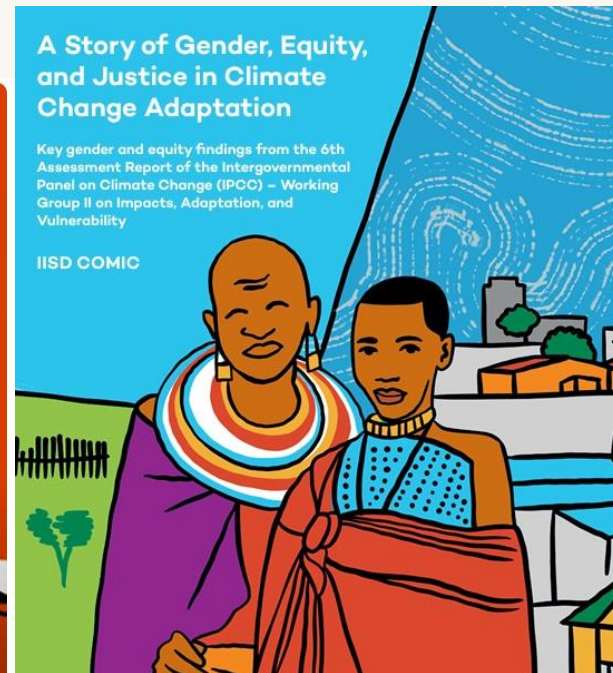


Sustainable Gender Equality - a film about gender mainstreaming in practice

SKR Jämställdhet
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PRIMARY GOALS OF THE GAP

Building on the findings of the UHWT study, the primary goals of the GAP are to:

-  **Raise Awareness** of the gender differences in travel
-  **Ensure Diverse Gender Perspectives are Considered** in Metro's policies, programs, projects, & services
-  **Address Gender Gaps** in Metro's policies, programs, projects, & services
-  **Improve the Quality & Accessibility** of Metro's services for women
-  **Create Measurable Progress** toward the GAP goals

Leadership – Talk the walk

- Know that the first thing you say sets the narrative
- Be reflective about the ways we all internalize, and reproduce, current systems
- Help support staff by using specific, accurate language
- Review communications and documents



Leadership – Walk the talk

- Review all internal procedures and policies for ways that women and gender needs are included or omitted.
- Experience your transportation systems: e.g. Conduct bus, walk, and bike field work with ALL levels of staff. Make space to learn from lived experiences. Partner with local groups.
- Commit to measurable goals to address sex and gender needs via data, planning, and implementation





THANK YOU

Tara Goddard, PhD
Associate Professor



TEXAS A&M UNIVERSITY

Landscape Architecture
& Urban Planning



TEXAS A&M UNIVERSITY

Hazard Reduction
& Recovery Center

Using incident data sources to identify gender disparities in transportation safety

outcomes

Katie Harmon

She/Her/Hers



www.hsrc.unc.edu

NC DPH data attribution & disclaimer

NC DETECT is a statewide public health syndromic surveillance system, funded by the NC Division of Public Health (NC DPH) Federal Public Health Emergency Preparedness Grant and managed through collaboration between NC DPH and UNC-CH Department of Emergency Medicine's Carolina Center for Health Informatics. The NC DETECT Data Oversight Committee does not take responsibility for the scientific validity or accuracy of methodology, results, statistical analyses, or conclusions presented.

Level setting...

- In most secondary transportation incident/injury data sources (e.g., crash, death, EMS, emergency department/hospital admissions data), sex/gender is poorly defined and treated as a binary (male/female)
 - “Sex/Gender” likely represents a combination of sex-assigned at birth and gender identity
 - No option other than “unknown” for individuals who do not fall into these narrow categories
 - I will be using the term “gender” and the terms “male” and “female” throughout this presentation despite these limitations

Presentation objectives

There are many ways to examine transportation data through a gender equity lens – this presentation will tackle it through an epidemiologic, population-based perspective by:

1. Reviewing several key concepts
2. Providing examples of their application to North Carolina (NC) data

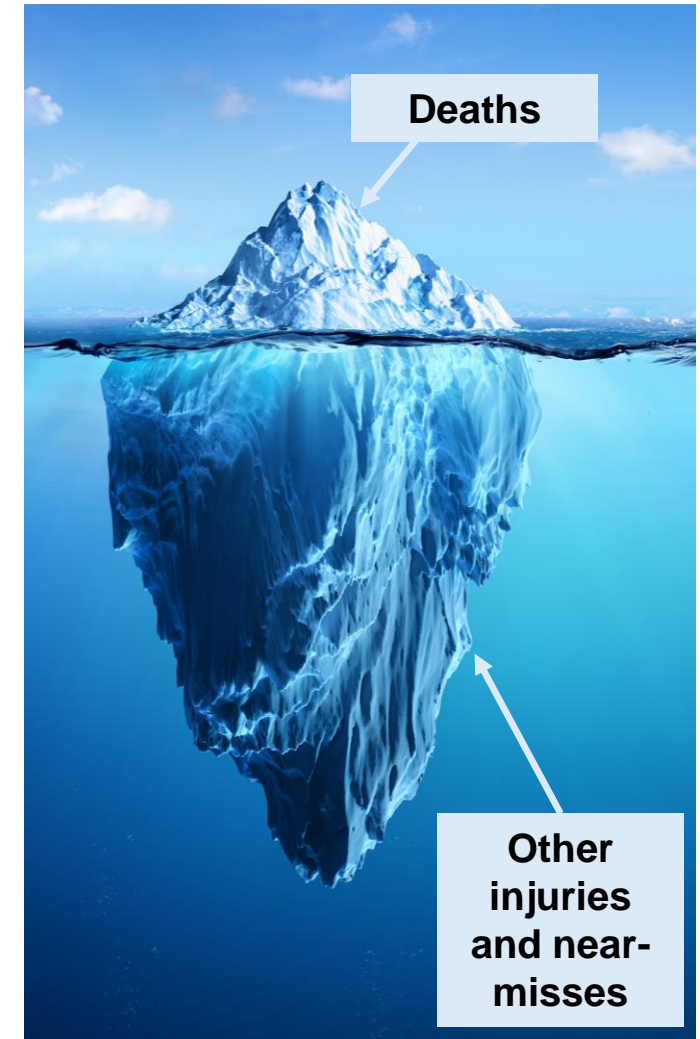
Examining disparities from a population perspective

1. Context is important

- At a minimum, what is the population composition in your geography of interest?
- What are the leading sociodemographic, health, travel, and traffic safety inequities and disparities?

2. Do not limit yourself to a single incident data source

- The Fatality Analysis Reporting System (FARS) is fantastic, but deaths are only the tip of the iceberg
- Integrating multiple datasets may help overcome some limitations



Examining disparities from a population perspective con.

3. Disaggregate, disaggregate, disaggregate

- We may be limited by what is already collected (e.g., gender categories) but we should disaggregate, whenever possible†

Hispanic Ethnicity (CCHI, 2020)

Crash (NC DMC)*	Emergency Department (NC DETECT)**	Death Certificate (SCHS)**
Hispanic	Hispanic	Cuban
Not Hispanic	Not Hispanic	Mexican
Unknown	Unknown	Puerto Rican
		Central/South American
		Other Hispanic
		Not Hispanic
		Unknown

*Hispanic ethnicity is collected as part of racial identity

**Hispanic ethnicity is collected separately from racial identity

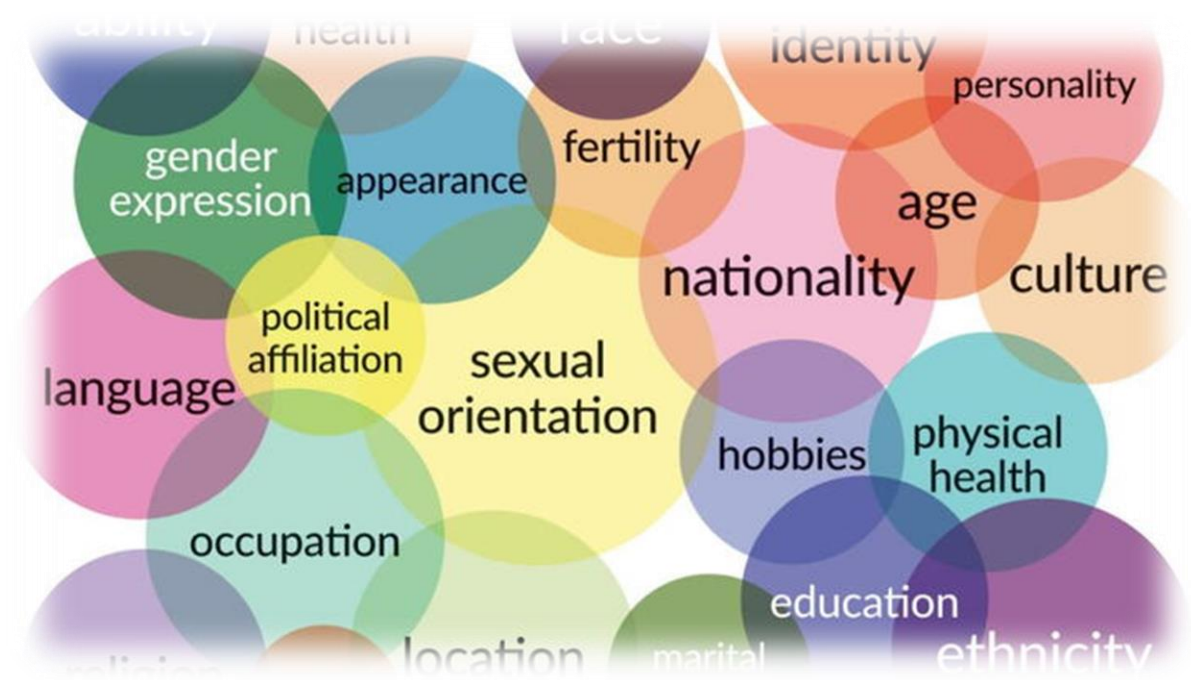
†Patient privacy/anonymity is paramount

Examining disparities from a population perspective con.

4. Stratify across multiple groups

- Disparities can exist across many dimensions (gender, sexual orientation, race, ethnicity, disability status, income, etc.)
- Individuals can belong to both historically privileged (White, educated) and oppressed groups (ESL, transwoman)

Intersectionality (McPhetridge, 2020)



Examining disparities from a population perspective con.

5. Broad trends are important, but so are the details
 - How will your data inform targeted interventions?
 - Don't assume all constituent groups are the same!
6. Supplement with qualitative data
 - Community perspective is key and can fill in knowledge gaps
 - Use data collection methods to ensure a diverse audience
7. Advocate for change
 - Data collection methods and datasets are not static
 - We can (and should!) collect better incident and exposure data

Community profiles

Also, qualitative data!

- What is your community's demographic composition, transportation characteristics, and social drivers?
 - Who lives in your community?
 - How do they move?
 - What transportation infrastructure is available and what is the quality/condition?
 - Are there underlying social vulnerabilities?
 - Are there historical and/or current societal inequities?
 - Are any of these factors influenced/compounded by gender?

Social Determinants of Health



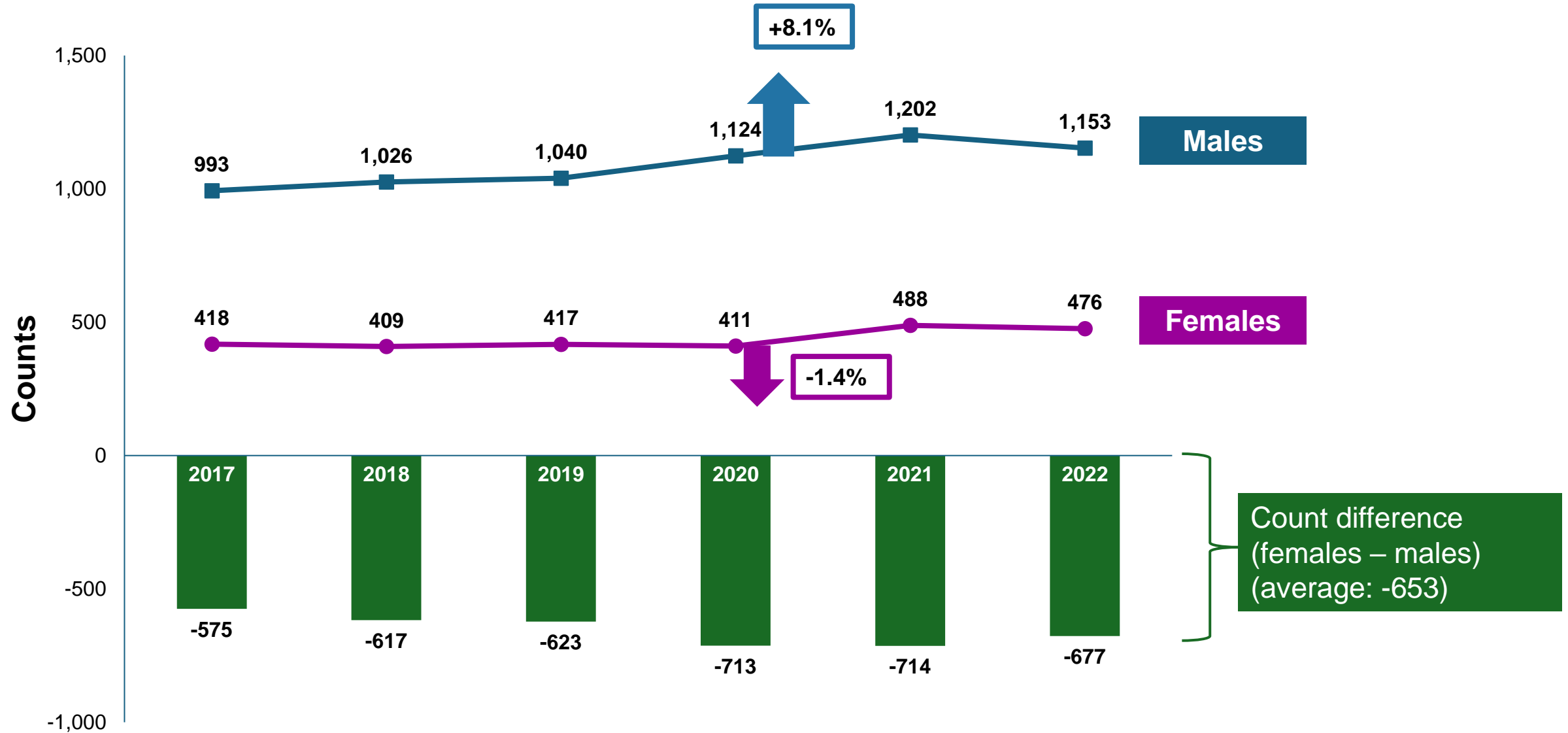
Social Determinants of Health
Copyright-free

Healthy People 2030

In addition to the usual suspects (US Census, travel surveys, volume/count data), consider public health sources such as community health assessments, Social Vulnerability Index, Social Deprivation Index

No single incident data source tells the entire traffic “safety” story

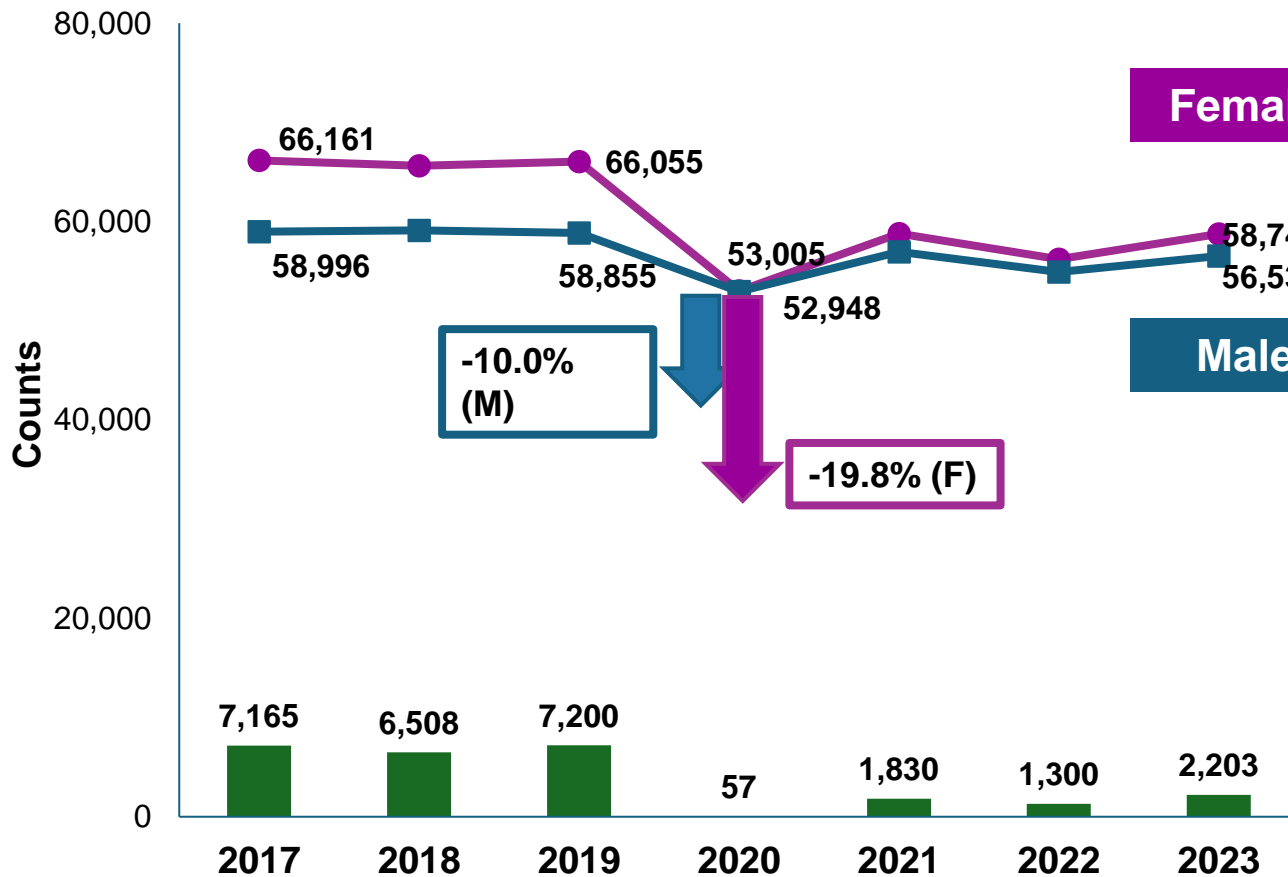
Number of traffic fatalities: NC, 2017-2022 (FARS)



No single incident data source tells the entire traffic “safety” story con.

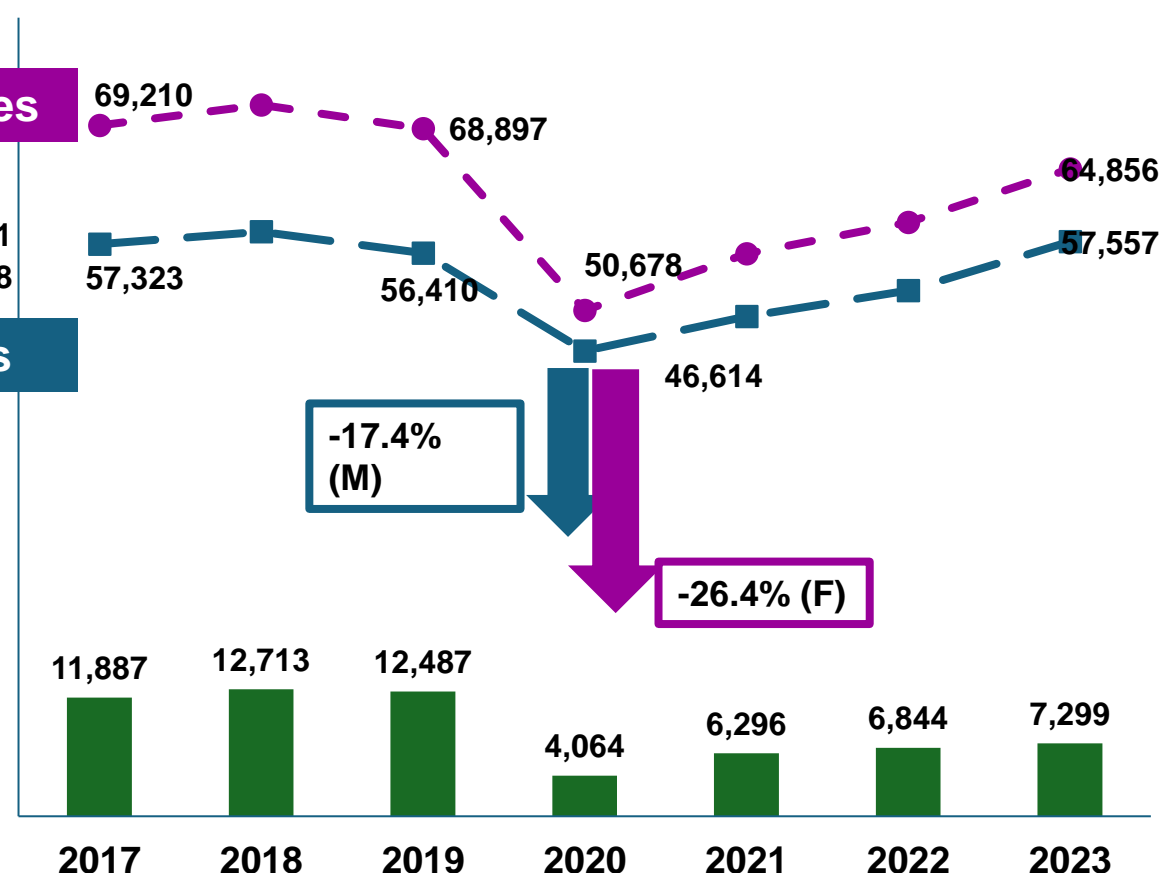
Number of persons with fatal and nonfatal traffic injuries: NC, 2017-2023 (NC DMV; NC DETECT)

Traffic (KABC) injuries (NC DMV)



Count difference (females – males) (average: 3,752)

Traffic injuries - ED visits (NC DETECT)

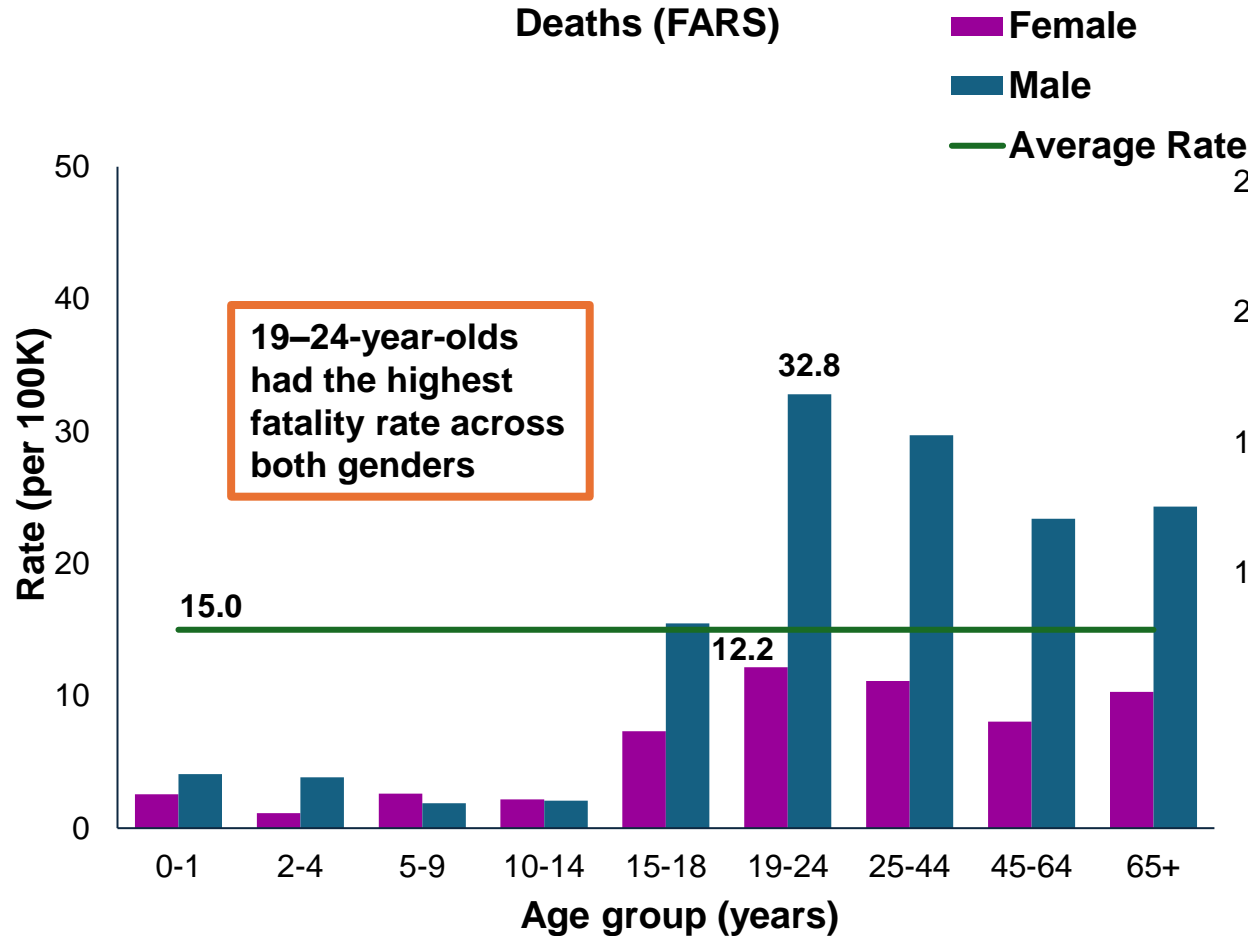


Count difference (females – males) (average: 8,799)

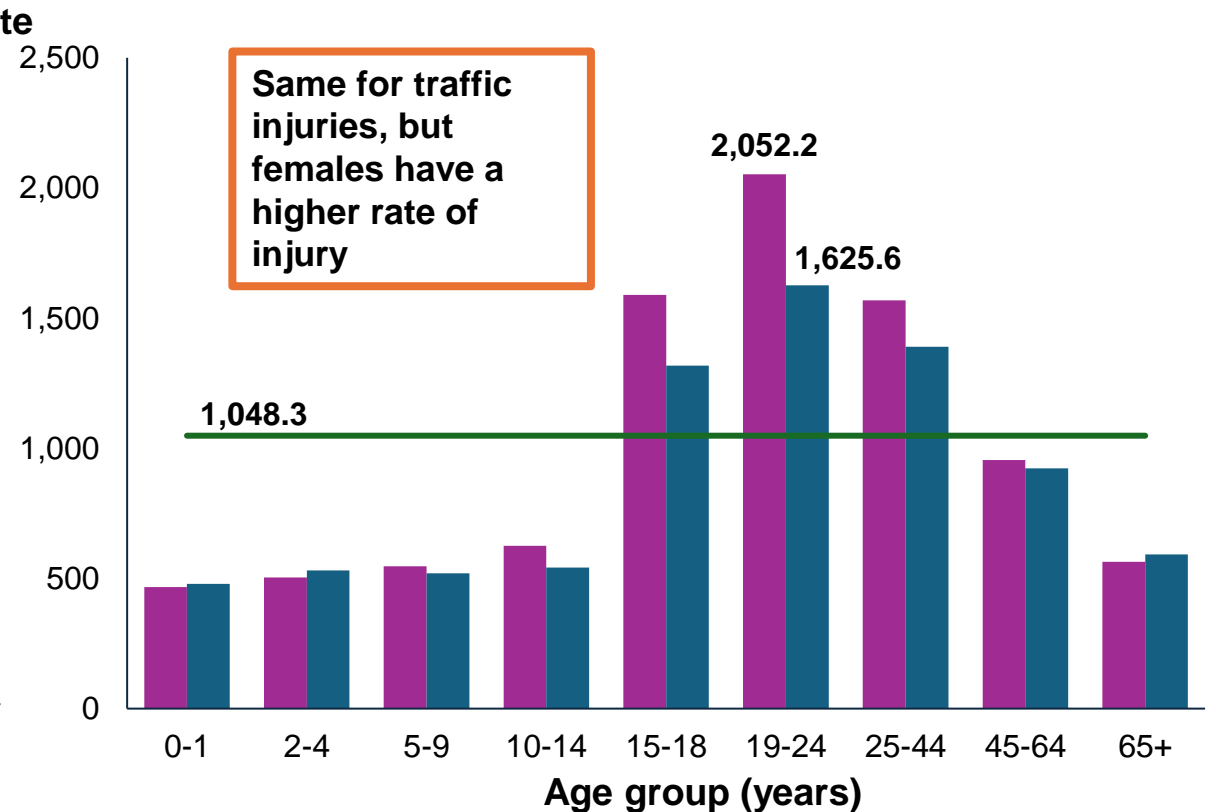
Disaggregate/stratify your data

Rates of fatal and nonfatal traffic injuries, stratified by gender & age group: NC, 2022 (FARS; NC DETECT)

Deaths (FARS)

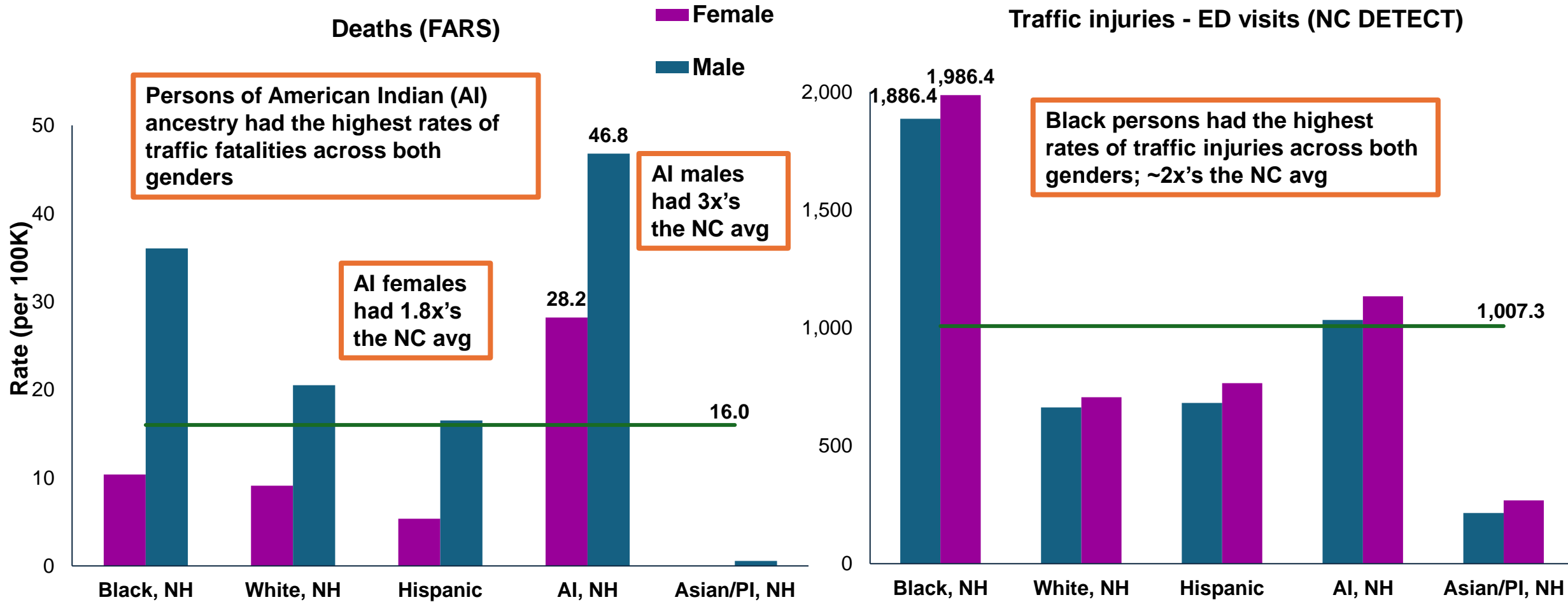


Traffic Injuries - ED Visits (NC DETECT)



Disaggregate/stratify your data con.

Rates of fatal and nonfatal traffic injuries, stratified by gender & race/ethnicity: NC, 2021 (FARS; NC DETECT)



Abbreviations: NH, Not Hispanic; AI, American Indian; PI, Pacific Islander

Dig a little deeper...

Motor vehicle occupant injuries have been “driving” observed trends

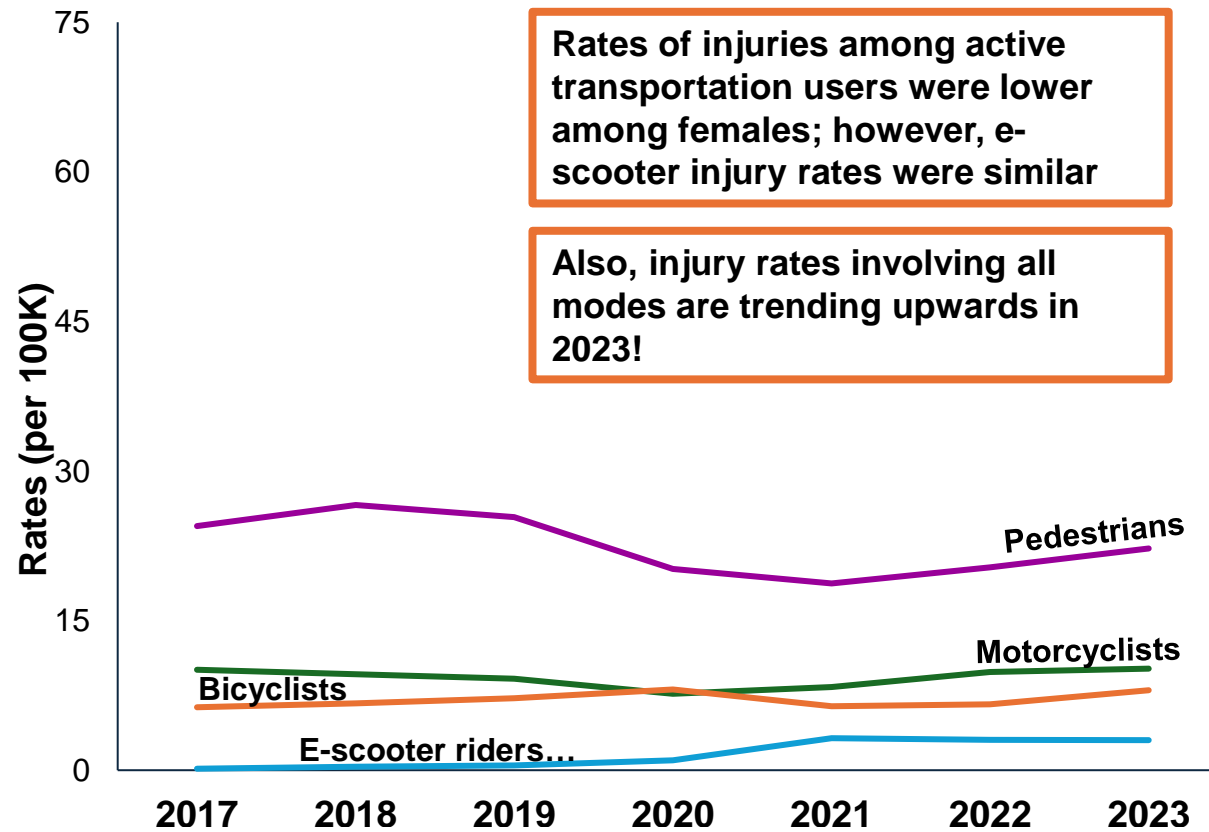
What are the injury trends for modes of active transportation?



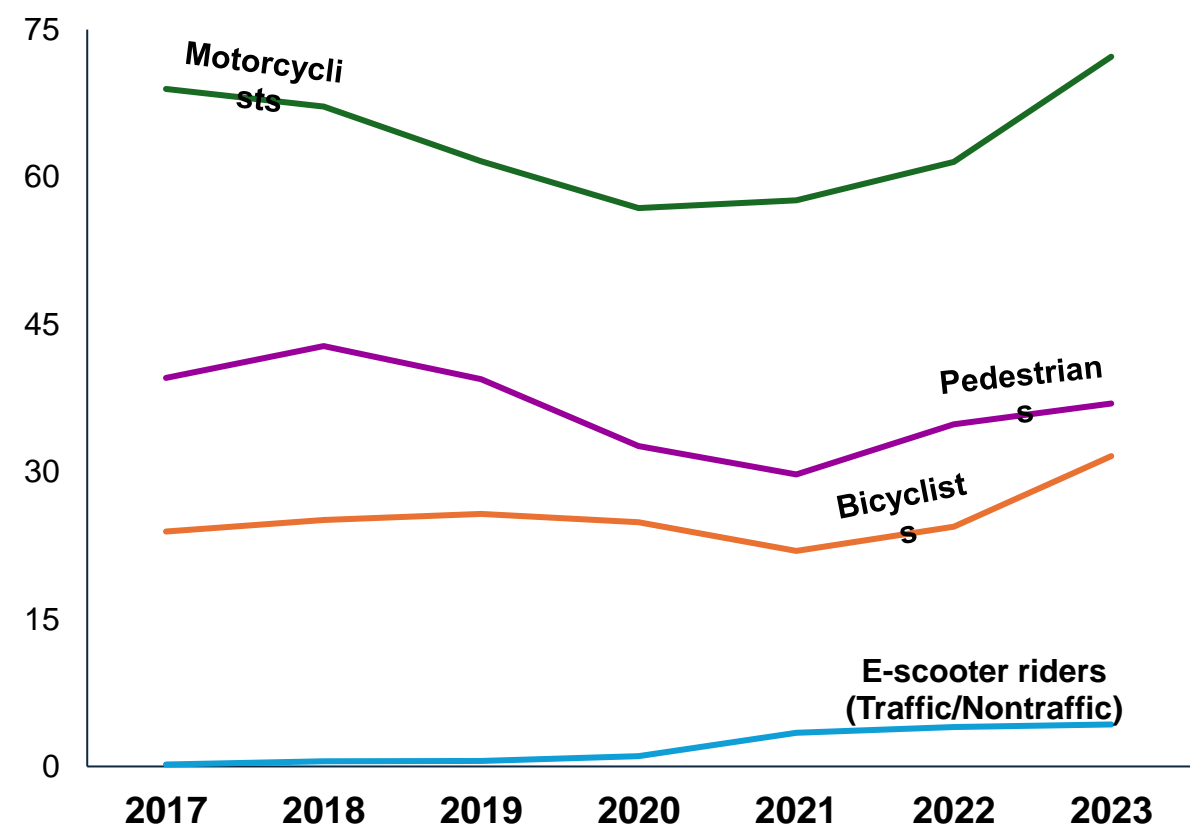
Dig a little deeper con.

Rates of fatal and nonfatal traffic injuries among active transportation users, stratified by gender & mode: NC, 2017-2023 (NC DETECT)

Female traffic injuries - ED visits (NC DETECT)



Male traffic injuries - ED visits (NC DETECT)



Dig a little deeper con.

- As part of a Collaborative Sciences Center for Road Safety (CSCRS) funded study, we examined predictors of injury severity among pedestrians using linked NC crash-ED visit data (Harmon, 2021)
- Female pedestrians were ***significantly less likely*** than male pedestrians to have serious or fatal injuries (**43%** versus **57%**)

Dig a little deeper con.

Female pedestrians were more likely to:

- Be involved in a non-roadway crash (**37%** vs. **22%**)
- Be struck at a lower impact speed (0-15 mph) (**62%** vs. **42%**)
- Have Medicaid or Medicare as their health insurance (**29%** vs. **25%**)
- Have one or more comorbidities (**36%** vs. **30%**)

Female pedestrians were less likely to:

- Be injured during the weekend (**31%** vs. **34%**)
- Be struck on roadways with posted speed limits >35 mph (**24%** vs. **36%**)
- Be injured under dark, unlighted conditions (**13%** vs. **20%**)
- Be uninsured (**24%** vs. **32%**)
- Be suspected of alcohol impairment (**2%** vs. **8%**)

Supplement with qualitative data

- There is no replacement for speaking with members of the community (i.e., qualitative data)
- Are crash injuries low because the corridor is safe? Or are crash injuries low because the built environment is inhibiting people from walking/riding/scooting? Don't assume responses will be the same across genders (Aldred et al., 2017; Branion-Calles et al., 2019; Ouali et al., 2020; Park & Garcia, 2019)

(Cis male) Partner: Bike lane

Me: Narrow shoulder with bicycle pictogram



Will not ride

Demand change

The North Carolina Injury Surveillance Data Quality Improvement Project: A Brief Discussion of NC DETECT Emergency Department Visit Data Quality Issues and Potential Solutions



Report Prepared By: Katherine J. Harmon, Amy Ising, Thais Rivas, Lucas M. Neuroth, and Anna E. Waller

Carolina Center for Health Informatics, Department of Emergency Medicine, and Injury Prevention Research Center, University of North Carolina at Chapel Hill

Submitted to NC DHHS/IVPB, August 30, 2024

Pg. 31 under “NC DETECT Injury Surveillance Recommendations”
(Harmon et al., 2024)

- **Discriminating between patient sex and gender identity.** Currently, NC DETECT contains a variable indicating a patient’s sex assigned at birth. This variable likely captures a mix of patient sex and gender. Therefore, end users recommended incorporating a separate “GENDER” variable into NC DETECT and clearly defining the variables SEX (i.e., sex assigned at birth) and GENDER (i.e., gender identity). For each of these variables, categories should be expanded beyond “Male”, “Female”, and “Unknown”. To ensure adequate data quality, education and outreach may need to be provided to medical staff outlining the difference between sex and gender and why each item has value for public health surveillance.

Contact information

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References

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- Park, Y., & Garcia, M. (2020). Pedestrian safety perception and urban street settings. *International Journal of Sustainable Transportation*, 14(11), 860-871.

Today's presenters



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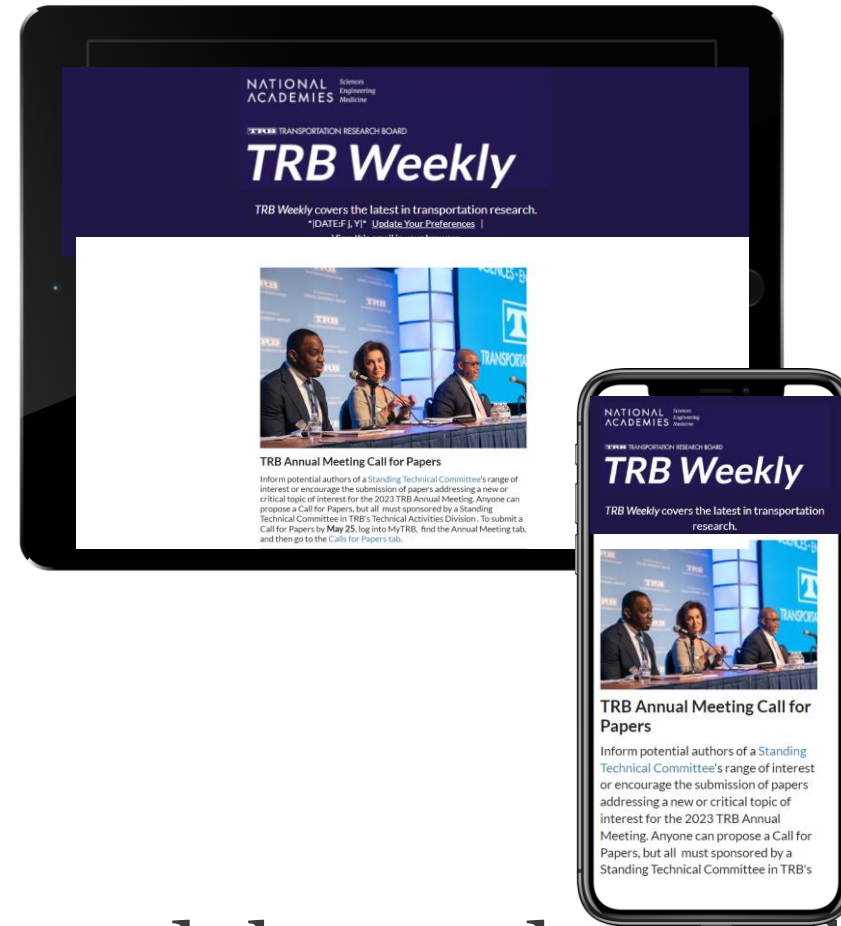
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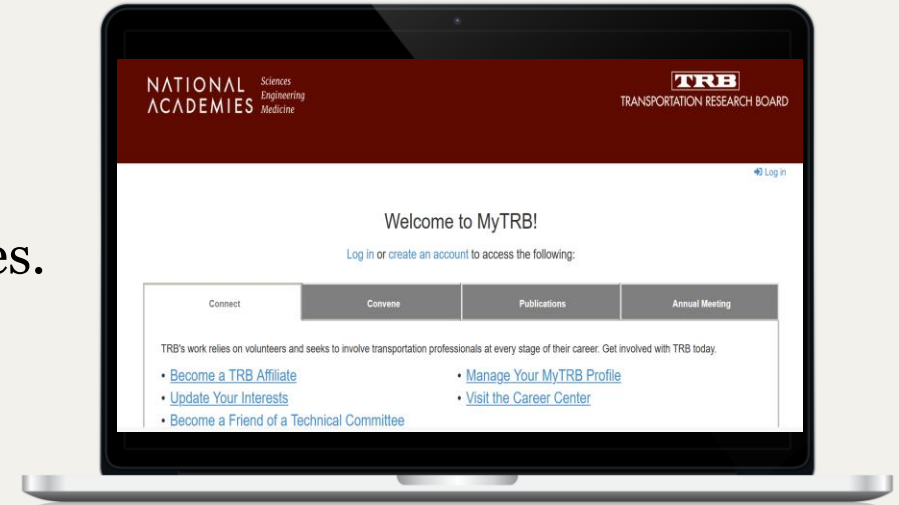


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