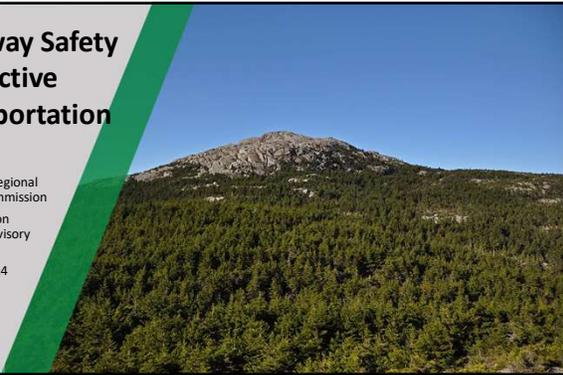


# Highway Safety and Active Transportation

Southwest Regional Planning Commission  
 Transportation Technical Advisory Committee  
 March 4, 2024

1

# Agenda

- Overview of New Hampshire Highway Safety/Active Transportation
- Strategic Highway Safety Plan
- Pedestrian and Bicycle Plan
- Vulnerable Road User Assessment
- Road Safety Audits (RSAs) and Highway Safety Demonstration Projects
- Challenges/ opportunities



2

# Highway Safety/Active Transportation

- NHDOT staff
  - Bill Lambert, Highway Safety/Active Transportation Administrator
  - Project Delivery
    - Corey Spetelunas, Highway Safety Project Manager
    - Amanda Joe Zatecka, Senior Highway Safety Engineer
    - Gerry Bedard, Active Transportation Engineer
    - Lilah Flynn, Highway Safety Engineer (CE I)(begins June 14, 2024)
  - Program Management
    - Vacant, Highway Safety Program Manager
    - Vacant, Highway Safety Data Analyst
    - Vacant, Highway Safety Transportation Planner



3

# Evolution of highway safety at NHDOT

- Prior to 2007
  - NHDOT “Safety Surveillance Team”
    - State Traffic Engineer, Highway Maintenance Engineer, Highway Design Administrator
  - Statewide “Regional Safety Conferences”
    - Biannual outreach to solicit specific safety concerns
  - Betterment funded intersection improvement projects
  - Monthly Traffic/Highway Maintenance district tours (ongoing)



4

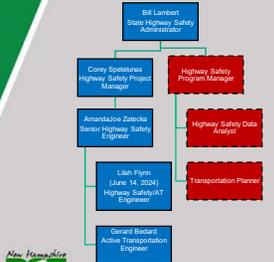
# Evolution of highway safety at NHDOT

- 2007 to 2013: Stuart Thompson is first “Highway Safety Engineer”, eventually adding Tim Harmon
- 2013 to 2017: Michelle Marshall replaces Stuart Thompson
- 2018 to 2022: Reorganization of Highway Design to include new Highway Safety/Active Transportation Section (Mike Dugas, Sally Gunn, Amanda Joe Zatecka, Larry Keniston, etc.)
- 2023 to present: Bill Lambert becomes first “Highway Safety, Active Transportation Administrator”



5

# Evolution of highway safety at NHDOT



- Purpose of reorganization:
  - Highway Safety and Active Transportation elevated to report to Assistant Commissioner
  - Traditional Civil Engineering positions reclassified to “program management” classifications
    - Allows engineers to focus on project delivery
  - Provides resources to manage SHSP, HSIP Implementation, VRUA, and other plans
  - Opportunity to improve collaboration with safety partners



6

## Strategic Highway Safety Plan - 2022

- Initial SHSP, 2007
- Updates
  - 2012-2016
  - 2017-2021

**Vision**  
Through a comprehensive, systematic approach we will use data-driven methods to select and implement appropriate countermeasures that will reduce crashes on all New Hampshire roads.

**Mission**  
Foster and sustain collaboration among private and public stakeholders, in the implementation of education, enforcement, engineering, and emergency medical services (EMS) strategies, to create a safety culture where one death on a New Hampshire roadway is too many.

**Goal**  
Reduce the number of fatalities and serious injuries by 50% by 2035, working toward 0 by 2050.

2022-2026 New Hampshire Strategic Highway Safety Plan  
Living Safer/Dies

New Hampshire DOT Department of Transportation 3/4/2024 Southwest Regional Planning Commission 7

7

## Strategic Highway Safety Plan – 2022

### Critical emphasis areas

- Intersections
- Roadway Departure
- Distracted, Impaired driving
- Speed and aggressive driving
- Vehicle Occupant Protection
- Older drivers, Teen traffic safety
- Vulnerable road users
  - Motorized
  - Non-motorized

New Hampshire DOT Department of Transportation 3/4/2024 Southwest Regional Planning Commission 8

8

## Strategic Highway Safety Plan – 2022

### Key action items

- Intersections:
  - Increase intersection conspicuity (signing and marking)
  - Educate drivers re: new (?) forms of intersection traffic control
- Roadway Departure:
  - Systemically install and maintain centerline and edge line rumble strips
  - Improve horizontal alignment warnings signs and devices
  - Improve work zone safety
- Distracted Driving:
  - Support law enforcement partners

New Hampshire DOT Department of Transportation 3/4/2024 Southwest Regional Planning Commission 9

9

## Strategic Highway Safety Plan – 2022

### Key action items

- Impaired Driving:
  - Support law enforcement partners (e.g. Wrong Way Driving action plan)
- Speed and Aggressive Driving:
  - Set credible speed limits using current practice
  - Educate the public of the dangers and consequences of excessive speed
- Vehicle Occupant Protection:
  - Partner with stakeholders to promote increased occupant protection
- Older Drivers:
  - Increase public transit and community transportation services

New Hampshire DOT Department of Transportation 3/4/2024 Southwest Regional Planning Commission 10

10

## Strategic Highway Safety Plan – 2022

### Key action items

- Teen Traffic Safety
  - Continue education outreach to high schools and driving instructors
- Vulnerable Road Users - Motorized
  - Support behavioral and educational stakeholders in outreach efforts
- Vulnerable Road Users - Non-motorized
  - Institutionalize and implement Complete Streets practices
  - Incorporate best practices for safe pedestrian and bicycle accommodations on roadways
  - Address short- and long-term maintenance of pedestrian and bicycle infrastructure elements

New Hampshire DOT Department of Transportation 3/4/2024 Southwest Regional Planning Commission 11

11

## Pedestrian and Bicycle Plan - 2023

- Includes full chapter on “Complete Streets” practices
- Key action items
  - Updated staff (and partner) training
  - Data acquisition for shoulder widths and other MIRE elements
  - Develop relevant design guidance
  - Develop more specific performance measures
  - Improve ped/bike volume data collection
  - Pursue new programmatic funding dedicated to non-motorized modes

NEW HAMPSHIRE PEDESTRIAN AND BICYCLE PLAN  
Final – August 2023  
New Hampshire DOT Department of Transportation

New Hampshire DOT Department of Transportation 3/4/2024 Southwest Regional Planning Commission 12

12

## Vulnerable Road User Assessment – 2023 Federal Requirements

- 2021 Bipartisan Infrastructure Law (BIL)
- **Data-driven process to identify areas of high-risk for vulnerable road users.** Specifically, the State must perform a quantitative analysis of VRU fatalities and serious injuries.
- **Consult with local governments, MPOs, and regional transportation planning organizations that represent high-risk areas.**
- **Develop program of projects/strategies to reduce safety risks to vulnerable road users in areas identified as high-risk**
- **Consider Safe System Approach Due to FHWA November 15, 2023**

New Hampshire DOT 3/4/2024 South West Regional Planning Commission 13

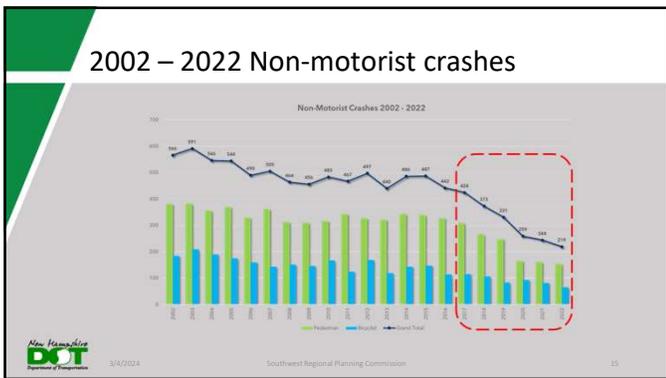
13

## What is a Vulnerable Road User?

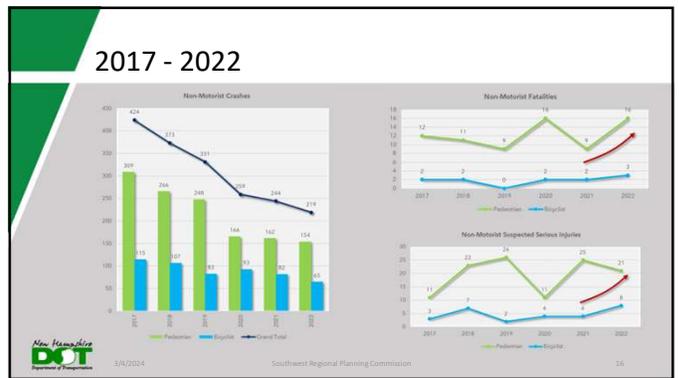
A Vulnerable Road User is defined by FHWA as “a non-motorist with a Fatality Analysis Reporting System (FARS) person attribute code for **pedestrian, bicyclist, other cyclist, and person on personal conveyance or an injured person that is, or is equivalent to, a pedestrian or pedal cyclist...**” It is important to note that unlike other organizations including the National Highway Traffic Safety Administration (NHTSA) and the National Safety Council, FHWA does not include motorcyclists among VRUs.

New Hampshire DOT 3/4/2024 South West Regional Planning Commission 14

14



15



16

## Crash Severity

**1,850** VRU Crashes

- FATALITIES: 73 11
- SUSPECTED SERIOUS INJURIES: 117 28
- SUSPECTED MINOR/POSSIBLE INJURIES: 556 282
- UNKNOWN: 179 77
- PROPERTY DAMAGE ONLY: 380 147

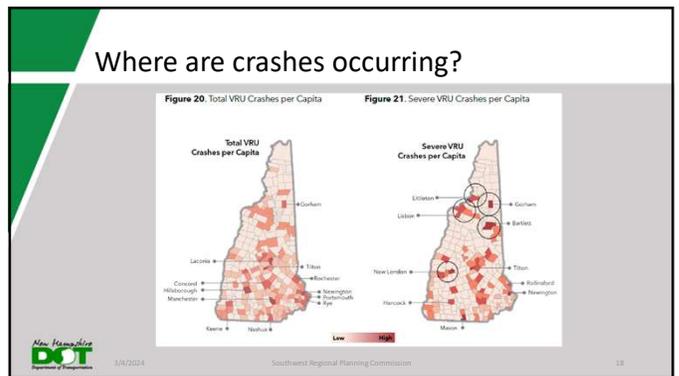
12% SEVERE DESIGNATION (2% of VRU Crashes)

58% of VRU involved in crashes were injured to some degree

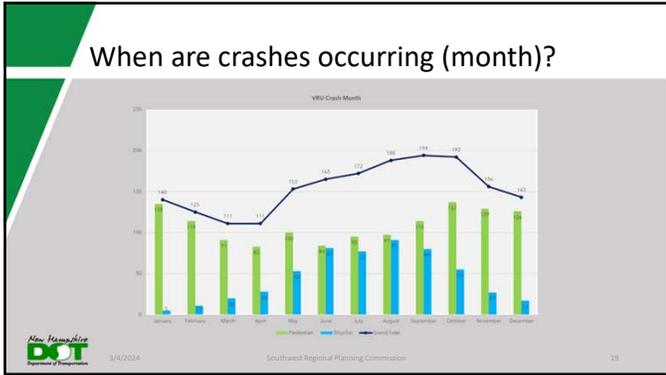
72% possible if unknown crashes resulted in injury

New Hampshire DOT 3/4/2024 South West Regional Planning Commission 17

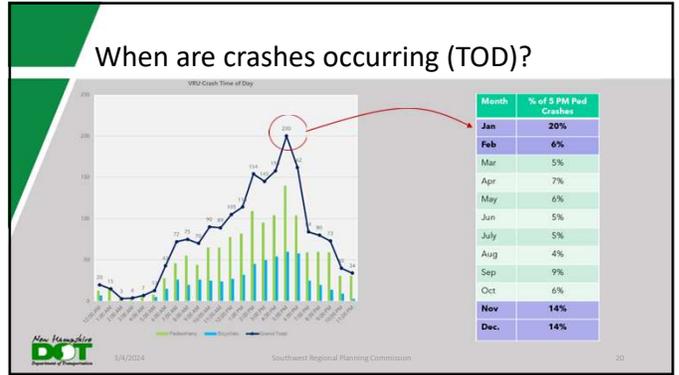
17



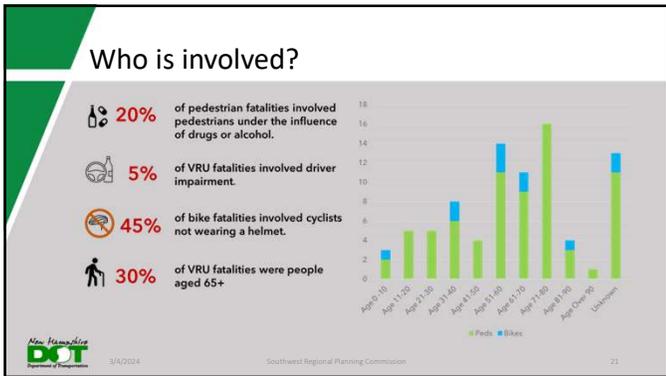
18



19



20



21

### High Injury Network (HIN)

- Federal regulations mandate that states must pinpoint areas of elevated risk for vulnerable road users as part of the Vulnerable Road User Safety Assessment. Typically, this is done by developing a High Injury Network (HIN) which identifies specific locations or corridors within a region where a disproportionately high number of severe and fatal traffic injuries occur. Once identified, these areas become top priorities for safety interventions.

22

### Vulnerable Road User Strategies

**Safe Roads/Safe Speeds**

- Enhance pedestrian and bicyclist safety along the high injury network.
- Identify, adopt, and encourage the use of best practices.
- Develop a series of programs intended to provide technical assistance to local entities

**Safe Road Users**

- Educate State, external partners, and the public about the needs of Vulnerable Road Users.

23

### Vulnerable Road User Strategies

**Data Improvements (all five SSA elements)**

- Improve data collection, data analysis, and data accessibility/transparency

**Future investments (all five SSA elements)**

- Invest in pedestrian and bicyclist safety

24

## Road Safety Audits (RSAs)

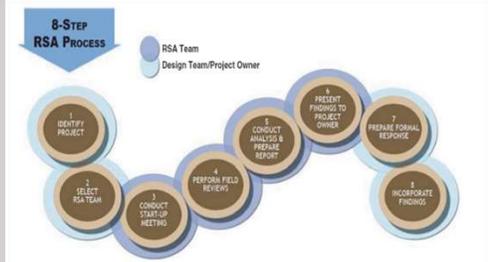
1. Applications submitted by towns/cities in collaboration with planning commissions
2. Multi-disciplinary team evaluation of specific safety concern and development of short-, intermediate-, and long-term safety countermeasures
3. Includes “table-top” discussion and field observation
4. Helps to identify and prioritize projects funded through Highway Safety Improvement Program



3/4/2024 Southwest Regional Planning Commission 25

25

## Road Safety Audits (RSAs)




3/4/2024 Southwest Regional Planning Commission 26

26

## Demonstration Projects

- Short-term application of innovative design elements using temporary materials
- Allows observation of alternatives without committing permanent resources
- Facilitates public input
- Provides opportunity for objective decision-making
- Communities should coordinate with planning commissions and NHDOT (typically, Highway Maintenance district office with support from Bureau of Traffic and Office of Highway Safety/Active Transportation)



3/4/2024 Southwest Regional Planning Commission 27

27

## Challenges

- Motorist behavior
- Overcoming years of “car first” highway design, construction, maintenance, and operation
- Data
  - Pedestrian and bicycle volumes
  - Crash data quantity and quality
  - Inventory data for network screening
- Reaching consensus
- Resources versus demand




3/4/2024 Southwest Regional Planning Commission 28

28

## Opportunities

- Adoption (and implementation) of a Complete Streets Policy
- Collaboration with law enforcement and other highway safety partners
- Big data and Artificial Intelligence
- Dedicated funding the IJA/BIL
- Innovative design and design alternatives
  - Intersection control (2-way to All-way STOP control)
  - Roundabouts versus traffic signal control
  - Consideration of lesser traffic level of service during peak periods



3/4/2024 Southwest Regional Planning Commission 29

29

## Opportunities Southwest region

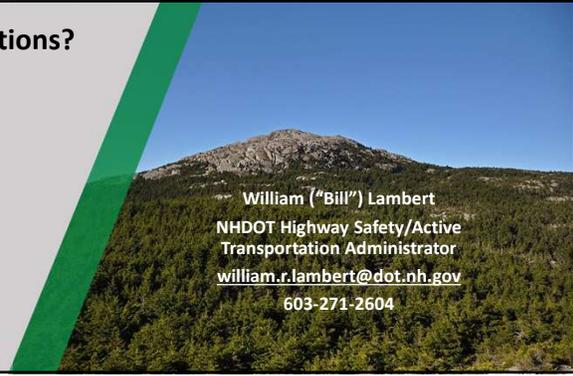
- Chesterfield, NH 9 at NH 63
  - [Google Maps](#)
- Fitzwilliam, NH 12 at NH 119
  - [Google Maps](#)
- Keene
  - NH 12 at Wyman Road/Corporate Drive
    - [Google Maps](#)
  - NH 9 at Whitcomb's Mill Road
    - [Google Maps](#)
- Others?



3/4/2024 Southwest Regional Planning Commission 30

30

**Questions?**



William ("Bill") Lambert  
NHDOT Highway Safety/Active  
Transportation Administrator  
[william.r.lambert@dot.nh.gov](mailto:william.r.lambert@dot.nh.gov)  
603-271-2604



31