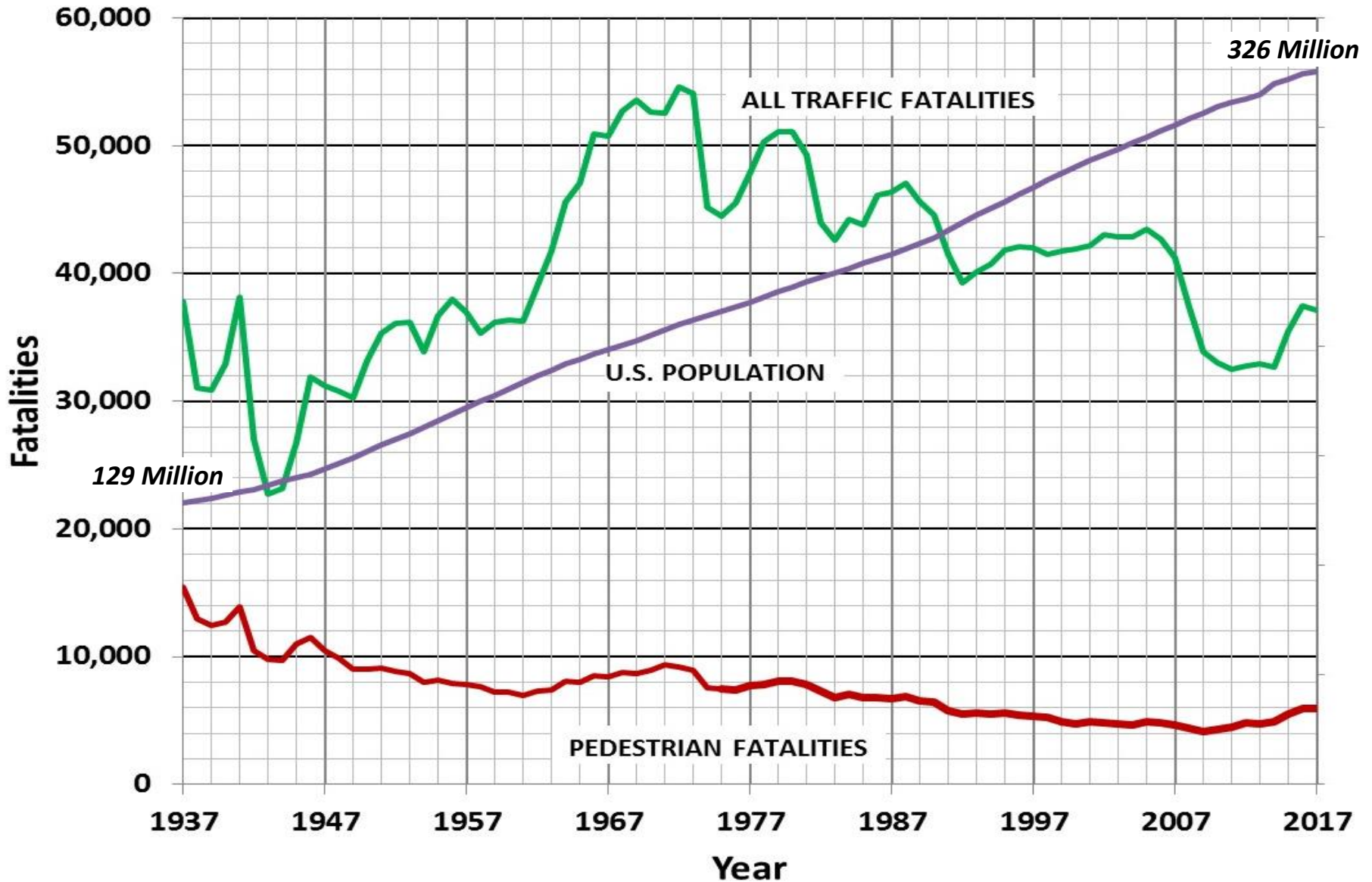


The Relevance of Vehicle Pedestrian Safety Systems in the U.S.

**SENIORS Project
Final Event - Athens, Greece
September 10, 2018**

**Peter G. Martin, Ph.D.
National Highway Traffic Safety Administration
U.S. Department of Transportation**

U.S. Fatality Trends



U.S. Sales – New Vehicles (January – July)



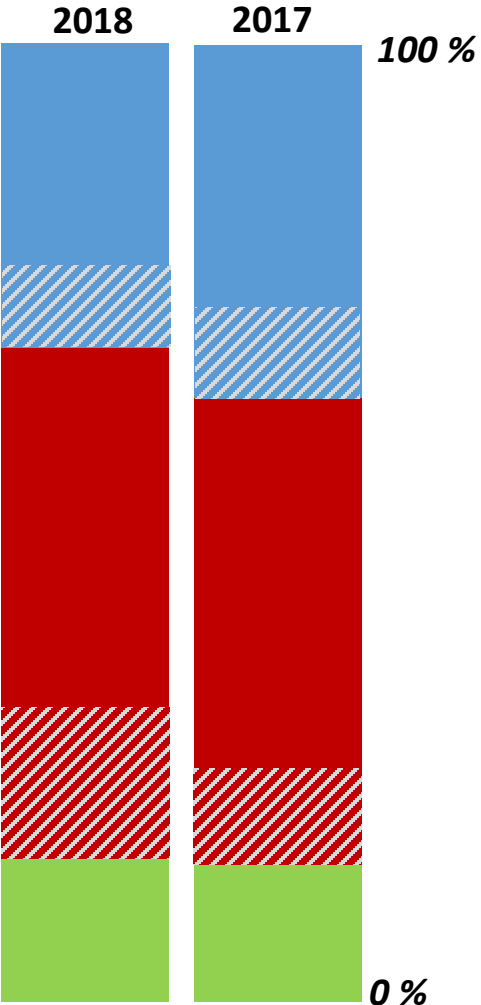
Sedans, coupes,
and hatchbacks



Minivans and SUVs



Full-sized pickup trucks



Source: The Automotive News, August 6, 2018

Current U.S. Activities

Real-world pedestrian crash data

- Survey state data to assess pedestrian injury trends by vehicle size class and model year.
- Investigate relationships between pedestrian injuries and vehicle designs.
- Analyze knee ligament injury patterns in field data

Test tools and test procedures.

- Establish best practices for pedestrian safety testing of U.S. passenger cars.
- Investigate the usefulness of Flex PLI with upper body mass against various vehicle size classes.

Vehicle testing

- Examine performance of U.S. passenger cars for pedestrian crashworthiness and AEB.
- Investigate presence of European designs on U.S. cars, pickups, SUVs.
- Examine performance of pop-up hoods on U.S. vehicles.

Current U.S. Activities, continued

Real-world pedestrian injuries: CIREN pilot study

- **Purpose: Observe the effectiveness of vehicle pedestrian safety systems.**
- **Detailed injury causation data from crashes involving late model vehicles.**
- **Collect crash causation, scene details, and avoidance-related data.**
- **Stage 1: nine-case pilot study to establish data collection methods, demonstrate feasibility.**

Automated Driving Systems – Concerns for Pedestrians

- **Examine how automated vehicles communicate intent with shared road users.**
- **Assess the degree of mutual recognition between pedestrians and automated vehicles.**
- **Identify key pieces of information automated vehicles must communicate to pedestrians.**
- **Twin European project: interACT.**

U.S. Regulations

NHTSA's Unified Agenda



List of projected rulemakings and reviews of existing regulations over the next 12 months.

Pre-rule stage:	9 actions
Proposed rule stage:	21 actions
Final rule stage:	12 actions

Long-term actions:	20 actions
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Includes an action related to GTR No. 9

U.S. New Car Assessment Program

Public Meeting

Friday, September 14, 2018

Structure of the Meeting.

- Meeting is a listening session for NHTSA.
- Recommendations from the public on how best to improve NCAP.

NHTSA seeks public input on Pedestrian Safety.

- Production of U.S. vehicles with pedestrian safety features.
- Value vehicle buyers place on pedestrian safety systems.
- Should NCAP include a pedestrian safety rating as part of an overall rating or as a separate assessment?

For further details, see:



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