State of Connecticut
2024-2026 Triennial
Highway Safety Plan

PREPARED BY
Highway Safety Office, Bureau of Policy and Planning,
Connecticut Department of Transportation

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EXECUTIVE SUMMARY

Executive Summary

The goal of the Connecticut Highway Safety Program is to prevent roadway fatalities and injuries as a result of crashes related to driver behavior. Under the Highway Safety Act of 1966 (U.S. 23 USC-Chapter 4) the Governor is required to implement a highway safety program through a designated State agency suitably equipped and organized to carry out the program. An appointed Governor's Highway Safety Representative oversees the program and supporting Section 402 and 405 highway safety grant funds made available to the States to carry out their annual Highway Safety Plans. The Connecticut Highway Safety program is an extension of this federal requirement. The Highway Safety Office (HSO) is located in the Connecticut Department of Transportation (CTDOT) in the Bureau of Policy and Planning. **The primary objectives of the HSO are to plan, coordinate, and implement effective highway safety programs and to provide technical leadership, support and policy direction to highway safety partners.**

This planning document provides historic, trend, and the most current crash data available in addition to other State-provided data detailing highway safety in Connecticut. The identified problem areas dictate the State's highway safety goals, objectives, and planned countermeasures. The basis for this examination is Connecticut's motor vehicle crash experience for the calendar year 2021 in comparison to the previous year(s). See the Highway Safety Planning Process section for further discussion of data sources used in this document. This document serves as Connecticut's application to the National Highway Traffic Safety Administration (NHTSA) for federal funds under Section 402 and submitted separately are applications for Section 405 and 1906 of the Fixing America's Surface Transportation (FAST) Act and the Bipartisan Infrastructure Law (BIL) for Federal Fiscal Years (FFY) 2024-2026.

The HSO focuses on NHTSA program areas under the Federal 402, 405 and 1906 programs including Impaired Driving, Occupant Protection, Child Passenger Safety, Distracted Driving, Police Traffic Services, Teen Driver Safety, Speed and Aggressive Driving, Motorcycle Safety, Traffic Records, Pedestrian and Bicyclist Safety, Preventing Roadside Deaths and Driver and Officer Safety Education as well as the Connecticut Racial Profiling Data Collection Program. These program areas provide equitable funding for countermeasures to combat key problems identified in each Section, including disadvantaged populations. Key priority areas include percentage of alcohol-related fatalities and injuries; percentage of unbelted fatalities, speed related fatalities and injuries; motorcyclist fatalities and injuries; pedestrian fatalities and injuries; and improving crash data collection and availability.
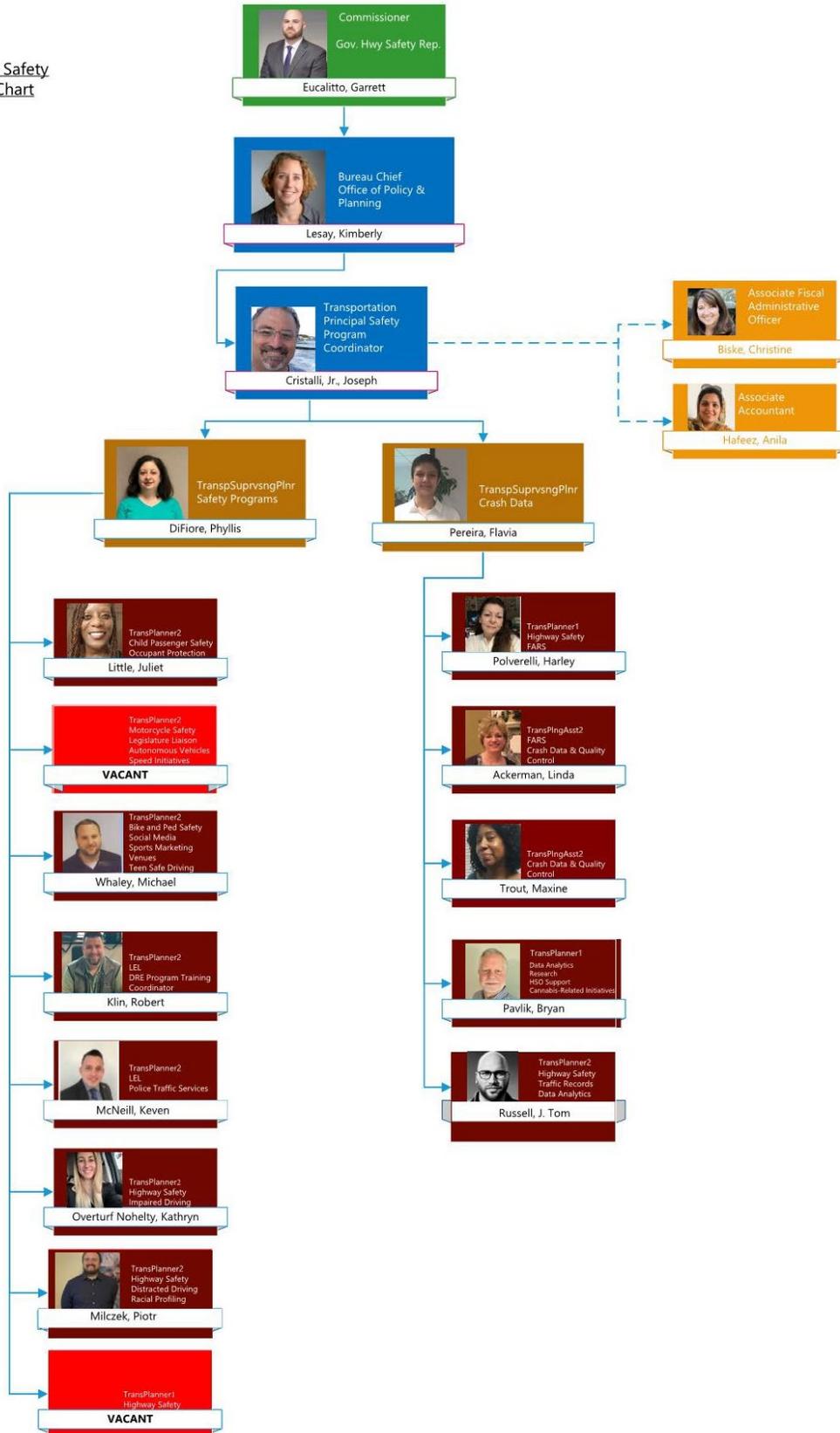
Note: The visual data pertaining to specific Problem Identifications are located in the Highway Safety Data Analysis section.

Core Outcome Measures, 2017-2021

Outcome Measures		2017	2018	2019	2020	2021
Traffic Fatalities	**Total**	281	293	249	299	298
	Rural	44	38	47	43	45
	Urban	235	252	199	254	253
	Unknown	2	3	3	2	0
Fatalities per 100M Vehicles Miles Driven	**Total**	0.89	0.93	0.79	1.00	1.03
	Rural	1.40	1.20	1.47	1.46	1.57
	Urban	0.83	0.89	0.70	0.94	0.97
Passenger Vehicle Occupant Fatalities (All Seat Positions)	**Total**	163	172	137	168	169
	Restrained	81	71	58	63	70
	Unrestrained	53	73	57	67	74
	Unknown	29	28	22	38	25
Alcohol-Impaired Driving Fatalities		114	122	120	98	123
Speeding-Related Fatalities		82	90	100	64	106
Motorcyclist Fatalities	**Total**	57	49	46	57	65
	Helmeted	22	20	15	26	25
	Unhelmeted	33	28	28	25	35
	Unknown	2	1	3	6	5
Drivers Involved in Fatal Crashes	**Total**	379	413	338	421	432
	Aged under 15	0	0	0	0	1
	Aged 15-20	27	28	31	34	34
	Aged under 21	27	28	31	34	35
	Aged 21 and over	347	376	297	372	386
	Unknown Age	5	9	10	15	11
Pedestrian Fatalities		46	49	59	54	59

Sources: FARS Final Files 2017-2020; FARS Annual Report File 2021

Organizational Chart

Office of Highway Safety
Organizational Chart

Commissioner
Gov. Hwy Safety Rep.
Eucalitto, Garrett

Bureau Chief
Office of Policy & Planning
Lesay, Kimberly

Transportation Principal Safety Program Coordinator
Cristalli, Jr., Joseph

Associate Fiscal Administrative Officer
Biske, Christine

Associate Accountant
Hafeez, Anila

TranspSuprvsngPlnr
Safety Programs
DiFiore, Phyllis

TranspSuprvsngPlnr
Crash Data
Pereira, Flavia

TransPlanner2
Child Passenger Safety
Occupant Protection
Little, Juliet

TransPlanner2
Motorcycle Safety
Legislature Liaison
Autonomous Vehicles
Speed Initiatives
VACANT

TransPlanner2
Bike and Ped Safety
Social Media
Sports Marketing
Venues
Teen Safe Driving
Whaley, Michael

TransPlanner2
LEL
DRE Program Training
Coordinator
Klin, Robert

TransPlanner2
LEL
Police Traffic Services
McNeill, Keven

TransPlanner2
Highway Safety
Impaired Driving
Overturf Nohelty, Kathryn

TransPlanner2
Highway Safety
Distracted Driving
Racial Profiling
Milczek, Piotr

TransPlanner1
Highway Safety
VACANT

TransPlanner1
Highway Safety
FARS
Polverelli, Harley

TransPlngAsst2
FARS
Crash Data & Quality Control
Ackerman, Linda

TransPlngAsst2
Crash Data & Quality Control
Trout, Maxine

TransPlanner1
Data Analytics
Research
HSO Support
Cannabis-Related Initiatives
Pavlik, Bryan

TransPlanner2
Highway Safety
Traffic Records
Data Analytics
Russell, J. Tom

1300.11 (b)(1) HIGHWAY SAFETY PLANNING PROCESS AND PROBLEM IDENTIFICATION

Planning Processes

The Department prepares this annual planning document to address a set of identified and defined highway and traffic safety problems. This problem identification process begins early in the calendar year with the examination of a variety of traffic and roadway related data. The analysis of these data identifies both general and specific patterns of concern and, from a review of historical patterns, results in a projection of future data trends. Other problems and deficiencies are identified through programmatic review.

Data Sources:
- Fatality Analysis Reporting System (FARS)
- NHTSA Fatality Analysis Reporting System (STSI)
- NHTSA Fatality and Injury Reporting System Tool (FIRST)
- Connecticut Crash Data Repository (CTCDR)
- Connecticut Department of Transportation (CTDOT)
- Connecticut Transportation Safety Research Center (CTSRC)
- Connecticut Vehicle Miles Traveled (VMT)
- Connecticut Department of Emergency Services and Public Protection (CTDESPP)/State Police and the Division of Scientific Services/Toxicology Laboratory
- Connecticut Division of Criminal Justice (CTDCJ)
- Centralized Infractions Bureau (CIB)
- Connecticut Judicial Information Systems (CTJIS)
- Connecticut Department of Motor Vehicles (CTDMV)
- Connecticut Department of Mental Health and Addictive Services (CTDMHAS)
- Connecticut Department of Public Health (CTDPH)
- Connecticut Office of the Chief Medical Examiner (CTOCME)
- Justice40 (J40) Initiative
- Environmental Protection Agency (EPA) – Environmental Justice Screening and Mapping Tool (EJScreen)
- Awareness Surveys
- Seat Belt Use Surveys
- U.S. Census Bureau

Problem Identification takes place on multiple levels. The first and earliest form of problem identification begins with reviewing projects from the previous fiscal year and requesting project level input from highway safety partners. This process may include sending out a project concept letter to stakeholders, partners, and program managers; or in some program areas, holding meetings with project directors and stakeholders. As part of the new Public Participation and

Engagement Requirement, the HSO gathers input from members of the community to pinpoint traffic safety problems. More information can be found in the Public Participation and Engagement section.

A major part of this process is to enlist the cooperation of highway safety partners who will facilitate the implementation of countermeasures. In addition, local political subdivisions and State agencies are routinely and systematically encouraged to identify municipal, regional, and State-level highway safety problems in order to propose specific countermeasures that address these problems. Program objectives and countermeasures are further developed based on problem identification.

The HSO understands that the classic components of an effective strategic plan are accurate and timely traffic/crash data analysis; the creation of realistic and achievable targets; the implementation of functional countermeasures; the utilization of applicable metrics; and the election of projected outcomes. Connecting and blending each of these steps is essential to the creation and implementation of a systematic and successful statewide plan to reduce crashes, injuries and fatalities on Connecticut's roadways. Graphic data analysis, mapping and distribution of pertinent data, and actively listening and incorporating feedback from the impacted communities, and information promote increased effectiveness in the deployment of resources. When available, using real time data to identify ongoing or emerging traffic safety issues increases the possibility of achieving a successful resolution. This is accomplished in the following ways:

Stakeholder Input – Requests for local problem identifications are sent annually to all highway safety stakeholders including impacted communities, 95 Municipal Law Enforcement Agencies, 52 Resident State Troopers, 11 State Police Troops, one (1) State Police Headquarters Traffic Unit, eight (8) University Police Departments and nine (9) Regional COGs.

Crash Data Analysis/Problem Identification – The data are analyzed by the HSO to identify major problem areas, over-represented groups, demographics, and other "drill-down" factors in an attempt to determine who, what, where, when and why crashes with fatalities and injuries are taking place. FARS data, annual observation belt use surveys, awareness surveys, injury, licensing and population, registration, citation and arrest/adjudication data, toxicology, Crash Outcome Data Evaluation System (CODES), the Justice40 layer and the CTCDR as well as State Vehicle Miles Traveled (VMT) data are all used in this process. The HSO data analysis contractor generates weighted crash data indices using crash, population, vehicle mileage, enforcement, and other data to aid in analysis. Additionally, we expanded our analysis by incorporating data from the Justice40 database. This data supplied us with a GIS layer abundant in Census data, including a field indicating whether a Census tract is disadvantaged. By filtering this GIS layer to highlight these disadvantaged Census Tracts and overlaying it onto Connecticut map, we could establish vital comparisons between crashes occurring within and outside these disadvantaged areas. The HSO will also utilize Environmental Protection Agency's EJScreen mapper, as well as a list of disadvantaged communities in the State, in the future, to enhance our understanding of the situations faced by disadvantaged communities within the broader safety landscape.

To assist in analyzing and setting performance measures and targets, the data include a five-year moving average to further normalize data trends over time and includes a projection based on the five-year moving average. In addition to the five-year moving average projection, since 2021, the HSO has used ten years of data for the annual projection to achieve improved decision making. The program manager(s) and Principal Highway Safety Coordinator set targets based on these projections, stakeholder input as well as priority ranking of specific highway safety problems and available funding. The HSO is mindful of NHTSA's recommendation of not setting recessive targets.

Countermeasure Selection –The objective of the strategy selection process is to identify evidence-based countermeasures that best address the issues identified in the data-driven problem identification process and collectively will lead to improvements in highway safety and the achievement of the performance targets. The sources used for the identification of evidence-based strategies have been the publication *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices,* NHTSA's Uniform Guidelines for State Highway Safety Programs*,* research, or substance evidence. To effectively tackle the identified problem areas, taking a comprehensive approach within each program area is crucial. By evaluating the contribution of each strategy towards the overall approach, Connecticut can allocate funding that supports the necessary strategies to meet the performance targets set for the program area. This approach enables Connecticut to work towards a solution that addresses the root causes of the problems and ensures a holistic approach to the issue at hand.

Project Implementation – Projects are selected using criteria including response to identified problems, potential for impacting performance targets, innovation, clear objectives, adequate evaluation plans, equity-related needs and cost-effective budgets. Sub-grantees are selected based on an ability to demonstrate significant programmatic impact based on data-driven problem analysis.

Monitoring and Continuous Follow Up and Adjustment– Traffic safety problems may be resolved with short term solutions or may continue for extended periods of time. To ensure accurate measurement of progress and to assess the current status of the targeted traffic safety condition, a clear and systematic evaluation process must be conducted at predetermined scheduled intervals. Consistent measurement and assessment will ensure the project is achieving the objectives it was designed to address and allows the agency to adjust and amend strategies to retain effectiveness. Monitoring and evaluation allow for prudent adjustments in strategies and tactics, if appropriate. Some traffic safety projects may be successfully measured and evaluated on a quarterly basis. Still other projects may need monthly, weekly, or daily scrutiny to accurately assess progress.

Data-Driven Approaches to Crime in Traffic Safety (DDACTS) – In addition, CTDESPP is using the DDACTS model to identify and implement enforcement in areas shown to have higher crash rates. Municipal agencies will use DDACTS to identify traffic safety problem identification. A successful, dynamic traffic safety program becomes more efficient and effective when employing all seven of the DDACTS guiding principles. Once a traffic safety condition has been identified and

diagnosed, a carefully crafted strategy employing the appropriate countermeasures must be implemented with clearly specified targets and objectives.

Process Participants

NHTSA and the Federal Highway Administration (FHWA) continue to provide leadership and technical assistance.

Participants include:
- Connecticut Office of the Governor and Lieutenant Governor
- Connecticut Department of Emergency Services and Public Protection (CTDESPP)/State Police and the Division of Scientific Services/Toxicology Laboratory
- Connecticut Department of Mental Health and Addiction Services (CTDMHAS)
- Connecticut Department of Public Health (CTDPH)
- Connecticut Department of Motor Vehicles (CTDMV)
- Connecticut Division of Criminal Justice (CTDCJ)
- Centralized Infractions Bureau (CIB)
- Connecticut Office of the Chief State's Attorney
- Connecticut Office of Policy and Management (CTOPM)
- Connecticut Police Chiefs Association (CPCA) and Municipal law enforcement agencies
- Connecticut Regional and Municipal Planning Agencies
- Connecticut Regional Councils of Governments (CRCOGs)
- Connecticut Department of Consumer Protection- Liquor Control
- Connecticut Department of Children and Families
- University of Connecticut (UConn)
- Connecticut Safety Research Center (CTSRC) at UConn
- Central Connecticut State University (CCSU)
- Federal Motor Carrier Safety Administration (FMCSA)
- Mothers Against Drunk Driving (MADD)
- The Connecticut Coalition to Stop Underage Drinking
- Safe Kids
- Connecticut Motorcycle Riders Association
- American Automobile Association (AAA)
- Connecticut Interscholastic Athletic Conference (CIAC)
- Boys and Girls Club of America
- The Governor's Prevention Partnership
- Yale New Haven Hospital
- Saint Francis Hospital
- Lawrence + Memorial Hospital
- Hartford Healthcare/Hospital
- Griffin Hospital

- Center for Latino Progress
- Local health departments
- City of Hartford Connecticut Department of Health and Human Services
- Connecticut Cannabis Chamber of Commerce
- Private sector and business organizations

Connecticut also actively participates as a member in:
- Governors Highway Safety Association
- Transportation Research Board
- National Association of State Motorcycle Safety Administrators
- American Association of State Highway and Transportation Officials

Methods for Project Selection

A major part of this process is to enlist the cooperation of highway safety partners who will facilitate the implementation of countermeasures. In addition, local political subdivisions, non-profits, and State agencies are routinely and systematically encouraged to identify community, municipal, regional, and State-level highway safety problems in order to propose specific grant applications that address these problems.

The HSO solicits grant applications throughout the year depending on emerging highway safety traffic issues as well as prior to enforcement periods. Requests for local problem identifications are sent annually to all highway safety stakeholders. The potential subrecipients are asked to submit a grant application containing a problem statement, a description of proposed activities and a complete budget. It is emphasized that to be funded, projects must have a direct link to HSO identified problems and targets, including community engagement.

The HSO reviews each application to verify that it addresses the identified problems and meets all of the application requirements. The budget is also reviewed. As necessary, the HSO works with the potential subrecipient to resolve any questions and develop a fully detailed and complete proposed grant application. Upon review by HSO staff, HSO senior administration makes the final grant selection determination and approval.

Risk Assessment

The HSO will evaluate each subrecipient's risk of non-compliance with Federal Statutes, regulations, and the terms and conditions of the sub-award for the purposes of determining the appropriate level of subrecipient monitoring. The HSO reviews each subgrantee to determine: if the grant recipient has received similar sub-awards; results of previous audits; if personnel or systems have changed substantially; whether previous applications and reporting have been

consistently on time and accurate and followed the authorized purposes of the grant award. Subgrantees are ranked based on these criteria and determined to be low, medium or high risk and an assessed need for monitoring is determined.

SHSP/HSIP Coordination

As required under MAP-21 (Moving Ahead for Progress in the 21st Century Act) legislation, the goal of this planning document is to compliment and coordinate with the State's Strategic Highway Safety Plan (SHSP) and Highway Safety Improvement Plan (HSIP). This process will use complementary funding wherever possible to improve safety on highway and transportation systems through projects that address the "4 E's" – Education, Engineering, Enforcement and Emergency Medical Services. Areas such as pedestrians, bicyclists, teen drivers (impaired driving) and distracted driving will be targeted under this coordinated process and will account for the overlap of countermeasures in their respective areas. In addition, the Safe Systems approach is part of the Strategic Highway Safety Plan (SHSP), and CTDOT will work towards integrating the Safe System principles into its planning and design practices to reduce fatalities and injuries. At the time of publication of this document, the 2022-2026 SHSP was accepted and approved by FHWA in May 2022. The shared goal-setting coordination is already taking place across these documents. The FFY2024-2026 HSP reflects targets in the SHSP/HSIP for this planning cycle.

Strategic Highway Safety Plan Emphasis Areas (2022 -2026):

1. Infrastructure (Roadway Departure and Intersections)
2. Pedestrians
3. Driver Behavior (Aggressive Driving, Distracted Driving, Impaired Driving, Motorcycles and Unrestrained Occupants

Tier II/Secondary Emphasis Areas:

1. Unlicensed Drivers
2. Hit-and-Runs
3. Work Zones
4. Commercial Vehicles
5. Older Drivers and Older Pedestrians
6. Pedal Cyclists/Bicyclists
7. Younger Drivers
8. Railway-Highway Grade Crossings
9. Tribal Owned Roadways
10. Traffic Incident Management
11. Wrong-Way Driving

Connecticut Highway Safety Timeline

January-February

Analyze previous year projects and seek partner input. Send latest crash data for analysis to HSO data contractor to begin problem identification process.

March-April

Review partner input, receive data analysis from HSO data contractor. Complete problem ID, review performance measures and begin setting performance targets and objectives based on proposed/planned tasks and activities.

May-June

Finalize performance targets and objectives and plan countermeasures based on partner input and planned NHTSA mobilization schedules. Countermeasures include activities outlined in proposed tasks/projects. Prioritize and plan projects based on anticipated project funding levels and carry-forward funds.

July

The triennial HSP submission deadline is July 1st, and the Annual Grant Application submission deadline is August 1st. The planning process is completed by gaining approval from the Governor's Highway Safety Representative and NHTSA. NHTSA reviews and approves the HSP by August/September of each year.
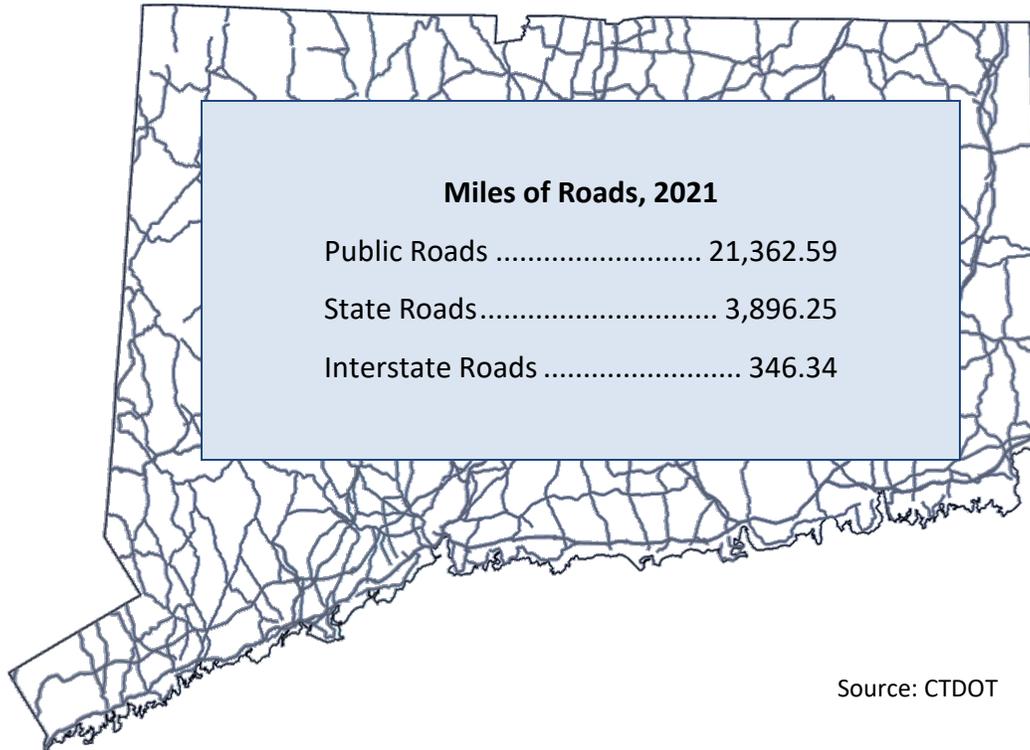
August-December

Upon HSP acceptance from NHTSA, the HSO execute, monitor and analyze projects for the current federal fiscal year.
Annual Evaluation Report is submitted by January 30th for the previous federal fiscal year.

Demographic Information

Connecticut Facts

State Capitol...Hartford
Largest City (Population 2021)...Bridgeport (148,529)
Counties 8
Boroughs 9
Towns (including cities)... 169
Cities... 21
Land Area .... 4,845 mi^2
Annual Miles of Travel Per Driver CT 11,122 (2021)
Daily VMT 79,420,671 (2021)
Annual VMT.. 28,988,544,915 (2021)

Miles of Roads

Miles of Roads, 2021

Public Roads 21,362.59

State Roads............................ 3,896.25

Interstate Roads 346.34

Source: CTDOT

Connecticut Police Departments

State Troops 11
Local Town Agencies/Municipal Police Departments 95
Resident Trooper Towns 52
University Police Departments 8
Tribal Police Departments 2

Connecticut State Police Barracks by Towns

Troop A - Southbury   Troop G - Bridgeport
Troop B - Canaan   Troop H - Hartford
Troop C - Tolland   Troop I   - Bethany
Troop D - Danielson   Troop K - Colchester
Troop E - Montville   Troop L - Litchfield
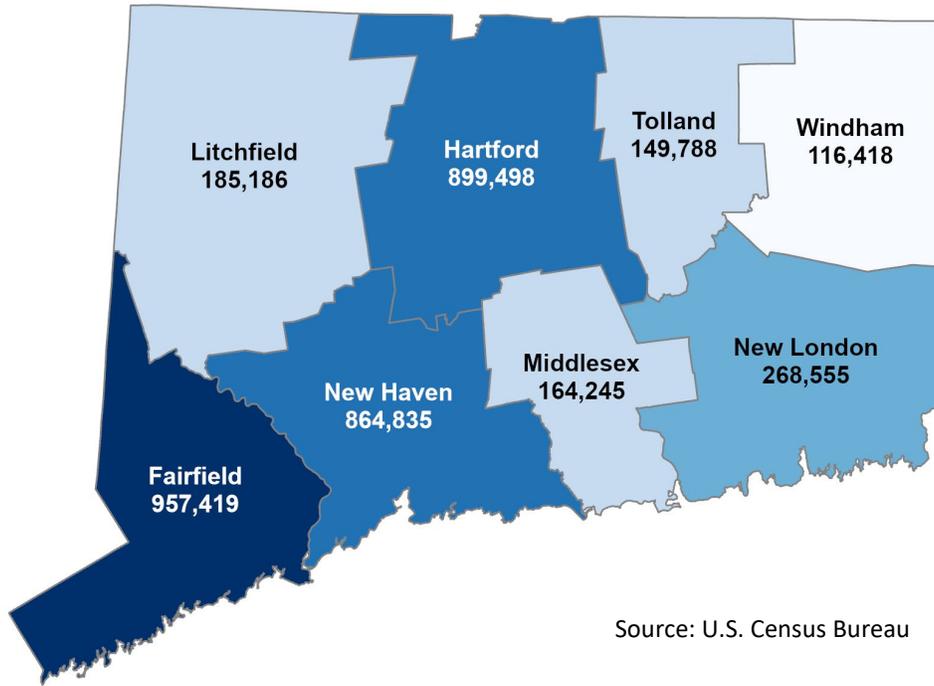Troop F - Westbrook

Connecticut Population

Connecticut Population Statistics, 2021

	Connecticut
Population Estimate (2021)	3,605,597
Under 5 Years Old (2021)	4.9%
Under 18 Years Old (2021)	20.2%
65 Years Old and Older (2021)	18%
American Indian or Alaska Native	0.3%
Asian	4.8%
Black/African American	10.6%
Hispanic or Latino	17.7%
Native Hawaiian or Other Pacific Islander	0.0%
White/Caucasian Persons	65.3%

Source: 2021 American Community Survey Estimate
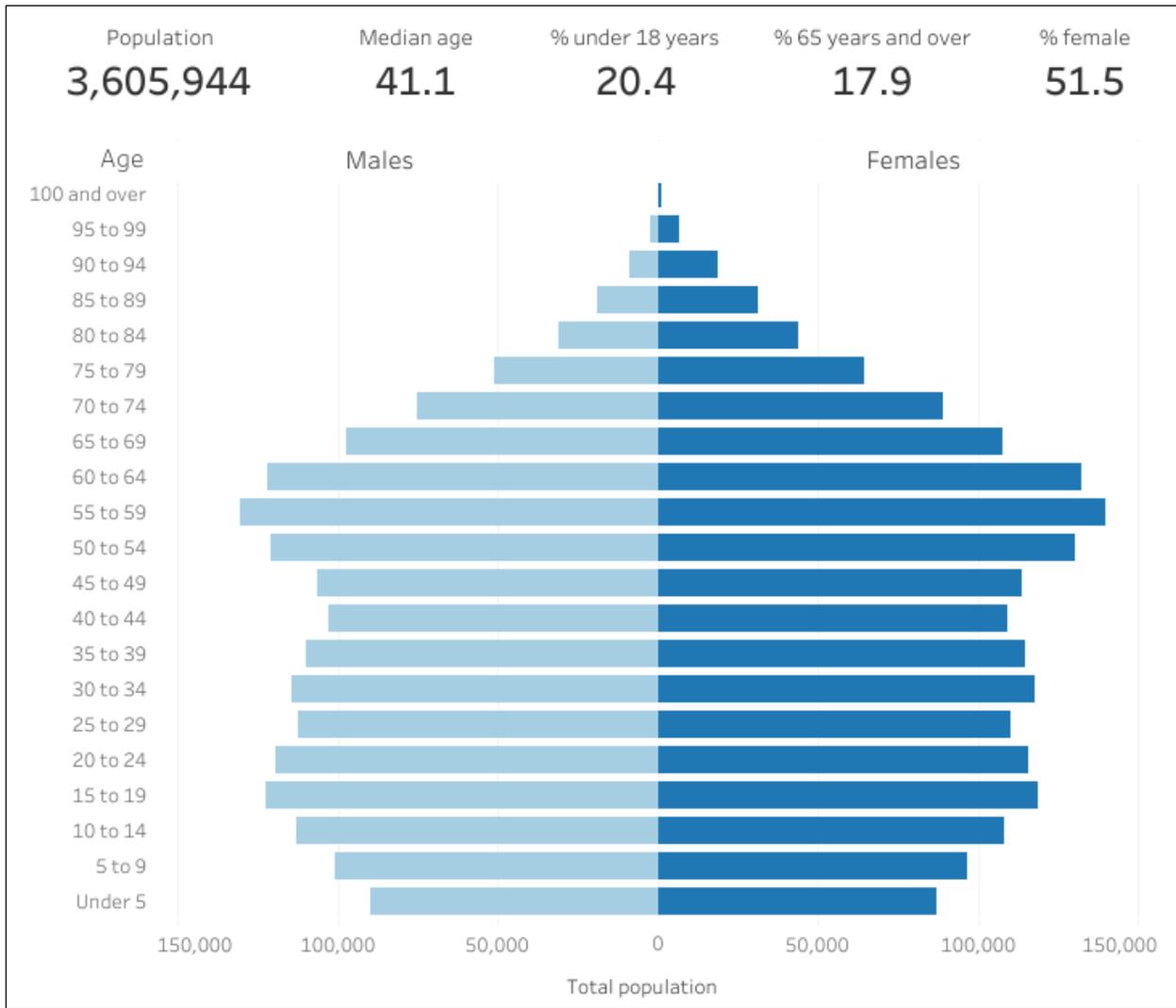
Connecticut Population by County, 2020

County	Population
Litchfield	185,186
Hartford	899,498
Tolland	149,788
Windham	116,418
Middlesex	164,245
New London	268,555
New Haven	864,835
Fairfield	957,419

Source: U.S. Census Bureau

Connecticut Population and Population Density, 2020

Connecticut

Total Population (2020):	Numeric Change in Population (2010–2020):	Percent Change in Population (2010–2020):
3,605,944	31,847	0.9%

Housing Units (2020):	Housing Unit Vacancy Rate (2020):	Percent Change in Housing Units (2010–2020):
1,530,197	7.3%	2.8%

Population Density in Connecticut Counties: 2020

People per square mile
- 500.0 or more
- 200.0 to 499.9

Connecticut Counties
(Ranked by 2020 total population)

	County	Population
1.	Fairfield County	957,419
2.	Hartford County	899,498
3.	New Haven County	864,835
4.	New London County	268,555
5.	Litchfield County	185,186
6.	Middlesex County	164,245
7.	Tolland County	149,788
8.	Windham County	116,418

Source: U.S. Census Bureau

Connecticut Population by Age, 2020

Population	Median age	% under 18 years	% 65 years and over	% female
3,605,944	41.1	20.4	17.9	51.5

Source: U.S. Census Bureau

Connecticut Diversity Index, 2020
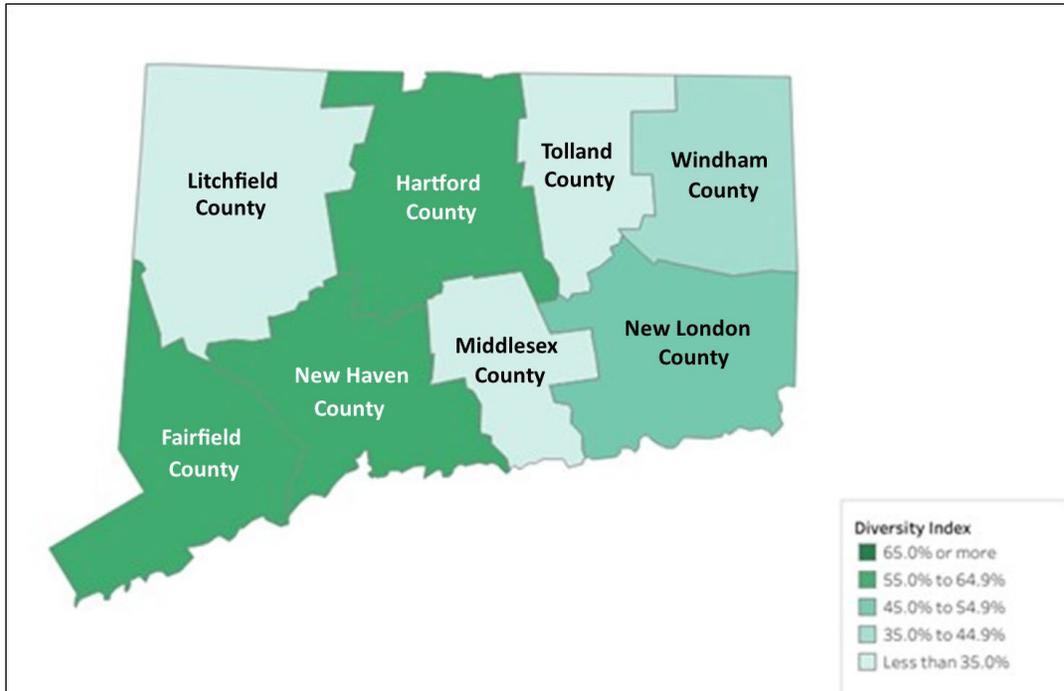
Notes: The Diversity Index (DI) is used to measure the probability that two people chosen at random will be from different race and ethnicity groups. The DI is between 0 and 1. A 0-value indicates that everyone in the population has the same racial and ethnic characteristics. A value close to 1 indicates that everyone in the population has different racial and ethnic characteristics. The probabilities have been converted into percentages to make them easier to interpret. In this format, the DI shows the chance that two people chosen at random will be from different racial and ethnic groups.

Source: U.S. Census Bureau

Connecticut Diversity Index, 2010 and 2020

Area	2010 %	2020 %	2010-2020 % Change
Fairfield County	52.1	60.6	16.3
Hartford County	52.2	60.6	16.1
Litchfield County	16.4	28.6	74.4
Middlesex County	24.8	34.4	38.7
New Haven County	50.6	59.5	17.6
New London County	37.4	45.3	21.1
Tolland County	23.0	34.8	51.3
Windham County	26.1	36.0	37.9
Connecticut	46.4	55.7	20.0

Source: U.S. Census Bureau

Highway Safety Data Analysis

Highway Safety Data Analysis

Figure 1 shows Connecticut's motor vehicle crash experience for 2021 and compares it with the prior year. Overall, the number of police reported crashes in the State increased (+20.7%) compared to 2020. An increase was observed in property damage only crashes (+22.2%) and injury crashes (+16.5%), whereas fatal crashes remained stable (-0.4%).

In 2021, there were 283 fatal crashes in which 298 persons were killed. The fatality total is similar to the previous year (-0.3%). Serious "A" injuries increased (+14.4%) in 2021, as did "B" level injuries (+17.7 %) and "C" level injuries (+16.7%).

Figure 1. Connecticut Motor Vehicle Crash Profile, 2021

Total Crashes
101,132
+20.7%[1]

Crashes With Fatalities[2]	Crashes With Property Damage Only[2]	Crashes With Injuries[2]
283	76,074	24,763
-0.4%	+22.2%	+16.5%

Number of Fatalities
298
-0.3%
Drivers   215
+12.6%
Passengers   25
-39.0%
Other[3]   58
-13.4%

Number of Injuries
34,174
+17.0%
A Inj.[4]   1,506
+14.4%
B Inj.   14,311
+17.7%
C Inj.   18,357
+16.7%
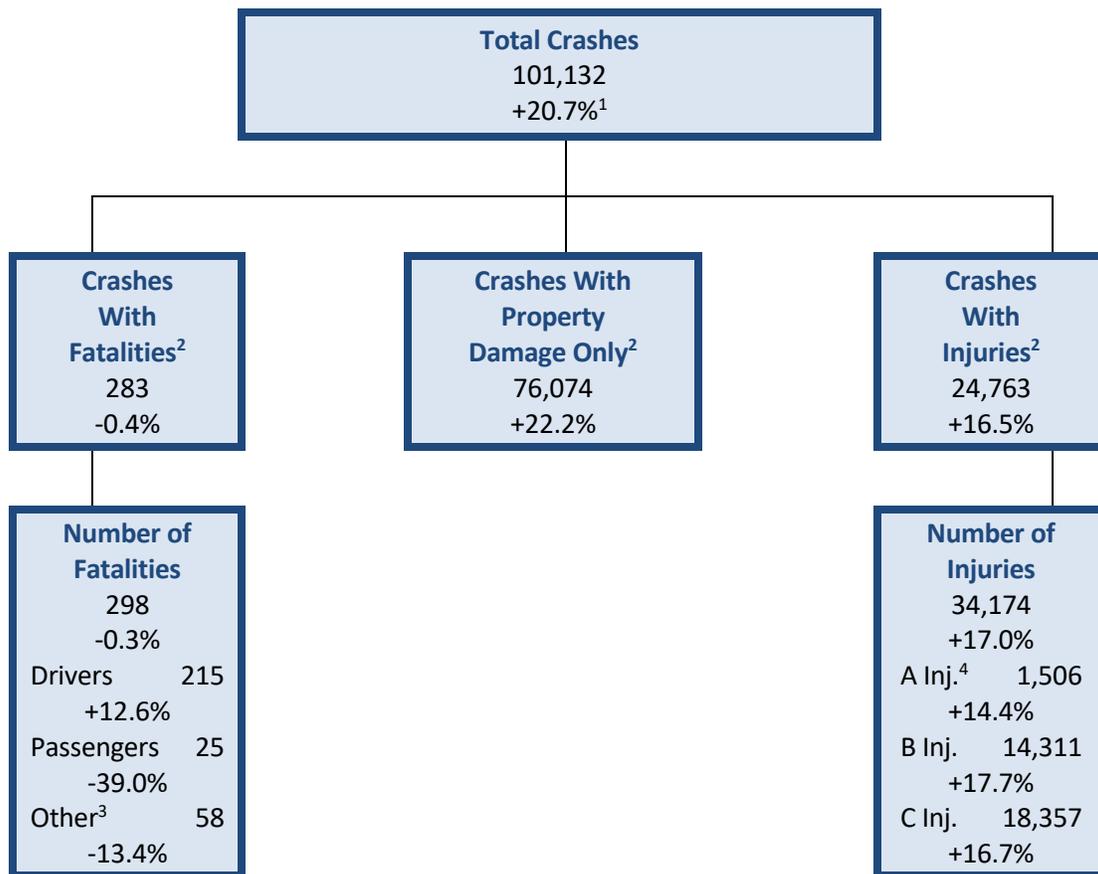
1. Percent change 2021 versus 2020
2. Data on fatal crashes are from the NHTSA FARS; data on injury and property damage only crashes are from the Connecticut Crash Data Repository
3. "Other" includes pedestrians, bicyclists, and other non-motorists
4. Injury severity codes: "A" = severe injury, "B" = moderate injury, "C" = minor injury

2021 Crash Rates

Table 1 shows Connecticut's fatality and injury rates for 2021 based on population, licensed drivers and Vehicle Miles Traveled (VMT), along with comparable rates for the United States. The table indicates the State's fatality rates are below national levels. Connecticut's fatality rate was 8.3 fatalities per 100,000 population compared to 11.8 per 100,000 population for the U.S. as a whole. Connecticut's fatality rate per 100M VMT was 1.0 compared to the national figure of 1.2 fatalities per 100M VMT. The non-fatal injury crash rates in Connecticut were higher than those for the U.S. as a whole.

Table 1. Connecticut and U.S. Fatality and Injury Rates, 2021

CT Data for 2021	Rate Base	Fatality Rate	Injury Rate
Population **3,605,597**	Per 100,000 Population	CT: 8.3 U.S.: 11.8	CT: 948 U.S.: 753
Licensed Drivers **2,606,396**	Per 100,000 Licensed Drivers	CT: 11.5 U.S.: 16.8	CT: 1,311 U.S.: 1,073
VMT **28,989,000,000**	Per 100M Miles of Travel	CT: 1.0 U.S.: 1.2	CT: 118 U.S.: 79

*FHWA does not include restricted licenses in their count – a recent upgrade in Connecticut teen driving laws may lower their number of persons licensed to FHWA and inflate the rate
Sources: 2021 American Community Survey Estimate; U.S. Census Bureau; NHTSA; FHWA; Connecticut Crash Data Repository

Crash Trends

Table 2, Figure 2 and Figure 3 contain data on the annual number of fatal crashes, the number of persons killed, injury crashes, and the number injured for the 22-year period from 2000 to 2021. Also shown are the number of licensed drivers and annual VMT for the State. The table shows that the 298 fatalities recorded in 2021 are the third highest in ten years. Fatalities decreased slightly from 299 in 2020, a 0.3 percent decrease. The injuries total (34,174) in 2021 is the fifth lowest figure in the 22-year period reported. The number of severe injuries ("A" injuries) reported (1,506) in 2021, is the fifth lowest figure reported in 22 years.

In the 283 fatal crashes that occurred in 2020, 110 were reported as speeding-related and 71 were reported as driving under the influence of alcohol, medication, or other drugs. Of the vehicles involved in fatal crashes, 196 were automobiles, 135 were light trucks (including 96 SUVs, 13 vans, and 26 pickup trucks), and 67 were motorcycles. Of the 298 fatalities that occurred in 2021, 56 (18.8%) were non-occupants such as pedestrians and bicyclists, 183 (61.4%) were vehicle occupants, and 57 (19.1%) were motorcyclists.

Table 2. Trend Data, 2000-2021

Year	Fatal Crashes	Killed	Injury Crashes	Injured				Miles of Travel (100M)	Licensed Drivers (1000)
				All	A Injury	B Injury	C Injury		
2000	318	342	34,449	51,260	3,976	12,245	35,039	307.6	2,652.60
2001	285	312	34,133	50,449	3,598	12,052	34,799	308.4	2,650.40
2002	298	322	31,634	47,049	2,997	11,226	32,826	312.1	2,672.80
2003	277	298	30,952	45,046	2,731	10,881	31,434	314.3	2,659.90
2004	280	294	30,863	44,267	2,683	10,487	31,097	316.1	2,694.60
2005	262	278	29,429	41,657	2,465	10,442	28,750	316.8	2,740.30
2006	293	311	27,367	38,955	2,415	10,950	25,590	317.4	2,805.10
2007	269	296	27,367	38,955	2,415	10,950	25,590	320.5	2,848.60
2008	279	302	26,050	36,386	2,311	11,384	22,691	317.4	2,883.30
2009	211	224	25,720	36,447	2,155	10,981	23,311	314.2	2,916.10
2010	299	320	24,457	34,476	2,033	11,150	21,293	312.9	2,934.60
2011	208	221	24,436	34,186	1,673	9,602	22,911	312	2,986.30
2012	248	264	23,690	33,388	1,779	8,826	22,783	312.7	2,485.70
2013	265	286	23,249	32,324	1,523	8,389	22,412	309.4	2,534.10
2014	234	248	22,796	31,845	1,356	8,681	21,808	311.9	2,140.10
2015	257	270	25,818	35,908	1,526	12,272	22,110	316	2,566.10
2016	292	304	27,676	38,650	1,689	13,828	23,033	316.4	2,611.00
2017	263	281	27,304	37,908	1,641	13,889	22,378	315	2,587.00
2018	275	293	27,126	37,592	1,363	13,619	22,610	316	2,605.60
2019	233	249	27,131	37,326	1,366	13,929	22,031	316	2,608.10
2020	284	299	21,278	29,225	1,316	12,170	15,739	298.5	2,508.70
2021	283	298	24,763	34,174	1,506	14,311	18,357	289.9	2,606.40

Sources: Fatal crash and fatality figures, FARS Final Files 2000-2020, FARS Annual Report File 2021;
injury data, Connecticut Crash Data Repository

Figure 2. Graphic Representation of Injury Data from Table 2
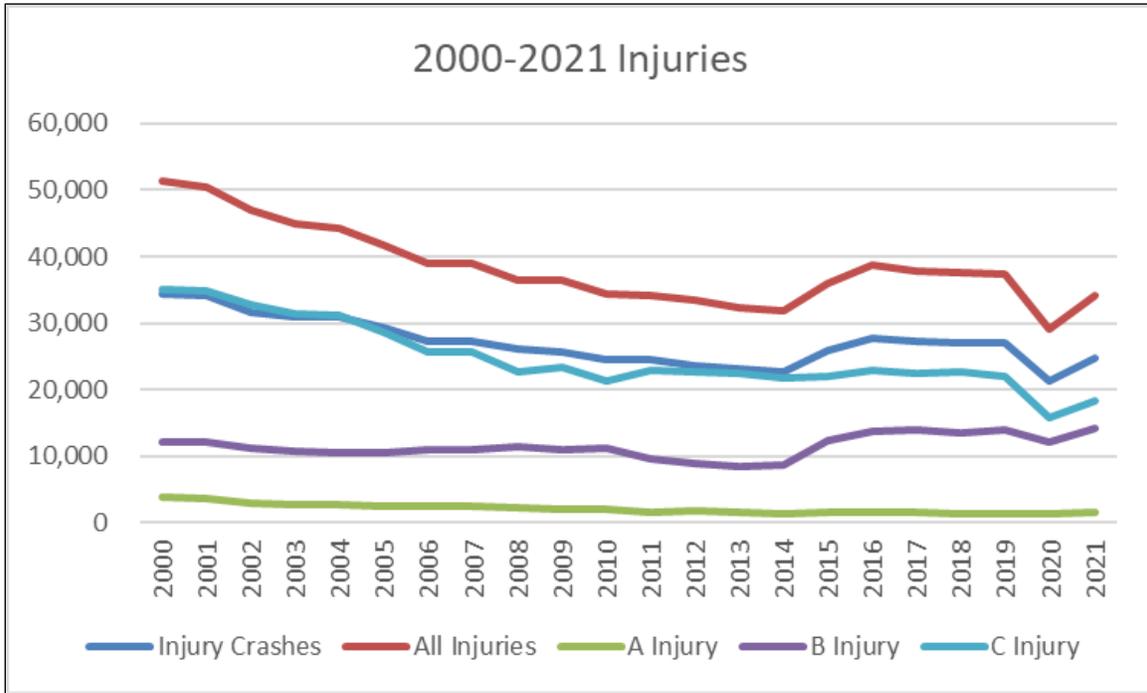
Sources: Fatal crash and fatality figures, FARS Final Files 2000-2020, FARS Annual Report File 2021; injury data, Connecticut Crash Data Repository
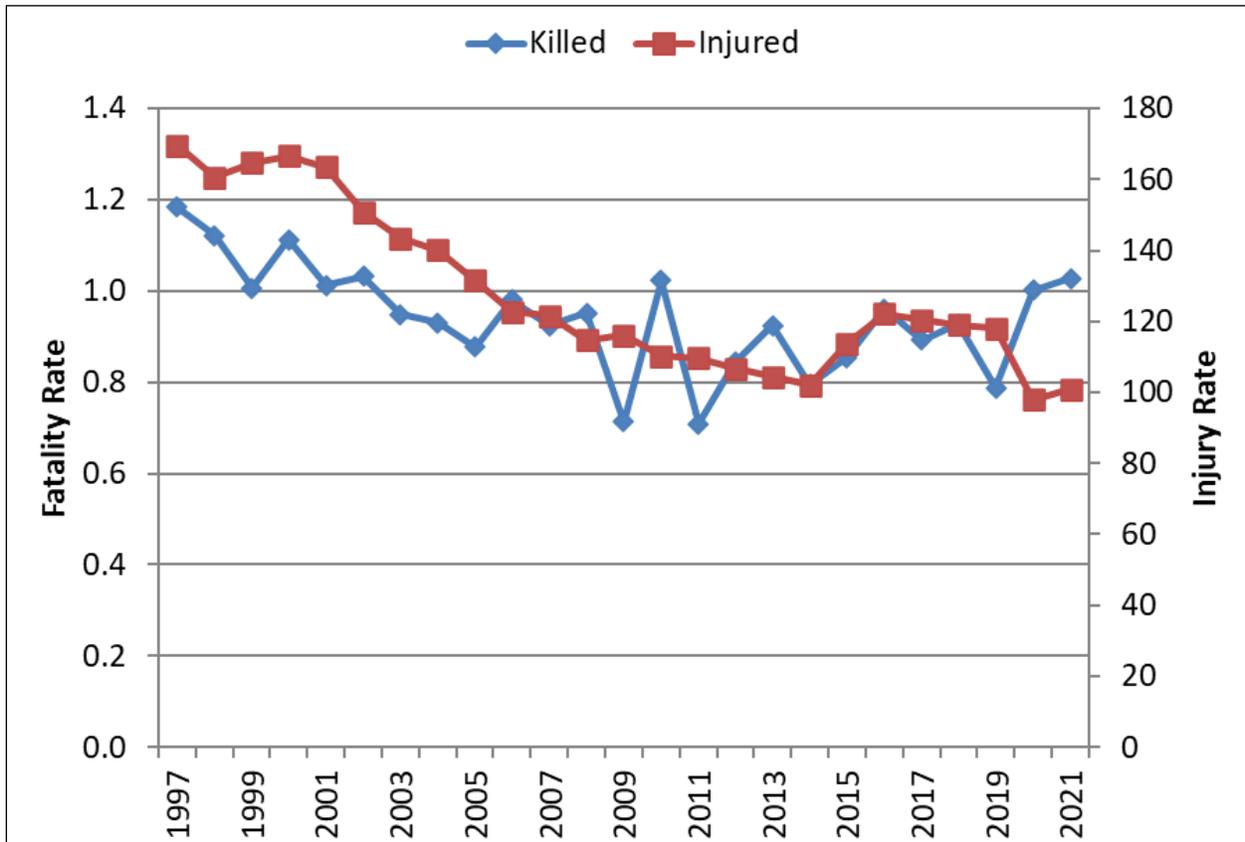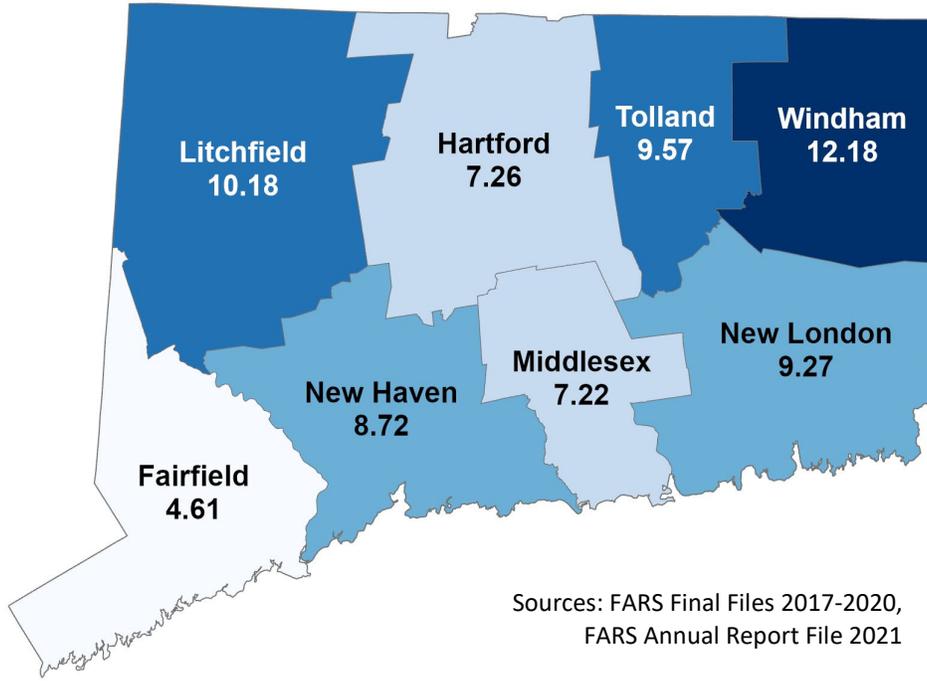
Figure 3. Graphic Representation of Fatality Data from Table 2
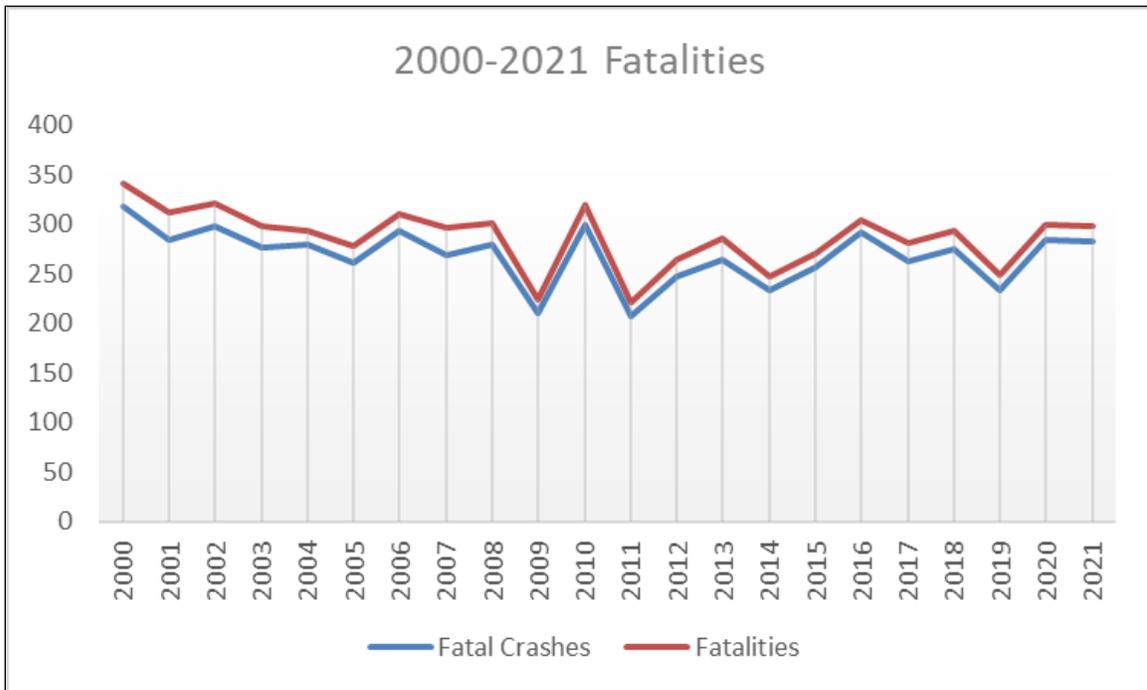
Sources: Fatal crash and fatality figures, FARS Final Files 2000-2020, FARS Annual Report File 2021; injury data, Connecticut Crash Data Repository

Figure 4 shows the trends in Connecticut's fatality and injury rates per 100 million VMT over the 1997 to 2021 period. The fatality rates generally declined during the 1990s and into the 2000s, reaching a historic low of 0.70 fatalities per 100M VMT in 2009 and 2011. There was a decreasing trend between 2015 and 2019 before rising again in 2021, with a fatality rate of 1.0. The injury rates increased slightly through the 1990s and have been on a declining trend since 2000, reaching 101 injuries per 100M VMT in 2021.

Figure 4. Fatalities and Injuries per 100M VMT, 1997-2021

Sources: Fatal crash and fatality figures, FARS Final Files 1997-2020, FARS Annual Report File 2021; injury data, Connecticut Crash Data Repository

Table 3 shows fatal, injury, and property damage-only crash rates per 100,000 population in Connecticut's eight counties during the 2017 to 2021 period, while Table 4 and Figure 6 presents the total number of fatalities by county. Not surprisingly, the greatest number of fatalities tend to occur in the most populous counties of New Haven, Hartford, and Fairfield (Table 4). In Figure 6, darker shaded colors on the map indicate higher concentrations of fatal crashes. These higher concentration towns are noticeably situated along the interstates and major highways of the State. On the other hand, in recent years, Fairfield and Hartford Counties generally have had fatal population-based crash rates that are below the statewide figures. Figure 5 shows the graphic representation of average fatal crash rates from Table 3.

Table 3. Crash Rates by County, 2017-2021

County	Crash Type	Rates per 100,000 Population by Year				
		2017	2018	2019	2020	2021
Fairfield	Fatal	6.1	4.4	3.0	6.0	3.5
	Injury	733.5	758.9	765.3	548.3	681.2
	Property Damage	2,797.2	2,802.0	2,734.5	1,885.6	2,440.7
Hartford	Fatal	6.1	7.3	6.8	6.9	9.1
	Injury	840.4	834.4	830.5	653.2	722.4
	Property Damage	2,416.2	2,386.9	2,383.4	1,693.4	1,997.5
Litchfield	Fatal	9.3	12.7	8.9	10.3	9.7
	Injury	591.7	531.7	522.4	408.4	476.2
	Property Damage	1,781.2	1,785.1	1,695.8	1,233.8	1,543.2
Middlesex	Fatal	6.1	8.0	7.4	8.5	6.1
	Injury	549.5	542.2	534.4	403.8	508.6
	Property Damage	1,804.7	1,852.1	1,742.8	1,374.4	1,511.3
New Haven	Fatal	8.3	9.4	7.1	9.1	9.6
	Injury	955.0	945.1	953.8	754.4	869.4
	Property Damage	2,824.5	2,769.4	2,735.6	2,074.4	2,496.8
New London	Fatal	9.7	8.6	10.9	7.8	9.3
	Injury	546.0	521.8	523.0	454.8	493.3
	Property Damage	2,092.7	2,018.5	1,958.9	1,485.9	1,746.2
Tolland	Fatal	7.3	9.9	6.6	13.4	10.6
	Injury	425.2	412.1	433.9	352.8	430.5
	Property Damage	1,465.7	1,369.6	1,411.9	959.6	1,177.0
Windham	Fatal	12.9	11.1	13.7	10.3	12.9
	Injury	434.0	470.0	429.9	412.9	468.1
	Property Damage	1,313.2	1,330.5	1,381.2	982.5	1,169.1
Statewide	Fatal	8.1	7.7	6.5	7.9	7.8
	Injury	760.4	758.5	761.0	590.7	686.8
	Property Damage	2,452.9	2,425.9	2,391.3	1,728.8	2,109.9

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021; Connecticut Crash Data Repository

Figure 5. Average Fatal Crash Rates by County per 100,000 Population, 2017-2021

(Graphic Representation of Average Fatal Crash Rates from Table 3)

Litchfield 10.18

Hartford 7.26

Tolland 9.57

Windham 12.18

New London 9.27

Middlesex 7.22

New Haven 8.72

Fairfield 4.61

Sources: FARS Final Files 2017-2020,
FARS Annual Report File 2021

Table 4. Connecticut Fatalities by County, 2017-2021

County	2017	2018	2019	2020	2021
Fairfield	59	45	31	59	35
Hartford	60	70	64	64	88
Litchfield	20	25	17	21	18
Middlesex	10	15	13	17	10
New Haven	77	85	63	83	88
New London	28	24	34	22	27
Tolland	12	16	10	21	16
Windham	15	13	17	12	16
Total	281	293	249	299	298

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure 6. Connecticut Fatalities by County, 2017-2021
(Graphic Representation of Data from Table 4)

Sources: FARS Final Files 2017-2020,
FARS Annual Report File 2021
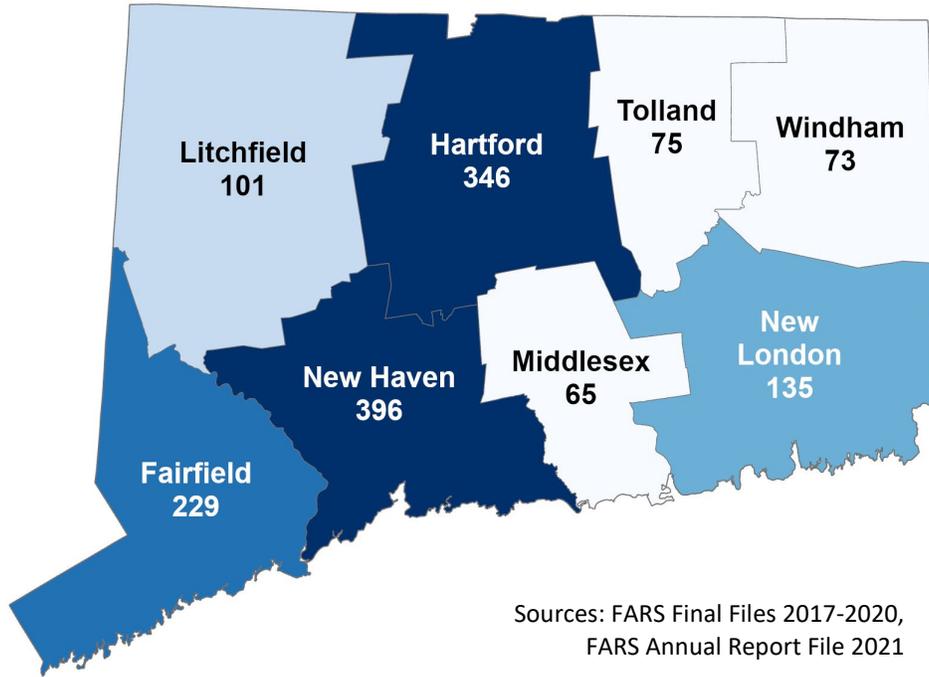
Race and Ethnicity

Table 5 and Figure 7 show the race and ethnicity distribution for fatal injuries in Connecticut from 2015 to 2021. Percentages for each group have fluctuated over the years. The gender distribution of male versus female fatal injuries has fluctuated between 67.8-76.3 percent in males and 23.5-29.7 percent in females. The 2021 population distribution in Connecticut is included in the Demographic Information section.

The American Indian or Alaska Native population in Connecticut is only 0.3 percent and the traffic fatalities in this group have been very low over the years. The percentage of fatal injuries in the Asian population was highest in 2020 and 2021 at 2.0 percent and lowest in 2016 at 1.0 percent whereas the percentage of fatal injuries in the African American population was the highest in 2021 at 21.5 percent and lowest in 2019 at 10.9 percent. The year 2021 had the highest traffic fatalities for the Hispanic population at 23.8 percent and lowest in 2017 at 16.1 percent. The fatal injuries were lowest for the Caucasian population in 2020 at 57.9 percent and highest in 2019 at 68.1 percent.

However, with respect to the population distribution for the different race and ethnic groups in Connecticut during 2020 and 2021, the fatality rate per 100,000 population for the Black or African American and Hispanic or Latino groups increased significantly. The fatality rate for the

Asian population remained unchanged at 3.47; for the African American population it increased from 14.18 to 17.07; for the Hispanic population it increased from 8.48 to 11.3; and, for the Caucasian population it decreased from 7.35 to 6.54 per 100,000 population for each race and ethnic group. **The increase was highest in the African American population.** The population numbers from the 2021 American Community Survey Estimate were used in the calculation of the fatality rate.

Table 5. Gender with Race and Ethnicity Distribution for Fatal Injuries in Connecticut, 2015-2021

Year	Total Fatalities	Gender		Race and Ethnicity						
		Male	Female	American Indian or Alaska Native	Asian	Black or African American	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	White	Unknown
2015	270	67.8%	27.0%	1.1%	1.1%	10.4%	17.8%	0.0%	64.4%	5.2%
2016	302	70.5%	25.8%	0.3%	1.0%	11.6%	16.6%	0.0%	66.2%	4.3%
2017	280	69.3%	28.2%	0.0%	1.8%	15.0%	16.1%	0.0%	64.3%	2.9%
2018	293	68.6%	29.7%	0.0%	1.7%	18.8%	18.8%	0.0%	59.0%	1.7%
2019	248	69.4%	27.8%	0.0%	1.2%	10.9%	16.5%	0.0%	68.1%	3.2%
2020	299	76.3%	23.7%	0.3%	2.0%	18.1%	18.1%	0.0%	57.9%	3.7%
2021	303	74.9%	25.1%	0.0%	2.0%	21.5%	23.8%	0.0%	50.8%	2.0%

Note: "Unknown" includes records that could not be obtained due to varying reasons
Source: Connecticut Department of Public Health

Figure 7. Race and Ethnicity Distribution for Fatal Injuries, 2015-2021
(Graphic Representation of Data from Table 5)
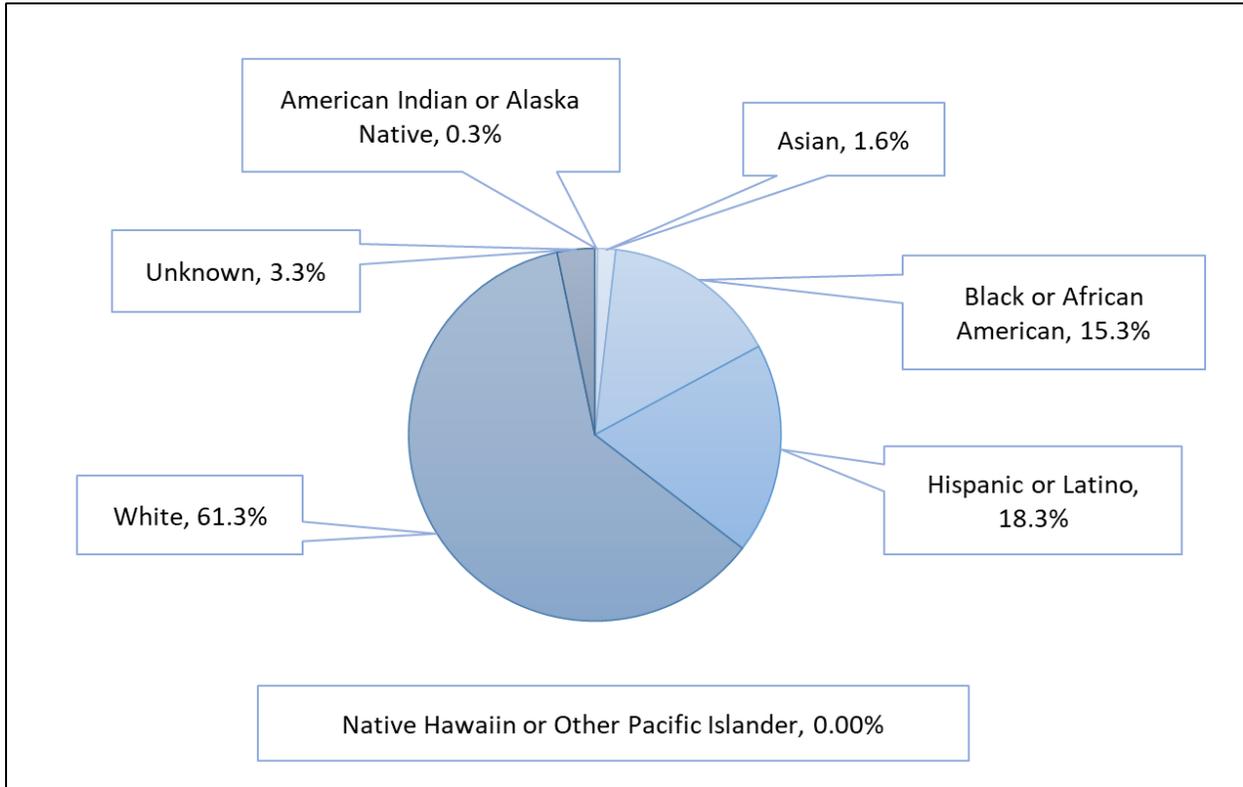
American Indian or Alaska Native, 0.3%

Asian, 1.6%

Unknown, 3.3%

Black or African American, 15.3%

Hispanic or Latino, 18.3%

White, 61.3%

Native Hawaiin or Other Pacific Islander, 0.00%

Note: "Unknown" includes records that could not be obtained due to varying reasons
Source: Connecticut Department of Public Health

The map in Figure 8 shows the Connecticut towns and the Justice40 tracts within the towns (blue) used for geospatial analysis. The Justice40 Initiative, established by the Biden-Harris Administration in 2021, is an effort to address longstanding disparities in disadvantaged communities across various sectors, including transportation. The goal is to enhance the quality of life in these communities by ensuring a significant proportion of federal benefits are directed toward them. Critical to this initiative is the Justice40 layer in GIS systems. This data layer is used to identify communities that could benefit substantially from the Justice40 Initiative. It does so by using Census tracts to evaluate environmental, climate, and socioeconomic burdens, providing an effective way to identify disadvantaged communities at a granular level. Specifically, the "disadvantaged or not" attribute is key to the HSO's analysis. The Justice40 layer, therefore, plays a crucial role in informing the development of the highway safety plan, aligning it with current federal objectives.

Figure 8. Justice40 Tracts within Connecticut Towns
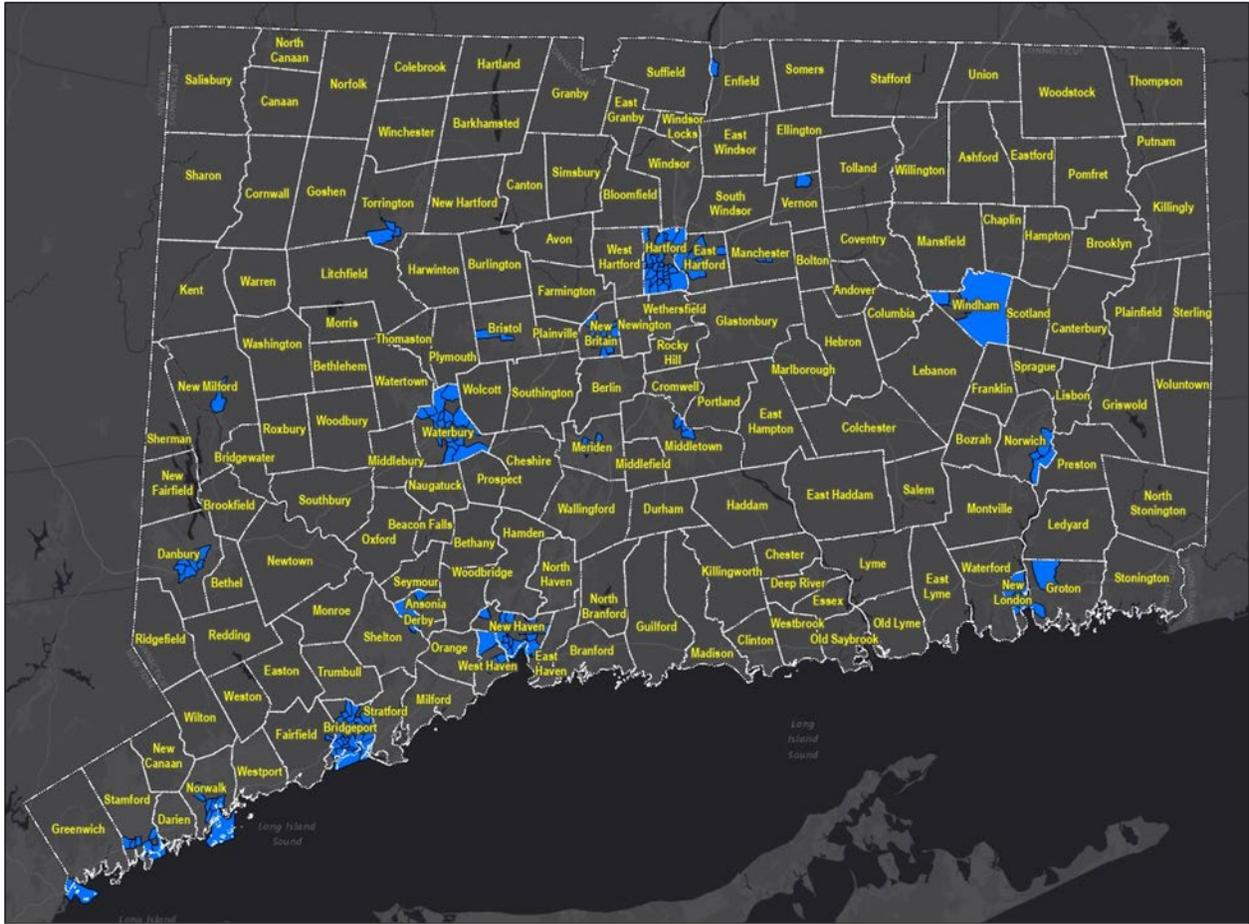
Source: Justice40 Database

Program Areas

Impaired Driving (ID)

Description of Highway Safety Problems/Problem Identification

The State of Impairment in Connecticut

Connecticut continues to experience the impacts of impairing substances not only on the road but also in personal life. In addition, the lingering effects of the COVID-19 pandemic combined with the misuse of impairing substances are still being studied for further analysis and action. Connecticut is certainly not alone with this issue as other states struggle to keep up with the impacts of a population attempting to return to a state of normalcy.

On the road, Connecticut has experienced a steady rise in alcohol impaired fatalities. Based on the current 2021 data, the State is ranked the sixth highest in the percentage of alcohol impaired deaths, an improvement over a recent rank of third in the year 2020. This is a high ranking no state wants to be a part of. Figure AL-1 below shows the geospatial data locations of both fatal crashes (red) and serious injury crashes (yellow) in Connecticut from 2017 to 2021 involving impaired drivers. Additionally, these crash locations have been overlayed on a map of Justice40 communities in Connecticut (blue polygons). Impaired driver fatal crashes are distributed more evenly over the State, where serious injuring crashes are more clustered around larger cities that fall within Justice40 communities in the southwest and central regions of the State.

It is important to note that this geospatial data is derived from the Connecticut Crash Data Repository and includes both alcohol impaired and drug-driving crashes Unfortunately at this time, FARS data does not include geospatial data associated with impaired-driving fatal crashes. The CTHSO hopes that NHTSA will make this data available in the future to provide analysis more accurately for data-driven decision-making.

Figure AL-1. Alcohol Impaired and Drugged Driving Fatal and Serious (A) Injury Crashes, 2017-2021
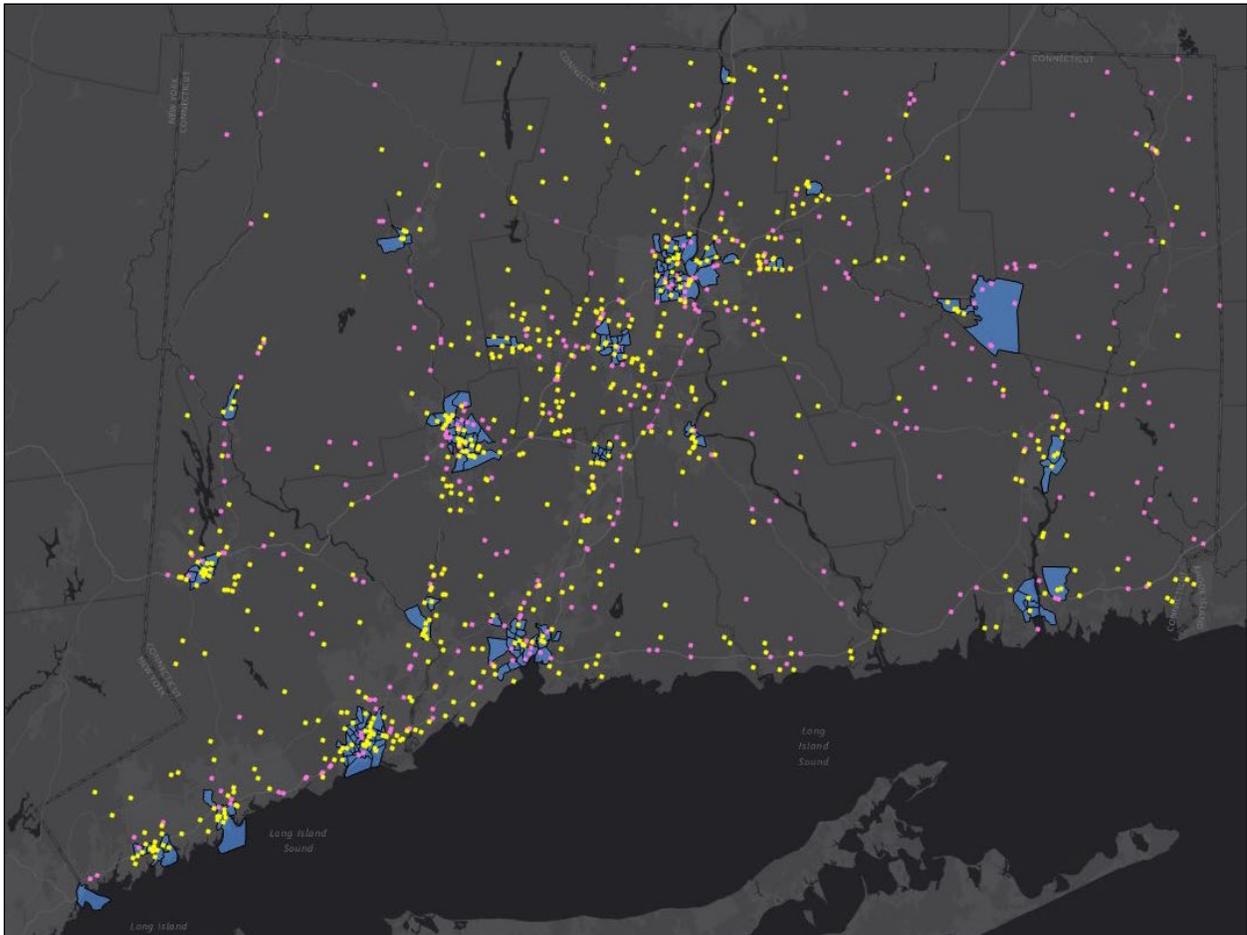
Notes: Red points indicate fatal crashes; yellow points indicate serious injury crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Source: Connecticut Crash Data Repository 06/07/2023

An analysis of FARS data from 2017 to 2021 shows a marked increase in drug-driving fatalities where drivers involved in a fatal crash tested positive for one or more drugs. Table AL-1 shows the most common drugs found in positive test results. Notable is that although the percentage of drivers tested decreased to 58.8 in 2021, the number of positive results for the majority of substances continued to rise, especially cannabinoids which saw a 327 percent increase over the 5-year period. Connecticut legalized recreational Marijuana in 2022 and the dispensaries opened for business in January of 2023. This may further exacerbate the use of cannabinoids. The graph in Figure AL-2 illustrates the data trends seen with these substances in relation to each other, with cannabinoids clearly standing out.

Table AL-1. Positive Drug Test Results for Drivers in Fatal Crashes, 2017-2021

Drug Type	2017	2018	2019	2020	2021	5 Year Total	5 Year Change
Cannabinoids	41	102	80	126	175	524	327%
Depressants	23	27	15	16	11	92	-52%
Narcotics	31	31	35	30	37	164	19%
PCP	3	3	2	6	9	23	200%
Stimulants	19	32	27	27	44	149	132%
Other Drug	10	12	9	18	20	69	100%
Total Positive	87	109	88	97	123	504	41%
N Drivers	379	484	375	421	432	2,091	
N Drivers Tested	297	360	285	291	254	1,487	
% Drivers Tested	78.4%	74.4%	76.0%	69.1%	58.8%	71.1%	

Notes: *A single driver can test positive for more than one drug, thus Total Positive likely overestimates the number of drug-positive drivers (i.e. multi-drug use); the 2021 data are likely an underestimate since lab results are often unavailable for the annual FARS file.
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure AL-2. Positive Drug Test Results for Drivers in Fatal Crashes, 2017-2021
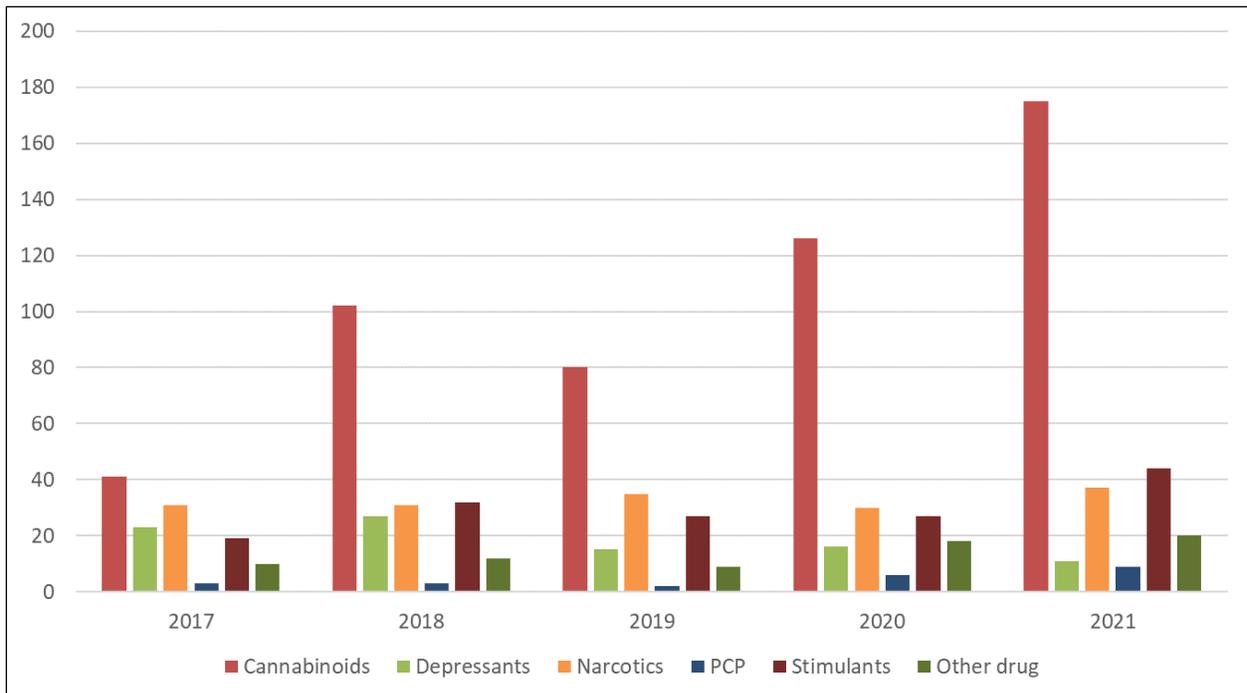
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Off the road, Connecticut has seen an increase in substance misuse on several levels which has been documented by Connecticut Department of Mental Health and Addiction Services (CTDMHAS). This State agency separates Connecticut into five regions called Regional Behavioral Health Action Organizations (RBHAOs) as seen in Figure AL-3. Each region has its own issues related to substance misuse, and each region has a unique mix of socioeconomic communities ranging from urban core areas to wealthy to suburban to urban periphery. Details regarding Figure AL-3 and Tables AL-2 and AL-3 can be found in a 2021 CTDMHAS report at PowerPoint Presentation (ct.gov). Details on the Figure AL-4 can be found in a 2022 DMHS report 2022_CRS_CT_Report_CONNECTICUT_FINAL_rev090722 (thehubct.org).

Figure AL-3. CT Regional Behavioral Health Action Organizations (RBHAOs)
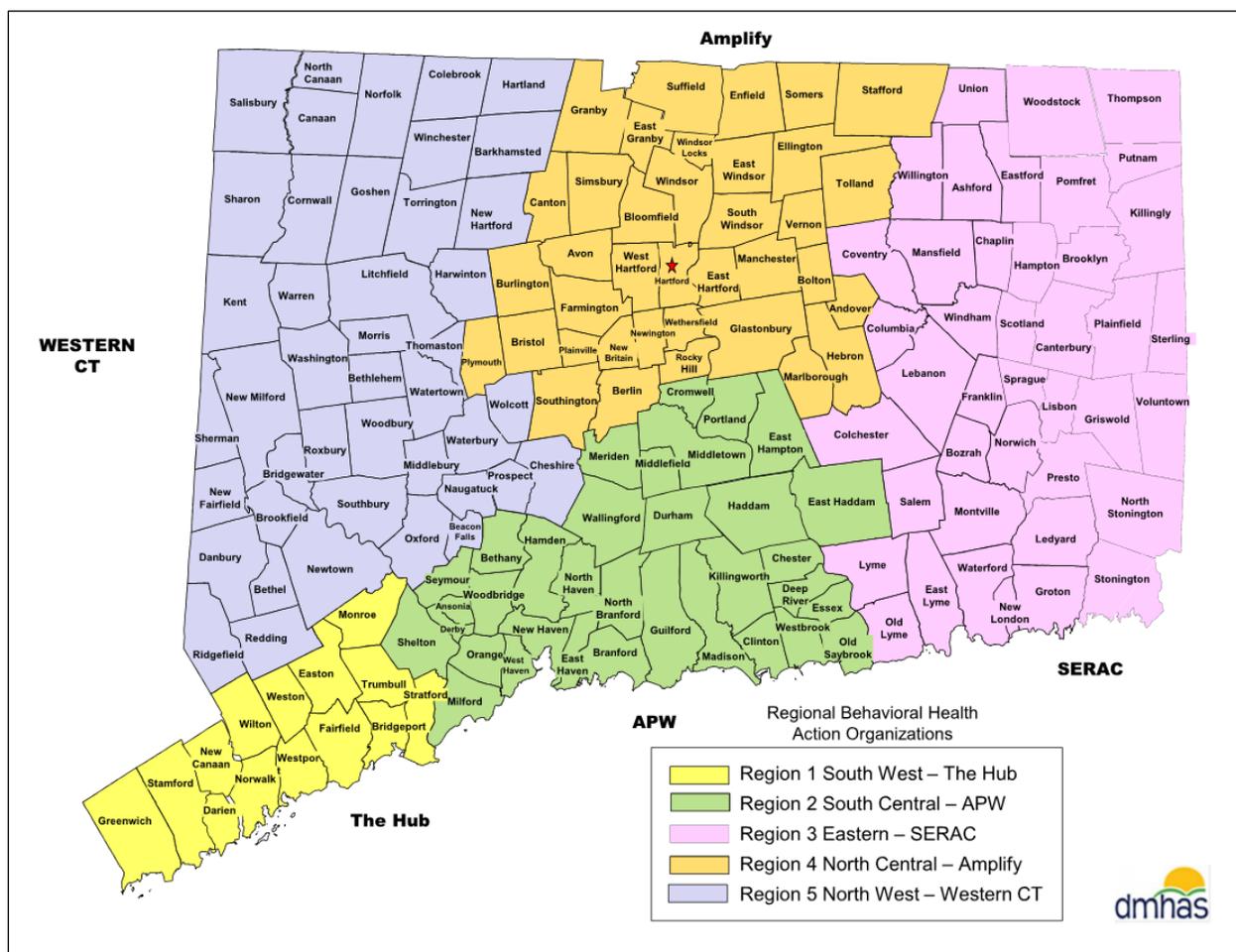
Source: Connecticut DMHAS

Within each of the CTDMHAS RBHAOs, regional leaders focus on substance misuse of the greatest concern, both immediate and emerging. As depicted in Table AL-2, each region shares many of the same areas of concern, ranging across covering alcohol, heroin/fentanyl/opioids, marijuana and prescription drugs.

Table AL-2. Connecticut Substance Misuse/Addition Priorities

Substance Misuse/Addiction Priorities

Priority	Region 1	Region 2	Region 3	Region 4	Region 5
1	Alcohol	Heroin/Fentanyl	Alcohol	Alcohol	Alcohol
2	Marijuana	Prescription Drugs	Heroin/Fentanyl	Heroin/Fentanyl	Heroin/Fentanyl
3	Tobacco/ENDS	ENDS	Prescription Drugs	Marijuana	ENDS
4	Prescription Drugs	Alcohol	ENDS	Prescription Drugs	Marijuana
5	Heroin	Marijuana	Marijuana	ENDS	Prescription Drugs
6	Problem Gambling	Tobacco	Tobacco	Tobacco	Tobacco
7	Cocaine	Cocaine	Problem Gambling	Cocaine	Cocaine
8		Problem Gambling	Cocaine	Problem Gambling	Problem Gambling

Note: E-Cigarettes, Vapes, and other Electronic Nicotine Delivery Systems (ENDS)
Source: Connecticut DMHAS Connecticut Community Readiness Survey Results, 2021

Additionally, the CTDMHAS regions also look at emerging misuse of substances of concern as shown in Table AL-3. These include misuse due to the lingering impact of the COVID-19 pandemic and the increase in cannabis/marijuana misuse due to recreational legalization and the declining perception of associated risk. Polysubstance use is also a growing concern. Figure AL-4 further breaks down the areas of greatest concern by demographics (age) for the State.

Table AL-3. Connecticut Emerging Issues in Substance Misuse

Emerging Issues: Substance Misuse

	Region 1	Region 2	Region 3	Region 4	Region 5
Substance Misuse	• **Vaping increase** *(subpopulations)* • **Vaping marijuana** • Decrease in **perception of harm** of **marijuana**, other substances • Increase in use of **rx drugs: Adderall, counterfeit pills** *(youth, young adults)* • **Illicit drugs: xylazine, Flualprazolem, eutylone** • **Polysubstance use**	• **Tobacco** and **marijuana** common in treatment & recovery, not addressed by providers • **Alcohol delivery services a concern, increased access due to COVID-19** • **Methamphetamine** and PCP more available *(New Haven)* • **Perception of risk** for heroin/fentanyl use declining **due to Narcan use** • **Increase in larceny** connected to illicit substance use • **Marijuana-related ED visits** have increased due to dependence, misuse, and **co-morbidity with psychotic disorder.** • **Vaping CBD** *(adolescents)*	• **Marijuana legalization concerns** • **Cocaine use, cocaine-involved deaths** • **Increase in stimulant, methamphetamine use** • **Vaping** *(youth, young adults)* • **Vaping THC** • **Substance use increase due to COVID-19** • **Technology barriers, telehealth issues due to COVID-19** (Need access to services)	• **Increase in overdose death rates: fentanyl**, and **stimulants, methamphetamine** • **Marijuana legalization concerns** • **Alcohol use increase due to COVID-19**	• **Marijuana legalization, perception of risk declining** • **Vaping marijuana** • **Kratom** • **Benzodiazepine misuse** • **Xylazine, methampethamine** • **Polysubstance use** • **Alcohol use increase due to COVID-19** *(adults)*

Top Emerging Issues: Substance Use

Marijuana (legalization, declining perception of risk/harm, ED visits, vaping)
Vaping (Vaping CBD, THC)
Stimulants (cocaine, methamphetamine) New Haven
COVID-19 effects (alcohol use, substance use, telehealth barriers)

Source: Connecticut DMHAS Connecticut Community Readiness Survey Results, 2021

Figure AL-4. CT Substances of Greatest Concern by Age Group
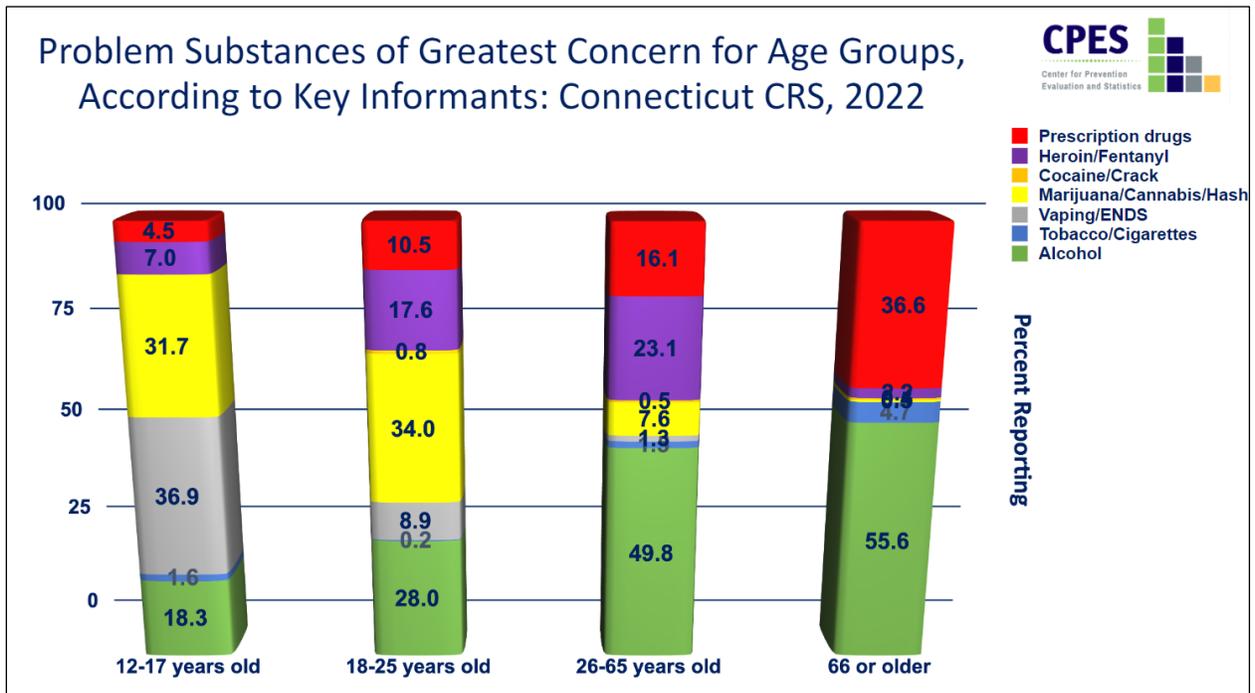
Source: Connecticut DMHAS Connecticut Community Readiness Survey Results, 2022

Digging deeper into the CTDMHAS regional data, it can be seen the impacts substance misuse has on that region's population as a whole. CTDMHAS Region 1, known as The Hub and located in the southwest corner of Connecticut near the New York metropolitan area, is a good example of a densely populated region that has an ongoing issue with substance and polysubstance misuse. This area of the State also has a large concentration of Justice40 tracts, with 25 percent of Connecticut's 185 Justice40 tracts falling in this CTDMHAS region alone.

Based on CTDMHAS reports created in 2020 and 2021 for Region 1 (found at Data (thehubct.org) and R1_Hub_BH_Priorities_Report_2021_FINAL.pdf (ct.gov)), one can see those areas with the greatest concern, including the impact of polysubstance misuse in many age and socioeconomic groups. Often individuals are unknowingly misusing polysubstances, not realizing that drugs being misused are typically a mix of dangerous substances.

Some of the highlights of these reports, which focus on 14 municipalities in southwestern Connecticut, are noted in the following impairing substance sections. These sections focus on the top four topics of substance misuse which are major areas of concern for all CTDMHAS regions: alcohol, heroin/fentanyl, cannabis/marijuana, and prescription drugs.

Alcohol – As noted in the 2021 CTDMHAS report, alcohol is the most commonly used substance both nationally and in Connecticut. According to the 2018-2019 National Household Survey of Drug Use and Health (NSDUH), Connecticut has the 5th highest prevalence of current alcohol use (60.0%) compared to other states in the U.S., and higher than the national prevalence (50.9%)

Some other key findings on alcohol in the report:
- Overall, NSDUH shows that the rate of alcohol use in Connecticut has remained relatively stable; the prevalence of current alcohol use in individuals 12 and older was 59.3 percent in 2008-2009 and 60.0 percent in 2018-2019. However, consistent with the national trend, underage drinking in Connecticut among 12 to 17-year-olds decreased significantly, from 18.6 percent in 2008-2009 to 11.2 percent in 2018-2019.
- Young adults in Connecticut ages 18-25 have the highest rate of reported past month alcohol use (65.6%), followed closely by those aged 26 or older (64.6%).
- The prevalence of binge drinking in Connecticut has remained relatively stable since 2010, and it has remained consistently higher than the national average. Binge drinking is highest among young adults (47.6%), followed by adults ages 26 or older (27.5%), and youth ages 12-17 (5.4%).
- The 2014-2018 NSDUH data for the southwest Connecticut region indicate the rate of past month alcohol usage for ages 12 and older has also remained stable, at 62 percent, which is higher than most regions and the state.
- The percent of individuals who do not perceive 5 or more drinks as a risk is surprisingly high as seen in Table AL-4.

Table AL-4. Percent Reporting Perception of Great Risk from Having 5+ Drinks of an Alcoholic Beverage Once or Twice a Week, ages 12+ (2016-2018)

All CT	Region 1	Region 2	Region 3	Region 4	Region 5
43.9%	44.6%	42.6%	39.8%	45.3%	27.6%

Figure AL-5 summarizes the usage of alcohol in this region of the State. As noted in the figure, alcohol is the most commonly used drug in Connecticut.
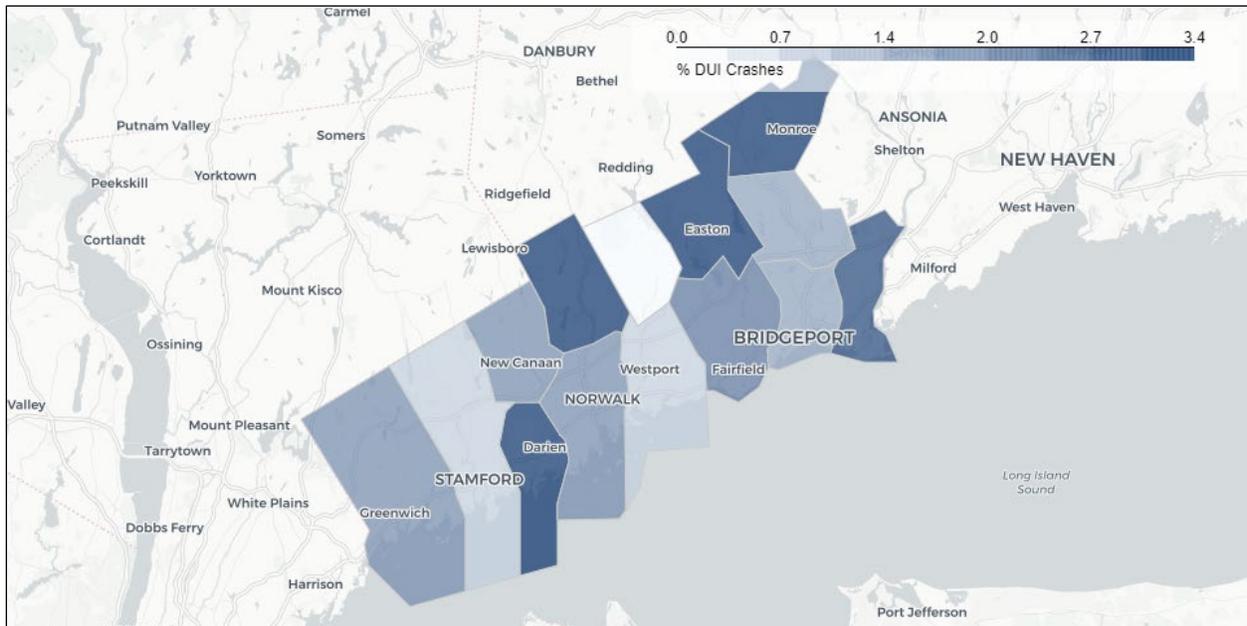
Figure AL-5. Connecticut DMHAS Southwest Region 1 Alcohol Use
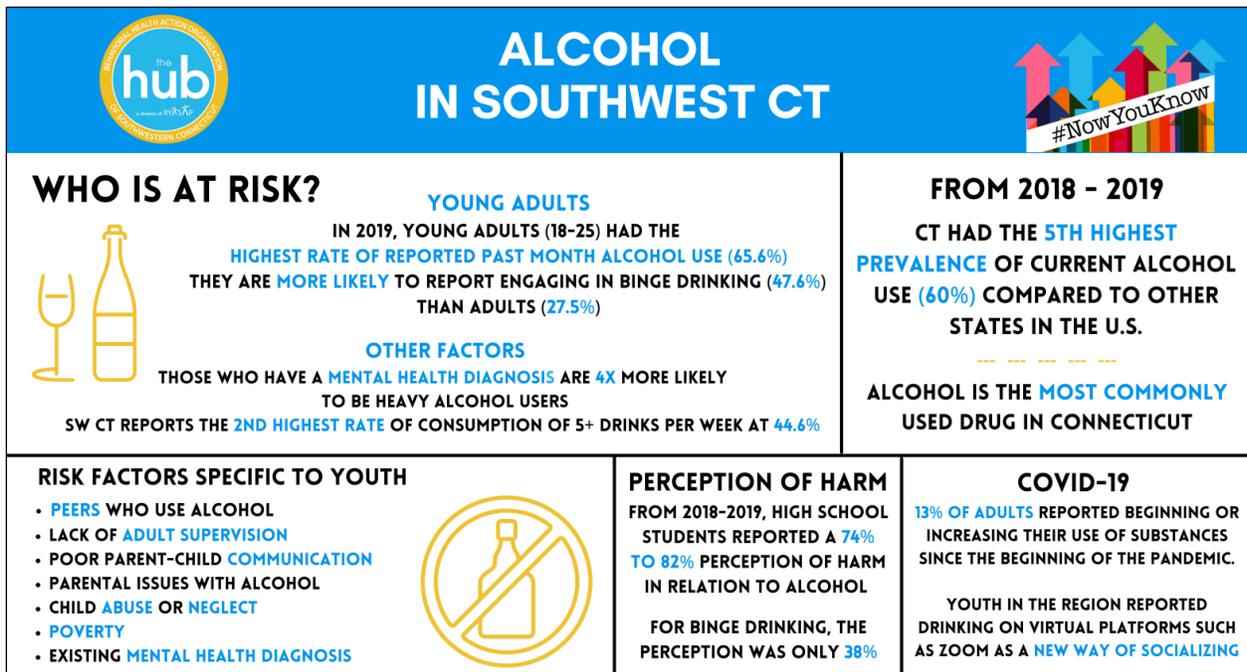
Source: Image from CTDMHAS / The Hub: Behavioral Health Action Organization for Southwestern CT, 2020

In this southwest region, three towns with the highest share of DUI crashes are Darien (3.4%), Easton (3.4%), and Monroe (3.3%) as shown on the town level using CTDOT geospatial data in Figure AL-6. In 9 of the 14 towns in the region, DUI crashes are less frequent than in the state on average, and in four towns such crashes are more frequent.

Figure AL-6. Connecticut CTDMHAS Southwest Region 1 Alcohol/DUI-Related Crashes, 2021

Sources: CTDMHAS, Connecticut Crash Data Repository (Southwest CT - DMHAS Regional Data Stories (ctdata.org))

Opioids – The issues and impacts associated with opioid misuse continue to have an impact. According to the CTDMHAS, Southwest Connecticut experienced 202 drug overdose deaths in 2020, an increase since 2019 (171 deaths). (Norwalk and Stratford experienced 17 overdose deaths, Stamford experienced 19 overdose deaths, and Bridgeport overdose fatalities continue at a high rate with 65 deaths in 2020).

Some other key findings on opioids in the report:
- In Connecticut, the use of heroin now often involves the use of fentanyl, either intentionally or not, as it is often found mixed.
- According to the 2018-2019 National Survey on Drug Use and Health (NSDUH), less than one percent (0.33%) of Connecticut residents 12 or older have used heroin in the past year, a rate slightly higher than the national average (0.28%).
- The highest prevalence is among young adults aged 18-25 years old (0.38%), followed by adults aged 26 or older (0.36%), and then adolescents (0.01%). According to the 2019 Connecticut School Health Survey (Connecticut's Youth Risk Behavior Surveillance survey), an estimated 1.8 percent of high school students in Connecticut reported heroin use in their lifetime.
- Fentanyl is often sold under the same or similar "brand" names as heroin, creating confusion and uncertainty among buyers. More than 1 in 3 (35%) fentanyl deaths in Connecticut in 2019 also involved heroin.
- Since 2017, deaths involving fentanyl have outnumbered deaths involving heroin, suggesting that much of the heroin consumed in Connecticut may contain fentanyl. Thus, all individuals who use heroin are at risk of fentanyl exposure.

Of note is that people who are addicted to other substances are more likely to meet criteria for heroin use disorder. Compared to people without an addiction, those who are addicted to alcohol are 2 times more likely to become addicted to heroin. Those addicted to marijuana are 3 times more likely, while those addicted to cocaine are 15 times more likely, and those addicted to prescription pain medications are 40 times more likely to become addicted to heroin. Figure AL-7 shows the trends of opioid-involved deaths in Connecticut from 2012 to 2019.

Figure AL-7. Connecticut Opioid Related Deaths, 2012-2019
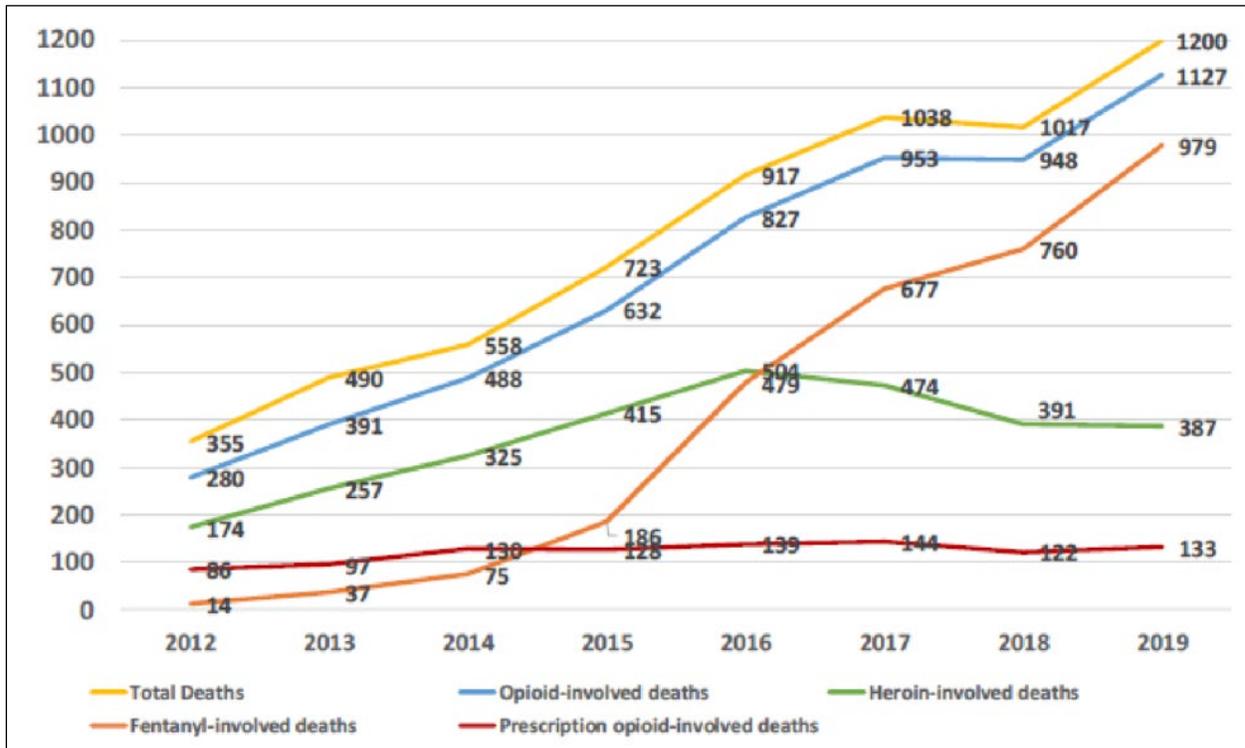
Source: Substance Abuse and Mental Health Services Administration

As seen in Figure AL-8, the impact of opioid use in CTDMHAS Region 1 is reflected in accidental drug intoxication deaths. As noted, this is prime area of polysubstance misuse, where a mix of drugs including fentanyl can have unexpected consequences.

Figure AL-8. Connecticut DMHAS Southwest Region 1 Heroine/Fentanyl/Opioid Use
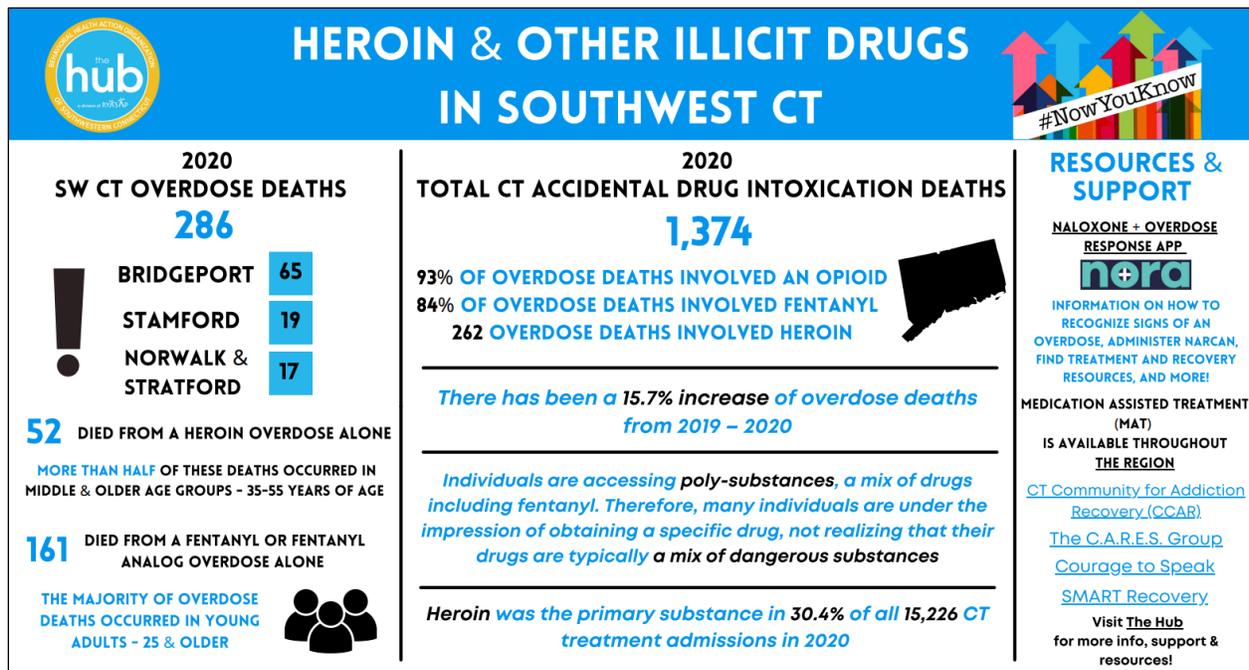
Source: Image from CTDMHAS / The Hub: Behavioral Health Action Organization for Southwestern CT, 2020

Cannabis – Cannabis remains the most used drug after alcohol, both in Connecticut and nationally. In Connecticut, the rates for cannabis usage have been consistently higher than the national average over the last couple of decades. Additionally, these data do not reflect cannabis use since the legalization of recreational cannabis in Connecticut in 2021.

Some other key findings on cannabis in the report:
- Cannabis use is widespread among young adults and adolescents in Connecticut. The 2018-2019 National Survey on Drug Use and Health (NSDUH) showed that, for 18- to 25-year-olds, past year cannabis use was higher than the national average (43.9% in Connecticut vs. 35.1% nationally). Similarly, young adults' past month use was also higher (27.2% in Connecticut vs. 22.5% nationally). Among youth ages 12-17 in Connecticut, 14.1 percent had used within the past year, and 7.5 percent had used within the past month, also higher than their national peers.
- The 2019 Connecticut School Health Survey identified differences in cannabis use among youth based on racial, gender, and sexual identities:
  - Gay, lesbian & bisexual youth (33%)
  - Hispanic youth (24%)
  - White youth (22%)
  - Black youth (15.5%)
  - Boys (22%), Girls (20%)
- The Regional Behavioral Health Priority Setting Workgroup found that the overall perception of harm in relation to cannabis has decreased. It was suggested that this stems

from a lack of education and understanding. The medicalization of cannabis is also thought to be a contributing factor when it comes to the perceived risk of this substance. 12th graders admitted that they would be more likely to try or increase their current use of cannabis if it were legalized. Legalization of cannabis in other states may have resulted in a decrease in perception of harm for individuals of all ages.

- According to the Connecticut Department of Consumer Protection, as of May 16, 2021, there are 53,605 residents registered with medical marijuana certificates. There are 11,995 residents registered in Southwest CT. There are 18 medical marijuana dispensaries in the state with 2 of them located in Southwest CT (Stamford and Westport).
- Cannabis concentrate is being seen at higher rates in recent history. These concentrates have extremely high levels of tetrahydrocannabinol (THC), ranging anywhere from 40 through 80 percent. This form of cannabis can be up to four times stronger in THC levels than traditional cannabis.
- Cannabis use in Connecticut has seen an increase even before recreational use was legalized in Connecticut as seen in Table AL-5.

Table AL-5. NSDUH Substate Estimates: Percent Reporting Past Month Cannabis Use, Ages 12+

Time Period	All CT	Region 1	Region 2	Region 3	Region 4	Region 5
2014-2016	9.3	8.5	9.7	10.6	9.3	8.6
2016-2018	10.9	9.6	11.0	11.4	11.8	10.4

The numbers in Connecticut shown in Figure AL-9 indicate that even before recreational cannabis was legalized, usage among young adults was higher than the national average. Inversely, there is a low perception of risk and harm when it comes to cannabis use.

Figure AL-9. Connecticut DMHAS Southwest Region 1 Cannabis/Marijuana Use
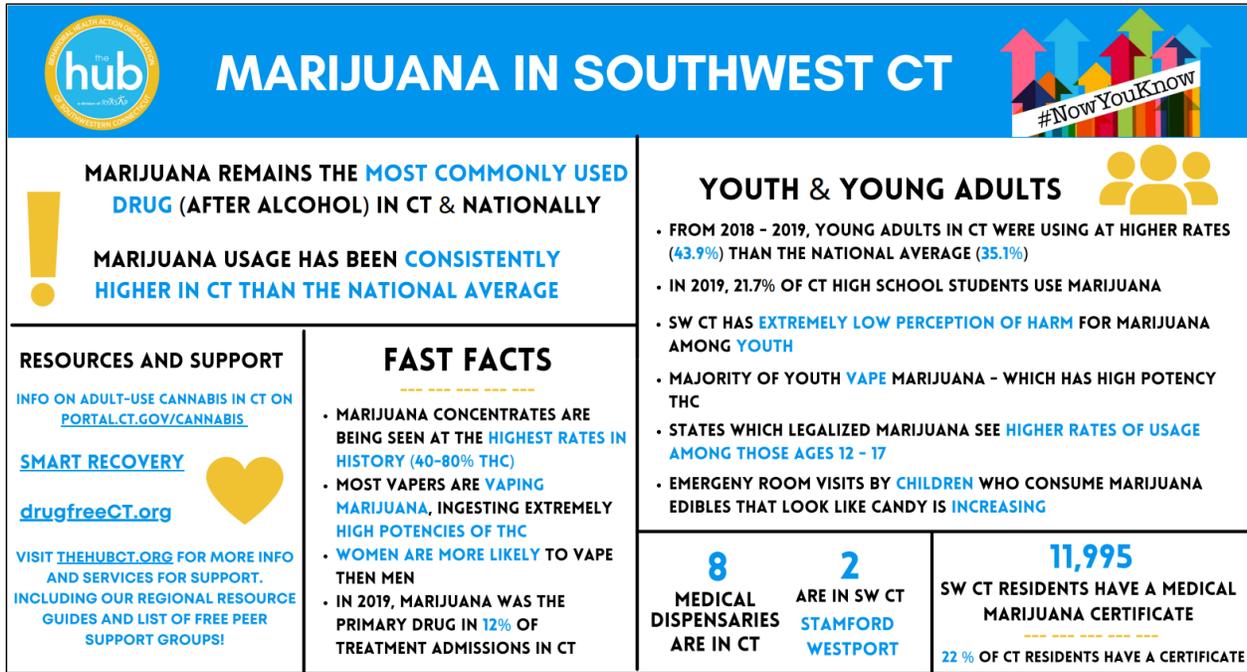
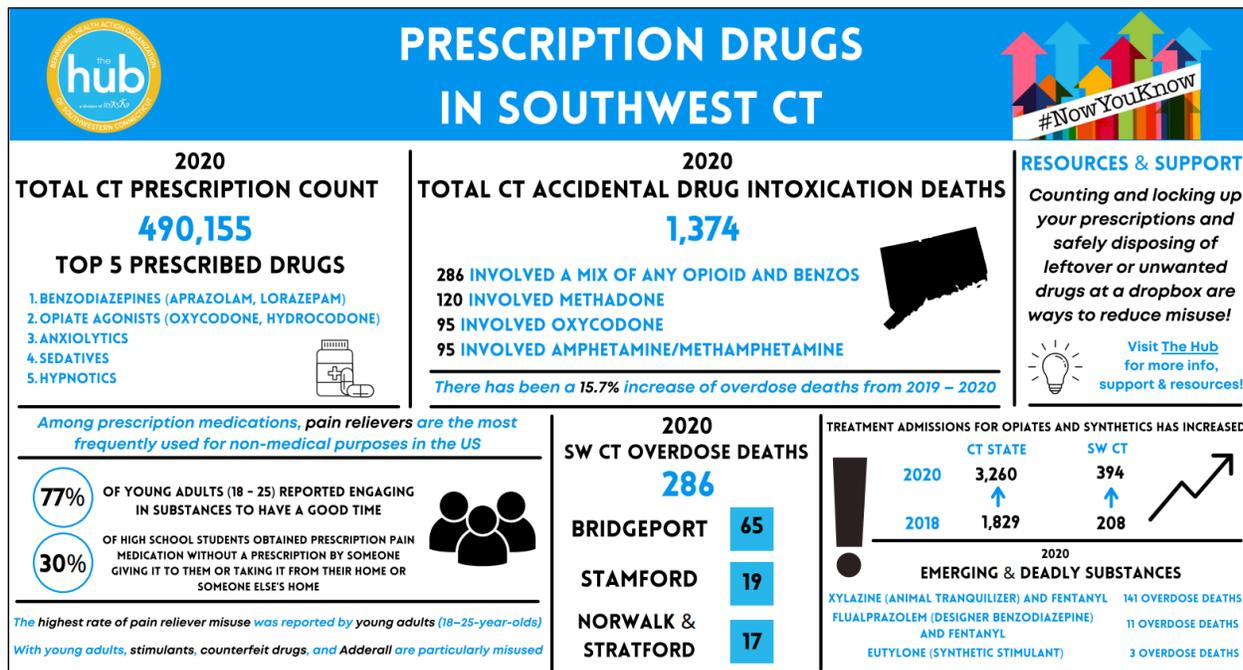Source: Image from CTDMHAS / The Hub: Behavioral Health Action Organization for Southwestern CT, 2020

Prescription Drugs – Non-medical use of prescription drugs is a problem that continues in the U.S., including within Connecticut. The types of prescription drugs most commonly misused include painkillers (opioids), central nervous system depressants (tranquilizers, sedatives, benzodiazepines), and stimulants. Many toxicology reports for drivers killed in crashes often show a mix of prescription drugs, or polysubstance misuse.

Some other key findings on prescription drugs in the report:

- Prescription drugs, particularly oxycodone and Percocet, were present in 11 percent of total suspected overdose deaths for the state. Bridgeport rated highest in suspected overdose deaths in Fairfield County with 338 deaths, followed by Danbury with 130 deaths. The total prescription count for Southwest CT was 490,155.
- Overall, there has been around a 15.7 percent increase of drug overdose deaths from 2019 to 2020. A lethal combination of xylazine, an animal tranquilizer and fentanyl were identified in 141 overdose deaths in 2020. An emerging and deadly substance, Flualprazolem, is a designer benzodiazepine combined with fentanyl, and has resulted in 11 overdose deaths in 2020. Eutylone, a synthetic stimulant, had resulted in 3 overdose deaths.
- The use of psychiatric medications continues to increase, with benzodiazepines (benzos) and antidepressants commonly prescribed. Among providers and consumers, concern has been expressed that dependence on benzos requires attention and may be seen as the next epidemic after opioids.

Figure AL-10 highlights some of the issues involving prescription drugs in CTDMHAS Region 1. Young adults aged 18-25 are seen engaging in the use of these drugs at an alarming rate of 77 percent. And thirty percent of high school students have access to prescription pain medications without a prescription.

Figure AL-10. Connecticut DMHAS Southwest Region 1 Prescription Drug Use

Source: Image from CTDMHAS / The Hub: Behavioral Health Action Organization for Southwestern CT, 2020

Areas of Concern – Additionally, some of the areas of need include the following underserved populations identified by the CTDMHAS Region 1 report:

- Continued attention should be paid to the elderly (at risk for alcohol and opioid misuse) and middle-aged populations who represent the largest population at risk of suicide and opioid abuse
- The undocumented who fear risk of deportation or legal pursuit due to immigration status
- Those with cultural/language differences
- Middle-class individuals and families continue to face cost barriers in accessing services since they may not qualify for state funded programs (income levels above thresholds for assistance but yet unable to pay for services out of pocket) Individuals with autism or disabilities are often overlooked in the behavioral health system and assumed to be under the care of a developmental disabilities provider; however, many may have cooccurring mental health issues, and there are very few services available for adults on the spectrum.
- EMS and other first responders are at heightened risk for developing mental health conditions or substance use disorder due to the trauma they endure by being the first people on call for psychiatric and emergency 9-1-1 calls

- Essential workers have reported elevated mental health challenges, specifically depression and anxiety due to the distress of working during a pandemic

Alcohol Crash Data Analysis

Alcohol-related driving fatalities are fatalities involving drivers or motorcycle operators with a Blood Alcohol Concentration (BAC) of 0.01 or higher whereas *alcohol-impaired driving* fatalities are those fatalities involving drivers or motorcycle operators with a BAC of 0.08 or higher. The 15-year trends in Connecticut's alcohol-related driving and non-alcohol-related driving fatalities are shown in Figure AL-11. There was a downward trend between 2007 and 2013. Since then, the trend has shifted upward before decreasing in 2019. Since then, alcohol-related driving fatalities have been trending upward again. There were 142 alcohol-related driving fatalities in 2020 and 135 in 2021, the second highest number in the last five years and fourth highest number in 15 years.

Figure AL-11. Fatalities by Alcohol Involvement, 2007-2021
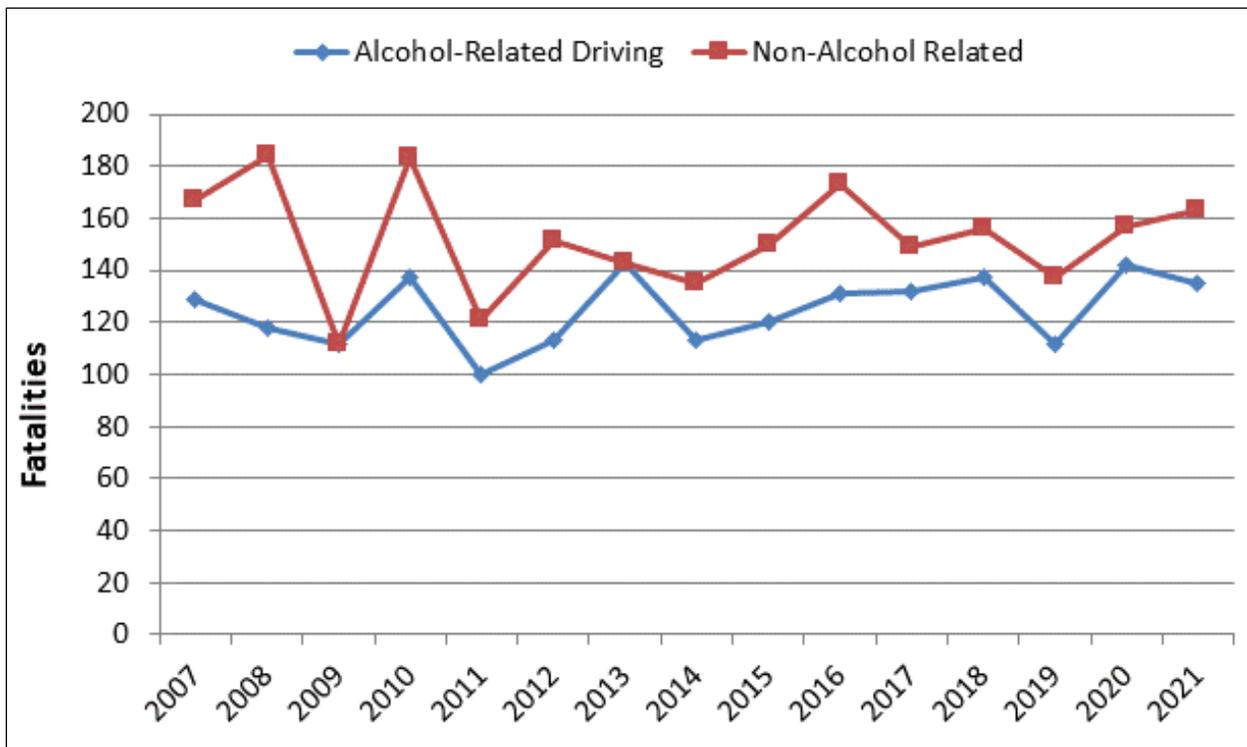
Sources: FARS Alcohol Imputed Data Final Files 2007-2020, FARS Annual Report File 2021

In 2021, Connecticut recorded BAC test results for 88 percent of fatally injured drivers and 6 percent of surviving drivers involved in fatal crashes. The State rate for fatally injured drivers was

above the national figure of 59 percent whereas the State's rate for surviving driving was lower than the national figure of 21 percent (when it was known if the test was given).

Table AL-6 shows that the percentage of alcohol-related driving (BAC ≥ 0.01) fatalities in Connecticut during 2021 (45%) was higher than the national average of 37 percent. Thirty-eight percent (38%) of Connecticut's fatal crashes were estimated to have been alcohol-impaired driving crashes (BAC ≥ 0.08), a higher rate than that seen nationwide (31%).

**Table AL-6. Alcohol-Related (BAC ≥ 0.01+) Driving Fatalities/
Alcohol-Impaired (BAC ≥ 0.08+) Driving Crashes, 2021**

	Connecticut	U.S.
Percentage of Alcohol-Related Driving Fatalities	45.1%	36.6%
Percentage of Alcohol-Impaired Driving Crashes	38.4%	30.8%

Source: FARS Imputed Alcohol Data Annual Report File 2021

When BAC test results are either not available or unknown, NHTSA employs a statistical model to estimate alcohol involvement. Alcohol Imputation Model data have been used in this Plan; Table AL-7 presents the imputed results. Note that using this method can produce slight differences in totals due to rounding.

Table AL-7. Alcohol-Impaired Driving Crashes/Fatalities

State of Connecticut	2017	2018	2019	2020	2021
Number of Alcohol-Impaired Driving Fatal _Crashes_	108	112	86	117	109
Percent Alcohol-Impaired Driving Fatal _Crashes_	41%	41%	37%	41%	39%
Number of Alcohol-Impaired Driving _Fatalities_	122	120	98	123	112
Percent Alcohol-Impaired Driving _Fatalities_	43%	41%	39%	41%	38%

Sources: FARS Imputed Alcohol Data Final Files 2017-2020, FARS Annual Report File 2021

The number of alcohol-impaired driving fatal crashes fluctuated between 2017 and 2021, hitting its lowest level in 2019 at 86, and rising to 109 in 2021. The number of alcohol-impaired driving

fatalities hit a low of 98 in 2019, increased to 123 in 2020 – the highest number in five years – before settling in at 109 in 2021. The percentage of all crashes related to alcohol-impaired driving in 2021 was the second lower in the five-year period reviewed. The percentage of all fatalities related to alcohol-impaired driving in 2021 was also the second lowest in five years. These figures, defined as a percentage of the total number of crashes and fatalities, remain unacceptably high. Table AL-8 shows Connecticut BAC test results for 2017 to 2021.

Table AL-8. BACs of Fatally Injured Drivers

BAC	2017	2018	2019	2020	2021
0.00	76	81	71	86	107
0.01-0.07	12	12	6	10	14
0.08 –Up	65	63	56	70	68
No/Unknown Result	31	24	27	25	26

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Table AL-9 shows the number of alcohol-related driving fatalities both by county and statewide for 2017 to 2021, the percentage of these that were known or estimated to have been alcohol-related, and the rate of alcohol-related driving fatalities per 100,000 population. Fairfield County had the highest percentage of alcohol-related driving fatalities for 2021 (55%), followed by New London (52%) and Litchfield (48%) Counties. The statewide data at the bottom of the table indicate that, for the five-year period shown, the percentage of alcohol-related fatalities ranged from 4.9 percent to 7.4 percent.

New London, Litchfield, and Windham Counties consistently have amongst the highest alcohol-related driving fatality rates per 100,000 of the population.

Table AL-9. Alcohol-Related (BAC ≥ 0.01+) Driving Fatalities by County

County	2017	2018	2019	2020	2021
Fairfield Total	59	45	31	59	35
% Alcohol	52.0%	35.8%	55.2%	48.0%	54.9%
Alcohol Rate/100,000	3.23	1.71	1.81	2.96	2.00
Hartford Total	60	70	64	64	88
% Alcohol	48.8%	40.3%	43.9%	45.0%	46.0%
Alcohol Rate/100,000	3.27	3.16	3.15	3.21	4.52
Litchfield Total	20	25	17	21	18
% Alcohol	48.0%	51.2%	48.8%	46.7%	47.8%
Alcohol Rate/100,000	5.27	7.07	4.60	5.30	4.65
Middlesex Total	10	15	13	17	10
% Alcohol	54.0%	44.0%	43.8%	61.2%	31.0%
Alcohol Rate/100,000	3.30	4.06	3.51	6.34	1.88
New Haven Total	77	85	63	83	88
% Alcohol	43.8%	49.3%	37.0%	44.3%	40.3%
Alcohol Rate/100,000	3.92	4.89	2.73	4.26	4.11
New London Total	28	24	34	22	27
% Alcohol	43.6%	61.3%	47.1%	57.3%	51.9%
Alcohol Rate/100,000	4.53	5.51	6.03	4.70	5.21
Tolland Total	12	16	10	21	16
% Alcohol	45.0%	51.3%	43.0%	35.2%	42.5%
Alcohol Rate/100,000	3.57	5.43	2.85	4.94	4.52
Windham Total	15	13	17	12	16
% Alcohol	36.0%	63.1%	53.5%	62.5%	45.0%
Alcohol Rate/100,000	4.64	7.01	7.79	6.45	6.18
Statewide Total Fatalities	281	293	249	299	298
% Alcohol	46.9%	46.7%	44.9%	47.4%	45.3%
Alcohol Rate/100,000	3.67	3.83	3.14	3.93	3.74

Sources: FARS Imputed Alcohol Data Final Files 2017-2020, FARS Annual Report File 2021

The number of alcohol-related driving fatalities increased statewide from 132 in 2017 to 137 in 2018, before dropping to 112 in 2019 and increased to 135 in 2021 (see Table AL-13). Overall fatalities have fluctuated from 281 in 2017 to 298 in 2021 (+6.1%). The percentage of fatalities that are alcohol-related was highest in 2020 (47.4%). The alcohol-related driving fatality rate has

shown an increase over the last five years, from 3.67 per 100,000 population in 2017 to 3.74 in 2021.

Table AL-10 shows the age groups of drinking drivers (BAC ≥ 0.01) killed during the five-year period from 2017 to 2021, along with the numbers of licensed drivers in these same age groups. The table also shows the rate of drinking drivers killed (fatalities per 100,000 licensed drivers).

The table indicates that persons between the ages of 25 and 44 made up 49 percent of the drinking drivers' fatalities. The table shows that approximately six percent (6%) of the fatally injured drinking drivers were under the legal drinking age.

The substantial over-representation (percent licensed drivers versus percent drivers killed) of the 21-24 and 25-34-year age groups and the under-representation of the 55 and over age group is also of significance.

Table AL-10. Fatally Injured Drunk Drivers by Age Group (BAC ≥ 0.01)

Age	Drinking Drivers Killed (2017-2021)		Licensed Drivers (2021)		Rate[3]
	Number[1]	Percent of Total	Number[2]	Percent of Total	
<16	0	0.0%	0	0.0%	n/a
16-20	25	5.9%	125,805	4.8%	19.6
21-24	61	14.7%	154,037	5.9%	39.7
25-34	119	28.5%	428,789	16.5%	27.7
35-44	83	20.0%	417,613	16.0%	19.9
45-54	67	16.1%	424,343	16.3%	15.8
55-64	39	9.4%	481,287	18.5%	8.1
65-69	11	2.6%	193,426	7.4%	5.6
>69	11	2.7%	381,096	14.6%	3.0
Total	417	100.0%	2,606,396	100.0%	16.0

1. Sources: FARS, Imputed Alcohol Data Final Files 2017-2020, FARS Annual Report File 2021
2. Source: FHWA
3. Fatality rate per 100,000 Licensed Drivers

Table AL-11 shows additional characteristics of these drivers and their crashes. The table shows that the fatally injured drinking drivers were predominately males (81% overall) and were most often killed in single vehicle crashes (61%). Overall, 81 percent of the victims had valid licenses, five percent had a previous DUI conviction, and 91 percent were Connecticut residents. Approximately 69 percent of the fatalities took place on arterial type roadways, 18 percent were on collector roadways, and 11 percent were on local roadways. The second part of Table AL-6 shows that during the period of 2017-2021 drinking driver fatalities were most likely to have occurred during overnight periods on Saturdays and Sundays (these are likely in the overnight periods of Friday into Saturday and Saturday into Sunday). Friday, Saturday, and Sunday account for approximately 60 percent of all alcohol-related driving fatalities. The table shows that 37 percent of the fatalities occurred during the daytime hours of 6am to 7:59pm, 33.3 percent took place during the late-night hours of midnight to 5:59am, and 30 percent occurred during the evening hours from 8pm to 11:59pm.

Table AL-11. Characteristics of Fatally Injured Drunk Drivers (BAC ≥ 0.01), 2017-2021

	2017 (N=86)	2018 (N=82)	2019 (N=70)	2020 (N=88)	2021 (N=90)	Total (N=417)
Age						
<21	3.7%	5.7%	7.7%	6.4%	6.6%	6.0%
21-34	42.3%	43.0%	43.1%	49.1%	38.6%	43.2%
35-49	29.4%	29.0%	28.2%	20.4%	32.8%	28.0%
50+	24.5%	22.3%	21.0%	24.1%	21.9%	22.8%
Sex						
Male	81.4%	79.2%	84.0%	81.1%	80.1%	81.1%
Female	18.6%	20.8%	16.0%	18.9%	19.9%	18.9%
Number of Vehicles						
Single Vehicle	60.1%	59.3%	63.8%	62.3%	58.4%	60.7%
Multiple Vehicle	39.9%	40.7%	36.2%	37.7%	41.6%	39.3%
License Valid	77.0%	88.7%	68.9%	80.5%	85.5%	80.6%
Previous DUI	8.2%	4.0%	10.0%	4.6%	0.0%	5.1%
Connecticut Resident	89.4%	87.9%	91.7%	92.0%	95.2%	91.3%
Road Type						
Arterial	73.3%	67.0%	56.3%	78.0%	68.2%	69.1%
Collector	12.5%	19.4%	30.7%	14.6%	26.2%	20.3%
Local	14.2%	13.6%	13.0%	7.4%	5.6%	10.6%

	2017 (N=86)	2018 (N=82)	2019 (N=70)	2020 (N=88)	2021 (N=90)	Total (N=417)
Day						
Sunday	20.0%	15.8%	20.5%	29.1%	20.6%	21.3%
Monday	9.8%	11.9%	7.1%	7.5%	10.5%	9.4%
Tuesday	13.0%	13.6%	7.1%	11.4%	11.5%	11.5%
Wednesday	8.2%	8.5%	7.0%	6.9%	6.4%	7.4%
Thursday	14.6%	10.9%	12.6%	10.8%	8.2%	11.3%
Friday	9.0%	11.9%	18.7%	13.3%	19.3%	14.3%
Saturday	25.6%	27.4%	27.0%	20.9%	23.5%	24.7%
Time						
Midnight-05:59	32.9%	33.3%	32.1%	35.1%	33.0%	33.3%
06:00-19:59	40.7%	28.3%	40.9%	43.9%	30.9%	36.8%
20:00-23:59	26.4%	38.5%	27.0%	21.0%	36.1%	29.9%
Month						
January	5.9%	8.1%	5.7%	5.0%	5.6%	6.1%
February	10.7%	7.6%	5.7%	3.4%	5.2%	6.5%
March	2.9%	2.4%	9.3%	10.4%	5.6%	6.0%
April	14.7%	9.1%	4.6%	8.2%	12.4%	10.0%
May	13.4%	10.3%	8.6%	6.9%	13.6%	10.7%
June	12.2%	8.7%	10.8%	17.0%	14.8%	12.9%
July	7.1%	14.9%	16.1%	8.8%	11.5%	11.5%
August	1.4%	8.7%	12.0%	9.9%	10.0%	8.3%
September	12.9%	10.1%	7.8%	4.9%	5.5%	8.2%
October	3.8%	5.0%	11.8%	3.4%	5.5%	5.7%
November	9.1%	6.1%	3.0%	14.2%	3.3%	7.3%
December	5.8%	8.9%	4.6%	8.0%	6.8%	6.9%

Sources: FARS Alcohol Imputed Data Final Files 2017-2020, FARS Annual Report File 2021

The distributions of crashes related to alcohol, medication, or other drugs by time of day and day of week are shown in Figures AL-12 and AL-13. Note that the injury crash data reporting does not allow for separate computation of alcohol-related crashes from the more general impaired crashes. As such, the 2021 impaired-related injury data presented here include impairment related to alcohol, medication, or other drugs. Monday through Thursday have fewer crashes and the frequency then builds through the weekend days. The frequency of crashes builds up in the afternoon and evening hours, peaking during the 6pm to 11pm time period.

Figure AL-12. Alcohol-Related and Other Impaired-Related Crashes by Day of Week, 2021
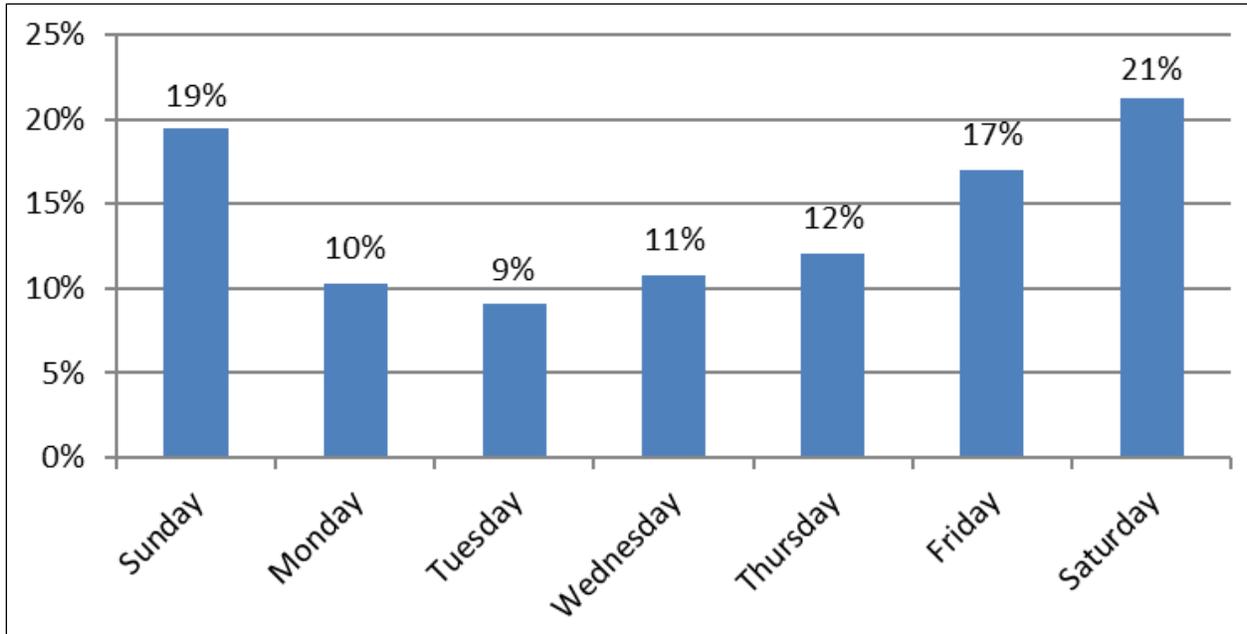
Source: Connecticut Crash Data Repository

Figure AL-13. Alcohol-Related and Other Impaired-Related Crashes by Time of Day, 2021
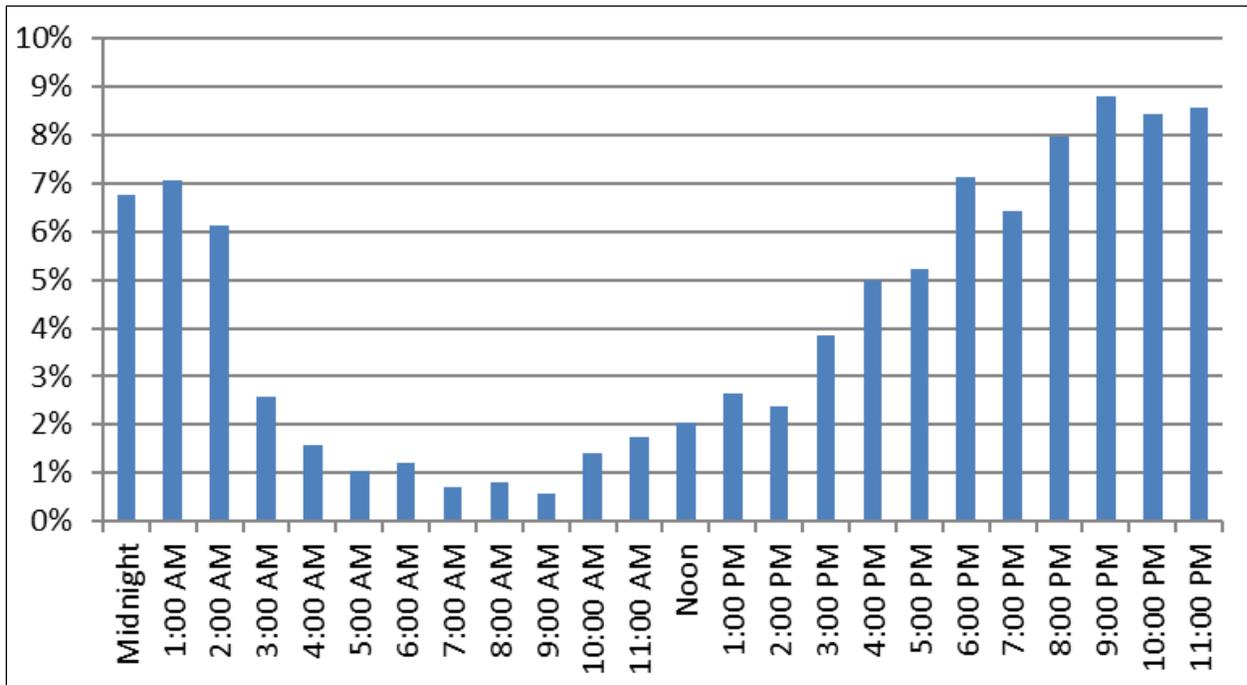
Source: Connecticut Crash Data Repository

Table AL-12 shows the percentage of Connecticut non-fatal crashes in 2021 in which police reported that *alcohol, medication, or other drugs* were involved. The table shows that alcohol, medication, or other drugs are a greater factor in severe crashes than less severe crashes. For instance, 2021 results indicate ten percent (10%) of "A"-injury crashes and six percent (6%) of "B"-injury crashes involved an impairing substance compared to three percent (3%) of "C"-injury and three percent (3%) of Property Damage Only crashes.

The lower percentage of impairing substance involvement in injury and property-damage only crashes also reflect the general unstated policy of many law enforcement agencies that unless a DUI arrest is made, alcohol, medication or other drug involvement is not indicated as a contributing factor in the crash. Crashes which result in property damage only or B and C type injuries are generally less likely to involve alcohol, medication, or other drugs.

Table AL-12. Percent of Crashes Police Reported Alcohol, Medication, or Other Drugs Involved, 2021

Maximum Severity Level	2021
A Injury	9.9%
B Injury	5.6%
C Injury	3.3%
No Injury	2.2%
Injury Crashes	4.7%
Total Crashes	2.9%

Source: Connecticut Crash Data Repository

Table AL-13 provides an overview of the statistics for alcohol-impaired driving crashes in Connecticut.

Table AL-13. Statistics for Alcohol-Impaired Crashes in Connecticut, 2017-2021

	2017	2018	2019	2020	2021
Alcohol-Impaired Driving Fatalities	122	120	98	123	112
Alcohol-Impaired Driving Fatal Crashes	108	112	87	117	109
Percent Alcohol-Impaired Driving Fatal Crashes	41.1%	40.7%	37.3%	41.1%	38.5%
Alcohol-Related Driving Fatalities	132	137	112	142	135
Percent Alcohol-Related Driving Fatalities	47.0%	46.8%	45.0%	47.4%	45.3%
Alcohol-Related Driving Fatalities per 100M VMT	0.42	0.43	0.35	0.47	0.47
Alcohol-Related Driving Injury Crashes*	1282	1083	1127	1078	1155
Percent Alcohol-Related Driving Injury Crashes	4.6%	4.0%	4.2%	5.1%	4.7%

Note: *Impaired injury crash data include impairment due to alcohol, medication, or other drugs

Drug Driving Crash Data Analysis

The FARS Drugs data file identifies each specimen tested and its corresponding drug result as positive, negative, tested with unknown results, not tested, or unknown if tested. The nature of the specimen sampled (e.g., urine, oral fluid, blood) can vary across individuals and there is no consistent set of policies for drug testing across states, so results should be interpreted with caution (see Research Note: Understanding the Limitations of Drug Test Information, Reporting, and Testing Practices in Fatal Crashes (dot.gov) for details). Drug test results may be reported for narcotic, depressant, stimulant, hallucinogen, cannabinoid, phencyclidine (PCP), anabolic steroid, inhalant, and other drugs. The tables that follow illustrate the trends in drivers and non-motorists who tested positive for drugs (i.e., positive result for any of the drug types listed above).

Table DR-1 shows that just about half (53.4%) of drivers involved in fatal crashes have been tested for drugs over the period 2017-2021, so it is difficult to estimate the "true" rate of drug positive drivers and fatalities related to driver drug use. Overall, about one-quarter of drivers involved in fatal crashes tested positive for drugs (24.9%), with rates fluctuating from year to year. Close to one quarter (23.1%) tested negative, five percent (5.3%) had unknown results despite being tested, 30 percent (30.4%) were untested, and the remainder (16.1%) had unknown test status (i.e., unknown if tested).

Table DR-1. Drivers Involved in Fatal Crashes – Drug Test Results

	2017	2018	2019	2020	2021	2017-2021
N Drivers Involved	379	413	338	421	433	1984
N Tested for Drugs	218	226	182	213	221	1060
Percent Tested	57.5%	54.7%	53.8%	50.6%	51.0%	53.4%
N Negative for Drug	99	119	74	97	70	459
Percent Negative Results	26.1%	28.8%	21.9%	23.0%	16.2%	23.1%
N Positive for Drug	97	91	77	101	129	495
Percent Positive Results	25.6%	22.0%	22.8%	24.0%	29.8%	24.9%
N Tested, Results Unknown	22	16	31	15	22	106
Percent Tested, Results Unknown	5.8%	3.9%	9.2%	3.6%	5.1%	5.3%
N Not Tested	82	124	90	130	178	604
Percent Not Tested	21.6%	30.0%	26.6%	30.9%	41.1%	30.4%
N Unknown if Tested	79	63	66	78	34	320
Percent Unknown if Tested	20.8%	15.3%	19.5%	18.5%	7.9%	16.1%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Of those drivers who were tested, 47 percent had positive results and 43 percent had negative results. Drug results were unknown for ten percent (10%) of tested drivers (Table DR-2).

Table DR-2. Known Drug Results for Drivers Involved in Fatal Crashes

Drivers Tested	2017 (N=218)	2018 (N=226)	2019 (N=182)	2020 (N=213)	2021 (N=221)	2017-2021 (N=1,060)
% Known Negative	45.4%	52.7%	40.7%	45.5%	31.7%	43.3%
% Known Positive	44.5%	40.3%	42.3%	47.4%	58.4%	46.7%
% Tested, Results Unknown	10.1%	7.1%	17.0%	7.0%	1.0%	10.0%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Table DR-3 shows that the number of drug positive driving fatal crashes increased across the period 2017-2021, reaching 128 in 2021, the highest total in five years. The number of drug positive driving fatalities has also increased since 2017 and reached a high of 136 in 2021. Note that it is common for the FARS Annual Report File (i.e., 2021) to have lower rates of alcohol and drug testing due to lags in laboratory reporting.

The percentage of crashes involving drug positive driving is approximately 36 percent for the five-year period reported but appears to be on an upward trend. The percentage of all fatalities involving drug positive driving follows a similar pattern. These figures, defined as a percentage of the total number of crashes and fatalities, remain high and fluctuate from year to year. Table DR-3 indicates the number of fatal crashes and fatalities involving a driver with positive drug test results.

Table DR-3. Fatal Crashes and Fatalities Involving Drug Positive Driving

State of Connecticut	2017	2018	2019	2020	2021
Number of Fatal Crashes Involving Drug Positive Driving	93	88	77	96	128
Percent Fatal Crashes Involving Drug Positive Driving	35%	32%	33%	34%	45%
Number of Fatalities Involving Drug Positive Driving	102	97	84	104	136
Percent Fatalities Involving Drug Positive Driving	36%	33%	34%	35%	46%

Sources: FARS Final Files 2017-2019, FARS Annual Report File 2021

Table DR-4 shows the drug testing results for fatally injured non-motorists. Testing rates were 85 percent or above every year except for 2019. Overall, 36 percent of fatally injured non-motorists had positive drug results, fluctuating from a low of 27 percent in 2017 to a high of 45 percent in 2021.

Table DR-4. Fatal Crashes and Fatalities Involving Drug Positive Driving

Non-Motorists Fatalities	2017	2018	2019	2020	2021
Non-Motorist Fatalities (N)	52	61	57	65	56
Percent Tested for Drugs	85%	85%	72%	85%	89%
Percent Non-Motorists with Positive Drug Results	27%	39%	32%	37%	45%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Occupant Protection (OP) and Child Passenger Safety (CPS)

Description of Highway Safety Problems/Problem Identification

The primary goals of the Occupant Protection programs are to increase the observed statewide seat belt use rate and to decrease unrestrained occupant injuries and fatalities. The strategies identified for accomplishing these goals include but are not limited to the rear seat belt law, strengthening existing legislation, high visibility enforcement, inspection stations, public information and education, serving diverse populations and people with special needs.

Problem Identification: Child Passenger Safety/Child Restraints

Table CPS-1 shows observed restraint use for children ages zero (0) to three (3) years from the State's child restraint observations. A resample of sites was performed in 2017 in lieu of a child restraint survey. These new sites better reflect child restraint use across the State and may not be comparable to previous years. As such it is recommended that results of the 2018 and subsequent surveys not be compared to previous years. Despite the COVID-19 pandemic, a survey was conducted in 2020 but the results may not be representative given the unusual circumstances of that year (not a compliant survey). The table indicates that in 2022, 97 percent of children under age four were restrained and 100 percent were in the rear seat of their vehicles. Ninety-eight percent (98%) of young children were restrained when the driver was belted but just 50 percent when the driver was not belted (however, given that only two drivers were unbelted, these results can be misleading). Child restraint use has increased by 28 percentage points since the first child restraint survey was performed in 1997. All young children (100%) observed in 2022 were riding in the rear seat of their vehicles.

Table CPS-1. Child Restraint Use (Age 0 to 3 Years), 1997 and 2015-2022

	Baseline 1997 (N=247)	2015 (N=165)	2016 (N=163)	2018 (N=392)	2019 (N=165)	2020 (N=212)	2021 (N=164)	2022 (N=103)
Child Restraint Use	70.4%	93.9%	90.8%	92.4%	93.3%	88.2%	98.8%	97.1%
Driver Belt Use	63.6%	90.3%	95.7%	93.6%	90.7%	90.1%	96.3%	97.1%
When Driver Belted	80.3%	94.0%	91.0%	94.6%	94.6%	89.2%	98.7%	98.0%
When Driver Not Belted	56.3%	93.3%	83.3%	60.0%	78.6%	75.0%	100.0%	50.0%
Children in: Front Seat	23.9%	1.2%	0.6%	0.6%	0.0%	0.0%	1.8%	0.0%
Children in: Rear Seat	76.1%	98.8%	99.4%	99.4%	100.0%	100.0%	98.2%	100.0%

Notes: Observations were first conducted in 1997 and as such 1997 is considered the baseline year for these data;
In 2017, a resampling of the sites was performed instead of the survey
Source: Connecticut Bellwether Seat Belt and Child Restraint Observations

A key challenge in problem identification in child passenger safety is the availability of research and analysis of data to identify specific groups of motorists who do not comply with the law. Currently, there are deficiencies in obtaining the necessary information to identify children that are not properly restrained.

Although Connecticut has high numbers of child restraint use and low numbers of children killed in crashes, Child Passenger Safety programs continue to be an important part of the CTHSO. These programs are also regulatory-driven and are required for each state. Connecticut continues to have success with child passenger safety through child seat installation and use training and child seat giveaways to those in need. Even with the low child fatality numbers, Connecticut still has room to improve to move toward zero child deaths.
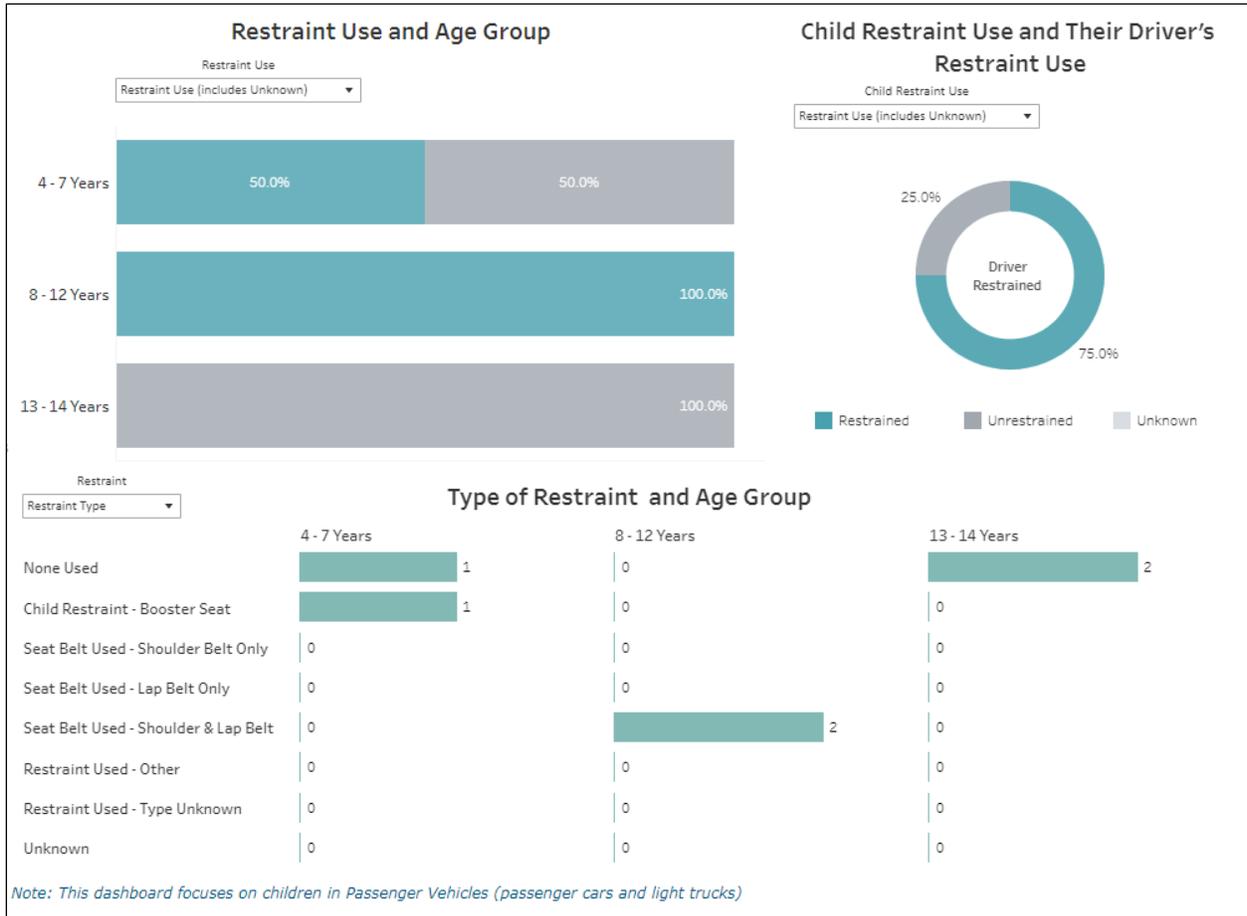
Figure CPS-1 gives an overview of the children ages 14 and under who from 2017 to 2021 were in some way involved in fatal crashes. The majority of the 88 children involved in fatal crashes were restrained in these crashes. Figure CPS-2 gives an overview of those children ages 14 and under who were killed in crashes during the same period. Of the 88 children involved in fatal crashes, six died, half of whom were unrestrained. Connecticut's record on child passenger safety illustrates how well these programs are making the impact each were intended to.

Figure CPS-1. Total Children Involved in Fatal Crashes by Restraint Use, 2017-2021

Restraint Use and Age Group

Restraint Use
[Restraint Use (includes Unknown) ▼]

Age Group	Restrained	Unrestrained	Unknown
< 1 Year	66.7%		33.3%
1 - 3 Years	100.0%		
4 - 7 Years	70.0%	5.0%	25.0%
8 - 12 Years	79.2%	4.2%	16.7%
13 - 14 Years	70.6%		29.4%

Child Restraint Use and Their Driver's Restraint Use

Child Restraint Use
[Restraint Use (includes Unknown) ▼]

Driver Restrained: 6.1%, 4.5%, 89.4%
Driver Unrestrained: 100.0%

▉ Restrained   ▉ Unrestrained   ▢ Unknown

Type of Restraint and Age Group

Restraint
[Restraint Type ▼]

	< 1 Year	1 - 3 Years	4 - 7 Years	8 - 12 Years	13 - 14 Years
None Used	2	0	1	1	5
Child Restraint - Forward Facing	1	14	8	0	0
Child Restraint - Rear Facing	3	4	0	0	0
Child Restraint - Booster Seat	0	0	4	0	0
Child Restraint - Type Unknown	0	1	0	0	0
Seat Belt Used - Shoulder Belt Only	0	0	0	1	0
Seat Belt Used - Lap Belt Only	0	0	0	0	1
Seat Belt Used - Shoulder & Lap Belt	0	2	2	18	8
Restraint Used - Other	0	0	0	0	0
Restraint Used - Type Unknown	0	0	0	0	3
Unknown	0	0	5	4	0

Note: This dashboard focuses on children in Passenger Vehicles (passenger cars and light trucks)

Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure CPS-2. Children Killed in Fatal Crashes by Restraint Use, 2017-2021

Restraint Use and Age Group

Restraint Use

Restraint Use (includes Unknown) ▼

Age Group		
4 - 7 Years	50.0%	50.0%
8 - 12 Years	100.0%	
13 - 14 Years		100.0%

Child Restraint Use and Their Driver's Restraint Use

Child Restraint Use

Restraint Use (includes Unknown) ▼

25.0%

Driver Restrained

75.0%

■ Restrained   ■ Unrestrained   ■ Unknown

Type of Restraint and Age Group

Restraint

Restraint Type ▼

	4 - 7 Years	8 - 12 Years	13 - 14 Years
None Used	1	0	2
Child Restraint - Booster Seat	1	0	0
Seat Belt Used - Shoulder Belt Only	0	0	0
Seat Belt Used - Lap Belt Only	0	0	0
Seat Belt Used - Shoulder & Lap Belt	0	2	0
Restraint Used - Other	0	0	0
Restraint Used - Type Unknown	0	0	0
Unknown	0	0	0

Note: This dashboard focuses on children in Passenger Vehicles (passenger cars and light trucks)

Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

Problem Identification: Occupant Protection

The latest scientific survey of belt observations was conducted in June 2022. It provides the most accurate and reliable statewide estimate of seat belt use available in Connecticut that is comparable to the 1995 baseline estimate accredited by NHTSA in September of 1998 and the statewide survey conducted in 1998. The results of statewide belt observations for the last ten (10) years are detailed in Table OP-1. Due to the COVID-19 pandemic, there was no official 2020 statewide survey. Seat belt use was 92 percent in 2022, the second highest rate ever.

Table OP-1. Statewide Scientific Observations, 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total	87%	85%	85%	89%	90%	92%	94%	n/a	92%	92%

Source: CTDOT Statewide Scientific Observations rounded to the nearest whole number

Table OP-2 shows driver and front seat passenger seat belt use rates in 2021 as a function of vehicle, location, and personal characteristics. The year 2012 is used as comparison since it corresponds to the last redesign. Observed seat belt use was highest in SUVs and cars, and lowest in pickup trucks. Seat belt use was highest on local roads and lowest on interstates, higher among females than males and higher for Caucasians than non-Caucasians. Statewide seat belt use increased by five percentage points from 2012 (the year of the last redesign) to 2021 (87% to 92%). Comparing 2021 results with those from 2012 shows that seat belt use increased in every category.

Table OP-2. Observed Driver and Front Seat Passenger Seat Belt Use, 2012 and 2021

	Drivers		Passengers	
	2012	**2022**	**2012**	**2022**
Vehicle Type				
Passenger Car	88.8%	92.1%	87.8%	92.2%
Pickup Truck	80.1%	84.7%	77.8%	87.1%
SUV	90.4%	93.9%	89.7%	95.2%
Van	90.6%	91.1%	90.3%	93.7%
Roadway Type				
Interstate	89.8%	95.2%	89.5%	96.5%
Principal Arterial	88.0%	91.1%	86.8%	93.5%
Minor Arterial	88.0%	87.0%	87.4%	89.4%
Collector	88.2%	85.9%	87.7%	89.0%
Local Road	86.1%	89.4%	84.8%	89.4%
Gender				
Male	86.8%	89.9%	84.9%	91.6%
Female	90.8%	94.6%	89.5%	94.6%
Race				
White	88.9%	92.2%	88.2%	93.8%
Black*	83.4%	85.1%	83.1%	89.4%

Notes: *Prior to 2021, race was coded as White/Non-White; now coded
White/Black/Other so results may not be comparable across years
Source: CTDOT Statewide Scientific Observations

Table OP-3 shows belt use in fatally injured passenger vehicle occupants as a function of time of day. Belt use rates are consistently lower at night than during the daytime. Over the period 2017-2021, daytime belt use in fatal crashes has been 15 percentage points higher than nighttime belt use.

Table OP-3. Percent of Belt Use by Time of Day, Fatally Injured Passenger Vehicle Occupants, 2017-2021

% Belted	2017	2018	2019	2020	2021	2017-21
Day (5am to 8:59pm)	68.8%	56.1%	57.3%	48.7%	55.1%	57.2%
Night (9pm to 4:59am)	48.1%	40.0%	33.3%	51.0%	37.0%	42.5%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Seat belt observation locations are preapproved by NHTSA and follow guidelines set down by the Federal agency. In 2022, Connecticut saw most locations selected with 94 percent and higher usage. Several locations, often in densely populated regions of the state, saw lower usage between 70 and 80 percent. Figure OP-1 shows the 2022 observation location results.

Figure OP-1. Locations of Observed Driver and Front Seat Passenger Seat Belt Use, 2022
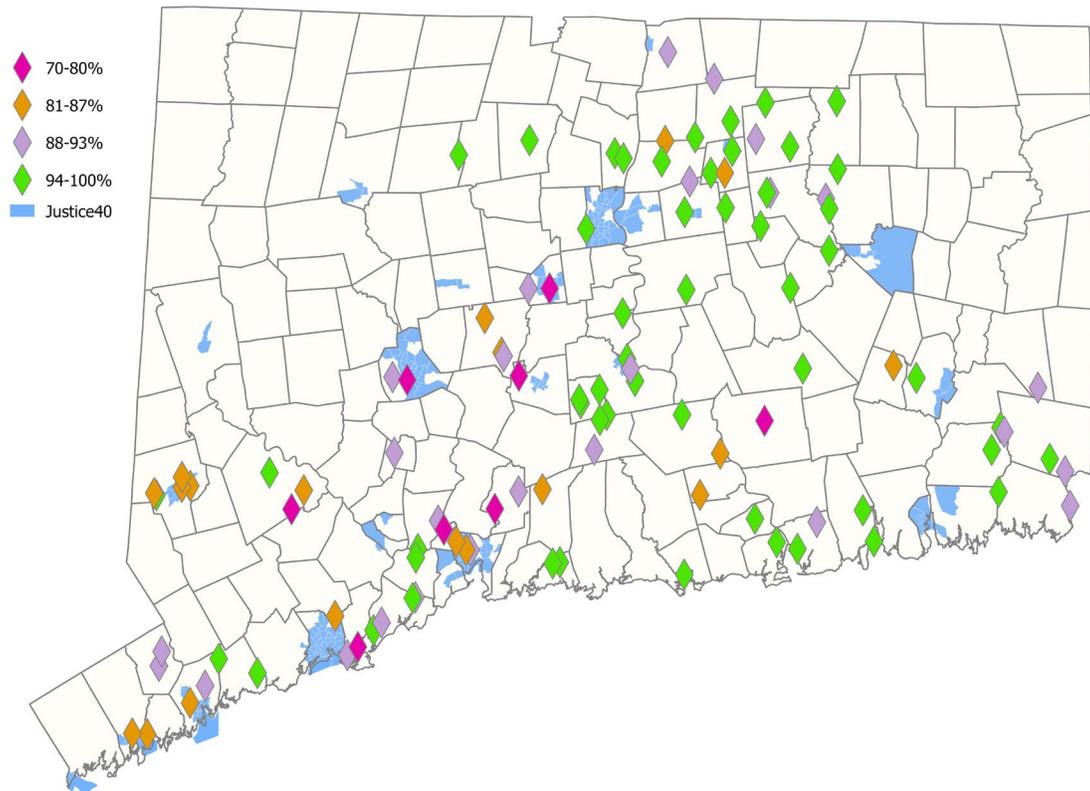
Figure OP-2 shows that, in addition to time of day, alcohol involvement is a factor to be considered in seat belt use by fatally injured drivers. Indeed, daytime seat belt use by drivers with zero BAC is 14 percentage points higher than drivers with BAC of 0.01 or above, and 17 percentage points higher than impaired drivers (BAC ≥ 0.08). A similar trend is seen at night. Seat belt use for drivers with zero BAC at night is 6 percentage points higher than drivers with BAC of 0.01 and above, and 8 percentage points higher than impaired drivers.

Figure OP-2. Fatally Injured Driver Belt Use by Time of Day and Alcohol Involvement, 2017-2021
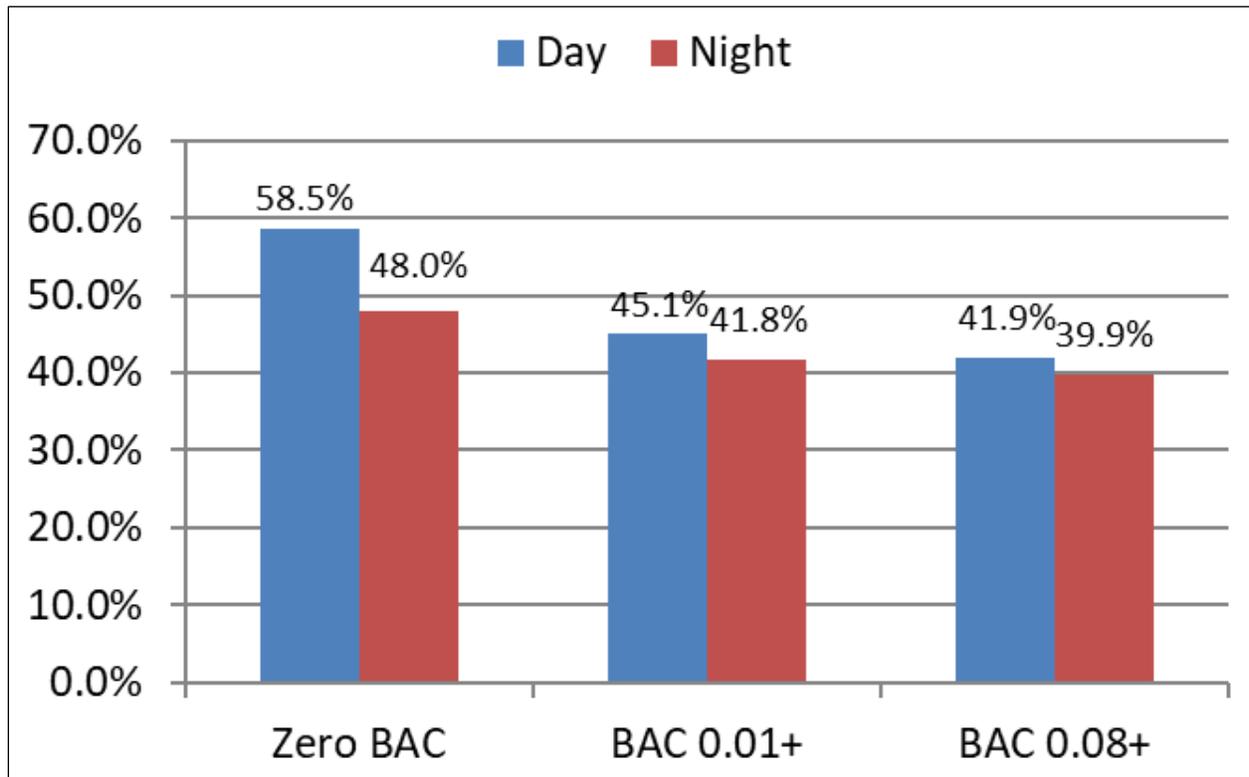
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Table OP-4 shows driver seat belt use among those killed or seriously injured ("A" injury) on a county-by-county basis in 2021. The data indicate that seat belt use in serious crashes varies around the State, ranging from a low of 61 percent in New London County to a high of 80.9 percent in Fairfield County. Table OP-5 shows that belt use in passenger vehicle fatalities has decreased between 2019 (2.3%) and 2020 (7.5%) but increased again in 2021 (41.4%).

Table OP-4. Driver Belt Use by Injury and County, 2021

Driver Injury	Fairfield	Hartford	Litchfield	Middlesex	New Haven	New London	Tolland	Windham
Killed or A Injury	80.9%	71.0%	79.2%	71.4%	71.9%	61.2%	79.4%	72.7%

Source: Connecticut Crash Data Repository

Table OP-5. Belt Use in Passenger Vehicle Fatalities, 2019-2021

	2019		2020		2021	
	N	Percent	N	Percent	N	Percent
Belt	58	42.3%	63	37.5%	70	41.4%
No Belt	57	41.6%	67	39.9%	74	43.8%
Unknown	22	16.1%	38	22.6%	25	14.8%
Total	137	100.0%	168	100.0%	169	100.0%

Sources: FARS Final Files 2019-2020, FARS Annual Report File 2021

Within the neighboring states of the northeastern region of the country, Connecticut's percentage of unrestrained fatalities rank the state near the bottom of the list. As seen in Figure OP-3, only the state of New York with 33 percent has a better rate than Connecticut at 40 percent for the 2017-2021 time period. For the most recent year (2021), Connecticut had a comparable rate with similar states in the northeast. New Jersey (47%), Massachusetts (45%), and Rhode Island (44%) all were similar to Connecticut's percentage (44%).

Figure OP-3. Percentages of Unrestrained Passenger Vehicle Occupants Killed, 2017-2021 (Left Map) and 2021 (Right Map)
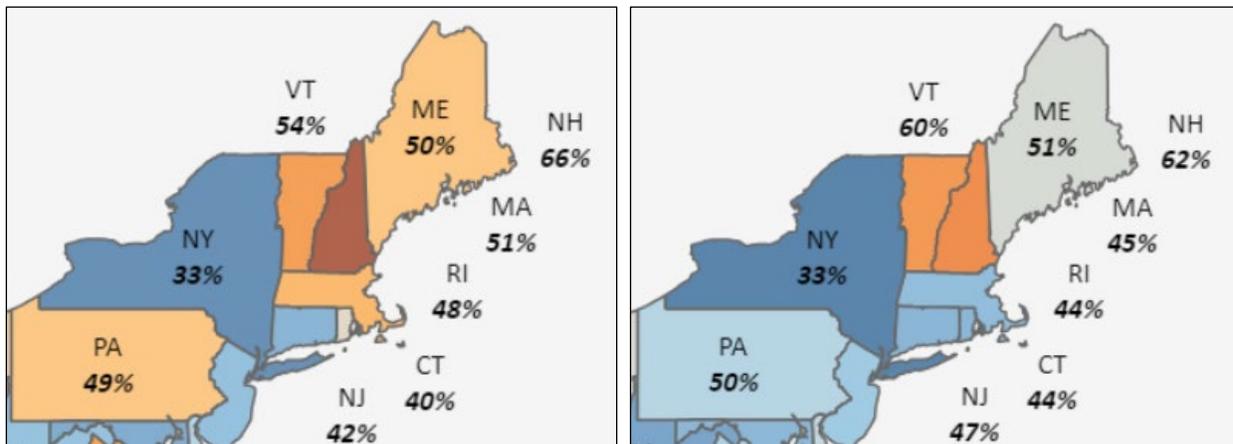
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Even with the lower regional ranking, unrestrained occupant fatalities continue to be an issue in Connecticut crashes and have room for improvement as seen in the 2017-2021 crash data in Figure OP-4. Fatal crashes shown with red points are scattered throughout the entire state relatively evenly. On the other hand, the majority of serious injury crashes shown with yellow points predominately stretch through the urban core of the center of the State, from the New York state line to the Massachusetts state line.

Figure OP-4 also includes the Justice40 data layer. Using this layer helps to geospatially visualize and analyze where these areas intersect with unrestrained occupant crashes. Some of the largest urban areas, including Bridgeport, Waterbury, Hartford, and New Haven, have some of the highest counts of these types of crashes. There is also a notable pattern of serious injury crashes along major highways, especially seen along the Interstate 91 corridor and along U.S. Route 7 north of Danbury close to the New York border.

Figure OP-4. Unrestrained Passenger Vehicle Occupants Killed and Seriously Injured, 2017-2021
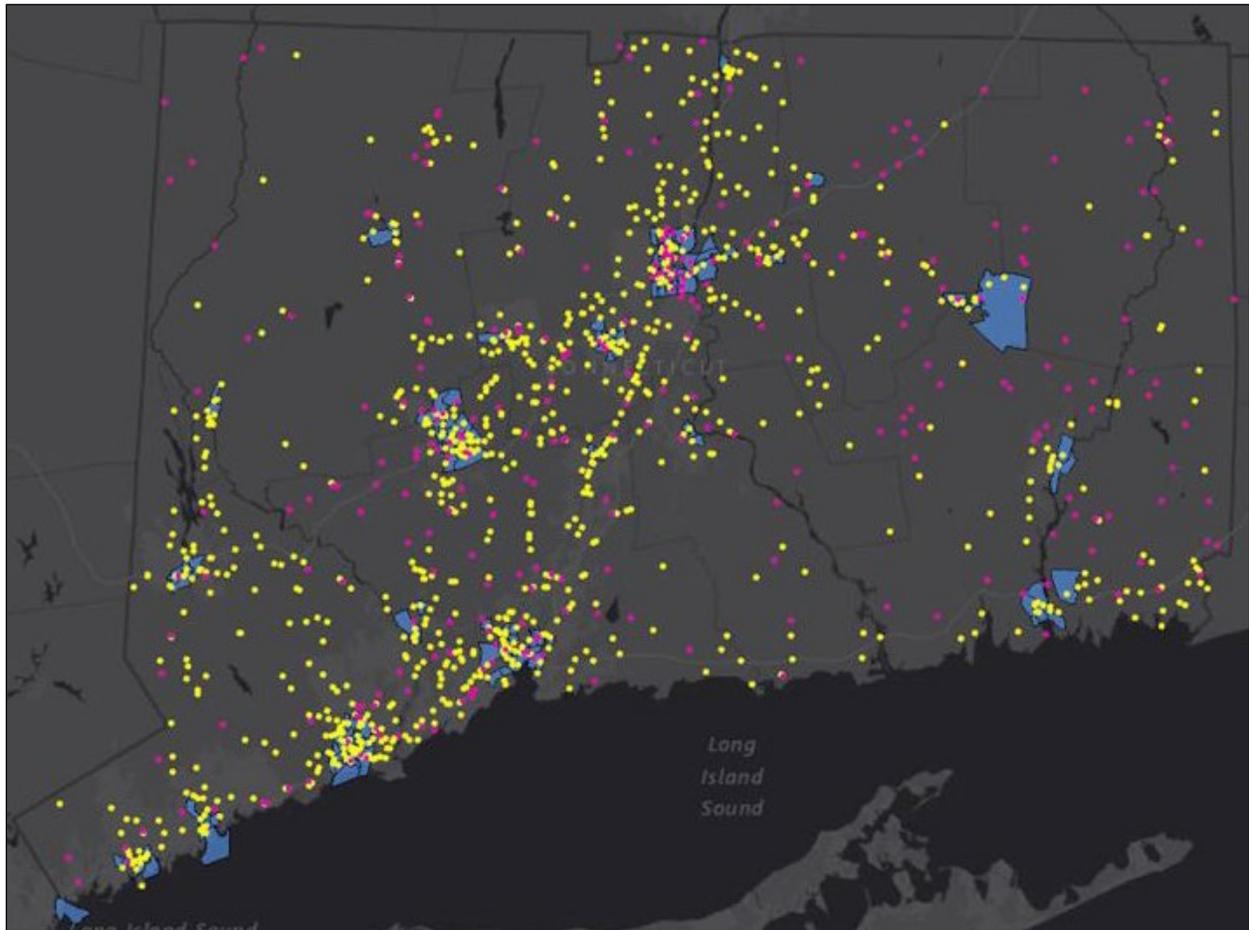
Notes: Red points indicate fatal crashes; yellow points indicate serious injury crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021, Connecticut Crash Data Repository 06/07/2023

These data can also be analyzed using geospatial tools to create heat maps, indicating the areas of highest concern. Figure OP-5 shows those areas in Connecticut where fatal crashes and serious injuries crashes are most concentrated during the same time period 2017-2021. For fatal crashes on the left, the Hartford area stands out, while for serious injury crashes on the right, the Bridgeport and Waterbury areas show the highest concentrations.

Figure OP-5. Unrestrained Passenger Vehicle Occupants Killed (Left Map)
and Seriously Injured (Right Map), 2017-2021
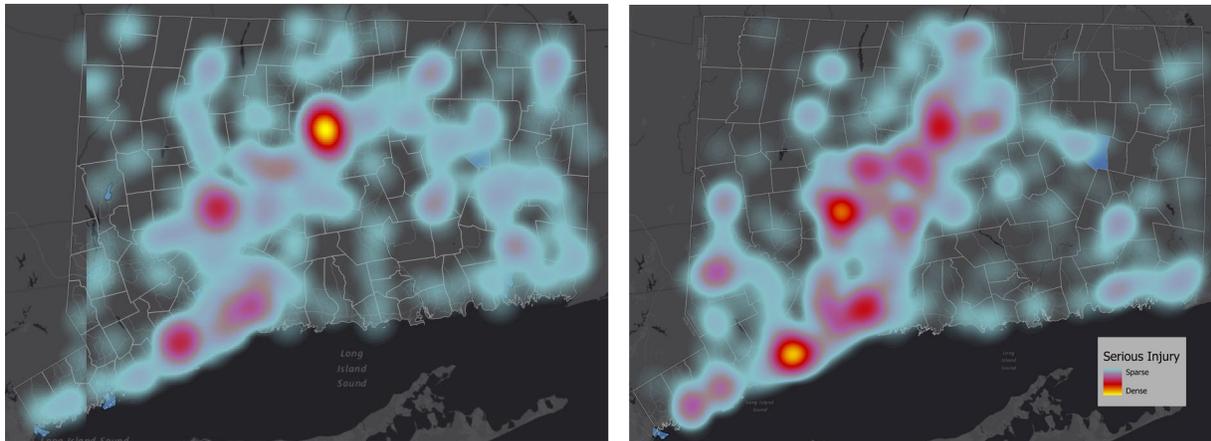
Notes: Red and yellow indicate denser areas of crashes; blue indicates less dense areas of crashes; refer to Figure 8 on page 28 for details on municipalities
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021, Connecticut Crash Data Repository 06/07/2023

Figure OP-6 shows the seating position and vehicle type of unrestrained occupant fatalities. For vehicle type, pickup trucks stand out as an area of concern.

Figure OP-6. Unrestrained Passenger Vehicle Occupants, by Occupant Characteristics, 2017-2021
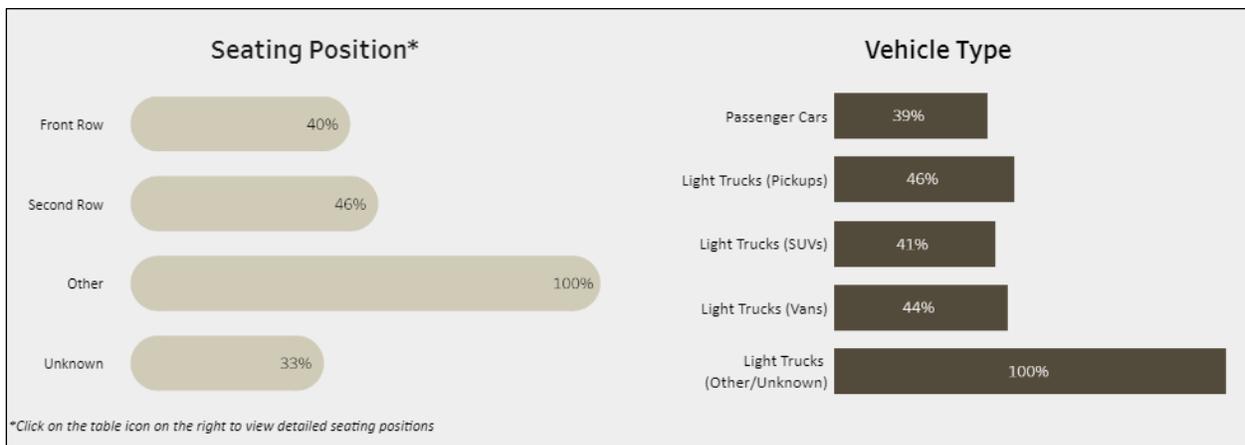
Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

Looking closer at fatalities, Figure OP-7 highlights the details of Connecticut's unrestrained fatalities from 2017 to 2021. The majority of adult fatalities fall within the ages of 21 and 24. Out of all known restraint fatalities, most unrestrained fatal crashes occur at night and on weekends, while road land use is comparable between rural and urban areas.

Figure OP-7. Passenger Vehicle Occupants Killed in Fatal Crashes by Known Restraint, 2017-2021
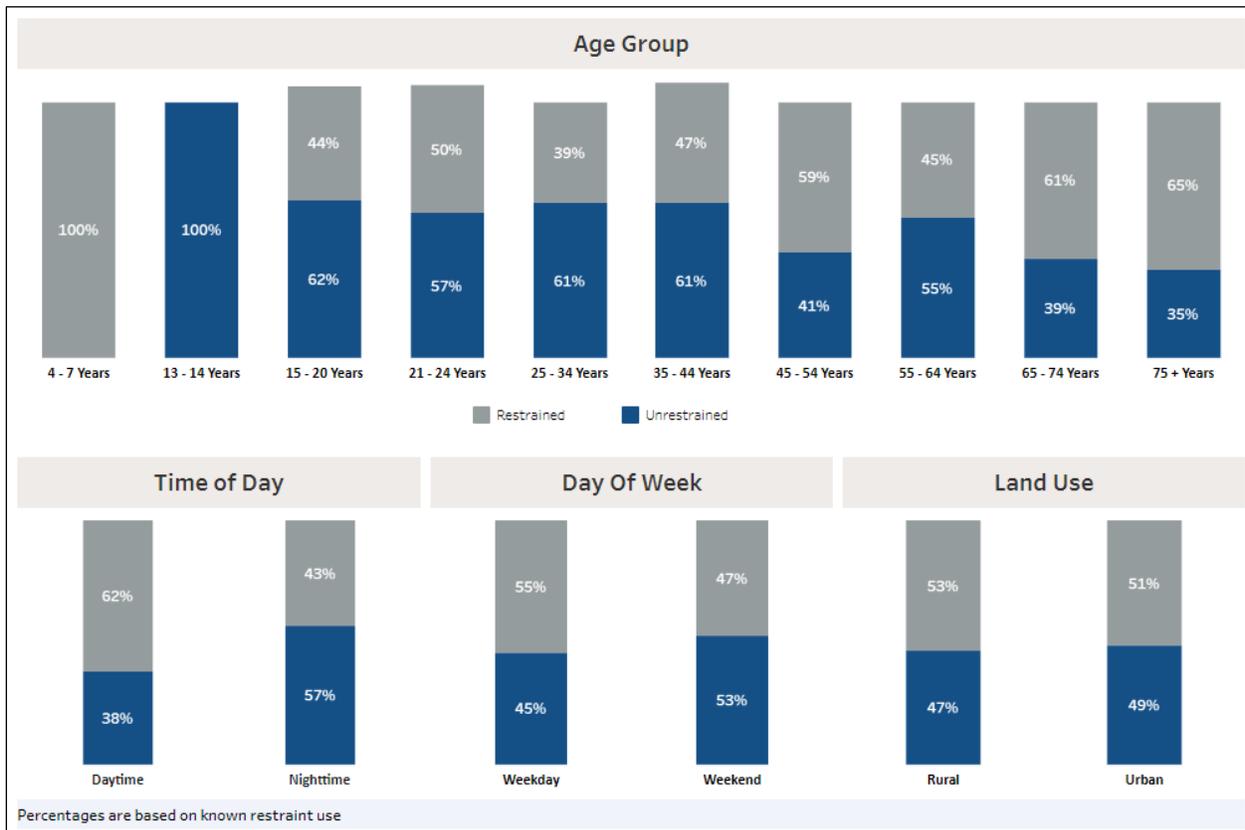
Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

Police Traffic Services (PTS)

Description of Highway Safety Problems/Problem Identification

Crash reporting in Connecticut via the Police Report 1 (PR-1) in the past only allowed for one (1) contributing factor to be assigned to a crash; this accounts for the major difference between contributing factors listed in CTDOT data versus FARS data. This issue has since been addressed through the development of a Model Minimum Uniform Crash Criteria (MMUCC) Guideline compliant crash reporting form. This change is reflected in 2015 and later crash data.

Among injury crashes in Connecticut during 2021, Table PT-1 shows the predominant contributing factors related to aggressive driving: following too closely; failure to yield right-of-way; operating in inattentive, careless, negligent or erratic manner; violating stop sign; and violating traffic light. Percentages are based on number of known factors assigned to involved drivers (may include up to four factors per driver).

Table PT-1. Aggressive Driving Contributing Factors in Injury Crashes, 2021

	Injury Crashes		Fatal Crashes		Property Damages Only Crashes	
	Number	%	Number	%	Number	%
Followed Too Closely	6,913	15.2%	13	2.9%	19,817	14.8%
Failed to Yield Right-of-Way	3,402	7.5%	16	3.5%	7,280	5.4%
Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner	728	1.6%	12	2.7%	1,786	1.3%
Ran Stop Sign	844	1.9%	2	0.4%	1,543	1.2%
Ran Red Light	1,056	2.3%	8	1.8%	1,190	0.9%

Source: Connecticut Crash Data Repository

During the 2017 to 2021 period, the most prevalent driver-related factors in fatal crashes (Table PT-2) were "speed-related" and "under the influence of alcohol, drugs, or medication." In 2021, "speed-related" was identified in 25 percent of fatal crashes, "under the influence of alcohol, drugs, or medication" in 18 percent, and "failure to keep in proper lane" in 16 percent of the fatal crashes. The data in Table PT-2 may involve up to four factors per driver thus the yearly total may add up to more than 100 percent. **As Highway Safety issues continue to emerge, distracted driving/handheld mobile electronic device use has been a consistently recognized factor leading to crashes, injuries and fatalities.** Table PT-2 indicates that "driver distracted by" was a driver-related factor in one percent (1%) of fatal crashes.

Table PT-2. Drivers Involved in Fatal Crashes/Related Factors of Drivers

Factors	2017 (N=382)	2018 (N=415)	2019 (N=340)	2020 (N=423)	2021 (N=438)
Speed-related	20.7%	21.4%	18.8%	23.9%	25.3%
Under the Influence of Alcohol, Drugs or Medication	8.9%	14.2%	13.2%	18.9%	17.8%
Failure to Keep in Proper Lane	16.0%	11.6%	9.4%	12.5%	16.0%
Operating the Vehicle in an Erratic, Reckless or Negligent Manner, Operating at Erratic or Suddenly Changing Speeds.	6.8%	9.6%	6.8%	10.4%	8.0%
Aggressive Driving / Road Rage	9.2%	5.1%	8.5%	8.7%	6.4%
Failure to Yield Right-of-Way	4.5%	4.6%	3.5%	3.5%	4.3%
Failure to Obey Actual Traffic Sign, Traffic Control Devices or Traffic Officers	2.9%	2.2%	2.6%	3.3%	2.1%
Driver distracted by…	2.9%	1.9%	4.1%	2.6%	0.9%
Driver's vision obscured by…	2.4%	3.9%	1.8%	3.3%	0.5%
Other Physical Impairment	3.4%	1.9%	1.2%	4.7%	0.5%
Overcorrecting	2.9%	2.2%	1.8%	2.8%	1.8%
Following Improperly	1.8%	1.9%	1.8%	3.1%	2.5%
Drowsy, asleep, fatigued, ill, or blackout	0.5%	2.7%	2.4%	1.9%	0.2%
None	41.1%	53.0%	48.5%	48.0%	43.6%
Other	3.7%	5.3%	6.8%	5.2%	7.8%
Unknown	17.3%	14.2%	15.9%	13.7%	13.0%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Table PT-3 indicates that more than half of speeding-related fatal crashes in the period 2017 to 2021 involved a driver with a positive BAC. Overall, 59 percent of speeding-related crashes involved a driver with a BAC of 0.01 or above and 52 percent of speeding-related crashes involved an impaired driver (BAC of 0.08 or above).

Table PT-3. Speeding-Related Fatal Crashes by Alcohol Involvement

	2017	2018	2019	2020	2021	2017-21
N Speeding-Related Crashes						
Zero BAC	35	36	23	46	43	183
BAC ≥ 0.01	46	53	41	55	68	263
BAC ≥ 0.08	42	48	38	46	58	233
% Speeding-Related Crashes						
Zero BAC	42.8%	40.1%	35.5%	45.9%	39.0%	41.0%
BAC ≥ 0.01	57.2%	59.9%	64.5%	54.1%	61.0%	59.0%
BAC ≥ 0.08	52.2%	54.3%	58.9%	45.7%	52.6%	52.2%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Over the five-year period of 2017-2021, the greatest proportion of fatalities (35.6%) occurred on roads with a posted speed limit of 30 mph or less, followed by roads with limits of 35 or 40 mph (24.4%) and 45 or 50 mph (16.5%). Details are included in Table PT-4.

Table PT-4. Fatalities by Posted Speed Limit

Posted Speed Limit	2017 (N=281)	2018 (N=293)	2019 (N=249)	2020 (N=299)	2021 (N=298)	Total (N=1,420)
30 mph or less	110	106	89	108	93	35.6%
35 or 40 mph	66	62	61	76	81	24.4%
45 or 50 mph	46	54	41	36	57	16.5%
55 mph	23	29	19	37	27	9.5%
60+ mph	25	39	31	33	35	11.5%
No statutory limit	7	2	4	1	0	1.0%
Unknown	4	1	4	8	5	1.5%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Table PT-5 represents the top 25 municipalities and Figure PT-1 represents all municipalities where speed-related crashes took place. The HSO will focus the majority of major cities speed grants on larger municipalities where the majority of these crashes occur. Other participating municipal departments may be selected based on past grant performance and/or a demonstrated need through additional problem identification provided as part of a specific grant application or by community request resulting from Public Participation and Engagement activities.

Table PT-5. Speed Crashes by Municipality (Top 25), 2018-2022

Town	2018	2019	2020	2021	2022	Total	Rank	Last Rank (2018-2020)
Bridgeport	467	383	317	387	241	1,795	1	1
Waterbury	458	344	317	353	244	1,716	2	2
Middletown	217	178	210	198	200	1,003	3	3
Danbury	193	185	136	174	107	795	4	4
New Britain	181	157	121	161	116	736	5	5
New Haven	155	157	126	157	104	699	6	6
Meriden	171	131	120	130	96	648	7	7
Hartford	86	109	104	152	172	623	8	11
Hamden	124	126	116	126	108	600	9	8
Norwalk	125	123	72	130	93	543	10	10
Wethersfield	127	158	84	104	51	524	11	9
East Hartford	120	93	63	108	58	442	12	13
Bristol	111	91	69	78	86	435	13	15
Trumbull	90	75	80	109	74	428	14	19
Shelton	100	105	82	81	58	426	15	12
Stamford	81	86	92	86	72	417	16	16
Norwich	98	102	70	94	46	410	17	18
Fairfield	84	110	74	82	52	402	18	14
West Haven	95	84	76	64	58	377	19	17
Wallingford	105	74	62	71	63	375	20	20
Seymour	98	68	54	74	53	347	21	21
Torrington	93	70	48	64	54	329	22	22
New Milford	69	74	52	70	60	325	23	25
Naugatuck	76	61	65	61	60	323	24	23
Manchester	60	78	43	61	73	315	25	31

Note: These data exclude interstates
Source: Connecticut Crash Data Repository

Figure PT-1. Ranked Speed Crashes (All 169 Municipalities), 2018-2022

Legend:
- 16 - 120
- 121 - 259
- 260 - 442
- 443 - 1003
- 1004 - 1795
- Justice40

Notes: These data exclude interstates;
refer to Figure 8 on page 28 for details on municipalities
Source: Connecticut Crash Data Repository
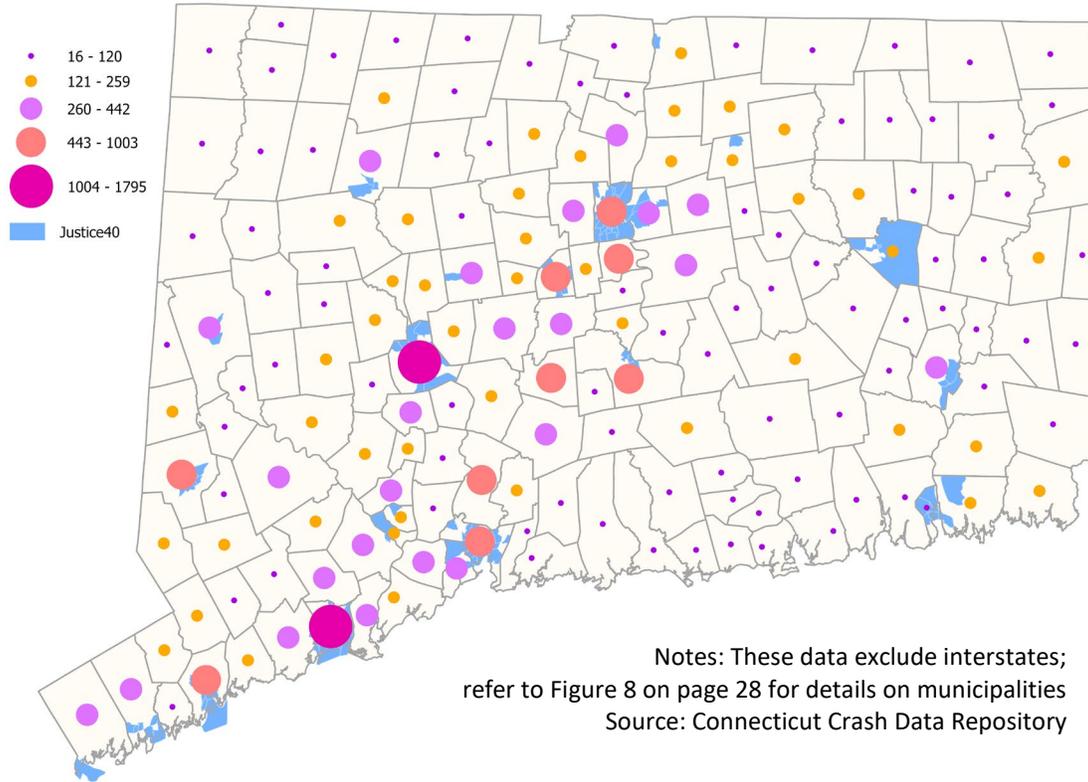
Table PT-6 provides an overview of the statistics for speed-related crashes in Connecticut versus the U.S. In 2021, Connecticut had a much higher percentage of speed-related fatal crashes than the U.S. as whole. The overall number of speeding-related fatalities in 2021 was the highest in five years. As noted earlier, the highest rankings for speed related crashes are within the towns with large, disadvantaged areas.

Table PT-6. Statistics for Speed-Related Crashes in Connecticut Versus U.S.

	2017	2018	2019	2020	2021
% CT Speed-Related Fatal Crashes	30.8%	32.4%	27.5%	35.6%	39.2%
% U.S. Speed-Related Fatal Crashes	25.9%	25.5%	25.9%	28.7%	28.1%
% CT Speed-Related Injury Crashes	10.0%	9.7%	9.2%	9.5%	9.1%
Speeding-Related Fatalities in CT	90	100	66	106	119

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Distracted Driving (DD)

Description of Highway Safety Problems/Problem Identification

To date, identifying the role distracted driving has played in fatality and injury crashes has been a challenge in Connecticut, due to the way crash data are collected and the nature of law enforcement's ability to determine the role of distraction as crash causation. This is especially true for the role mobile electronic devices play in causing crashes. Often, data on crashes caused by drivers distracted by a mobile phone can only be collected in very serious crashes with injuries and fatalities or where witness testimony exists. For this reason, the crash data available may underreports the number of crashes caused by distracted drivers. Generally, three percent (3%) of all crashes, two percent (2%) of fatal crashes and four percent (4%) of injury crashes are attributed to some form of driver distraction in the State of Connecticut.

Crashes where police indicated distraction/inattention were examined for 2017 to 2021 in Figure DD-1. Only crashes where the most severe injury was at least a "B" on the KABCO injury scale were included. "B" crashes made up about 92 percent of the 4,375 crashes included in these data. The data include distraction from sources other than cell phone use, similar to the criteria used by NHTSA to report on distracted affected incidents for fatal crashes (that is, the HSO attempted to make the non-fatal data comparable with the NHTSA fatal data reported below). The number of distracting driving crashes has fluctuated from 2017 to 2020 and were at the second lowest level in 2021.

The KABCO scale defines K = a fatality resulting from the crash; A = incapacitating injuries such as amputation, disabling, and/or more; B = the victim has minor injuries such as cuts or scrapes but are not incapacitating; C = there is possible injury, but on a lesser scale; O = there were no apparent injuries at the scene.

Figure DD-1. Distracted Driving Crashes, 2017-2021
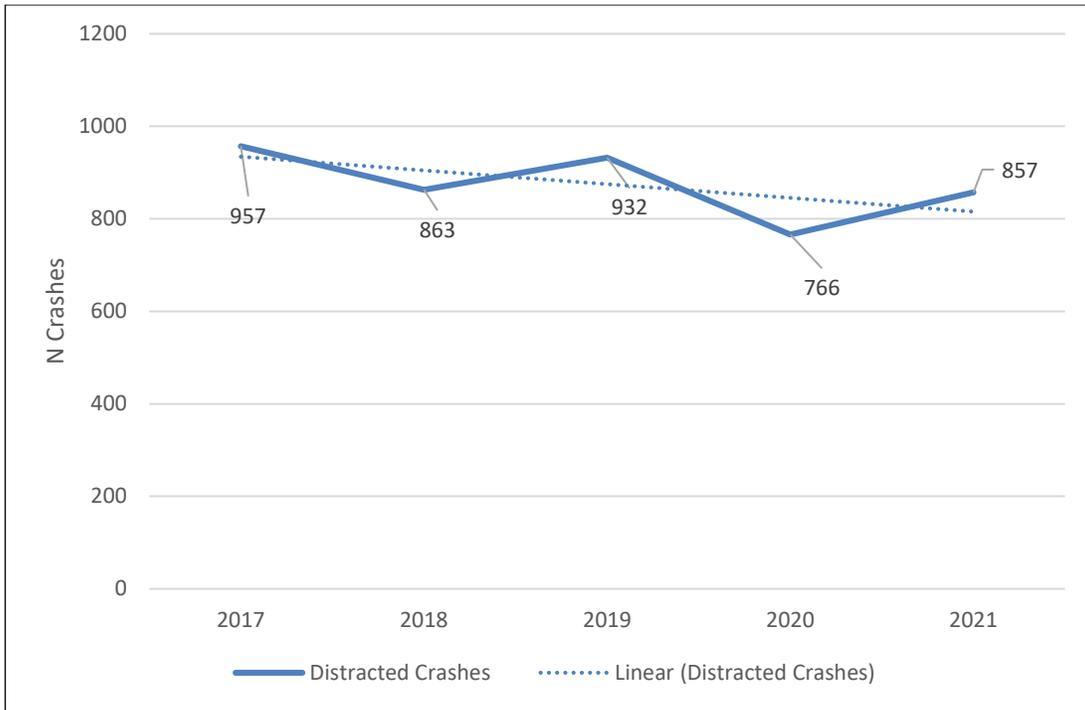
Source: Connecticut Crash Data Repository

Table DD-1 shows that most distracted driving crashes in the period 2017-2021 occurred in Hartford County (28%) followed by New Haven (27%) and Fairfield (19%) Counties. Most of the percentages were in line with expectations based on VMT distribution across the counties. That is, in most cases the percent of distracted crashes in a county was similar (+/- 2 percentage points) to the percent of the VMT in those counties. Fairfield County crashes were five percentage points below the expected (24% of the VMT and 19% of the distracted crashes) whereas Hartford and New Haven Counties were overrepresented in distracted crashes relative to the VMT distribution (+3 and +4 percentage points, respectively).

Table DD-1. Distracted Driving Crashes by County/VMT, 2017-2021

County	% VMT (2021)	% Distracted Driving Crashes
Fairfield	24%	19%
Hartford	25%	28%
Litchfield	5%	6%
Middlesex	6%	5%
New Haven	23%	27%
New London	9%	8%
Tolland	5%	4%
Windham	3%	3%

Source: Connecticut Crash Data Repository

Table DD-2. shows that most distracted driving crashes occurred on Minor Arterial roadways (29%) followed by Other Principal Arterials (24%). The pattern of crashes was far off from what might be expected based on VMT distribution across Connecticut's roadway functional classes. For instance, Interstates make up 34 percent of traffic volume but only account for 12 percent of distracted crashes. Minor Arterials however account for 18 percent of the volume but 24 percent of the distracted crashes. Whether these discrepancies indicate a different propensity for driving while distracted across different roadway types, differential reporting by State Police versus municipal police, or a differential risk of crashing while driving distracted by functional class, or something else, is unknown.

Table DD-2. Distracted Driving Crashes by Roadway Functional Class, 2017-2021

Functional Class	% VMT	% Distracted Driving Crashes
Interstates	34%	12%
Other Freeways	15%	10%
Other Principal Arterial	13%	24%
Minor Arterial	18%	29%
Major Collector	10%	12%
Minor Collector	1%	1%
Local	9%	13%

Source: Connecticut Crash Data Repository

Table DD-3 shows that 32 percent of distracted driving crashes took place between the hours of 2pm and 5pm. Friday crashes were the most frequent (17%), but overall, fairly evenly distributed throughout the days of the week (Table DD-4).

Table DD-3. Distracted Driving Crashes by Time of Day, 2017-2021

Hour	N	%	Hour	N	%
Midnight	100	2%	Noon	7	6%
1:00am	100	2%	1:00pm	277	6%
2:00am	83	2%	2:00pm	320	7%
3:00am	50	1%	3:00pm	346	8%
4:00am	30	1%	4:00pm	355	8%
5:00am	42	1%	5:00pm	357	8%
6:00am	102	2%	6:00pm	265	6%
7:00am	177	4%	7:00pm	184	4%
8:00am	193	4%	8:00pm	158	4%
9:00am	171	4%	9:00pm	145	3%
10:00am	178	4%	10:00pm	147	3%
11:00am	214	5%	11:00pm	95	2%

Source: Connecticut Crash Data Repository

Table DD-4. Distracted Driving Crashes by Day of Week, 2017-2021

Day of Week	N	Percent
Sunday	562	13%
Monday	584	13%
Tuesday	593	14%
Wednesday	631	14%
Thursday	626	14%
Friday	730	17%
Saturday	644	15%

Source: Connecticut Crash Data Repository

Table DD-5 shows that the months of May through October shared the highest incidents of distracted crashes with each having about over nine percent (9%) of the crashes. January and February had the lowest number, accounting for six percent (6%) of the crashes.

Table DD-5. Distracted Driving Crashes by Month of Year, 2017-2021

Month	N	Percent
January	278	6%
February	283	6%
March	337	8%
April	337	8%
May	406	9%
June	415	9%
July	443	10%
August	378	9%
September	414	9%
October	428	10%
November	318	7%
December	333	8%

Source: Connecticut Crash Data Repository

Figures DD-1 and DD-2 display statewide visualizations of the 141 serious injuries and 49 fatalities respectively, resulting from distracted driving crashes in Connecticut from 2017 to 2021. Both figures underline the wide distribution of these incidents, highlighting the pervasive nature of this road safety issue. It is important to note that distracted driving incidences are underreported due to the inherent difficulty in identifying them. These visualizations underscore the need for comprehensive and targeted strategies to tackle distracted driving, acknowledging its significant impact on communities across Connecticut.

Figure DD-1. Serious Injuries from Distracted Driving Crashes, 2017-2021
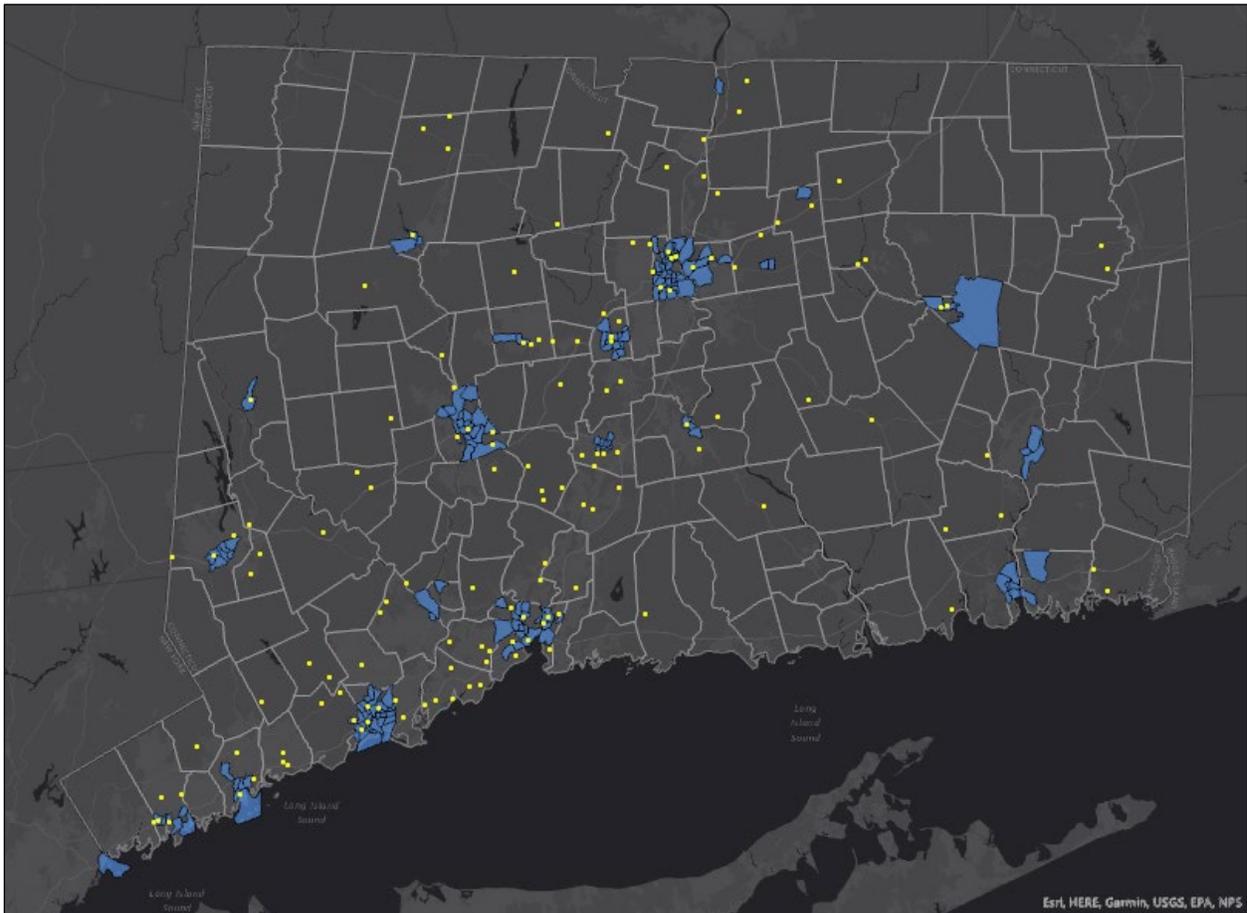
Notes: Yellow points indicate serious injury crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Source: Connecticut Crash Data Repository

Figure DD-2. Fatalities from Distracted Driving Crashes, 2017-2021

Notes: Points indicate crashes: 2021 crashes are light green, 2020 are green, 2019 are blue, 2018 are red, and 2017 are dark green. Blue polygons indicate Justice40 areas; refer to Figure 8 on page 28 for details on municipalities
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Motorcycle Safety (MS)

Description of Highway Safety Problems/Problem Identification

In 2021, a total of 65 motorcycle operators and passengers were killed on Connecticut roadways, representing 22 percent of the State's total traffic fatalities. Based on 83,418 registered motorcycles, the fatality rate per 10,000 registered vehicles was 7.8, an increase from the 2020 rate of 6.9 per 10,000 registered vehicles.

Nationally, motorcyclist fatalities in 2021 accounted for 14 percent of motor vehicle crash victims (22% in Connecticut) with a fatality rate of 6.0 per 10,000 registered motorcycles (7.8 in Connecticut). Table MS-1 indicates that, from 2020 to 2021, the fatality rate per 10,000 registered motorcyclists increased in Connecticut while decreasing nationwide. The percentage of total fatalities represented by motorcyclists increased in Connecticut and decreased nationwide from 2020 to 2021.

Table MS-1. Motorcyclists Killed/Fatality Rate, 2020 and 2021

	Connecticut		U.S.	
	2020	**2021**	**2020**	**2021**
% of all fatalities	19.1%	21.8%	14.1%	13.8%
Fatality Rate per 10k Motorcyclists	6.9	7.8	6.6	6.0
Motorcycles Registered	83,197	83,418	8,317,363	9,881,414

Sources: FARS, FHWA, Connecticut Department of Motor Vehicles

Tables MS-2 and MS-3 show the numbers of motorcyclists killed and injured during the 2017 to 2021 period. In 2021, the number of motorcyclists killed (66) was the highest in five years. The number of operator and passenger injuries in 2021 (1,062) was the second highest number for the five-year period shown. The injury rate of 127 injuries per 10,000 registered motorcycles was the second highest in the five-year period.

Table MS-2. Motorcyclists Killed

	2017	**2018**	**2019**	**2020**	**2021**
Operators Killed	55	48	43	55	65
Passengers Killed	2	1	3	3	1
Total Killed	57	49	46	58	66

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Table MS-3. Motorcyclists Injured

	2017	2018	2019	2020	2021
Operators Injured	948	848	890	1,017	987
Passengers Injured	114	65	100	107	75
Total Injured	1,062	913	990	1,124	1,062
Injuries per 10,000 Registrations	116	104	115	135	127
Total Number of Crashes*	1,250	1,127	1,137	1,271	1,248

Note: *Includes Property Damage Only
Sources: Connecticut Crash Data Repository, Connecticut Department of Motor Vehicles

Eighty-six percent (86%) of fatally injured motorcycle operators in Connecticut were tested for alcohol in 2021 (Table MS-4), the third highest rate of testing in five years. During these years, 46 to 59 percent of those tested were found to have been drinking (any trace of alcohol). For 2021, 46 percent had been drinking and 32 percent (18 of 56) had BACs of 0.08 or more.

Table MS-4. BACs of Fatally Injured Motorcycle Operators

BAC	2017	2018	2019	2020	2021
0	18	23	17	25	30
0.01-0.07	6	8	5	3	8
0.08-up	20	13	16	19	18
No/Unknown	11	4	5	8	9
Percent tested	80.0%	91.7%	88.4%	85.5%	86.2%
Percent 0.01+	59.1%	47.7%	55.3%	46.8%	46.4%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Table MS-5 shows the distribution of the age and gender of motorcycle operators involved in fatal and injury crashes during the 2017 to 2021 period. The table indicates that the majority of riders are under the age of 45 (67% in 2020). Of significance is the high percentage of riders in the 45-54- and 55-64-year-old age groups. These two (2) groups alone made-up 25 percent of the operators involved in fatal/injury crashes in 2021. Overall, riders 35 or older accounted for 52 percent of riders involved in fatal crashes. This tendency toward an older ridership follows national trends. This table also shows that males are predominant among the riders involved in fatal and injury crashes (96% in 2021).

Table MS-5. Motorcycle Operators Involved by Age and Sex
Fatal/Injury Crashes, 2017-2021

		2017 (n=982)	2018 (n=871)	2019 (n=907)	2020 (n=1,020)	2021 (n=948)
Age	**Under 16**	0.0%	0.6%	0.2%	0.7%	0.3%
	16-20	6.7%	5.3%	4.9%	5.8%	5.5%
	21-24	11.5%	12.1%	11.5%	12.4%	12.6%
	25-34	26.8%	29.3%	27.8%	31.0%	29.2%
	35-44	15.2%	15.4%	17.7%	16.1%	19.3%
	45-54	19.3%	19.1%	15.8%	14.8%	13.9%
	55-64	14.4%	12.9%	15.6%	13.8%	11.5%
	65-69	3.7%	2.9%	3.0%	3.4%	4.1%
	69-up	2.5%	2.3%	3.4%	2.0%	3.6%
Gender	**Male**	97.1%	96.7%	95.3%	96.9%	95.8%
	Female	2.9%	3.3%	4.7%	3.1%	4.2%

Note: Unknown values are excluded in body of table
Source: Connecticut Crash Data Repository

Table MS-6 and Figure MS-1 show the distributions by month, day of week, and time of day of motorcycle crashes involving fatalities and injuries during the 2017-2021 period. Motorcycle crashes in Connecticut are rare during the colder months with 11.5 percent having taken place during the five-month period from November through March. Crashes are more frequent on Saturdays and Sundays (42%). In 2021, 61 percent of the crashes occurred between 12pm (noon) and 8pm.

Table MS-6. Motorcycle Operators: Month, Day of Week, and Time of Fatal and Other Injury Crashes, 2017-2021

	2017 (n=961)	2018 (n=860)	2019 (n=890)	2020 (n=1,021)	2021 (n=990)
Month					
January	1.0%	0.7%	0.9%	0.6%	0.4%
February	2.1%	1.2%	0.8%	1.4%	0.2%
March	1.4%	2.1%	2.6%	4.4%	5.4%
April	10.2%	6.4%	6.0%	5.3%	10.7%
May	11.1%	14.0%	14.0%	13.6%	12.3%
June	13.9%	19.2%	18.3%	15.6%	17.2%
July	15.8%	15.8%	17.3%	15.9%	13.1%
August	16.4%	15.0%	17.2%	15.7%	13.2%
September	14.8%	13.7%	14.3%	13.3%	12.5%
October	9.8%	6.9%	6.3%	8.6%	9.4%
November	2.7%	2.9%	1.8%	5.1%	3.2%
December	0.7%	2.2%	0.6%	0.6%	2.3%
Day of Week					
Sunday	21.5%	17.0%	19.9%	20.7%	18.2%
Monday	9.6%	10.9%	11.9%	8.8%	8.0%
Tuesday	8.6%	11.2%	7.2%	10.1%	12.2%
Wednesday	12.9%	13.3%	11.9%	9.9%	10.4%
Thursday	13.7%	11.4%	9.4%	12.1%	12.3%
Friday	13.6%	14.0%	14.8%	13.7%	15.5%
Saturday	20.0%	22.3%	24.8%	24.7%	23.4%
Time of Day					
Midnight-03:59	4.4%	5.8%	4.5%	4.3%	5.2%
04:00-07:59	4.3%	5.8%	3.8%	2.4%	4.1%
08:00-11:59	10.7%	10.1%	11.9%	8.0%	11.5%
12:00-15:59	28.9%	28.4%	26.1%	30.4%	23.3%
16:00-19:59	36.6%	33.0%	36.3%	39.2%	37.9%
20:00-23:59	15.1%	16.9%	17.4%	15.7%	17.9%

Source: Connecticut Crash Data Repository

Figure MS-1. Motorcycle Operators: Number of Crashes by Month, Day of Week, and Time of Day (Fatal and Other Injury Crashes), 2017-2021

(Graphic Representation of Data in Table MS-6)

Motorcycle Crashes by Month (N), 2017-2021

Motorcycle Crashes by Day of Week (N), 2017-2021

Motorcycle Crashes by Time of Day (N), 2017-2021
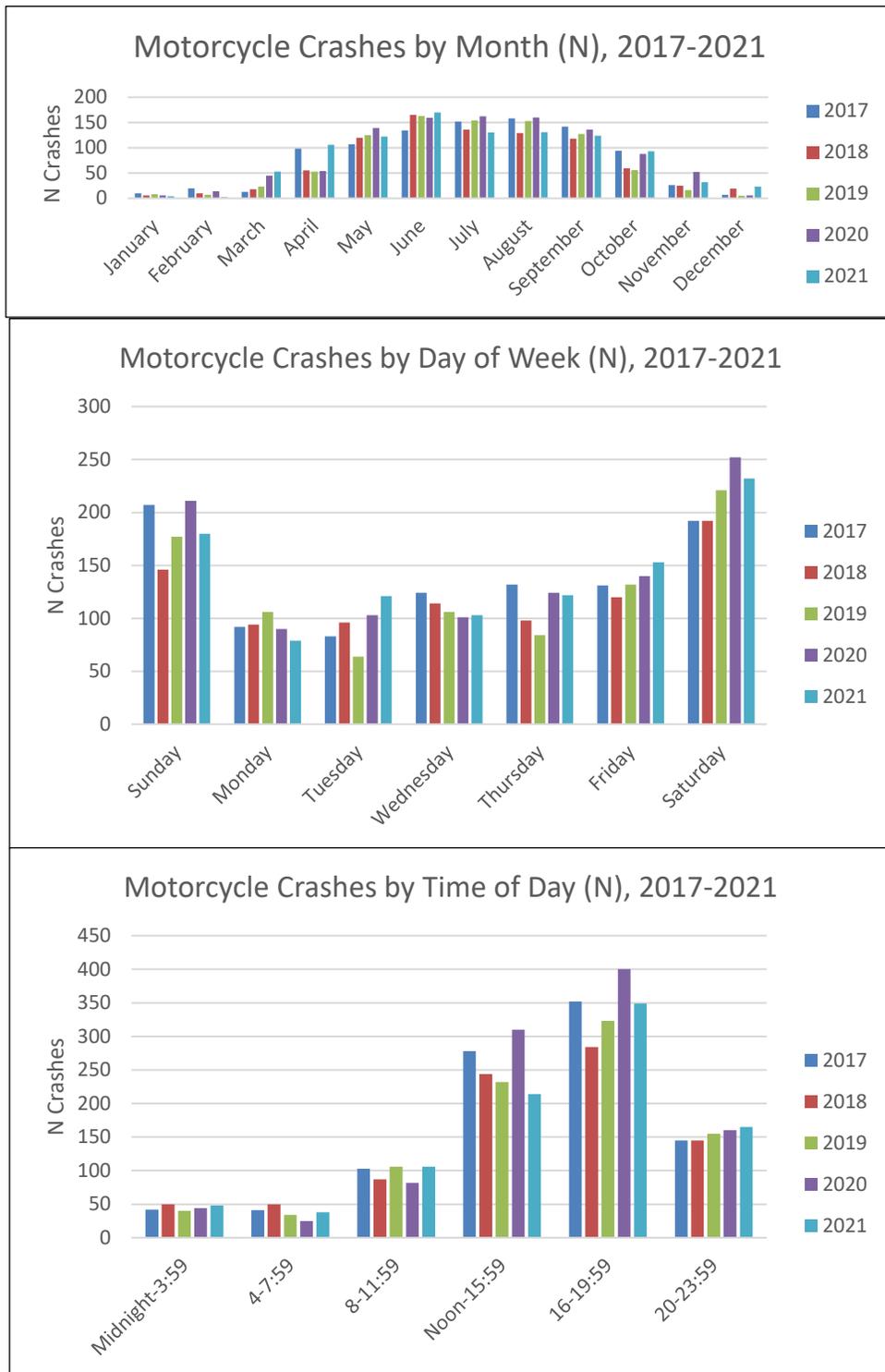
Table MS-7 shows the total fatal and injury motorcycle crashes in each Connecticut County in 2021 and the number of these crashes per 100,000 population.

Table MS-7. Motorcyclist Fatal/Injury Crashes by County, 2021

County	2021 Crashes Total	2021 Crashes per 100,000 Pop.
Fairfield	201	20.94
Hartford	206	22.97
Litchfield	66	35.68
Middlesex	37	22.46
New Haven	302	34.97
New London	90	33.48
Tolland	46	30.61
Windham	42	36.08

Sources: Connecticut Crash Data Repository; population data estimate for 2021

Table MS-8 summarizes the statistics for motorcyclists in Connecticut.

Table MS-8. Summary Statistics

	2017	2018	2019	2020	2021
Motorcyclists Killed and Injured	1,119	962	1,036	1,182	1,128
Injuries per 10,000 Registered Motorcycles	123	109	120	142	135
Number of Unhelmeted Motorcyclist Fatalities	33	28	28	25	35
Number of Motorcyclist Injuries Helmeted	470	435	442	476	478
Number of Operators Killed with BAC > 0.00%	26	21	21	22	26
Number of Motorcyclist Trained	4,371	3,891	3,453	819	3,330

Sources: FARS, CTDOT, Connecticut Crash Data Repository

Figures MS-2 and MS-3 portray the distribution of fatal and serious injury motorcycle crashes in Connecticut from 2017 to 2021. Fuchsia points on Figure MS-2 and yellow points on Figure MS-3

indicate the precise locations of these crashes, with blue overlays identifying the Justice40 Census tracts, or disadvantaged communities.

Figure MS-2 reveals that approximately 23 percent of fatal motorcycle crashes occurred within disadvantaged tracts, where about 20 percent of Connecticut's population resides. The remaining 77 percent took place in non-disadvantaged tracts. Similarly, Figure MS-3 demonstrates that around 28 percent of serious injury crashes transpired within these same disadvantaged areas.

These patterns indicate a moderate difference in fatal and serious injury crashes' distribution. This aligns with the fact that motorcycle travel often spans broader areas and for recreational purposes.

Figure MS-2. Fatal Crashes for Motorcycle Operators, 2017-2021
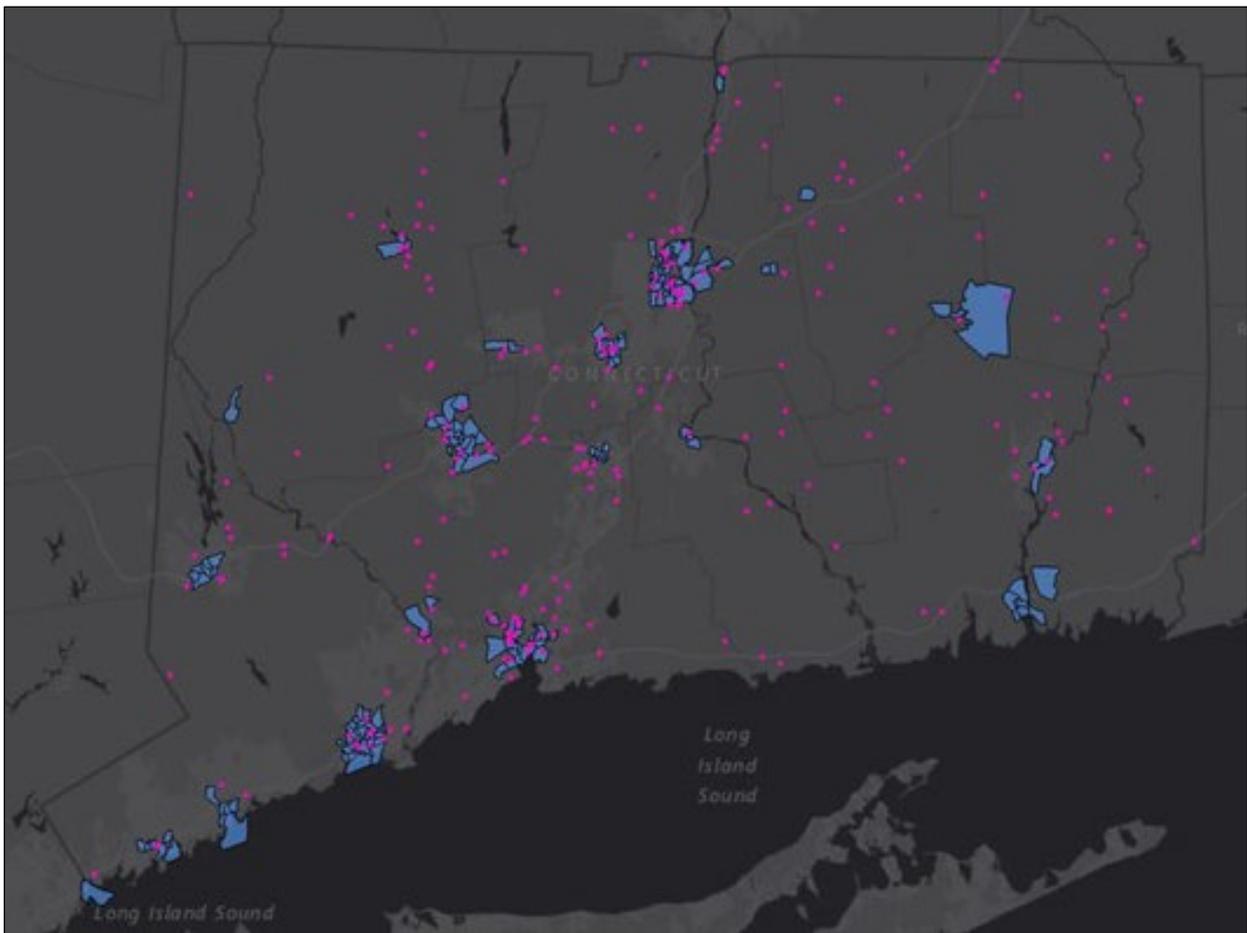
Notes: Red points indicate fatal crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure MS-3. Serious (A) Injury Crashes for Motorcycle Operators, 2017-2021
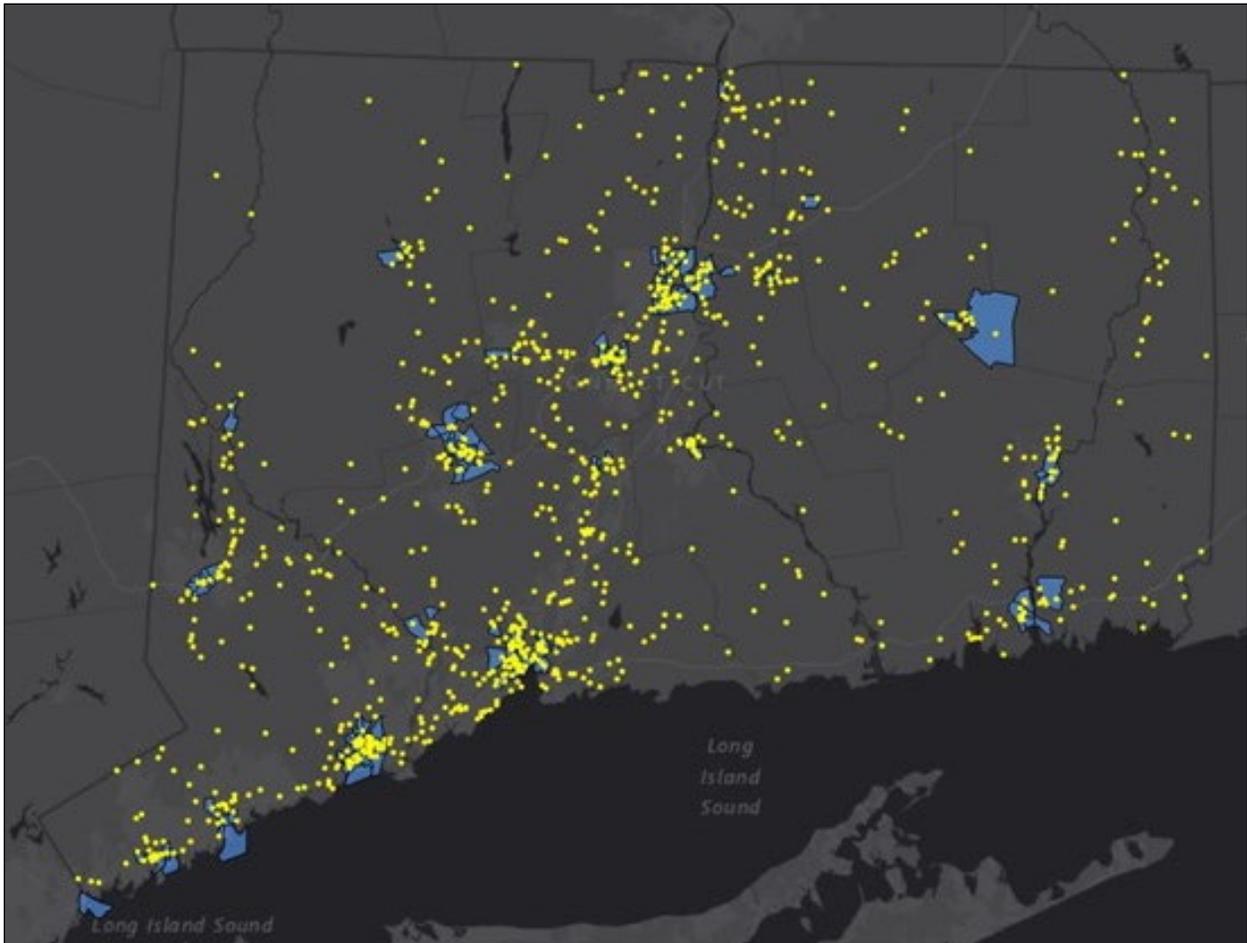
Notes: Yellow points indicate serious injury crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Source: Connecticut Crash Data Repository

Figures MS-4a, 4b, and 4c represent the environmental characteristics and the motorcyclist characteristics for the period of 2017-2021. The majority of motorcyclist fatalities occur on non-interstate minor arterials during daylight hours in urban areas away from the intersections. The speed related fatalities vary by age. Nearly half (47 percent) occurred during the summer season. Of the total motorcyclist fatalities, 41 percent occurred in single-vehicle crashes, while 59 percent occurred in multiple-vehicle crashes.

Figure MS-4a. Connecticut Motorcyclist Fatalities by Environmental Characteristics, 2017-2021
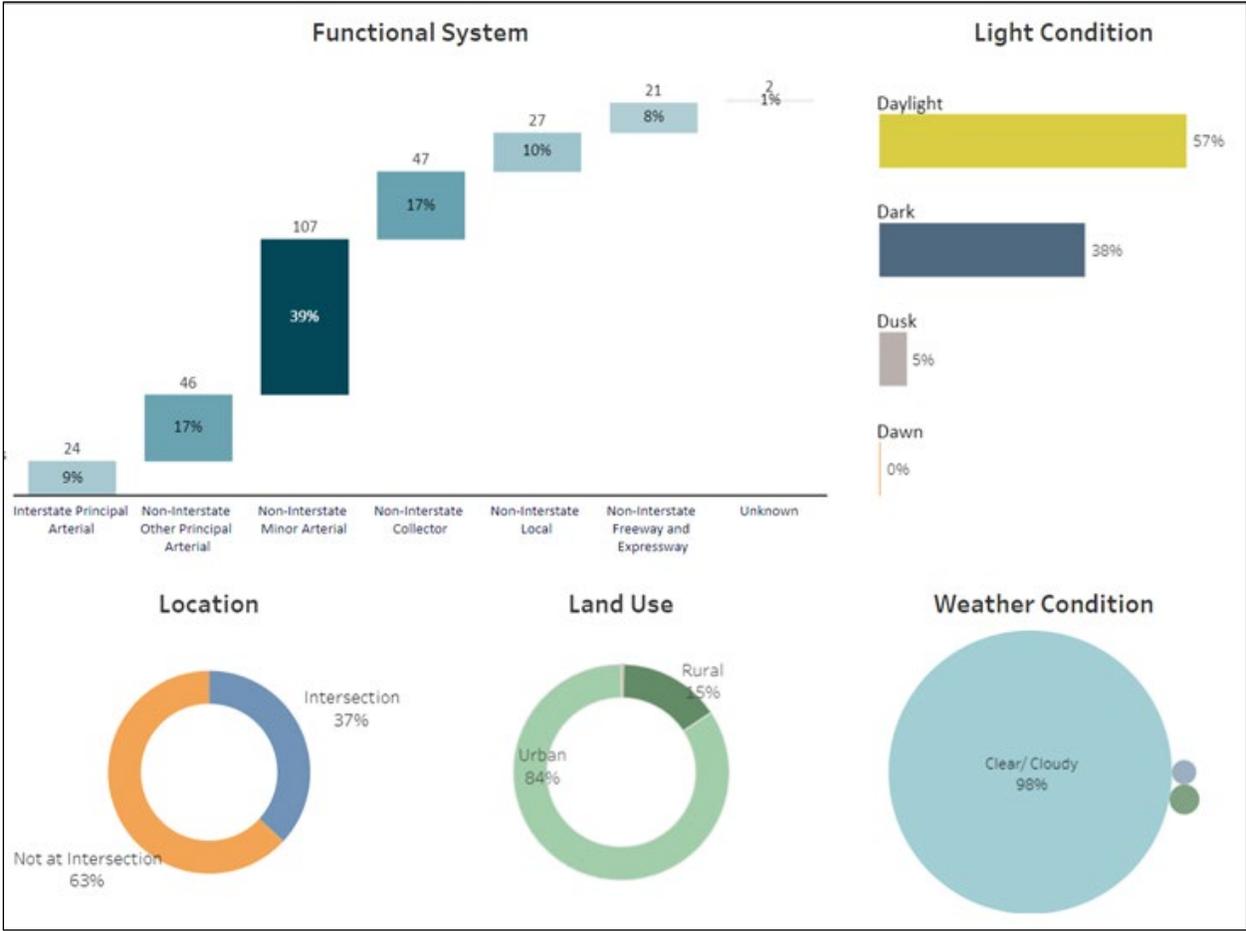
Functional System

Interstate Principal Arterial	Non-Interstate Other Principal Arterial	Non-Interstate Minor Arterial	Non-Interstate Collector	Non-Interstate Local	Non-Interstate Freeway and Expressway	Unknown
24 (9%)	46 (17%)	107 (39%)	47 (17%)	27 (10%)	21 (8%)	2 (1%)

Light Condition

- Daylight: 57%
- Dark: 38%
- Dusk: 5%
- Dawn: 0%

Location

- Intersection 37%
- Not at Intersection 63%

Land Use

- Rural 15%
- Urban 84%

Weather Condition

- Clear/Cloudy 98%

Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure MS-4b. Connecticut Motorcyclist Fatalities Rider Characteristics, 2017-2021
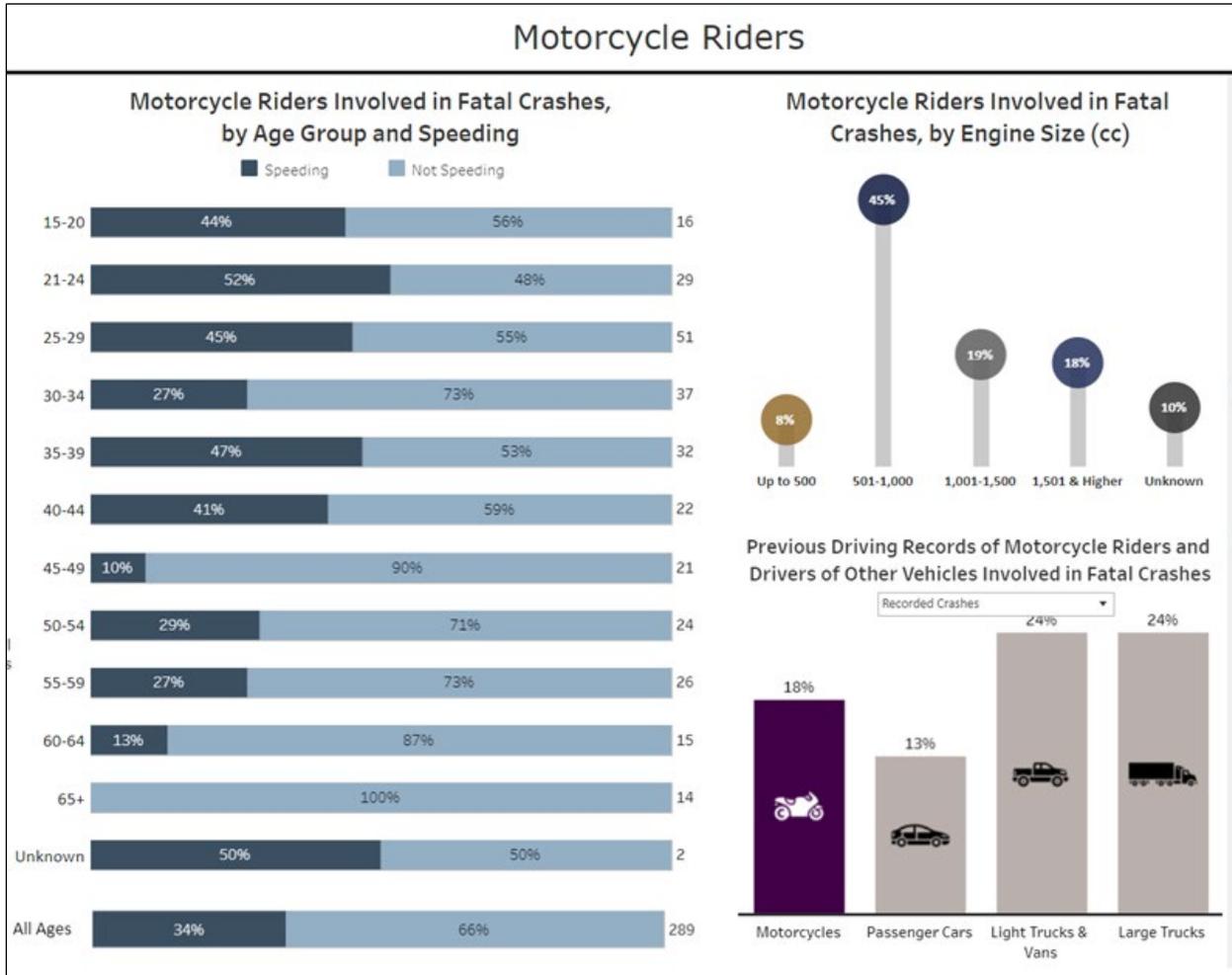
Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure MS-4c. Connecticut Motorcyclist Fatal Characteristics, 2017-2021
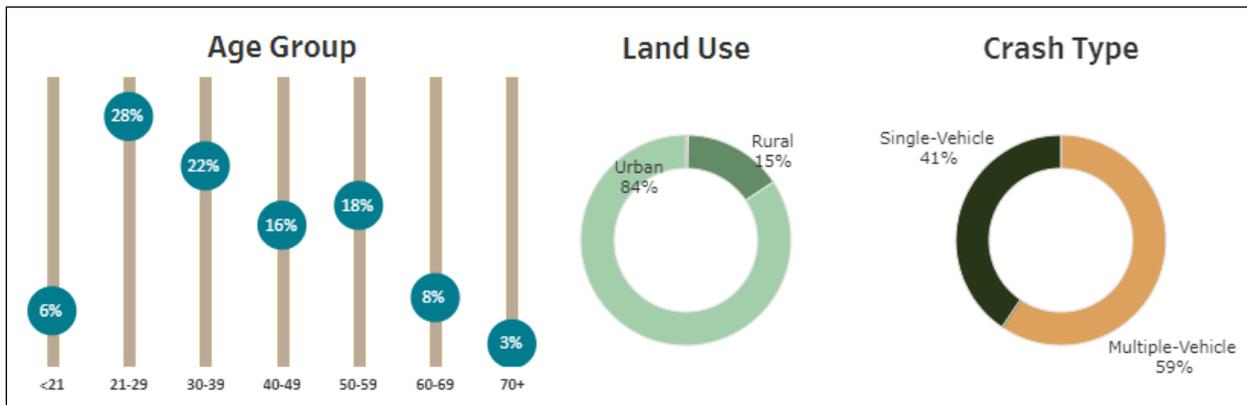
Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

In summary, the motorcycle crash data show:

- 2021 had the highest number of motorcyclist fatalities in the period 2017 to 2021
- The majority of motorcycle fatal and injury crashes occurred between the hours of 12pm (noon) and 8pm
- Saturdays and Sundays being the most common days for fatal and injury crashes
- Most fatal and injury crashes occurring in the summer months
- Almost all motorcycle operators involved in crashes were male

Traffic Records (TR)

Description of Highway Safety Problems/Problem Identification

The Traffic Records Strategic Plan is an active document updated annually to reflect new issues and the changing environment within highway safety/traffic safety data systems. The Traffic Records Strategic Plan is posted on the CTDOT Traffic Records Webpage. The following web link contains the most recent version of the Strategic Plan: https://portal.ct.gov/DOT/Programs/Traffic-Records

A state must work to ensure that complete, accurate, timely, uniform, integrated, and accessible traffic records data are collected, analyzed, and made available for decision-making at all levels of government. Analyzing reliable traffic records data is central to identifying traffic safety problems and designing effective countermeasures to reduce injuries and deaths caused by crashes.

From real-time data capture in the field to direct online query capabilities and timely data analysis in a state data repository, changes are occurring in all phases of Connecticut's traffic records system. Electronic reporting and linkage of data across the different systems is crucial with less dependence on paper reporting, resulting in better service to the public and improved traffic records data that are timely, complete, and accurate.

Stakeholders of Connecticut's traffic record systems continue to make great strides in their push to achieve system-wide electronic reporting. Connecticut supports the Safe System Approach, as such, it has focused on improving Post-Crash Care. Emphasis on EMS patient care reporting resulted in nearly all EMS providers in the State conducting electronic reporting using the national standard National Emergency Medical Services Information System (NEMSIS) version 3.4.0. In 2022, there were 177 EMS agencies reporting data. The average number of electronic Patient Care Reports (ePCRs) between 2020 and 2022 was 877,022. The average number of 9-1-1 call responses between 2020 and 2022 was 658,136. The Office of Emergency Medical Services (OEMS) at the Connecticut Department of Public Health (CTDPH) has completed a formal EMS Data Dictionary compliant with NEMSIS. This EMS Data Dictionary includes 212 state and 146 nationally required elements.

The CTDPH, the OEMS, and CTDPH Information Technology have transitioned to Image Trend Elite, which is used by at least 41 states, including in New England states and New York. The effort to improve EMS data accuracy has started. Validation rules for important criteria and attachment of a "warning" that allows data to be submitted but raises a flag to the submitter with a warning message are in development. Also, a new 3.5 Schematron was uploaded to the NEMSIS website in February 2023. Agencies are expected to transition to the newer NEMSIS 3.5 by July 1, 2023. To increase the accuracy and completeness of the EMS dataset, the OEMS will upgrade key validation rules from warnings to errors starting January 1, 2024.

In 2022, The UConn CTSRC, under funding from CTDOT/HSO, entered into a data sharing agreement with CTDPH to receive crash-related records from Connecticut's NEMSIS data, Connecticut's emergency department and hospital discharge data (ChimeData), and Connecticut's International Trauma Diagnosis data (ITDX). This agreement complies with the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule, protecting identifiable health data as defined by Regulations of Connecticut State Agencies 19a-25-1 et. Seq., under guidance from the CDC's National Center for Injury Prevention and Control's (NCIPC) Traffic Safety initiative of Linking Information for Nonfatal Crash Surveillance (LINCS). This agreement was created to address the prevention and reduction of motor vehicle crash-related fatal and nonfatal injuries by improving upon the knowledge base of injury-related behaviors associated with child passengers, teen drivers, older adult drivers, substance-impaired drivers, distracted drivers, pedestrians, bicyclists, and motorcyclists.

Under an executed memorandum of understanding (MOU), CTDPH has provided UConn with EMS and in-patient hospital discharge data from 2016 to the present. Hospital discharge data were linked with state motor vehicle crash records, yielding a 75 percent match rate. EMS data is being processed and will be linked with crash records. Additionally, the CTDESPP has provided breath and fluid (blood, urine, vitreous) toxicology results from motor vehicle crashes and DUI stops from 2015 to the present. These two data sets have been linked with crash data yielding a 75 percent match rate for breath data and a 47 percent match rate for fluid data.

Analysis of all linked datasets is ongoing, with the current focus on documenting differences between the original and linked datasets, data gaps, and suggestions for improving matched quality. Future research on linked crash and CTDPH data will focus on the relationship between demographic variables (gender, age, race), injury severity, and associated medical costs. In contrast, analysis of linked toxicology data will focus on polysubstance use and identifying any correlated variables such as demographics or driver behaviors. UConn has also received ten years of motor vehicle arrest and infraction data from the Connecticut Judicial branch that have been linked with crash data, allowing dashboards to be created to view the intersection of crash and judicial data.

eCitation and the Online Adjudication/Disposition Systems have significantly contributed towards timeliness in processing traffic violations and updating the Driver History Files. Some of the benefits are:

- Cases are resolved more quickly
- Relevant dispositions are available on the driver's history more quickly
- Dispositions are based on complete information
- Ability to offer alternative behavior modification programs not to prosecute
- Increased opportunity for law enforcement involvement

The 2021 Traffic Records Assessment by NHTSA put forth the following set of recommendations to further enhance the efficiency and effectiveness of Connecticut's traffic records system:

- Improve data dictionaries for crash data system, driver data system, citation and adjudication system, and the injury surveillance system
- Improve interfaces with the crash data system, vehicle data system, roadway data system, citation and adjudication system, and the injury surveillance system
- Improve data quality control for the driver data system, vehicle data system, citation and adjudication system, and the injury surveillance system
- Improve process flows for the vehicle data system

The recommendations for the Injury Surveillance System and the Crash Data System are currently being implemented as indicated above. Acknowledging significant gains in the State's traffic records system, many opportunities remain for improving core data systems. Responding to increased emphasis by NHTSA, FHWA, and FMCSA, the Traffic Records Coordinating Committee (TRCC) prioritizes integrating planned performance measures with any new proposed system improvements.

Community Traffic Safety (CTS)

Driver Groups Problem Identification

Table CTS-1 outlines the age distribution of licensed drivers in Connecticut and the U.S. during calendar years 2019 to 2021. The data show that the percentage of Connecticut licensed drivers aged 19 and younger is slightly lower than the U.S. percentage (3.5% vs. 3.7%, respectively), and that the percentage of drivers aged 70 and older is slightly higher in Connecticut (14.6%) than in the U.S. (13.0%).

Table CTS-1. Licensed Drivers by Age Group, 2019-2021

Licensed Drivers by Age		2019		2020		2021	
		N	%	N	%	N	%
Connecticut	**Under 16**	0	0.0%	0	0.0%	0	0.0%
	16-17	29,960	1.1%	23,790	0.9%	29,146	1.1%
	18-19	63,020	2.4%	59,369	2.4%	61,080	2.3%
	19 and under	92,980	3.6%	83,159	3.3%	90,226	3.5%
	20	36,746	1.4%	35,287	1.4%	35,579	1.4%
	16-20	129,726	5.0%	118,446	4.7%	125,805	4.8%
	21-24	156,551	6.0%	148,276	5.9%	154,037	5.9%
	25-34	433,937	16.6%	414,524	16.5%	428,789	16.5%
	35-44	408,345	15.7%	395,259	15.8%	417,613	16.0%
	45-54	452,021	17.3%	420,824	16.8%	424,343	16.3%
	55-64	484,584	18.6%	467,848	18.6%	481,287	18.5%
	65-69	181,834	7.0%	183,100	7.3%	193,426	7.4%
	70 up	361,063	13.8%	360,393	14.4%	381,096	14.6%
Nationwide	**Under 16**	43,808	0.0%	61,635	0.0%	111,152	0.0%
	16-17	3,045,234	1.3%	2,893,373	1.3%	2,917,012	1.3%
	18-19	5,693,151	2.5%	5,396,276	2.4%	5,479,483	2.4%
	19 and under	8,782,193	3.8%	8,351,284	3.7%	8,507,647	3.7%
	20	3,254,342	1.4%	3,236,841	1.4%	3,234,417	1.4%
	16-20	11,992,727	5.2%	11,526,490	5.1%	11,630,912	5.0%
	21-24	14,223,656	6.2%	14,041,261	6.2%	14,201,880	6.1%
	25-34	40,298,969	17.6%	39,900,499	17.5%	40,654,543	17.5%
	35-44	37,989,286	16.6%	38,208,444	16.7%	39,543,173	17.0%
	45-54	38,092,538	16.7%	37,372,539	16.4%	37,443,726	16.1%
	55-64	39,740,652	17.4%	39,417,228	17.3%	39,612,716	17.0%
	65-69	16,241,884	7.1%	16,574,842	7.3%	17,105,452	7.3%
	70 up	30,056,199	13.1%	31,092,864	13.6%	32,478,243	14.0%

Source: Federal Highway Administration

Table CTS-2 contains 2019, 2020, and 2021 fatal crash rates per 100,000 licensed drivers by driver age group for Connecticut operators and the U.S. as a whole. The data indicate that younger drivers (under 21) consistently have a much higher involvement in fatal crashes than older drivers. The data also show that the involvement rate of Connecticut drivers in fatal crashes is lower than that for the U.S. in all age groups.

Table CTS-2. Number of Drivers Involved in Fatal Crashes by Age Group
Per 100,000 Licensed Drivers*, 2019-2021

	2019		2020		2021	
	CT	US	CT	US	CT	US
Under 16	n/a	317.3	n/a	339.1	n/a	176.3
16-17	26.7	31.4	37.8	36.9	34.3	42.6
18-19	25.4	34.7	30.3	40.0	24.6	45.0
19 and under	25.8	35.0	32.5	41.1	28.8	45.9
20	19.0	30.3	19.8	38.4	25.3	39.4
16-20	23.9	32.7	28.7	38.8	27.0	42.9
21-24	19.8	32.6	31.0	35.0	24.0	38.8
25-34	15.7	26.3	24.6	30.1	24.5	32.5
35-44	11.5	22.1	14.9	23.4	20.4	26.0
45-54	10.4	19.9	13.3	20.8	13.0	23.4
55-64	9.1	18.2	10.7	18.6	11.6	20.4
65-59	8.2	15.7	10.4	14.2	8.3	16.0
70 up	12.5	17.1	11.1	14.8	8.4	16.3

Note: *Licensed drivers within each age group
Sources: FARS Final Files 2019-2020, FARS Annual Report File 2021

Table CTS-3 shows the 2019, 2020 and 2021 non-fatal injury crash rates per 100,000 licensed drivers by driver age group. There was an increase in involvement in injury crashes for drivers under 21 in 2021 compared to 2020 and 2019. Drivers over the age of 21 had increased involvement in 2021 compared to 2020, but lower involvement when comparing 2021 to 2019.

Table CTS-3. Number of Drivers Involved in Injury Crashes by Age Group
Per 100,000 Licensed Drivers*, 2019-2021

	2019	2020	2021
16-17	3,418	3,190	3,568
18-19	3,089	2,650	3,274
19 and under	3,195	2,804	3,369
16-20	3,154	2,711	3,345
21-24	3,055	2,671	2,967
25-34	2,590	2,136	2,408
35-44	2,089	1,587	1,888
45-54	1,688	1,279	1,459
55-64	1,358	1,019	1,159
65-74	1,857	1,294	1,482
75 up	528	370	420

Note: *Licensed drivers within each age group
Source: Connecticut Crash Data Repository

Table CTS-4 and Figure-CTS-1 show that, in the period 2017-2021, 46 percent of fatal crashes involving drivers under 21 took place from May through August. July and June had the highest number of crashes (20 and 19, respectively). Sixty-one percent (61%) of fatal crashes occurred at night, between 6pm and 2:59am (94 fatal crashes). Hartford, New Haven, and Fairfield Counties (40, 38, and 32 crashes, respectively) accounted for the highest number of fatal crashes involving young drivers.

**Table CTS-4. Fatal Crashes Involving Young Drivers (20 and under)
Month, Time of Day, and County, Five-Year Total, 2017-2021**

	N=155	Percent
Month		
January	11	7.1%
February	7	4.5%
March	11	7.1%
April	9	5.8%
May	16	10.3%
June	19	12.3%
July	20	12.9%
August	16	10.3%
September	13	8.4%
October	13	8.4%
November	11	7.1%
December	9	5.8%
Time of Day		
Midnight-3am	26	16.9%
3am-6am	10	6.5%
6am-9am	8	5.2%
9am-Noon	6	3.9%
Noon-3pm	20	13.0%
3pm-6pm	16	10.4%
6pm-9pm	32	20.8%
9pm-Midnight	36	23.4%
County		
Fairfield	32	20.6%
Hartford	40	25.8%
Litchfield	12	7.7%
Middlesex	5	3.2%
New Haven	38	24.5%
New London	11	7.1%
Tolland	11	7.1%
Windham	6	3.9%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

**Figure CTS-1. Fatal Crashes Involving Young Drivers (20 and under)
Month, Time of Day, and County, Five-Year Total, 2017-2021**

(Graphic Representation of Data in Table CTS-4)

Young Drivers Crashes by Month, 2017-2021

Young Drivers Crashes by Time of Day, 2017-2021

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021
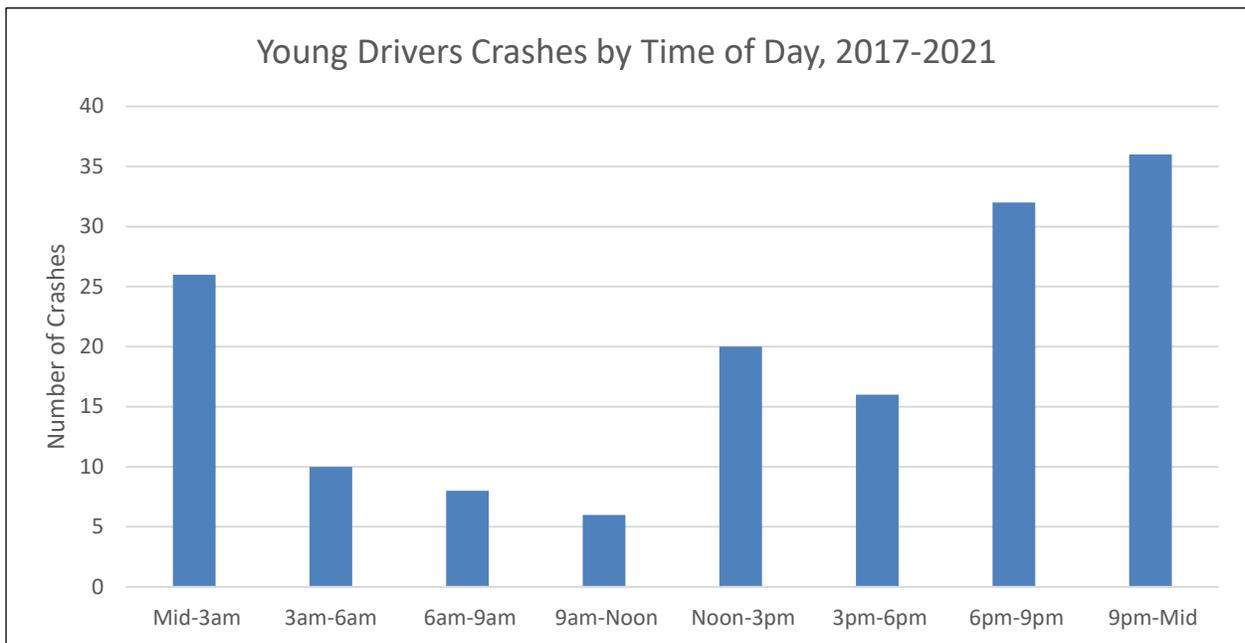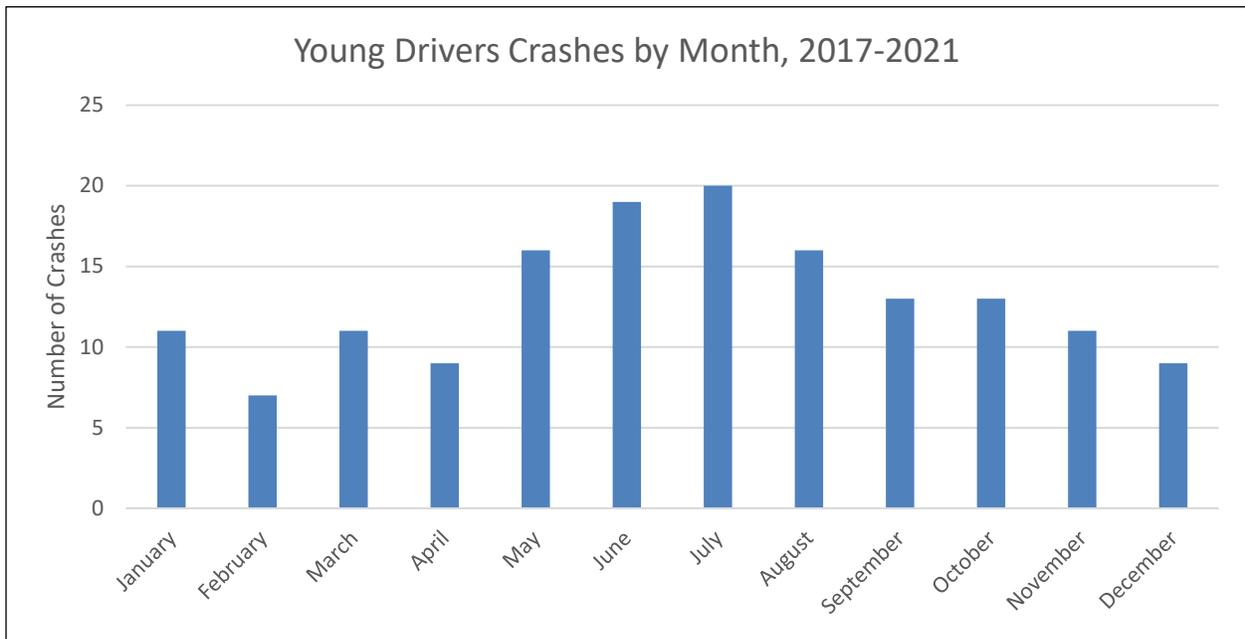
Sources: FARS Final Files 2017-2020,
FARS Annual Report File 2021
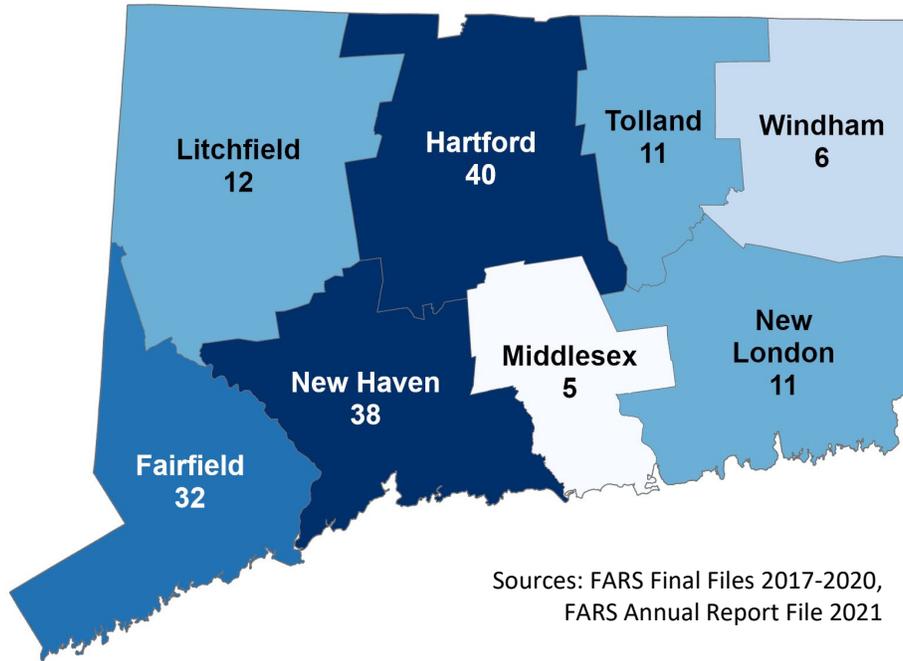
Table CTS-5 and Figure CTS-2 show the number of drivers involved in fatal crashes by age. Drivers aged 25 to 34 consistently show the highest involvement in the period 2017-2021.

Table CTS-5. Drivers Involved in Fatal Crashes by Age

	2017	2018	2019	2020	2021
Total	379	413	338	421	432
Under 16	0	1	0	0	1
16-17	8	5	8	9	10
18-19	11	16	16	18	15
19 and under	19	22	24	27	26
20	8	6	7	7	9
16-20	27	27	31	34	34
21-24	39	51	31	46	37
25-34	86	93	68	102	105
35-44	62	61	47	59	85
45-54	55	69	47	56	55
55-64	47	51	44	50	56
65-69	15	17	15	19	16
70 and up	43	34	45	40	32
Unknown	5	9	10	15	11

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure CTS-2. Drivers Involved in Fatal Crashes by Age

(Graphic Representation of Data in Table CTS-5)
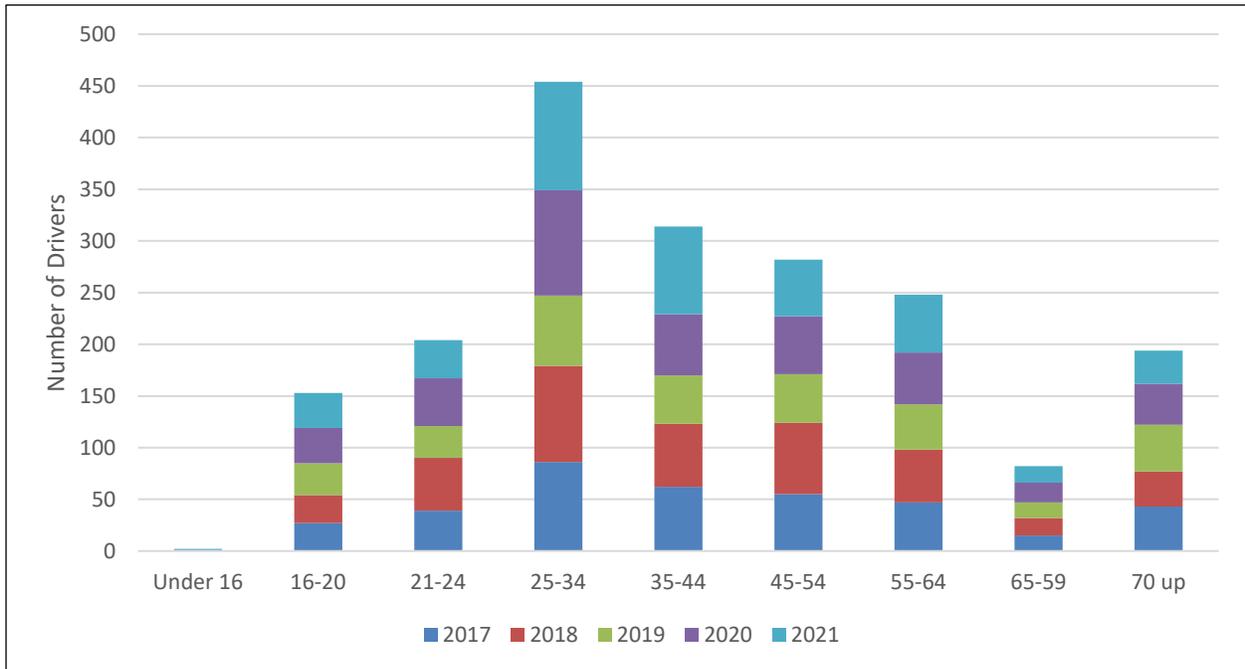
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure CTS-3a shows the distribution of fatal crashes in drivers aged 25-34 in Connecticut for the period of 2017-2021. These incidents are compared with the location of Census tracts identified as disadvantaged by the Justice40 Initiative. The HSO's analysis reveals that out of 454 drivers involved in fatal crashes, 128 incidents (28.2%) occurred within disadvantaged communities. Considering that disadvantaged communities represent 185 of the 829 total Census tracts in Connecticut (22.3%), the proportion of incidents in disadvantaged communities is higher than their representation among all tracts. A significant number of incidents happened near major freeways, some of which are near disadvantaged communities. Even though these incidents did not occur within the disadvantaged tracts, their nearness suggests potential indirect impacts on these communities. This visualization underscores the need to closely monitor traffic safety in and around disadvantaged communities of New Haven, Bridgeport, Waterbury, New Britain, and Hartford for a comprehensive understanding of the road safety scenario within the state. This includes the towns/cities of Hartford, East Hartford, Manchester, New Britain, New Haven, West Haven, Bridgeport, Fairfield, and Waterbury.

Figure CTS-3b shows the distribution of serious injury crashes in drivers aged 25-34 for the period of 2017-2022. The serious injury crashes show similar trend as the fatal crashes with concentration in and around municipalities of New Haven, Bridgeport, Waterbury, New Britain, and Hartford which includes the towns/cities of Hartford, East Hartford, Manchester, New Britain, New Haven, West Haven, Bridgeport, Fairfield, and Waterbury.

Figure CTS-3a. Fatal Crash Distribution for Drivers Aged 25-34, 2017-2021
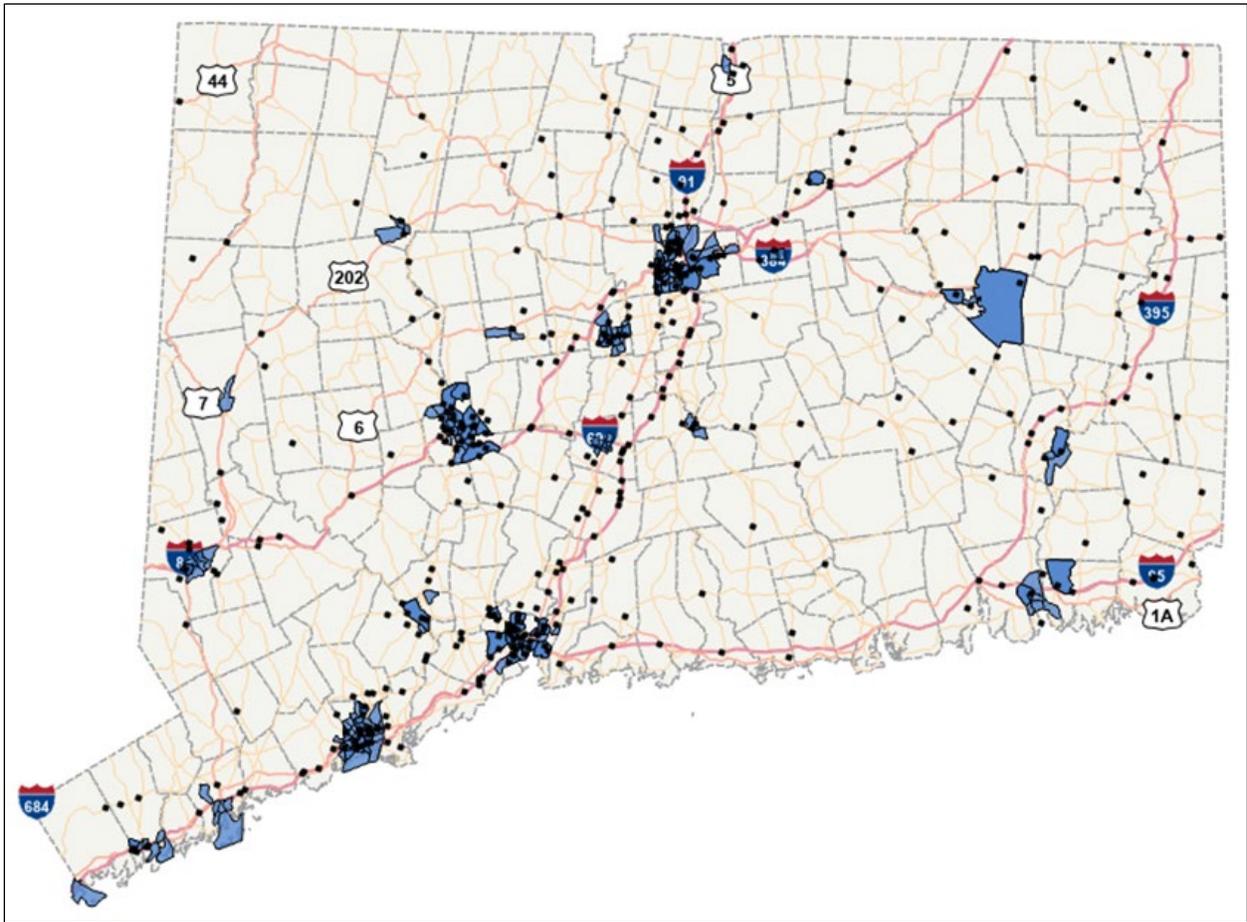
Notes: Black points indicate fatal crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure CTS-3b. Serious (A) Injury Crashes for Drivers Aged 25-34, 2017-2021
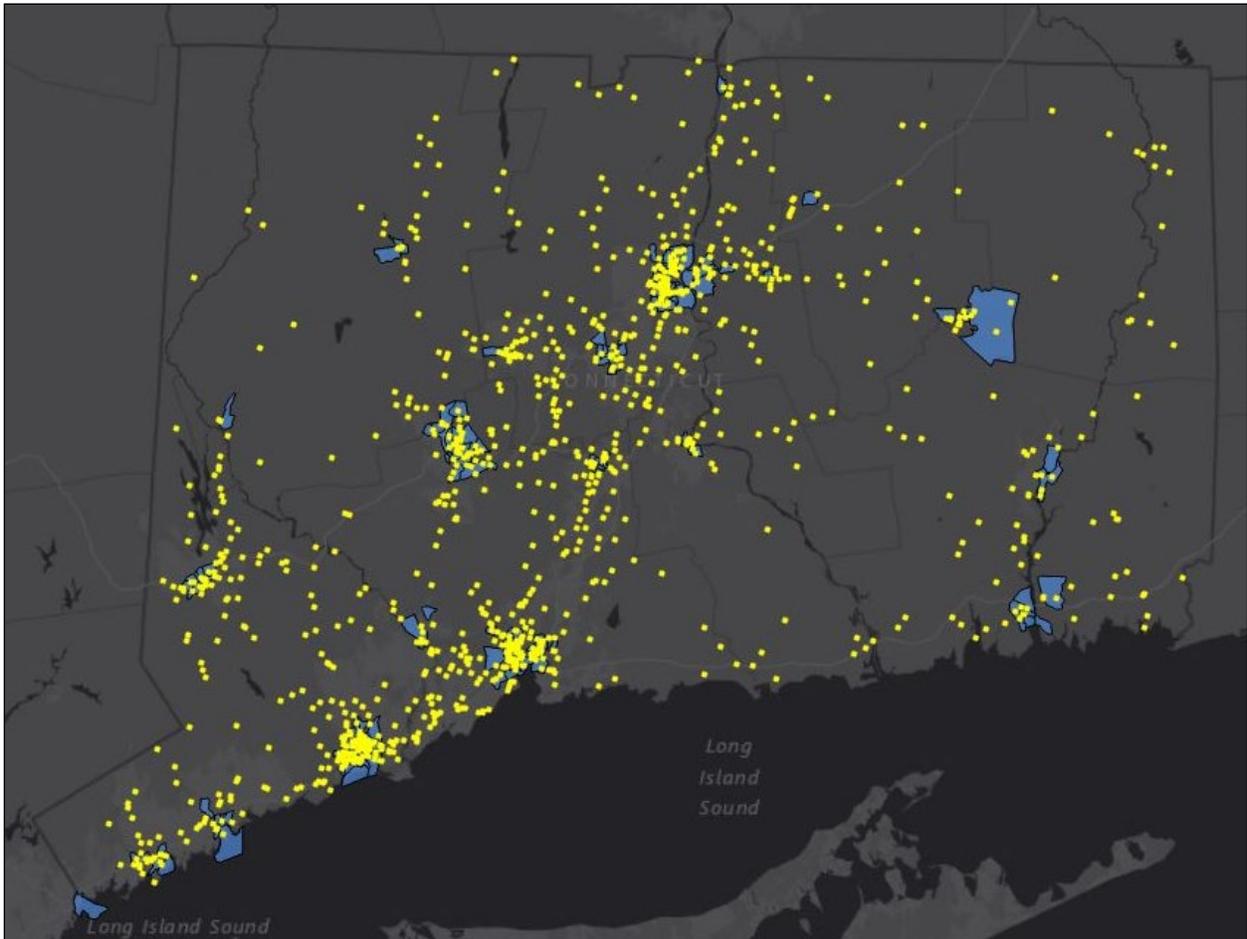
Notes: Yellow points indicate serious injury crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Source: Connecticut Crash Data Repository

Table CTS-6 and Figure CTS-4 list the most common driver-related factors for young drivers (age 20 and under) involved in fatal crashes during the 2017 to 2021 period. The most prevalent factor was "speed-related", identified in 37 percent of young drivers involved in fatal crashes, followed by "operating the vehicle in an erratic, reckless, or negligent manner" (17%) and "aggressive driving/road rage" (16%). The data in Table CTS-6 may involve up to four factors per driver thus the total may add up to more than 100 percent.

Table CTS-6. Young Drivers Involved in Fatal Crashes/Related Factors of Drivers, 2017-2021

	N Drivers*	Percent^
Motorists	(N=155)	
Driver-Related Factors	(N=195)	
Speed Related	57	36.8%
Operating the Vehicle in an Erratic, Reckless or Negligent Manner	27	17.4%
Aggressive Driving / Road Rage	24	15.5%
Under the Influence of Alcohol, Drugs or Medication	23	14.8%
Improper Lane Usage	19	12.3%
Driver has not complied with Learner`s Permit or Intermediate Driver License Restrictions (GDL Restrictions)	13	8.4%
Overcorrecting	11	7.1%
Distracted	8	5.2%
Failure to Yield Right-of-Way	8	5.2%
Failure to Obey Actual Traffic Sign, Traffic Control Devices or Traffic Officers; Failure to Obey Safety Zone Traffic Laws	7	4.5%
Police Pursuing this Driver or Police Officer in Pursuit	4	2.6%
None Reported	55	35.5%
Unknown	12	7.7%
All Other Factors	13	8.4%

Notes: *Sum of factors is greater than number of drivers because each driver can be assigned more than one factor; ^Sum of percentages is greater than 100 since each driver can be assigned more than one factor
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure CTS-4. Young Drivers Involved in Fatal Crashes/Related Factors of Drivers, 2017-2021

(Graphic Representation of Data in Table CTS-6)
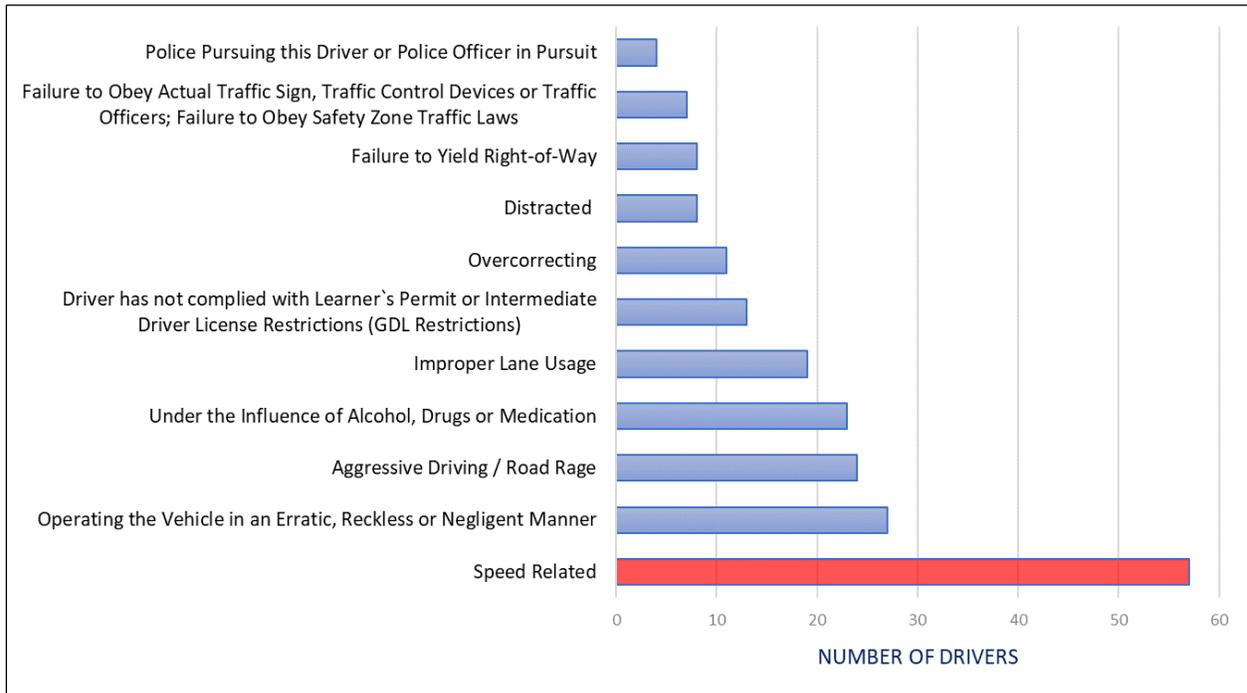
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Pedestrians and Bicyclists Problem Identification

In Connecticut in 2021, three (3) bicyclists were killed and 299 were injured in motor vehicle crashes whereas 53 pedestrians were killed and 1,029 were injured. Table CTS-7 and Figure CTS-5 outline the characteristics of pedestrian and bicyclist fatalities.

Pedestrian fatalities occurred more frequently during October through January (44.5%) than during other months of the year (Table CTS-7). The majority (64.9%) of pedestrian fatalities occurred in the 3pm to midnight time period. The largest number of pedestrian fatalities occurred in New Haven (102), Hartford (78) and Fairfield (60) Counties, accounting for about 88 percent of the victims.

Most bicyclist fatalities occurred in May and September (each at 19%), and 75 percent occurred between 3pm (noon) and midnight. New Haven, Middlesex and Litchfield Counties accounted for 81 percent of all bicyclist fatalities in the period 2017-2021.

Table CTS-7. Connecticut Pedestrian and Bicyclist Fatalities
Month, Time of Day, and County Five-Year Total, 2017-2021

	Pedestrian Fatalities		Bicyclist Fatalities	
	(N=274)	%	(N=16)	%
Month				
January	30	10.9%	0	0.0%
February	21	7.7%	0	0.0%
March	18	6.6%	0	0.0%
April	15	5.5%	1	6.3%
May	17	6.2%	3	18.8%
June	8	2.9%	1	6.3%
July	28	10.2%	2	12.5%
August	27	9.9%	2	12.5%
September	18	6.6%	3	18.8%
October	31	11.3%	1	6.3%
November	31	11.3%	2	12.5%
December	30	10.9%	1	6.3%
Time of Day				
Midnight-3am	22	8.1%	1	6.3%
3am-6am	17	6.3%	0	0.0%
6am-9am	19	7.0%	0	0.0%
9am-Noon	15	5.5%	1	6.3%
Noon-3pm	22	8.1%	2	12.5%
3pm-6pm	50	18.5%	4	25.0%
6pm-9pm	84	31.0%	4	25.0%
9pm-Midnight	42	15.5%	4	25.0%
County				
Fairfield	60	21.9%	2	12.5%
Hartford	78	28.5%	1	6.3%
Litchfield	9	3.3%	3	18.8%
Middlesex	4	1.5%	3	18.8%
New Haven	102	37.2%	7	43.8%
New London	12	4.4%	0	0.0%
Tolland	5	1.8%	0	0.0%
Windham	4	1.5%	0	0.0%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

**Figure CTS-5. Connecticut Pedestrian and Bicyclist Fatalities
Month, Time of Day, and County Five-Year Total, 2017-2021**
(Graphic Representation of Data in Table CTS-7)

Non-Motorist Fatalities by Month

Non-Motorist Fatalities by Time of Day

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021
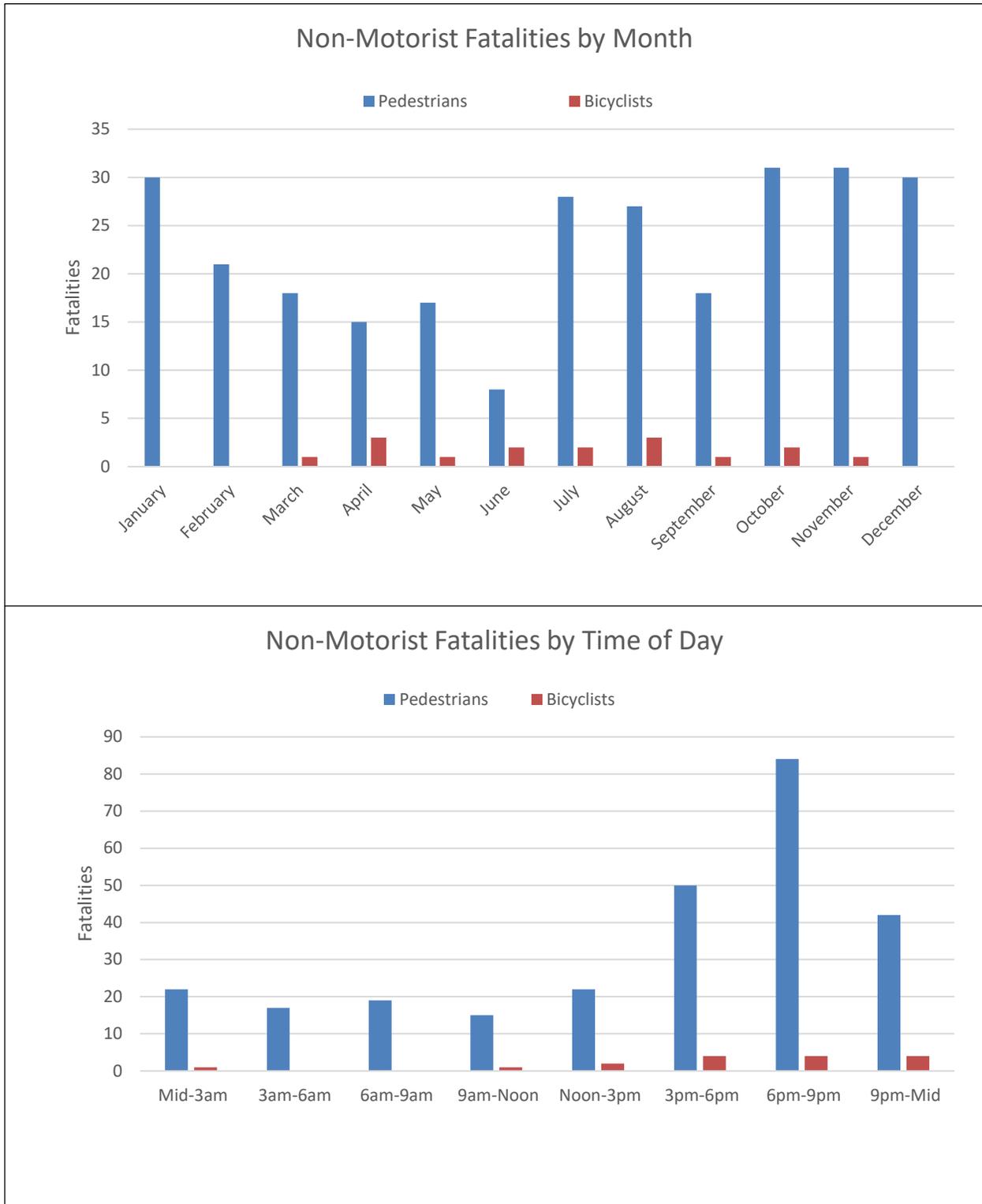
Sources: FARS Final Files 2017-2020,
FARS Annual Report File 2021
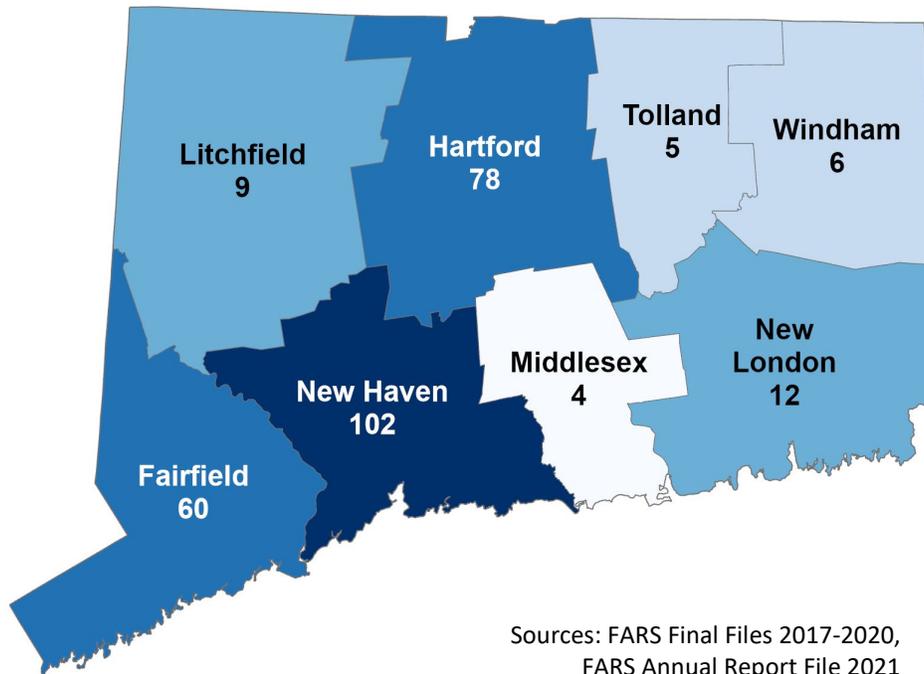
The majority of pedestrians and bicyclists killed in crashes had one (1) or more factors reported (Table CTS-8). The most common actions for pedestrians were "failure to yield right-of-way" and "not visible" (cited in 69 and 49 cases, respectively) whereas the most common actions for bicyclists were "failure to yield right-of-way" (5) and "failure to obey traffic signs, signals, or officers" cited in two cases each.

Table CTS-8. Connecticut Pedestrian and Bicyclist Fatalities Related Factors for Pedestrians and Bicyclists Five-Year Total, 2017-2021

	Pedestrians	Bicyclists
Fatalities	(N=271)	(N=15)
Non-Motorist Condition/Action	N=332	N=12
Failure to yield right of way	69	2
Not visible (dark clothing, no lighting, etc.)	49	1
Darting or running into road	42	0
In roadway improperly (standing, lying, working, playing)	42	0
Under the influence of alcohol, drugs, or medication	30	1
Failure to obey traffic signs, signals, or officer	22	2
Improper crossing of roadway or intersection	18	1
Physical impairment	18	1
Distracted	12	0
Entering/exiting parked/standing vehicle	5	0
All Other Factors	25	4

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Table CTS-9 shows that the majority of motorists involved in fatal pedestrian and bicyclist crashes had no factors reported. When a factor was reported, the most common factor in pedestrian crashes was "operating vehicle in an erratic, reckless, or negligent manner" followed by "speed-related." For fatal bicyclist crashes, no single driver-related factor emerged as the most common.

Table CTS-9. Connecticut Driver-Related Factors of Motorists Involved in Pedestrian and Bicyclist Fatalities, Five-Year Total, 2017-2021

	Fatal Pedestrian Crashes	Fatal Bicyclist Crashes
Motorists	**(N=286)**	**(N=17)**
Driver-Related Factors	**N Factors =286**	**N Factors=17**
Operating Vehicle in an Erratic, Reckless, or Negligent Manner	33	3
Vison Impaired by…	28	0
Speed-Related	35	1
Distracted	19	1
Under the Influence of Alcohol, Drug, or Medication	17	3
Improper Lane Usage	14	2
Aggressive Driving/Road Rage	12	1
Failure to Yield Right-of-Way	2	1
Emotional (depressed, angry, disturbed, etc.)	6	0
None Reported	145	7
Unknown	72	3
All Other Factors	120	5

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Bicyclist Problem Identification

Bicyclist fatalities accounted for less than two percent (2%) of the total number of traffic fatalities in Connecticut in 2021. Annual bicyclist fatalities ranged from one (1) to six (6) during the 2017 to 2021 period. There were 299 non-fatally injured bicyclists involved in motor vehicle crashes in Connecticut in 2021, the lowest number in the last five (5) years. The 2021 injury figure represents one percent (1.0%) of all motor vehicle related injuries.

Table CTS-10. Bicyclists Killed and Injured, 2017-2021

	2017	2018	2019	2020	2021
Killed	3	1	3	6	3
Injured	444	353	413	350	299
Bicyclists Killed and Injured per 100k Population	12	10	12	10	8
Percent Bicyclists Helmeted	24%	28%	22%	31%	29%

Sources: FARS, Connecticut Crash Data Repository

Table CTS-11 shows that bicyclist fatalities have remained stable in Connecticut between 2017 and 2021 (0.0%). During the five-year period of 2017 to 2021, the number of bicyclist fatalities in Connecticut each year ranged between one (1) and six (6).

Table CTS-11. Connecticut Bicyclist Fatalities

	2017	2018	2019	2020	2021	% Change 2017-2021
Connecticut	3	1	3	6	3	0.0%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Bicyclist fatalities have generally represented less than two percent (2%) of all Connecticut fatalities.

Table CTS-12. Connecticut Bicyclist Fatalities as Percent of Total Fatalities

	2017	2018	2019	2020	2021
Connecticut	1.1%	0.3%	1.2%	2.0%	1.0%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure CTS-6a represents the map displaying bicycle crashes in Connecticut from 2017-2021 distinguishing fatal and serious injury crashes within Justice40 Census tracts. There was a total of 197 crashes of which16 were fatal crashes and 6 of those occurred in Justice40 tracts, and 187 were serious injury crashes and 72 of those occurred in Justice40 tracts. Figure CTS-6b shows the fatal crashes and serious injury crashes in Justice40 versus non-Justice40 tracts. The majority of bicyclist fatalities and serious injury crashes occur in non-Justice40 tracts. However, within the Justice40 tracts, there is a high concentration of bicyclist serious injury crashes in the municipalities of Hartford, New Haven, West Haven, and Bridgeport. Overall, the western half of the State shows a higher number of bicyclist serious injury crashes.

Figure CTS-6a. Bicyclist Fatal and Serious (A) Injury Crashes, 2017-2021
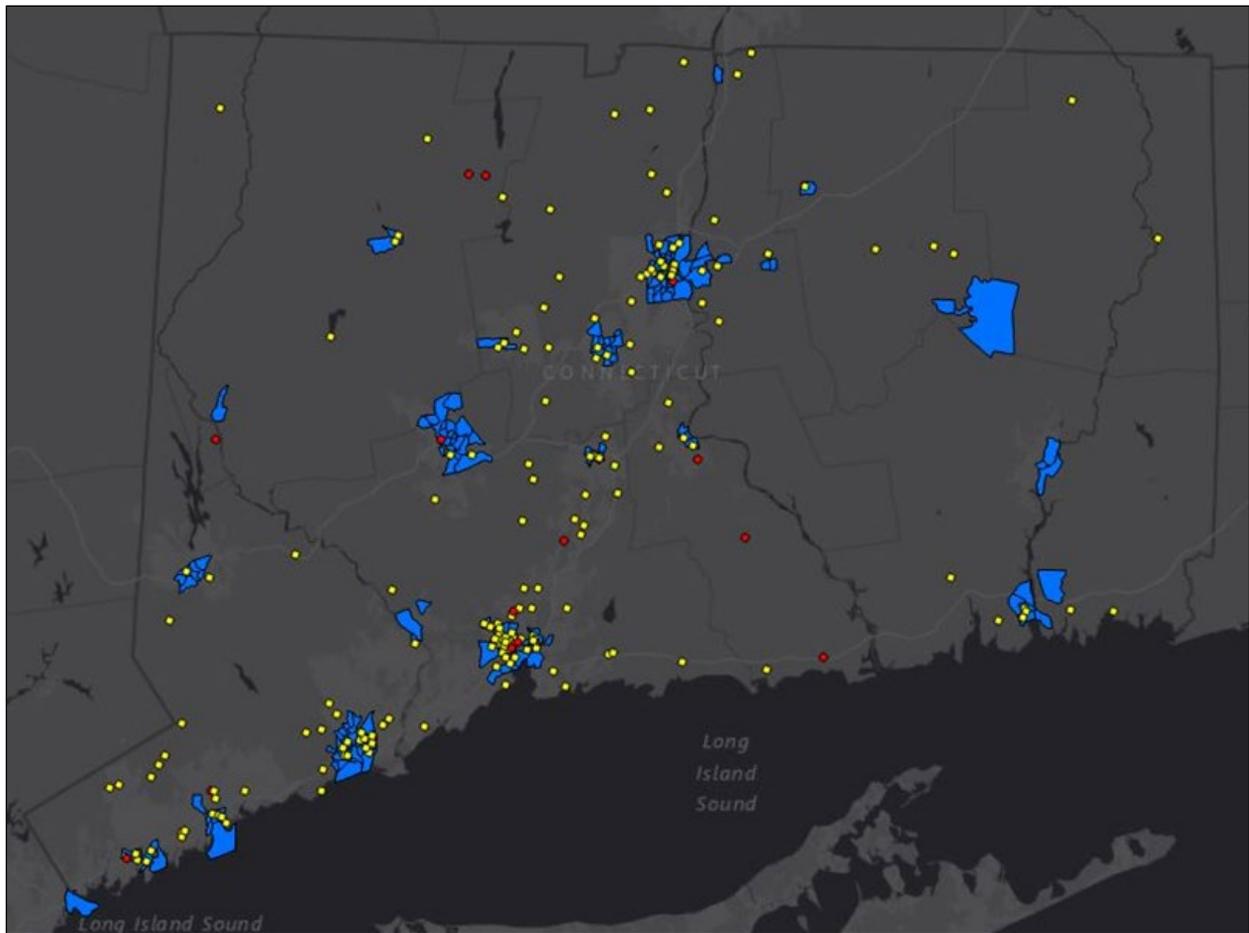
Notes: Red points indicate fatal crashes; yellow points indicate serious injury crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Source: Connecticut Crash Data Repository

Figure CTS-6b. Fatal and Serious (A) Injury Bicycle Crashes in Justice40 vs Non-Justice40 Census Tracts
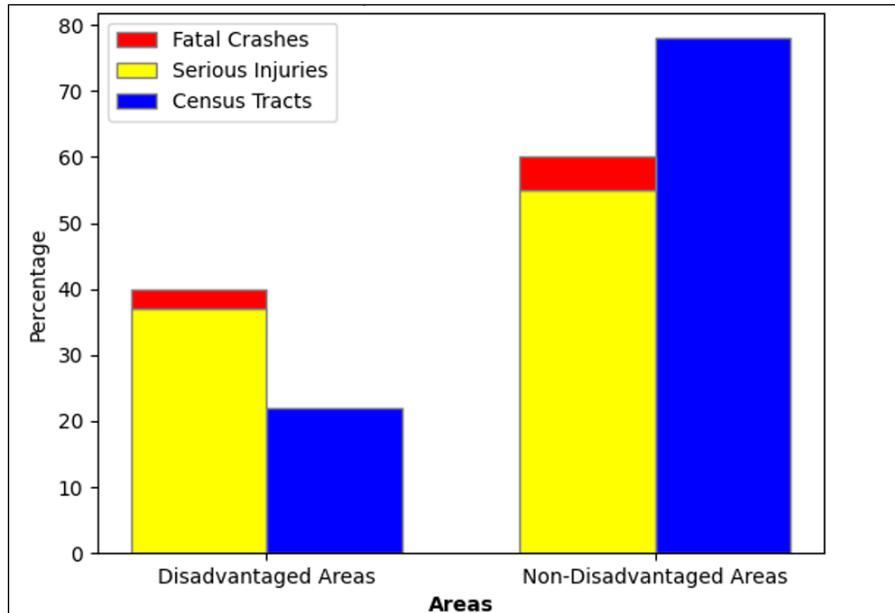
Figure CTS-7a and 7b represent the bicyclist fatal crash characteristics with majority of the crashes occurring during fall, summer, and spring from 3pm to midnight on weekdays during low light conditions. Also, the majority of the fatal crashes occur along principal arterial roads followed by minor arterials in urban areas.

Figure CTS-7a. Connecticut Bicyclist Fatalities by Crash Characteristics

Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021
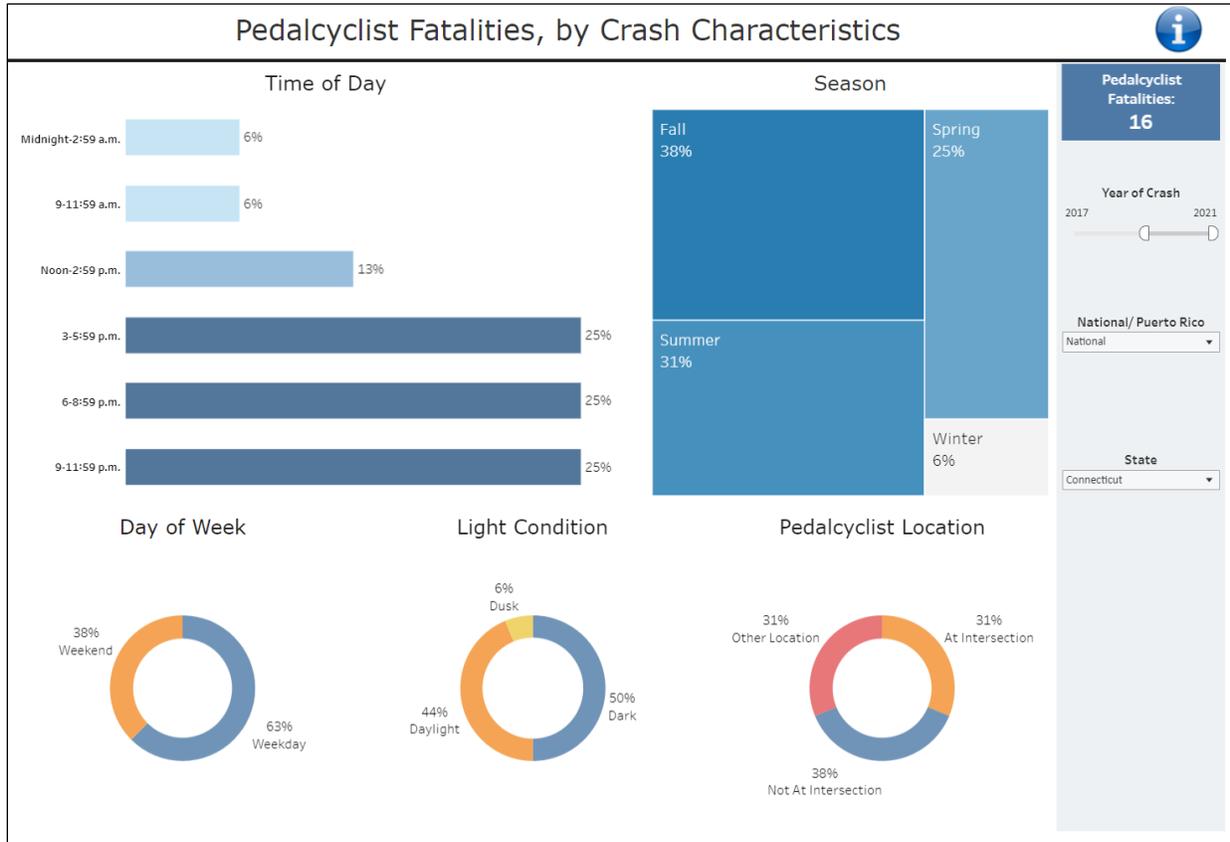
Figure CTS-7b. Connecticut Bicyclist Fatalities by Environmental Characteristics
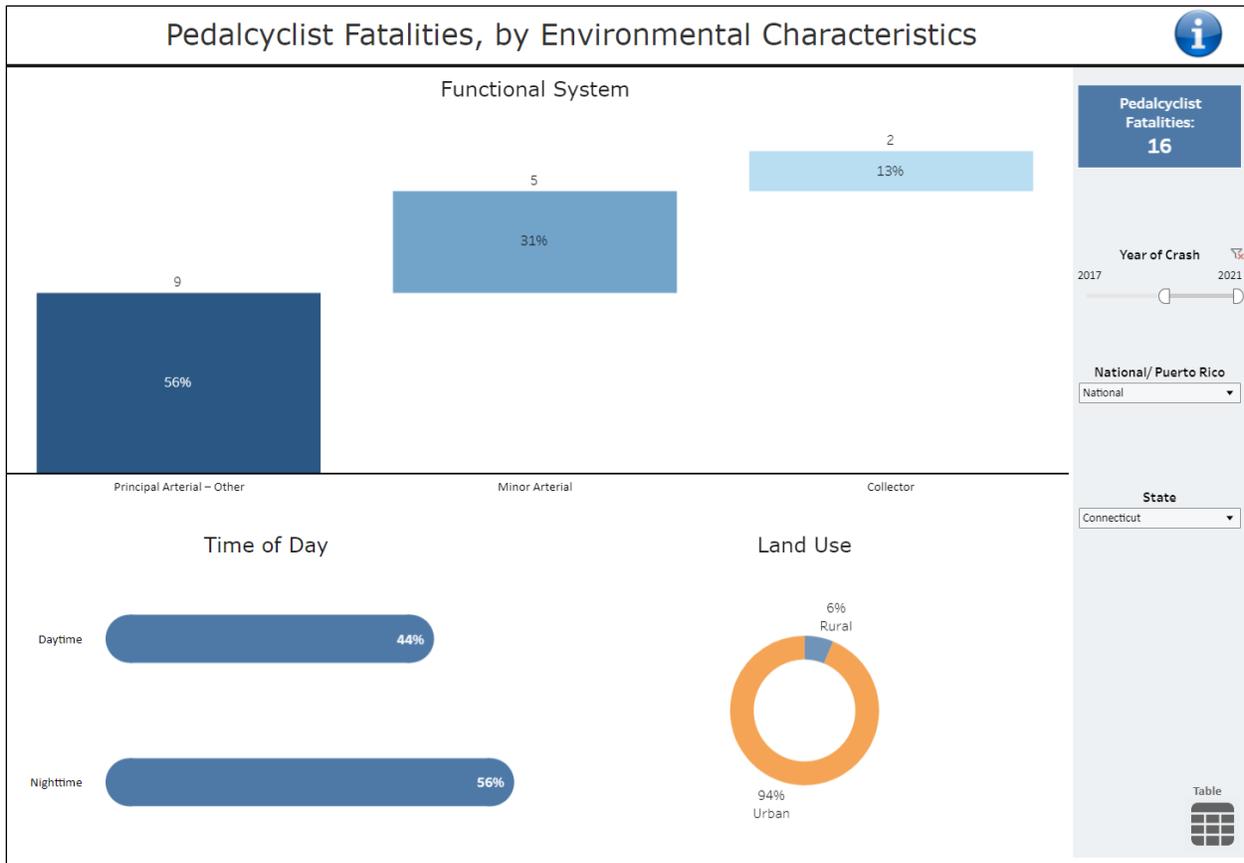
Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

Pedestrian Problem Identification

Table CTS-13 shows that the number of pedestrian fatalities in Connecticut fluctuated over the five-year period of 2017 to 2021. In 2021, there were 53 pedestrian fatalities, a five percent (+8.2%) increase from the 49 fatalities observed in 2017. The pedestrian fatality rate for Connecticut in 2021 was 1.5 per 100,000 population (Table CTS-13). Pedestrian fatalities in Connecticut accounted for 18 percent of all motor vehicle crash victims in 2021.

Table CTS-13. Connecticut Pedestrian Fatalities

	2017	2018	2019	2020	2021	% Change 2017-2021
Fatalities	49	59	54	59	53	+8.2%
% of Total Fatalities	17.4%	20.1%	21.7%	19.7%	17.8%	
Fatality Rate per 100k Population	1.4	1.7	1.5	1.6	1.5	+7.3%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Table CTS-14 shows the number of fatally and non-fatally injured pedestrians in the State over the 2017 to 2021 period. The State's 2021 non-fatal injury pedestrian rate was 29 per 100,000 population, the second lowest rate in the last five years.

Table CTS-14. Number of Pedestrians Killed and Injured

	2017	2018	2019	2020	2021
Killed	49	59	54	59	53
Total Injured	1,309	1,260	1,340	932	1,029
Serious (A) Injury	242	210	220	163	183
Moderate (B) Injury	644	622	613	504	530
Minor (C) Injury	423	428	507	265	316
Fatality Rate per 100,000 Population	1.4	1.7	1.5	1.6	1.5
Non-Fatal Injury Rate per 100,000 Population	37	35	38	26	29

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021; Connecticut Crash Data Repository

Figure CTS-8a represents the map displaying pedestrian fatal crashes in Connecticut from 2017-2021. There were a total of 274 pedestrian fatalities. The majority of fatal crashes were concentrated in the western half of the State and the disadvantaged communities of New Haven, West Haven, Bridgeport, Waterbury, Danbury, New Britain, East Hartford and Hartford. Figure CTS-8b indicates that approximately 38 percent of the pedestrian fatalities occurred in Justice40

tracts or disadvantaged communities which represents 20 percent of all the tracts in Connecticut. A pedestrian in a disadvantaged community is approximately 2.5x more likely to be killed in a crash than an individual in a non-disadvantaged community.

Figure CTS-8a. Pedestrian Fatal Crashes, 2017-2021
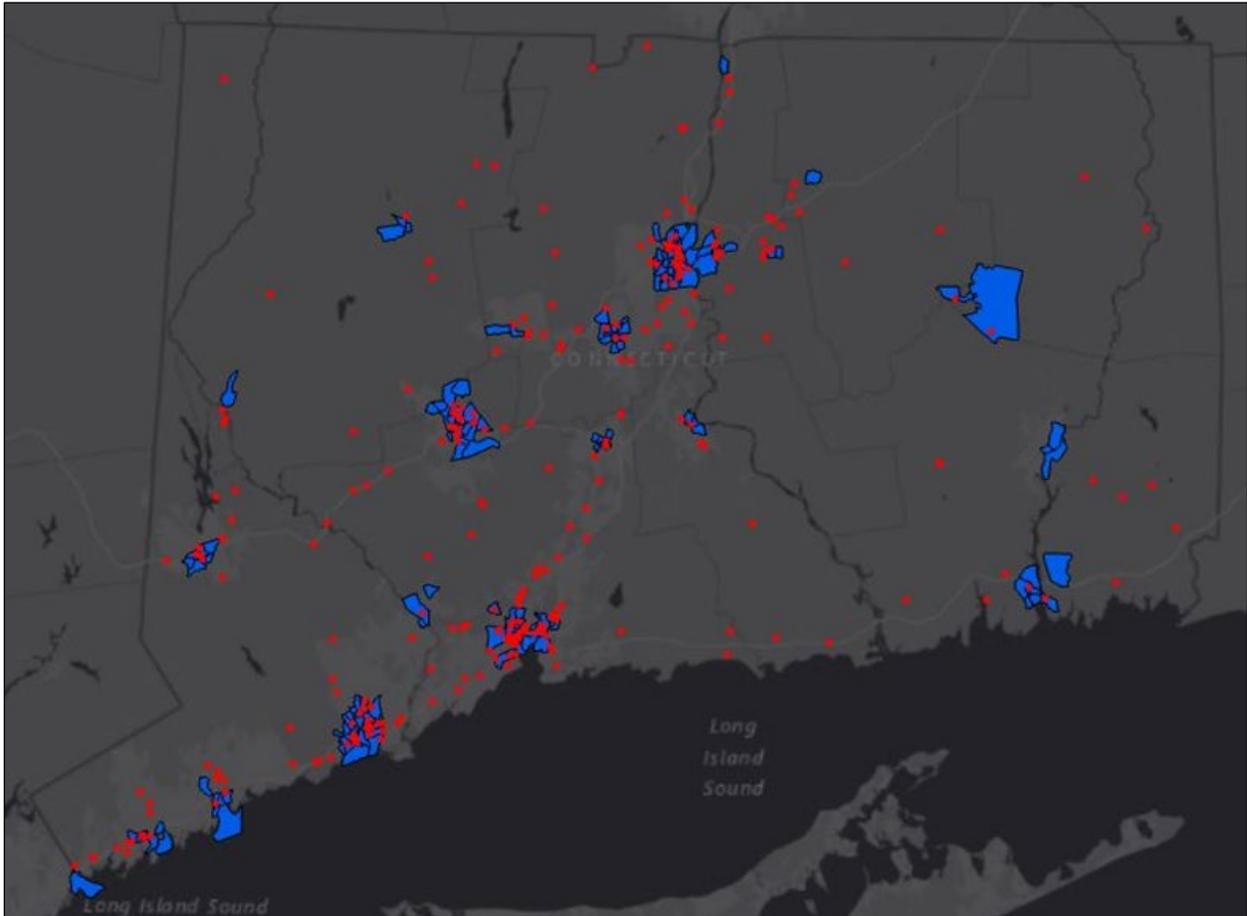
Notes: Red points indicate fatal crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

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Figure CTS-8b. Pedestrian Fatal Crashes in Justice40 vs Non-Justice40 Census Tracts
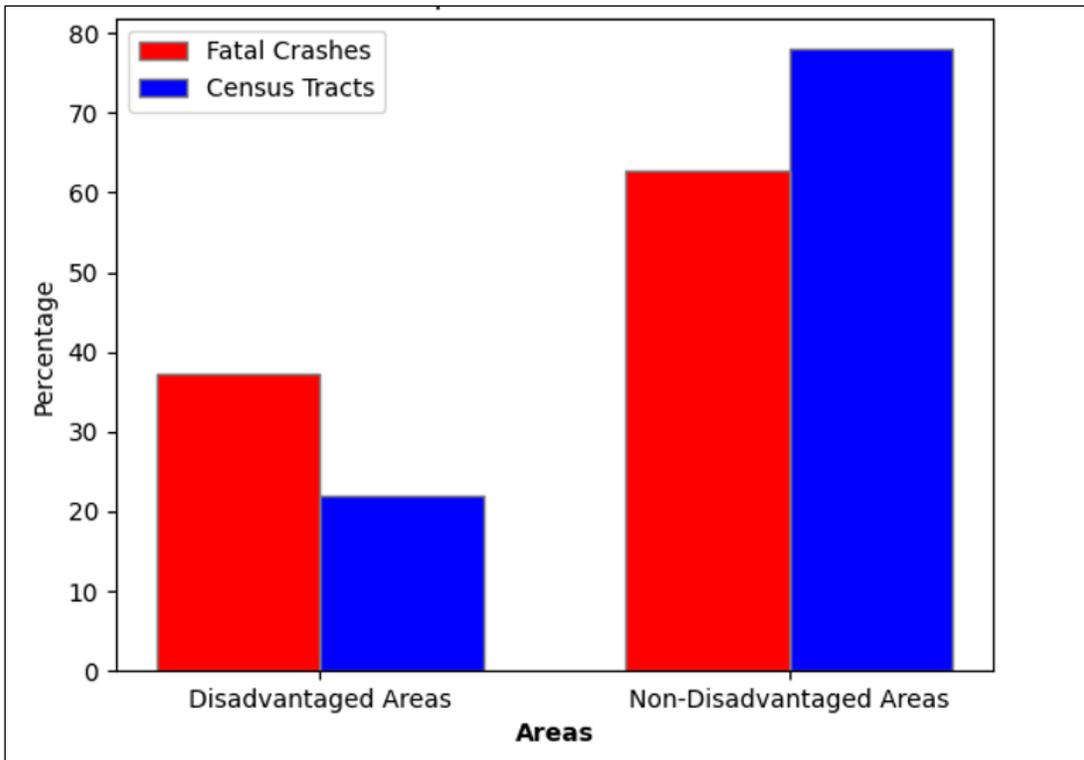
Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure CTS-8c shows the distribution of pedestrian serious injury crashes for the period of 2017-2022. The pedestrian serious injury crashes appear to be spread out all over the State with high concentration in the disadvantaged communities of Norwalk, New Haven, West Haven, Bridgeport, Waterbury, Danbury, New Britain, East Hartford, Hartford, Meriden, Derby, Manchester, Norwich and New London.

Figure CTS-8c. Pedestrian Serious (A) Injury Crashes, 2017-2021
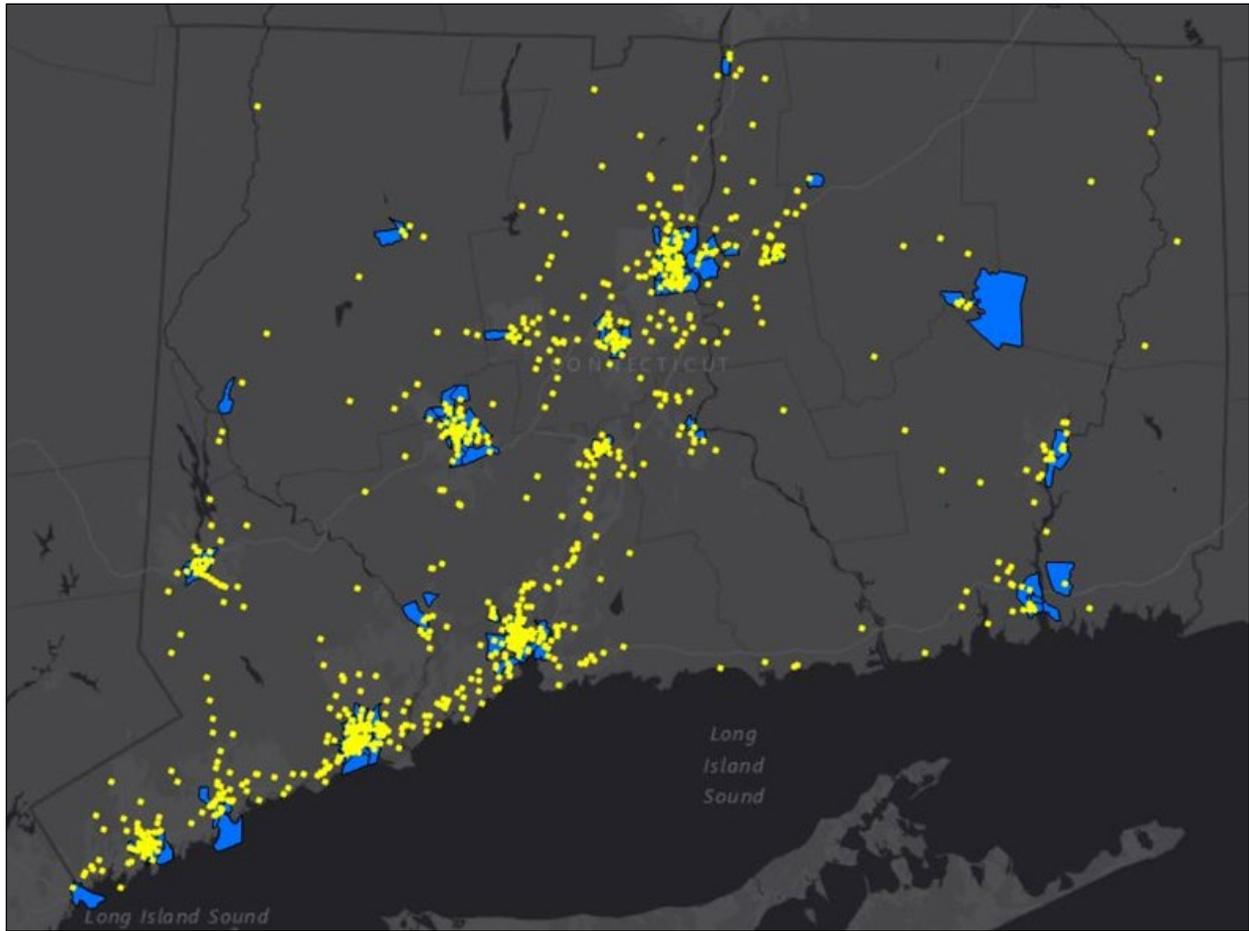
Notes: Yellow points indicate serious (A) injury crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Source: Connecticut Crash Data Repository

Figure CTS-9a and 9b represents the pedestrian fatal crash characteristics with the majority of crashes occurring during fall, winter and summer from 3pm to midnight on weekdays during low light conditions. The majority of crashes do not occur at intersections. Also, the majority of fatal crashes occur along principal and minor arterial roads in Urban areas.

Figure CTS-9a. Connecticut Pedestrian Fatalities by Crash Characteristics, 2017-2021
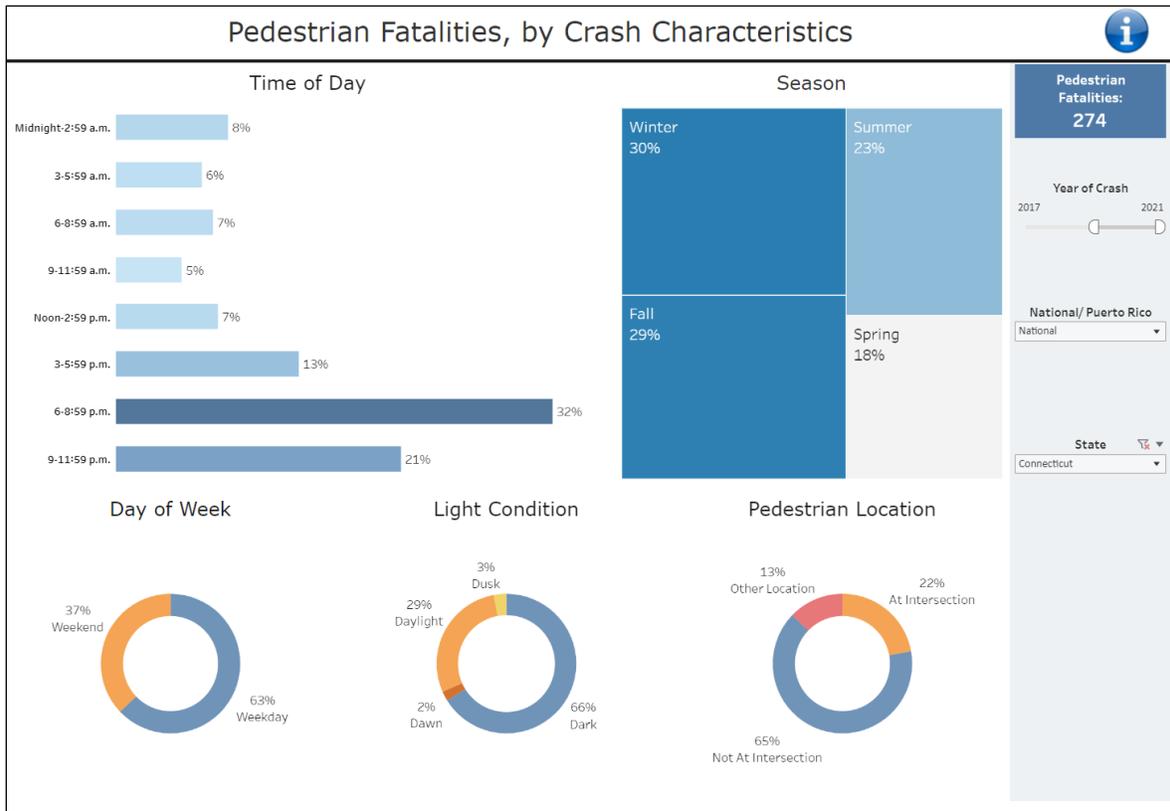
Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure CTS-9b. Connecticut Pedestrian Fatalities by Crash Characteristics, 2017-2021
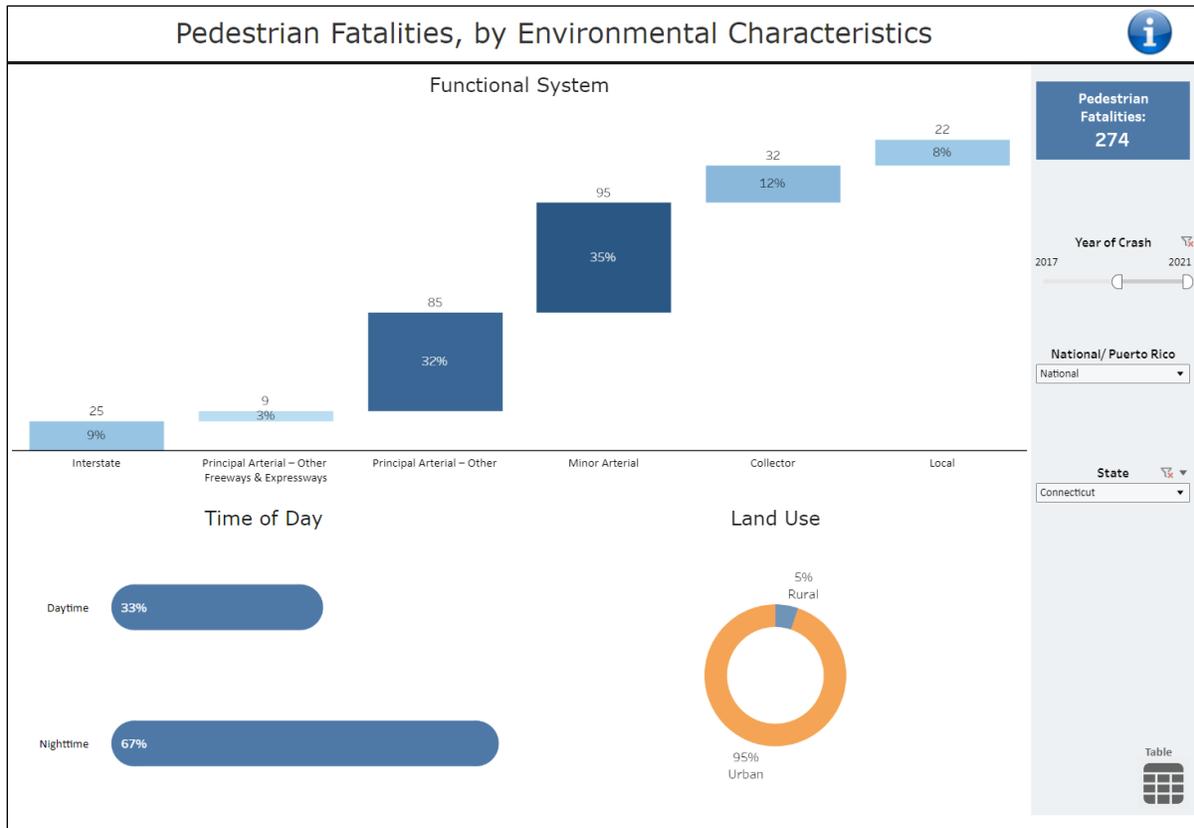
Sources: NHTSA Data Visualization Portal, FARS Final Files 2017-2020, FARS Annual Report File 2021

Older Pedestrian Problem Identification

Pedestrian injury and fatality data collected for 2017-2022 were combined and compared across age groups. Fatal ("K") injury data were obtained from FARS for 2017 to 2021. The preliminary 2022 fatal injury data and the 2017-2022 minor ("B" and "C" injuries) and serious ("A") injury data were obtained from the Connecticut Crash Data Repository.

Four age categories were created: under 21, 21 to 44, 45 to 64, and 65 and over. Table CTS-15 shows the number of minor, serious, and fatal injuries for each category. Minor and serious injuries were more prevalent in the 21-44 age group, whereas fatal injuries were more prevalent in the 45 to 64 age group.

Table CTS-15. Pedestrian Injuries by Age Group, 2017-2022

	Minor	Serious	Fatal
<21	1,122	181	12
21-44	2,187	476	96
45-64	1,663	381	112
65+	692	180	93

Sources: Fatality data from FARS Final Files 2017-2020, FARS Annual Report File
2021; injury data from the Connecticut Crash Data Repository 2017-2022;
preliminary fatality data from Connecticut Crash Data Repository 2022

Census data indicate that in the period covered, persons under 21 accounted for 25 percent of the population, those 21 to 44 made up 30 percent, persons 45 to 64 accounted for 28 percent, and those 65 and over, made up 18 percent of the population of Connecticut. Table CTS-16 shows the population distribution as well as the distribution of minor, serious, and fatal injuries for each age group. Comparing the population distribution to the injury distribution shows that the under 21 age group is under-represented in every injury category, whereas the 21-44 and 45-64 age groups are over-represented in every injury category.

Table CTS-16. Percent Injuries by Age Group, 2017-2022

	Minor	Serious	Fatal	Population
<21	19.8%	14.9%	3.8%	24.8%
21-44	38.6%	39.1%	30.7%	29.8%
45-64	29.4%	31.3%	35.8%	27.8%
65+	12.2%	14.8%	29.7%	17.6%
Total	100.0%	100.0%	100.0%	100.0%

Sources: Fatality data from FARS Final Files 2017-2020, FARS Annual Report File
2021; injury data from the Connecticut Crash Data Repository

The differential between injury and population distribution for each age and injury category is shown in Figure CTS-10. The figure clearly shows the over-representation of pedestrians 45 and up in fatal injuries.

Figure CTS-10. Injury to Population Differential by Age Group, 2017-2022
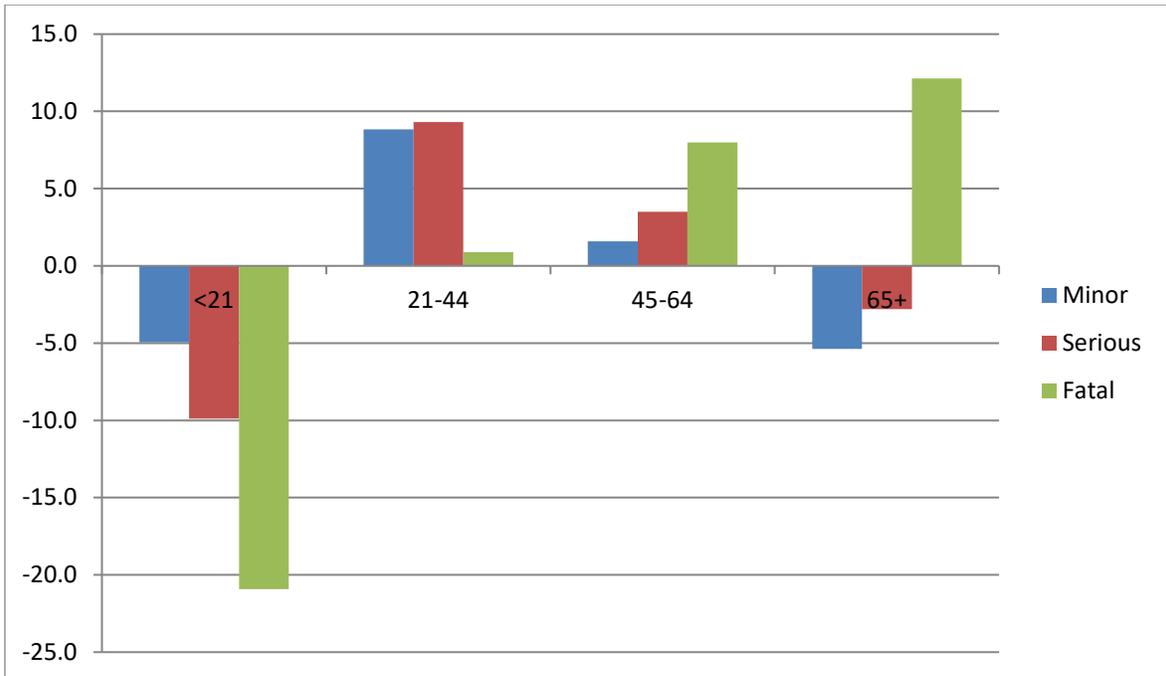
Sources: Fatality data from FARS Final Files 2017-2020, FARS Annual Report File 2021;
injury data from the Connecticut Crash Data Repository

Injury rates per 100,000 population for the various age and injury categories are shown in Table CTS-17. Note that the 2022 data are only preliminary and may only be partial, and as such can be misleading. The overall data show the 21-44 age group to have the highest rate of minor and serious injuries whereas the 65 and over age group has the highest rate of fatal injuries. The serious and fatal injury rates per population are also represented graphically in Figure CTS-11.

Table CTS-17. Injury Rates per 100K Population, 2017-2022

Injury	Age	2017	2018	2019	2020	2021	2022	2017-22
Minor	<21	24.25	24.71	23.85	13.80	17.80	22.31	21.15
	21-44	39.04	34.47	40.55	28.08	30.57	32.78	34.22
	45-64	29.26	31.40	33.13	24.24	24.59	24.57	27.89
	65+	19.67	21.63	21.09	15.02	15.44	17.41	18.33
Serious	<21	4.56	3.48	4.09	1.50	3.02	3.74	3.41
	21-44	9.62	8.81	8.03	5.28	6.32	6.77	7.46
	45-64	6.38	6.16	6.97	6.27	5.32	7.24	6.39
	65+	5.33	3.74	3.96	4.49	5.04	6.16	4.79
Fatal	<21	0.44	0.11	0.11	0.35	0.34	0.34	0.28
	21-44	1.14	1.99	1.32	1.79	1.49	1.56	1.55
	45-64	1.37	2.48	2.12	1.95	1.81	1.43	1.86
	65+	3.50	2.28	3.01	2.48	1.42	1.39	2.33

Sources: Fatality data from FARS Final Files 2017-2020, FARS Annual Report File 2021;
injury data from the Connecticut Crash Data Repository

Figure CTS-11 shows that serious injury rates for the period of 2017 -2021 by population decrease with increasing age (after age 20), going from 8.03 serious injuries per 100,000 population for those ages 21 to 44 to 4.46 for those 65 and up. Fatal injury rates show the opposite pattern and increase with increasing age, from a low of 0.36 fatalities per 100,000 population for those under 21 to a high of 2.58 fatalities per 100,000 population for those 65 and over.

Figure CTS-11. Serious and Fatal Injury Rates by 100k Population, 2017-2021
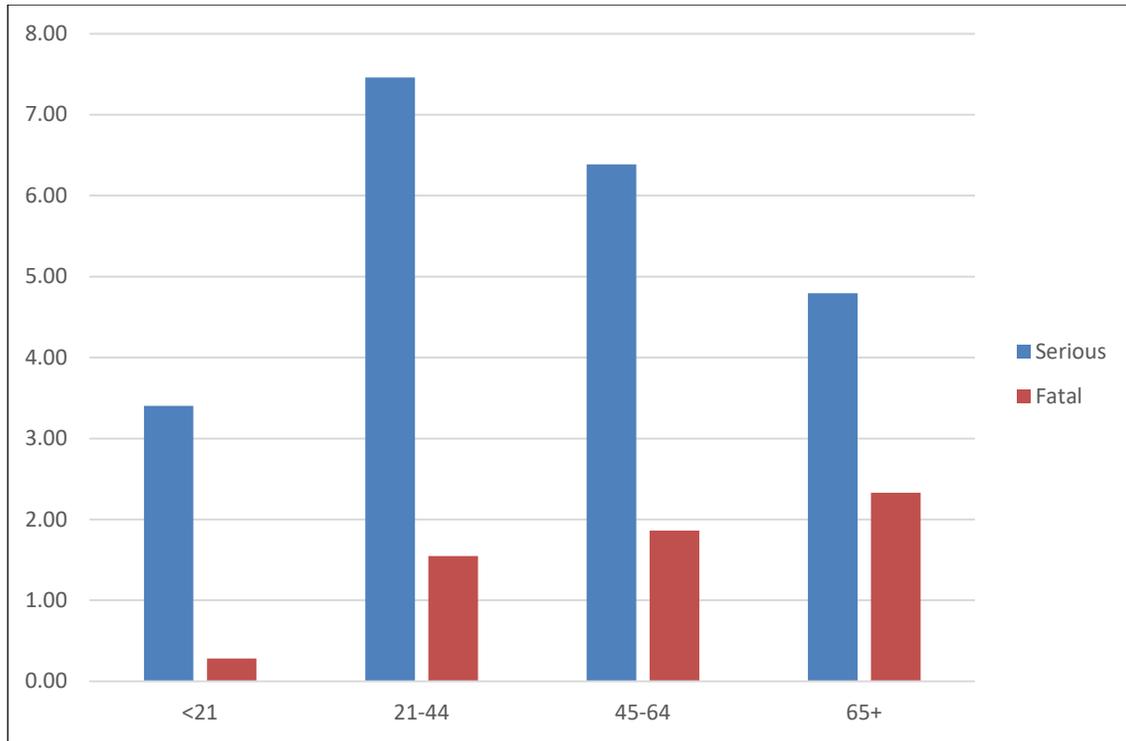
Sources: Fatality data from FARS Final Files 2017-2020, FARS Annual Report File 2021;
injury data from the Connecticut Crash Data Repository

Figure CTS-12a represents the map displaying older pedestrian (65+) fatalities in Connecticut from 2017-2021. The majority of fatal crashes appear to be concentrated in the western half of the State and in the disadvantaged communities of Bridgeport and New Haven.

Figure CTS-12a. Older Pedestrian (65+) Fatal Crashes, 2017-2021
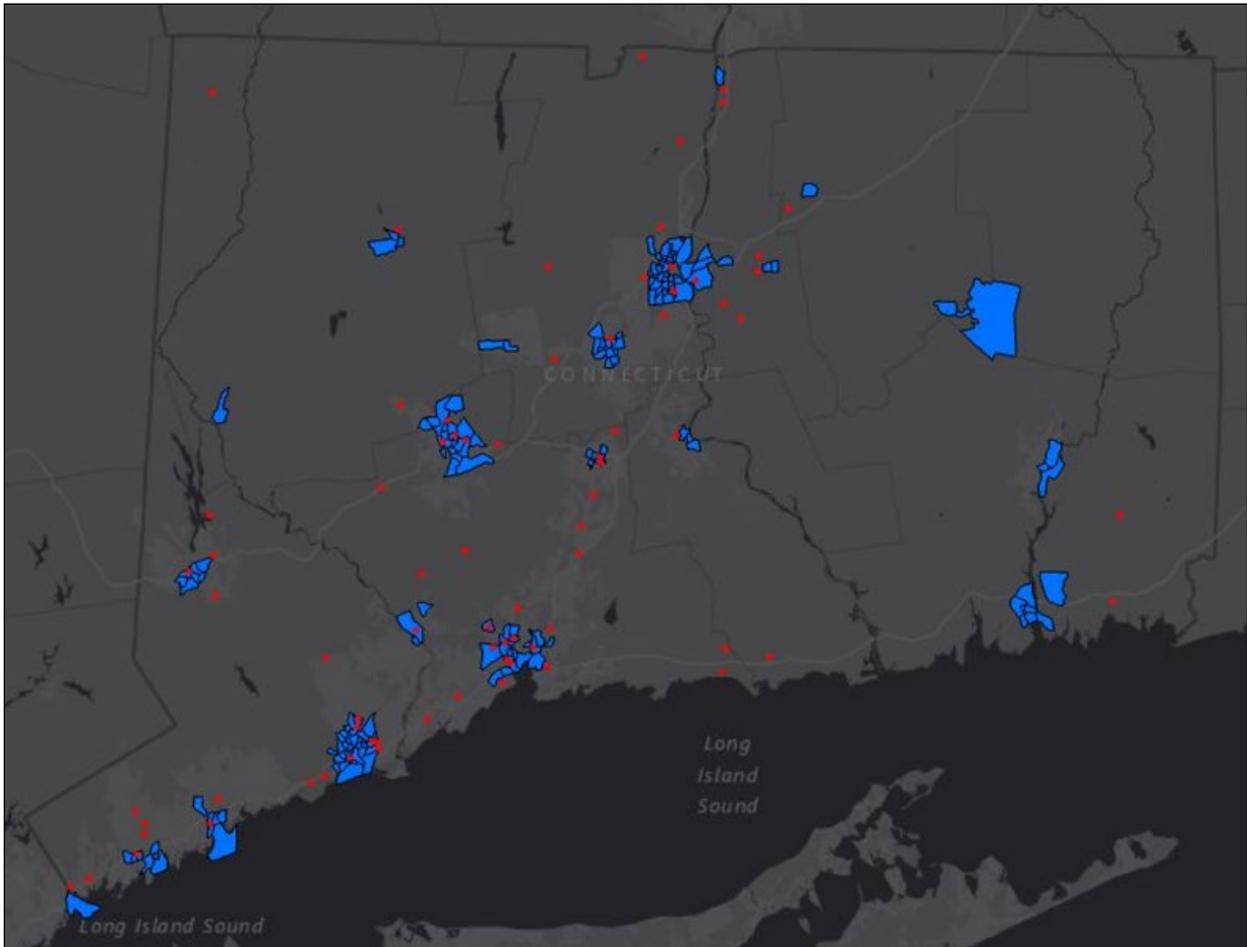
Notes: Red points indicate fatal crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Sources: Fatality data from FARS Final Files 2017-2020, FARS Annual Report File 2021

Figure CTS-12b shows the distribution of older pedestrian (65+) serious injury crashes for the period of 2017-2022. The older pedestrian serious injury crashes appear to be higher in the western half of the State and the disadvantaged communities of Stamford, Norwalk, Bridgeport, New Haven, New Britain, and Hartford.

Figure CTS-12b. Older Pedestrian (65+) Serious (A) Injury Crashes, 2017-2021
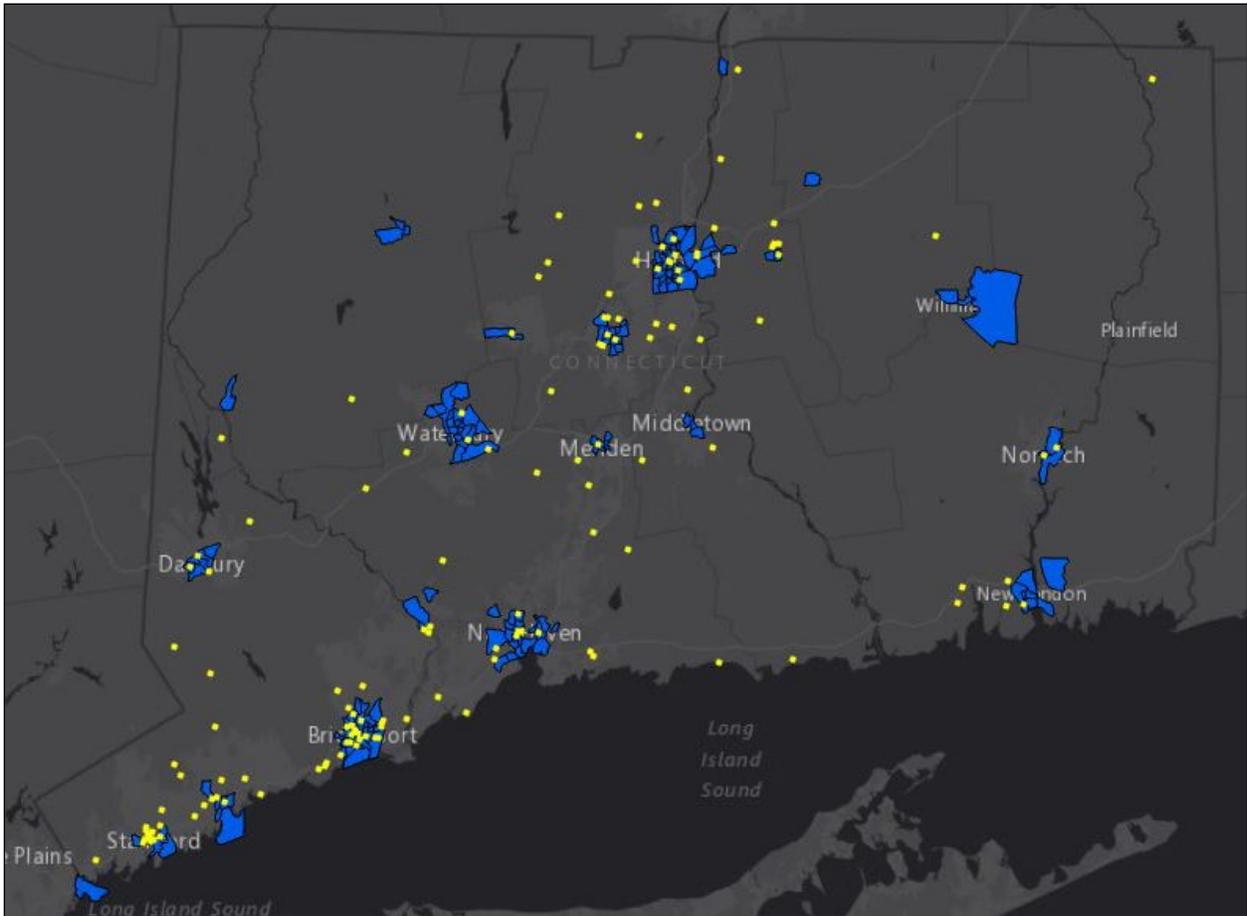
Notes: Yellow points indicate serious injury crashes; blue polygons indicate Justice40 areas; some data points may overlap and may not represent the exact number; refer to Figure 8 on page 28 for details on municipalities
Source: Connecticut Crash Data Repository

Preventing Roadside Deaths (PRD)

Description of Highway Safety Problems/Problem Identification

Roadside fatalities represent events in which a pedestrian is killed under unusual circumstances, such as getting in or out of a car, or pushing/working on a disabled vehicle. These are often vehicle occupants who temporarily step out of the vehicle, but since they are fatally injured *outside* of the vehicle, these fatalities are classified as pedestrian fatalities. Fatalities related to working in the roadway, bus stops, mailbox use, or vendor trucks (e.g., ice cream truck) are also included in this category.

Table PRD-1 shows some fluctuations in yearly fatalities in the five-year period from 2017 to 2021. The year 2018 had the highest number of roadside pedestrian fatalities at eight (8). The five-year total shows that more than half of such fatalities are related to a disabled vehicle (11 out of 23). The most common crash types related to roadside pedestrian fatalities were "Disabled Vehicle-Related," "Working in Roadway," and "Entering/Exiting Parked or Stopped Vehicle."

Table PRD-1. Roadside Pedestrian Fatalities in Connecticut, 2017-2021

Pedestrian Crash Type	2017	2018	2019	2020	2021	2017-2021
Disabled Vehicle-Related	0	4	0	3	4	11
Working in Roadway	2	2	0	1	0	5
Entering/Exiting Parked or Stopped Vehicle	2	1	1	0	0	4
Mailbox-Related (going to/from or standing at a mailbox or newspaper box)	0	1	0	1	0	2
Vendor Truck-Related	0	0	0	0	0	0
Transit Bus Stop-Related	0	0	1	0	0	1
School Bus Stop-Related	0	0	0	0	0	0
Total Roadside Fatalities	4	8	2	5	4	23
Total Pedestrian Fatalities	49	59	54	59	53	426
Percent Roadside Fatalities	8.2%	13.6%	3.7%	8.5%	7.5%	5.4%

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021

A separate tally was done for pedestrian killed or seriously injured (i.e., "A" injuries) in work zones, covering the period from 2017-2021. The number of serious injuries ranged from 0 to 2 each year; the number of pedestrian fatalities in work zones ranged from 0 to 1 each year. See Table PRD-2 for the yearly tally.

Table PRD-2. Pedestrian Fatalities and Serious Injuries in Work Zones, 2017-2021

Work Zones	2017	2018	2019	2020	2021	2017-2021
Serious (A) Injuries	1	0	2	2	0	5
Fatalities	1	0	0	0	1	2
Total	2	0	2	2	1	7

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021;
serious injury data from Connecticut Crash Database Repository

There was a total of 17 fatalities and 36 serious ("A") injuries in work zones during the period of 2017-2021. More than half (8 out of 17) occurred in *construction* zones. The number of fatalities has fluctuated from 2 to 6 every year; the number of severe injuries has ranged from 3 to 15. In 2021, there were 6 serious injuries and 4 fatalities in work zones in Connecticut. Two of the 2021 fatalities were in *construction* zones and 2 were in *work zone, type unknown* (no additional detail is available for serious injuries). Table PRD-3 shows the yearly tally for work zone fatalities.

Table PRD-3. Fatalities and Serious Injuries in Work Zones, 2017-2021

	2017	2018	2019	2020	2021	2017-2021
Serious (A) Injuries	4	3	15	8	6	36
Fatalities	6	2	2	3	4	17
Total	10	5	17	11	10	53

Sources: FARS Final Files 2017-2020, FARS Annual Report File 2021;
serious injury data from Connecticut Crash Database Repository

Driver and Officer Safety Education (DOSE)

Description of Highway Safety Problems/Problem Identification

Connecticut Law Section 7-294s supports the State and local police training programs to provide training in the use of physical force and body-worn recording equipment and cultural competency and sensitivity training. Each police, basic or review, training program conducted or administered by the Division of State Police (within DESPP), the Police Officer Standards and Training Council established under Section 7-294b or a municipal police department in the state shall include tactical training for police officers regarding:

- the use of physical force,
- training in the use of body-worn recording equipment and the retention of data created by such equipment, and
- cultural competency and sensitivity and bias-free policing training.

In response to the recent national police reform and transparency efforts, the HSO, in partnership with the Connecticut Police Chiefs Association (CPCA), Connecticut Department of Motor Vehicles (CTDMV), and the Transportation Safety Resource Prosecutor, is collaborating to produce a video series entitled Breaking Barriers. The goal of the training videos is to give new motor vehicle drivers examples on how to proceed when encountering a police officer during a traffic stop. The videos are designed to provide insight into the perspective of both the police officer and the motoring public before, during and after a traffic stop. Furthermore, the training videos will provide insight into how police officers are tasked with enforcing traffic laws to reduce the number of serious injury and fatal crashes on Connecticut roadways.

Law enforcement in Connecticut receives mandatory training on how to safely conduct traffic stops and how to interact with motorists in a fair and equitable way. The videos will highlight this training and provide new motor vehicle drivers with a better understanding of the mindset of the police officer. In addition, the videos will provide the perspective of the motorists for law enforcement, in an effort to create ways to better engage with the community in a positive way. The main objective of the Breaking Barriers video series will be to create a training program for both driver's education programs as well as law enforcement on the expectations during a traffic stop. The videos will highlight a motorist's perspective of a traffic stop, and how to work together to make the experience as positive and safe as possible for all parties involved.

1300.11 (b)(2) PUBLIC PARTICIPATION AND ENGAGEMENT (PPE)

Triennial HSP Engagement Planning

The goal of the Connecticut Highway Safety Program is to prevent roadway fatalities and injuries as a result of crashes related to driver behavior. The Connecticut HSO has worked and will continue to work with communities to address the concerns and needs that are presented to the HSO by incorporating appropriate projects and countermeasure strategies into the highway safety plan and provide funding and resources as allowable by NHTSA regulations.

The Justice40 Initiative, established by the Biden-Harris Administration, is an effort to address longstanding disparities in disadvantaged communities across various sectors, including transportation. The goal is to enhance the quality of life in these communities by ensuring a significant proportion of federal benefits are directed toward them.

Critical to this initiative is the Justice40 layer in GIS systems. This data layer is used to identify communities that could benefit substantially from the Justice40 Initiative. It does so by using Census tracts to evaluate issues including environmental, climate, sociodemographic, and socioeconomic burdens, providing an effective way to identify disadvantaged communities at a granular level. Specifically, the "disadvantaged or not" attribute is key to the HSO's analysis. The Justice40 layer, therefore, plays a crucial role in informing the development of the highway safety plan, aligning it with current federal objectives.

In addition to utilizing the Justice40 data layer, the HSO will utilize data from the Environmental Protection Agency's EJScreen tool to bolster the analysis. EJScreen is a significant resource for environmental justice mapping and combines environmental, sociodemographic, and socioeconomic indicators into a nationally consistent dataset. Like Justice40, EJScreen uses Census tracts to identify areas with environmental and sociodemographic challenges. The EJScreen mapping tool merges the environmental indicators with socioeconomic indicators, aiding in understanding the environmental burdens different communities face.

By using both the Justice40 and EJScreen tools, the Connecticut HSO demonstrates its commitment to employing the most pertinent data and tools in developing the highway safety plan. Our goal is addressing traffic safety issues effectively, ensuring that resources are allocated to reduce fatalities and serious injuries, particularly in disadvantaged communities.

The HSO has identified disadvantaged communities in Connecticut using the Justice40 tracts. The map below in PPE Figure-1 shows the Connecticut towns and the Justice40 tracts within the towns (blue) used for geospatial analysis. This strategy has helped the HSO engage communities at the town level and at the Justice40 tract level. It is important to understand that the communities living in these tracts do not just travel within the disadvantaged tracts. When a

certain area is designated as a Justice40 tract, it is necessary to address the traffic safety issues not just within the tract but in the surrounding areas as well. Therefore, addressing the traffic safety issues at the town level will allow the HSO to engage with the health departments, town officials, non-profits, local police departments etc. as necessary, who work in those communities and understand the communities at a more intimate level. The Justice40 tracts in some of these towns/cities show a higher concentration of traffic fatalities and serious injuries as indicated by data analysis/problem identification in the respective program areas above and PPE Table-1. Especially, the Justice40 tracts in and around the cities of Hartford, Waterbury, New Haven, and Bridgeport are overrepresented in traffic fatalities and serious injuries. These cities have a majority of the area/population designated as disadvantaged per the Justice40 and EJScreen criteria (PPE Figure 1, 2 and 3). In addition, per the U.S. Census Bureau, in PPE Table-1 and 2, these major cities have over 50 percent of the underserved population. The African American and Hispanic population in Hartford is 82 percent, Waterbury is 62 percent, New Haven is 63 percent and Bridgeport is 77 percent. The PPE Table-3 shows the Justice40 statistics for the cities of Hartford, Waterbury, New Haven and Bridgeport. The African American and the Hispanic population is overrepresented in traffic fatalities in Connecticut as indicated in Table-5 of the Race and Ethnicity subsection of the Highway Safety Planning Process and Problem Identification. In 2021, 21.5 percent and 23.8 percent traffic fatalities were African American and Hispanic, respectively. In Connecticut however, African Americans only accounted for 10.6 percent, and Hispanics accounted for 17.7 percent of Connecticut's population.

There are 27 towns in Connecticut with Justice40 tracts as indicated below. Reducing the fatalities and serious injuries by increasing Federal and State investment and programming in the four major cities of Hartford, Waterbury, New Haven, and Bridgeport will be a priority during the 2024-2026 HSP planning period as the areas listed above are overrepresented in crashes and are underserved areas; the HSO will work hard to address traffic safety issues in all the towns listed above with the expansion of partnerships. The HSO is actively working towards enhancing relationships with community leaders and members to bring the necessary changes and build capacity within HSO programs with more staffing and increased funding to meet the communities' unique needs and bring needed resources to reduce traffic-related injuries and deaths.

Connecticut's Justice40 Towns (Not in any particular order)

|			
1.) Groton	8) Byram (Community in Greenwich)	15.) New Britain	22.) West Haven
2.) Vernon	9) Fairfield	16.) Danbury	23.) Norwalk
3.) Enfield	10.) New Haven	17.) Bristol	24.) New London
4.) Middletown	11.) Meriden	18.) Stamford	25.) Norwich
5.) Shelton	12.) Bridgeport	19.) Waterbury	26.) Windham
6.) Derby	13.) Hartford	20.) Torrington	27.) Manchester
7.) Ansonia	14.) East Hartford	21.) New Milford	

PPE Figure 1. Connecticut Towns and the Justice40 Tracts
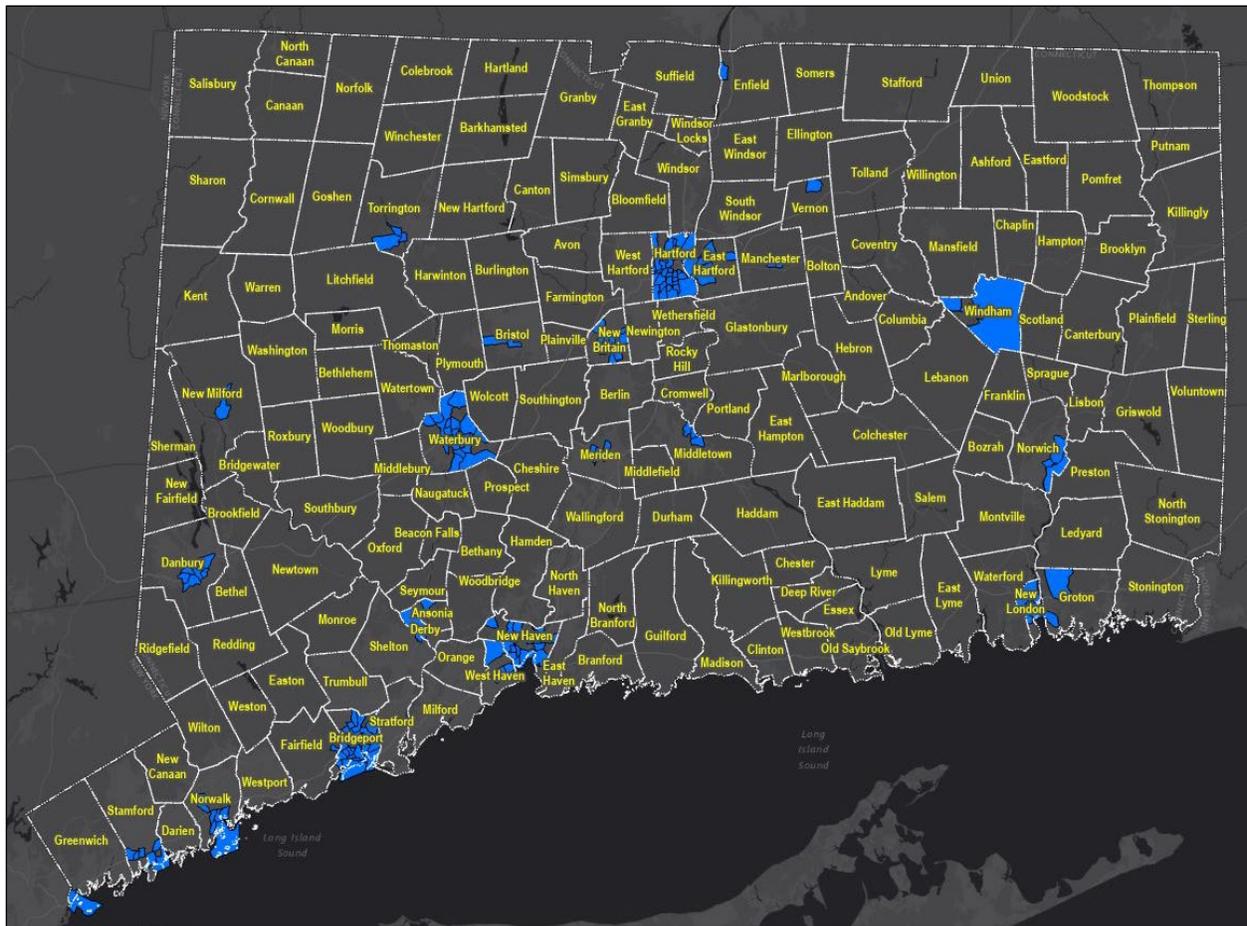
Sources: CTDOT and Justice40 Database

EJScreen's data will be utilized to delve deeper into the communities within New Haven, Bridgeport, Hartford, and Waterbury, which were identified through the Justice40 layer as disadvantaged and are the top four cities with high incidences of fatalities and serious injuries. By considering additional information from EJScreen, the HSO can establish a more comprehensive understanding of these communities' environmental and socioeconomic challenges. The PPE Figure 2, EJScreen Supplemental Demographic Index, uses the five socioeconomic indicators including percent low life expectancy, percent low-income, percent unemployed, percent limited English speaking, and percent less than high school education.

PPE Figure 2. EJScreen Supplemental Demographic Index for Connecticut
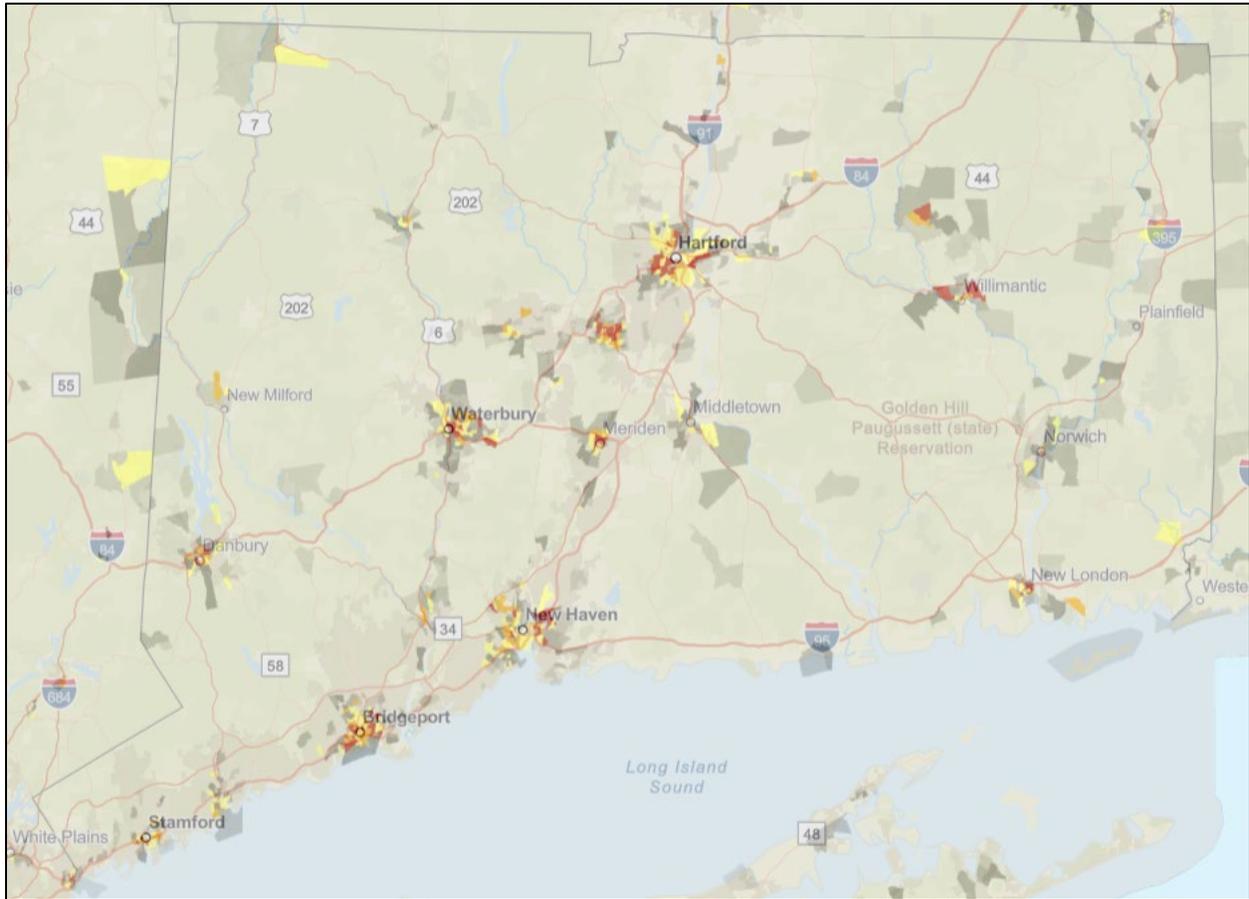
Note: Refer to Figure 8 on page 28 for details on municipalities
Source: EJScreen Mapping

During the 2024-2026 triennial HSP period, the HSO will focus on reducing the fatalities and serious injuries respectively by increasing Federal and State investment and programming in the four major cities of Hartford, Waterbury, New Haven, and Bridgeport. The ultimate goal is to expand the outreach and services to all towns with Justice40 tracts as well underserved communities not located within the Justice40 tracts. In addition, data from the EJScreen will also be utilized.

PPE Table-1. Fatalities and Serious Injuries in Towns with Justice40 Tracts, 2017-2021

Justice40 Towns	Fatalities 2017-2021	Serious Injuries 2017-2021	Total Fatalities and Serious Injuries 2017-2021	% African American + Hispanic Population
New Haven	**89**	**615**	**704**	**63**
Bridgeport	**46**	**585**	**631**	**77**
Hartford	**84**	**424**	**508**	**82**
Waterbury	**62**	**298**	**360**	**62**
Stamford	24	240	264	41
Meriden	26	194	220	48
New Britain	20	147	167	59
Danbury	19	142	161	40
Norwalk	18	140	158	43
Bristol	17	138	155	22
Manchester	19	123	142	33
Fairfield	13	120	133	10
East Hartford	25	94	119	64
Norwich	17	100	117	32
West Haven	20	91	111	46
Middletown	13	89	102	26
Enfield	18	71	89	17
Shelton	13	67	80	15
Torrington	15	64	79	19
New Milford	8	68	76	14
Vernon	14	61	75	19
Groton	7	47	54	18
Byram (Greenwich)	16	37	53	15
Windham	8	44	52	47
New London	2	44	46	51
Derby	5	26	31	33
Ansonia	2	23	25	39

Sources: FARS Final Files 2017-2020; FARS Annual Report File 2021;
Connecticut Crash Data Repository; U.S. Census Bureau

PPE Figure-3. Racial and Ethnic Composition of Municipalities with Justice40 Tracts
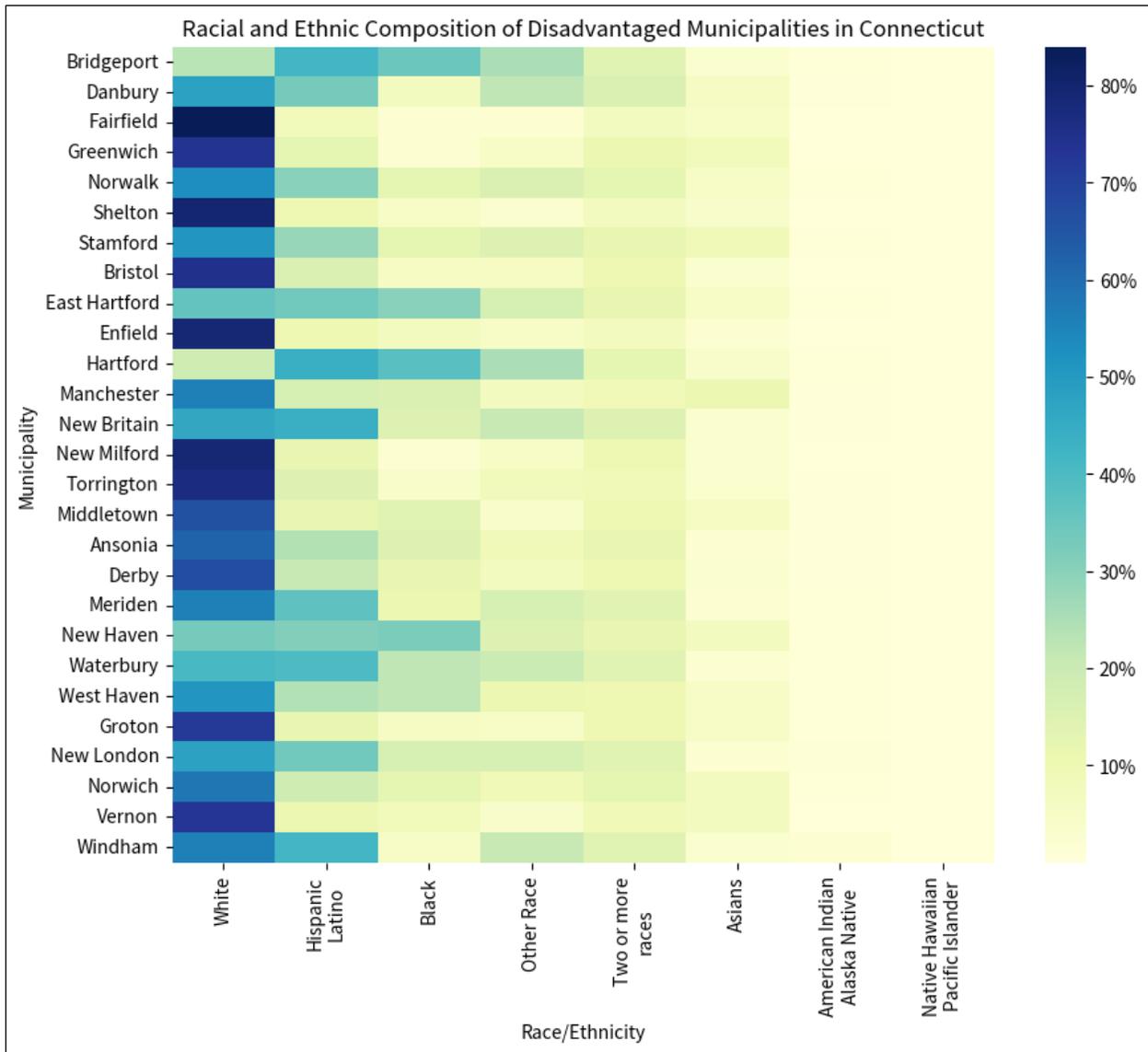
Source: U.S Census Bureau

PPE Table-2. Race and Ethnic Distribution in Towns with Justice40 Tracts

Town Name	Total Population	% White/ Caucasians	% Black or African Americans alone	% American Indian and Alaska Native alone	% Asians	% Native Hawaiian and Other Pacific Islander	% Other Race	% Two or more races	% Hispanic or Latino
Ansonia	18918	62%	15%	0.40%	2%	0.02%	9%	12%	24%
Bridgeport	148654	23%	35%	0.90%	3%	0.09%	25%	14%	42%
Bristol	60833	75%	6%	0.30%	3%	0.03%	6%	10%	16%
Danbury	86518	48%	7%	0.60%	6%	0.04%	22%	16%	33%
Derby	12325	67%	12%	0.40%	3%	0.09%	7%	10%	21%
East Hartford	51045	36%	30%	0.70%	5%	0.06%	17%	12%	34%
Enfield	42141	79%	7%	0.30%	2%	0.02%	5%	7%	10%
Fairfield	61512	84%	2%	0.10%	5%	0.02%	2%	7%	8%
Greenwich	63518	74%	2%	0.20%	8%	0.03%	5%	11%	13%
Groton	38411	72%	6%	0.80%	5%	0.19%	5%	10%	12%
Hartford	121054	19%	38%	0.80%	4%	0.07%	25%	13%	44%
Manchester	59713	56%	16%	0.50%	11%	0.06%	7%	9%	17%
Meriden	60850	56%	11%	0.70%	2%	0.08%	17%	14%	37%
Middletown	47717	66%	14%	0.40%	6%	0.03%	4%	10%	12%
New Britain	74135	46%	15%	0.50%	3%	0.06%	21%	15%	44%
New Haven	134023	33%	32%	1.00%	7%	0.10%	15%	12%	31%
New London	27367	48%	17%	1.10%	2%	0.13%	17%	14%	34%
New Milford	28115	79%	2%	0.20%	3%	0.02%	5%	10%	12%
Norwalk	91184	53%	13%	0.70%	5%	0.02%	16%	13%	30%
Norwich	40125	58%	13%	1.00%	7%	0.16%	9%	13%	19%
Shelton	40869	80%	5%	0.10%	4%	0.04%	3%	7%	10%
Stamford	135470	51%	13%	0.70%	9%	0.03%	15%	12%	28%
Torrington	35515	77%	4%	0.50%	3%	0.04%	8%	9%	15%
Vernon	30215	73%	8%	0.20%	7%	0.04%	4%	9%	11%
Waterbury	114403	41%	22%	0.70%	2%	0.09%	20%	14%	40%
West Haven	55584	51%	22%	0.70%	5%	0.02%	11%	10%	24%
Windham	24425	56%	5%	2.00%	3%	0.03%	21%	14%	42%

Source: U.S. Census Bureau

PPE Table-3. Justice40 Statistics for Bridgeport, Hartford, New Haven, and Waterbury

Municipality	Current asthma among adults aged greater than or equal to 18 years (percentile)	Housing burden(percentile)	Linguistic isolation (percentile)	Percent individuals aged 25 or over with less than high school degree	Percent of individuals below 200% Federal Poverty Line (percentile)	Proximity to hazardous waste sites (percentile)	Unemployment (percentile)
Bridgeport	70.38	91.09	91.97	26.12	72.44	91.09	91.12
Hartford	92	92.85	83.94	27.03	79.56	88.35	86.68
New Haven	95.32	93.58	83.53	19.47	83.84	91.63	87.74
Waterbury	95.25	91.65	83.85	24.6	82	86.6	85.85

Source: Justice40 Database

Triennial HSP Engagement Outcomes

Non-white and less affluent neighborhoods are historically more likely to have the fewest transportation choices. These communities are more likely to have mobility obstacles to reach jobs, schools, and opportunities and more likely to be exposed to the danger of vehicles speeding on roads. For many years, government policies, most notably the Federal-Aid Highway Safety Act of 1956, have reinforced these obstacles, building highways through historically Black and Brown neighborhoods, displacing communities, and cutting them off from one another.

PPE Figure-4 highlights the historical redlining in the greater Hartford region, Waterbury, New Haven, and the Stamford region. According to Cornell Law School, defines the term, *"[r]edlining can be defined as a discriminatory practice that consists of the systematic denial of services such as mortgages, insurance loans, and other financial services to residents of certain areas, based on their race or ethnicity."* Past policies, promoted by Federal interests, encouraged segregation based on racial and socioeconomic demographics. Although such policies are no longer legal, research shows that their legacy often persists well beyond their termination. As is evident from the PPE Table-3, the disadvantaged communities of Bridgeport, Hartford, New Haven, and Waterbury face higher societal burdens. As such, community residents distrust government officials, as their voices have been ignored in the past.

PPE Figure-4. Historical Redlined Areas in Connecticut
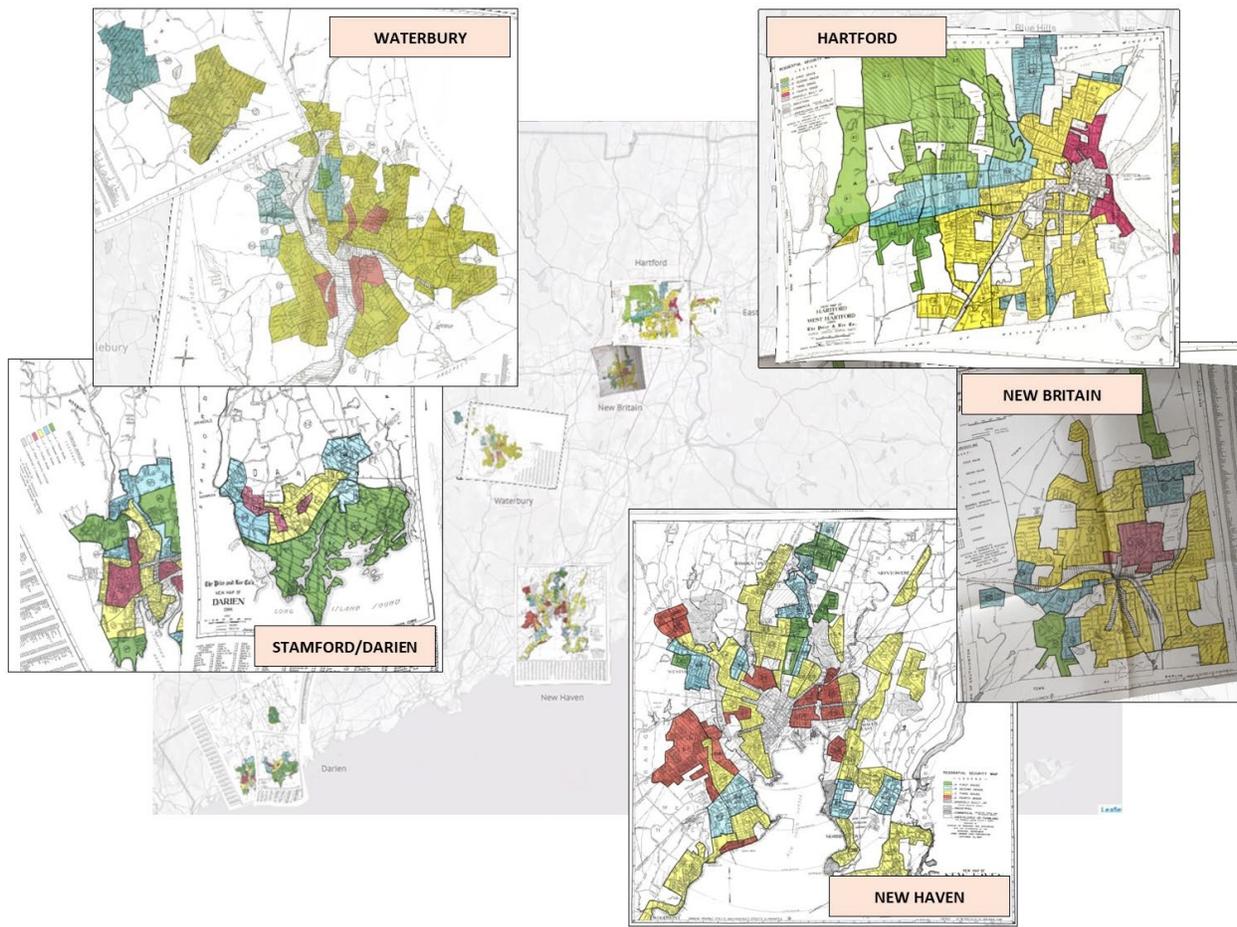
Source: Mapping Inequality (richmond.edu)

The Connecticut HSO has extensive relationships with many non-profit organizations and advocacy partners, including local governments, who have established relationships with underserved communities. The HSO leveraged these relationships to engage historically underserved communities, as these organizations have built relationships with the community on trust and shared purpose. The HSO uses a Community Solutions-Based Approach, a reimagined community engagement based on collaboration, knowledge sharing, and trust. This model uses the power of communities to apply their insights to frame the problem and then move forward to designing and developing the solution in conjunction with the HSO's partners. The HSO has committed itself to action, transparency, and reciprocity, and as such, has addressed community needs in developing this Triennial HSP and connected these communities to State resources and Federal resources.

After conducting a thorough analysis, the HSO found that fatalities and injuries disproportionately impacted certain populations and geographies. To identify these communities, the HSO utilized a range of data sources, including Justice40 and redlining data. By

doing so, the HSO was able to locate historically disadvantaged communities across Connecticut. This allowed the HSO to pinpoint the impact of past race-based policies and ensure that efforts were directed toward those who needed it most. It is essential to recognize that race is still the best predictor of social and economic outcomes in American society (Raj Chetty and others, Race and Economic Opportunity in the United States: an Intergenerational Perspective, The Quarterly Journal of Economics, Volume 135, Issue 2, May 2020, Pages 711–783). That is why the HSO wants to emphasize the significance of conducting a racial equity analysis. This approach is practical and effective because it supports the most marginalized group and benefits society as a whole. It is important to note that this approach does not exclude other vulnerable populations, such as those with disabilities or low income. Rather, it takes an intersectional standpoint and considers all factors contributing to inequality. By doing so, the HSO can work toward a more just and equitable society for all. Justice40 incorporates a comprehensive strategy that takes into consideration various factors, such as demographic data, transportation obstacles, impoverished areas, inadequate investments, healthcare, and proximity to hazardous waste sites. Justice40 aims to promote equity and justice throughout American society.

As noted in previous data analysis, the HSO identified its priority areas and then worked with its partners to reach out to those areas. The partners were utilized as agents to represent the State. Community members from Justice40 communities were asked a very important question: "What is the traffic safety problem in your neighborhood that you want to solve?" This question was critical in generating feedback incorporated into the Triennial HSP. The HSO did not rely on traditional models of community outreach such as surveys or focus groups. Instead, the HSO implemented the Community Solutions-Based model, where agents with established trusted relationships within the community went out to accessible and safe spaces for community members to communicate in a language that community members could understand. Community members know their neighborhood best, and it is because of this format the HSO, through its established partnerships, got feedback that community members would likely have felt uncomfortable sharing with a government official who was not known to the community. The Community Solutions-Based model is innovative and inclusive. It reverses hierarchical systems and includes historically excluded individuals. Adopting this model has led to trust, innovation, and unique insights from community members. It was crucial for the betterment of the community that the HSO adopted this model to create a more inclusive feedback structure. As the HSO continues to build trust with the HSO's partners and the community, the HSO must reciprocate by listening to their feedback and using it to create solutions that address their concerns. The HSO prioritized building trust and collaboration with the community and its partners by valuing the communities' feedback and incorporating it into the Triennial HSP's solutions/countermeasures/programs. The HSO fulfilled the essence of the Bipartisan Infrastructure Law Public Participation and Engagement requirement, as this approach ensured that all individuals' needs were being addressed and created a stronger, more impactful plan for everyone, especially for underserved and marginalized groups.

With respect to pedestrian and bicycle safety, the HSO has engaged with communities around the state and has done considerable work within some of the largest Justice40 communities, particularly Hartford, Bridgeport, Waterbury, New Britain, Manchester, New Haven, Norwalk and

East Hartford. As a result of the Community Solutions-Based Approach, community members have asked for additional pedestrian and bicyclist education and safety equipment. The community members are representative and reflective of their respective cities. Bridgeport, Hartford, New Haven and Waterbury are among Connecticut's top 5 locations for pedestrian fatalities. These cities have lower-income neighborhoods with major arterial roads built for higher speeds and increased traffic volumes at intersections, exacerbating dangerous conditions for pedestrians and cyclists. The term "pedestrian" encompasses road users who walk or roll, including those who use assisted mobility devices, such as wheelchairs, walking canes, walkers, and white canes. The HSO has leveraged its established relations with long term trusted partners and participated in activities including, but not limited to, helmet fittings with free helmets for children in need (using non-NHTSA funds), community-specific safety messaging, walk audits, bicycle rodeos, health information events, support to law enforcement implementing pedestrian safety initiatives, community input events, school and library activities, training on traffic-safety issues and more. The HSO has participated in community stakeholder meetings to help solicit input on safety concerns and possible improvements, for example in planning Hartford's "slow streets" and bicycle network, as well as traffic calming initiatives in Waterbury and New Britain. The HSO has also supported other organizations in their work to advance road safety, such as the Center for Latino Progress in Hartford and AARP. Additionally, the HSO partners participated in a number of community-based boards and groups, including the Farmington Valley Trails Council, the Bicycle and Pedestrian Advisory Board, Hartford's Complete Streets Committee, and Connecticut Regional Councils of Governments (CRCOGs) Complete Streets Committee, Active Transportation Committee, CTDOT Vision Zero Committee and Micromobility Team.

The work done by the HSO, and its partners is driven by the needs identified by the community. Cities, neighborhoods, and organizations request the HSO's involvement and express need for items such as helmets or technical assistance, including walk audits and community education events. At each event the HSO attends or organizes, staff talks with community members about what they see as their primary needs and concerns. Inequitable investments in these communities continue to affect neighborhood-level transportation today adversely and restrict their mobility. The community members do not have vehicles and rely on walking or bicycling for their transportation needs. Purchasing primary pedestrian and bicycle safety equipment such as bicycle helmets, shoe clip lights, LED lights for wheelchairs, and lights for bicyclists is out of reach due to income limitations. Largely, Traffic Safety Professionals have ignored essential life-saving equipment for non-drivers and have encouraged vehicle occupants to use their basic safety equipment, such as seat belts and child passenger safety seats, but have seen safety equipment for pedestrians and bicyclists as non-essential or "giveaways." Transportation professionals who spend more time behind the wheel do not understand or consider the needs of vulnerable road users. However, directly engaging the State's underserved communities has made it clear that safety equipment is a significant need. Community members also requested more in-person pedestrian and bicyclist education in addition to education through media messaging. The HSO uses this feedback to connect people with resources, plan future events and inform the triennial HSP.

With respect to occupant protection and child passenger safety, the HSO has partnered with several non-profit, faith-based organizations, day care centers, family service centers and

community-based organizations through the Waterbury PD, the Center for Injury and Violence Prevention at the Yale New Haven Hospital (YNHH) and Connecticut Children's Medical Center (CCMC), including but not limited to Carolyn's Place, Waterbury Police Activity League, Community Mental Health Affiliates, TEAM Inc., fire departments, town health departments, police departments etc. in economically disadvantaged and vulnerable at-risk people in each community. The program coordinators/managers at the Waterbury PD, YNHH and CCMC also collaborate with other area hospitals including St. Mary's Hospital and Griffin Hospital. These hospitals, non-profits and community-based organizations work statewide and through their outreach/public engagement efforts have reached several Justice40 communities including but not limited to Bridgeport, Norwalk, Groton, New Haven, Byram community in Greenwich, Derby, Ansonia, East Hartford, Meriden, Torrington, Waterbury, West Haven, and Middletown. There is a sizeable immigrant population in Connecticut from Ukraine, Haiti, Afghanistan, Asia and Brazil. The language barrier and differences in the traffic safety laws necessitates reaching out to these populations for community engagement and traffic safety education. In addition, the HSO also started a project with the Waterbury PD in collaboration with the organization called Hangtime. The meetings are held at various locations such as Halfway House, VFW halls etc. in the Justice40 communities of Waterbury and Bridgeport. This project addresses the traffic safety and child passenger safety educational and training needs of the people who have been incarcerated, an underserved population that is often overlooked. The HSO works very closely with the program coordinators at the Waterbury PD, YNHH and CCMC to reach the Justice40 communities not just in and around Waterbury and New Haven but statewide through the trusted community leaders. Feedback gathered from the communities during CPS training sessions, educational events and other events, suggests that there is lack of general child passenger safety awareness (laws, proper use, seat selection and general harnessing). A vast majority of the car seats are either installed improperly or used wrong and this is especially pronounced in communities with language and cultural barriers. The communities and the HSO safety partners have consistently expressed the need for additional certified CPS technicians and trainings to serve at locations in addition to those already served by the HSO, child passenger safety educational material, conventional car seats as well as car seats for children with special health care needs. The HSO constantly receives request for additional funding to provide conventional seats to those in need and then educate the parents and caregivers in order to keep kids safe on Connecticut's roads. The HSO safety partners regularly hear feedback from participants during training sessions about knowing people with wrong seats or no seats, but they are too afraid to go to the police departments or a clinic. There is a need to be able to reach these people through grass root mechanisms and community organization efforts to get them an appropriate car seat.

The special car seats are needed for a relatively short time frame such as in the Spica cast situation. These are extremely expensive and cost prohibitive for families in economically disadvantaged communities. This is being further exacerbated by many local ambulance companies not providing transportation to and from outpatient appointments when the parents do not have the proper seat. The program manager at the YNHH has requested funding to start a loner program for the special car seats to get the best return on investment and keep kids safe. This feedback from the community will be used to plan and allocate resources in the triennial HSP.

With respect to traffic enforcement services and racial profiling, since 2013, in conjunction with the Connecticut HSO, the Connecticut Racial Profiling Prohibition Project (CTRP3) has been working to engage community stakeholders to inform them of work and solicit feedback. The Connecticut Racial Profiling Prohibition Project's mission is to bring together community stakeholders and law enforcement to identify and address racial and ethnic disparities in traffic enforcement. The primary method for engagement has been through organized public forums and soliciting online feedback.

Public Forums: The Institute for Municipal and Regional Policy (IMRP) hired a part-time employee (20 hours a week) to coordinate 6 to 8 public forums across the state each year. This position was grant funded with the Section 1906 monies. Planning a forum requires a lot of on-the-ground effort by staff to ensure that the public is aware of the event. The underserved and Justice40 communities that the HSO is trying to reach do not always have access to commonly used communication methods such as social media. One of the greatest successes has come from developing relationships with faith-based organizations, non-profits, local advocacy groups, and other organizations that are trusted by the community. These relationships historically yield the best outcome for securing community attendance and support. A significant amount of time and effort is spent by the community outreach coordinator to identify local organizations with strong community reputations and develop meaningful relationships with the principles. Local community leaders are the most productive way to inform the community of a forum and specify any community needs, such as language access. It is important to identify a location for the event that is physically in the community and where community members are comfortable gathering. For example, forums have been hosted in church basements, local VFW halls, community centers, and public libraries, to name a few. The format for a forum includes a brief (10-minute) presentation about the CTRP3 project and the HSO highlights any research findings related to the community. The presentation is followed by a short, facilitated panel discussion. The purpose of the panel discussion is to set the tone for the event and provide information to the audience. Lastly, the HSO opens the discussion to the audience to solicit feedback or answer questions. The HSO reserves the largest amount of time for community feedback and questions. The forums have all been filmed or had copious notes recorded. The notes and video footage are a great way to review what was said so that staff can make improvements to the CTRP3 program. When an event has been filmed, the HSO posts the full program on the department's website. The full film can frequently be more than two hours, so a shorter version is posted that highlights the program.

Online Feedback: The CTRP3 project website is designed to allow visitors to submit comments or questions about the project. The site receives thousands of visitors each month. On average, the HSO receives between 8 and 10 comments submitted to the site each month. The website is designed to forward those comments directly to the project manager who can respond with the appropriate feedback or information. Information gathered from online feedback can help to identify locations for future public forums or events.

The HSO will tap into the existing community outreach infrastructure used by the CTRP3 project to broaden the topic to include traffic safety issues.

Ongoing Engagement Planning

With pedestrian and bicyclist safety initiatives, the HSO would like to be able to offer safety items, such as helmets and bicycle lights, to communities in need. The HSO receives many requests for these supplies, especially from Hartford schools who serve children without the means to obtain this equipment. In 2022, the HSO was able to distribute helmets to children at events such as school presentations and Hartford's DominGO, a community event in some of Hartford's most underserved areas. The HSO also sees the value in having more of the HSO's safety information translated into Spanish. Connecticut's cities have large Hispanic populations, and only some HSO materials are accessible to them. The HSO would like to provide resources for both adults and children in the language they are most comfortable using. With the addition of a full-time community outreach specialist (in addition to the existing program manager), the HSO plans to increase the HSO presence in Connecticut communities even further during the 2024-2026 triennial HSP period. This will give the HSO an opportunity to invest more in New Haven, Danbury, Norwich, and the other Justice40 communities where the HSO's reach has been somewhat limited. The HSO is aware that pedestrian and bicycle safety equipment stated above must be identified in a project agreement, including justification to purchase the safety equipment based on data-driven problem identification, including an educational component, and contains specific performance criteria that justify the safety benefit, such as a targeted population, the number of items for distribution, the method of distribution, and the educational component of the project. As such, the HSO will continue to work with the NHTSA Region 2 to accomplish these planned activities and projects. Based on the HSO's community solutions-based approach, the HSO has conducted or supported the following pedestrian and bicycling safety initiatives within Hartford, Bridgeport, Waterbury, New Britain, Manchester, New Haven, Norwalk, and East Hartford:

- Walking Audits
- Vision Zero Council
- The American Association of Retired Persons (AARP) & CCSU Age Inclusive Communities Event
- Safe Routes to School
- Translation/Interpretation (Spanish)

Part of the HSO's Public Participation and Engagement (PPE) goal is to increase its reach from the above Justice40 communities to all the other Justice40 Communities in the State. The HSO plans to add a grant funded position at Connecticut Children's Medical Center during the 2024-2026 triennial HSP planning period.

With the occupant protection and child passenger safety initiatives, the HSO looks forward to working with NHTSA Region 2 Office to achieve growth in the HSO's current levels of support for the CPS technician trainings, car seat educational material in both English and Spanish, linguistic services when reaching out to immigrant populations with language barrier or Hispanic communities, increased funding for additional car seats, especially the specialized car seats for children with special health care needs. This will allow the HSO to expand the occupant

protection and child passenger safety program to additional Justice40 communities during the 2024-2026 triennial HSP period. The HSO has received requests for support from several Justice40 towns including but not limited to Bridgeport, Hartford, East Hartford, Byram (Greenwich), Danbury, New Britain, Windham, Stamford, Derby, Somers, Putnam, Naugatuck and the general valley area, and New London. It is important to note that although the HSO has engaged disadvantaged communities in some of the towns already, certain towns have several disadvantaged tracts and the HSO needs to build the capacity to be able to serve them all. The need for CPS technician training and car seat education is important to all communities, especially to Justice40 communities. Several non-disadvantaged communities have also reached out to the HSO including but not limited to Beacon Falls, Naugatuck, Ridgefield, Southington, South Windsor, and Wethersfield. The HSO subgrantee at the YNHH has requested an additional grant funded position for FFY2024 to focus on the greater Bridgeport area. This position will address a large, underserved population in several Justice40 communities on the coastline from New Haven west to Byram (community in Greenwich). This new hire would be bilingual and someone who can assimilate into the community and provide education and assistance especially to the dominant Hispanic population in these areas. There is a need to add one to two additional grant funded position(s) in the subsequent FFY2025-2026 years, to expand to additional underserved population in the entire state. The East Hartford PD has also requested a part-time grant funded position during the triennial HSP period to expand their CPS services to the East Hartford community, which is a designated Justice40 community with 64 percent African American and Hispanic population.

Several car seat technicians as well as fire departments and police departments that provide car seat fitting services have voiced the need to the HSO to provide funding for calming objects such as sensory bags, weighted blankets, etc. to help calm autistic kids during seat check events. Funding support for these needs will be incorporated in the triennial HSP.

The HSO also plans to increase the support to the Waterbury PD to expand the traffic safety-related services to incarcerated citizens through the Hangtime organization. Starting 2024-2025, the Hangtime organization will be located in a building opposite the Courthouse in Bridgeport (a major Justice40 location) to make itself more accessible to the population most in need. The organization will be located in a building that will provide other resources to the incarcerated population for assimilation back into the community. The services provided by Hangtime will include traffic safety education including but not limited to impaired driving, distracted driving, occupant protection, child passenger safety education, providing car seats, school bus safety related education, etc.

Connecticut has a strong child passenger safety program, and the HSO looks to NHTSA Region 2 to support capacity building to expand the HSO's reach to disadvantaged communities.

The HSO has, thus far, collected feedback from communities via trusted partners, direct community feedback, social media comments, emails, phone calls, meetings, community co-creation groups etc. The HSO will expand its public participation and engagement by utilizing the existing community outreach infrastructure used by the CTRP3 project to complement its use of the Community Solutions-Based model. The CTRP3 already has the infrastructure in place to coordinate 6 to 8 public forums across the state on an annual basis. Although the forums have largely focused on the work of the racial profiling project, the HSO would design a program that

solicits feedback on broader traffic safety issues. For example, the HSO could broaden the topic to "Equity in Traffic Safety" and discuss the rise in roadways fatalities as it relates to the State's most vulnerable communities. The CTRP3 project is not only concerned about racial profiling, but ensuring Connecticut has a traffic safety system that reduces roadway fatalities and crashes and has a fair and equitable enforcement system.

A Connecticut law enacted in 1995 established a process for the development of Neighborhood Revitalization Zones (NRZs). The objective of the NRZ process is to revitalize neighborhoods through the collaborative involvement of residents, businesses, and government to determine the vision and priorities of the individual neighborhoods. The NRZ process provides a mechanism for community members, local stakeholders, along with local municipal officials, to develop a strategic plan to revitalize their neighborhoods. Municipalities wishing to participate in the process may establish zones in one or more of their neighborhoods by a resolution of their legislative body. There are approximately 30 active NRZs in Connecticut. The major Justice40 communities of Hartford, Bridgeport, Waterbury, and New Britain have the most active NRZs that meet on a monthly basis. New Haven does not have an active NRZ program, it developed "Community Management Teams." CMTs are neighborhood organizations that meet monthly and help plan community events and discuss public safety issues and other community concerns. New Haven has 12 CMTs that cover the entire city. The CTOPM maintains a list of active NRZs and the local community contact. In addition to discussing crime and blight, NRZs frequently discuss local traffic problems. At least one community police officer routinely attends the NRZ meetings to bring neighborhood concerns back to the department. In Hartford, NRZs have advocated for stop signs, speed bumps, and other traffic mitigation initiatives. In FFY2024, the HSO intends to hire a new Program Manager with expertise in public engagement. The HSO's new employee will attend the NRZ meetings on a regular basis to gather feedback regarding traffic safety issues/concerns. The HSO will identify specific neighborhoods to target for intervention based on routine analysis of traffic crash data and as indicated in the problem identification section for each program area, with special attention to Justice40 communities. The new employee will also explore other community groups for traffic safety engagement and expand the public engagement program. In addition, the HSO will consider contracting with a third party to conduct community co-creation groups on specific highway safety topics. Finally, the HSO will solicit local feedback through a dedicated highway safety page on the department's website.

In FFY2023, the HSO supported a part-time grant funded position at the Connecticut Police Chiefs Association (CPCA) to build and enhance the relationship between communities and police departments throughout the state, and this effort will continue during the triennial HSP period. There will be educational trainings through driving schools, driver education programs, AAA and the HSO regarding law enforcement practices during traffic stops.

In FFY2023, the HSO started the educational program for preventing roadside deaths in the town of Fairfield. During the FFY2024, the HSO will also expand its preventing roadside deaths educational program to the Justice40 town of Bridgeport and other Justice40 towns in Connecticut during the subsequent years. The HSO will also expand the impaired driving

educational program for teens/young drivers with the focus on high schools in the Justice40 communities during the FFY 2024-2026 HSP planning period

Apart from the already existing partnerships, the HSO plans to expand its working relations with the Connecticut Council of Governments. During the FFY2024 plan year, the HSO will be working with the South Central Regional Council of Governments (SCRCOG) to address traffic safety issues in the Region through a grant funded position. The SCRCOG region consists of a total of 15 towns including three Justice40 communities of New Haven, West Haven, and Meriden.

By employing a multi-faceted approach to traffic safety, the HSO is hopeful about bringing the behavioral change necessary to reduce traffic fatalities and injuries on Connecticut roadways especially for underserved groups.

1300.11 (b)(3) PERFORMANCE PLAN

The Performance Plan lists the highway safety performance targets for 2024-2026. *While the term 'Target' is used in accordance with the Federal Register, CTDOT and the HSO views these as guiding projections, and not an endorsement of any specific number of fatalities or serious injuries.*

	Performance Measure	Target Value 2026
1	C-1) Number of traffic fatalities (FARS)	270
2	C-2) Number of serious injuries in traffic crashes (State crash data files)	1300
3	C-3) Fatalities/VMT (FARS, FHWA)	0.850
4	C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions (FARS)	65
5	C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of 0.08 and above (FARS)	110
6	C-6) Number of speeding-related fatalities (FARS)	96
7	C-7) Number of motorcyclist fatalities (FARS)	55
8	C-8) Number of unhelmeted motorcyclist fatalities (FARS)	29
9	C-9) Number of drivers aged 20 or younger involved in fatal crashes (FARS)	31
10	C-10) Number of pedestrian fatalities (FARS)	55
11	C-11) Number of bicyclist fatalities (FARS)	3
12	B-1) Observed seat belt use for passenger vehicles, front seat outboard occupants (survey)	93%
13	Distracted driver fatalities	10
14	Percentage of Law Enforcement Agencies participating in the use of eCitation	100%
15	Traffic Stop data collection	100%
16	Roadside fatalities	5
17	Work Zone fatalities	2

Performance Measure C-1: Number of Traffic Fatalities
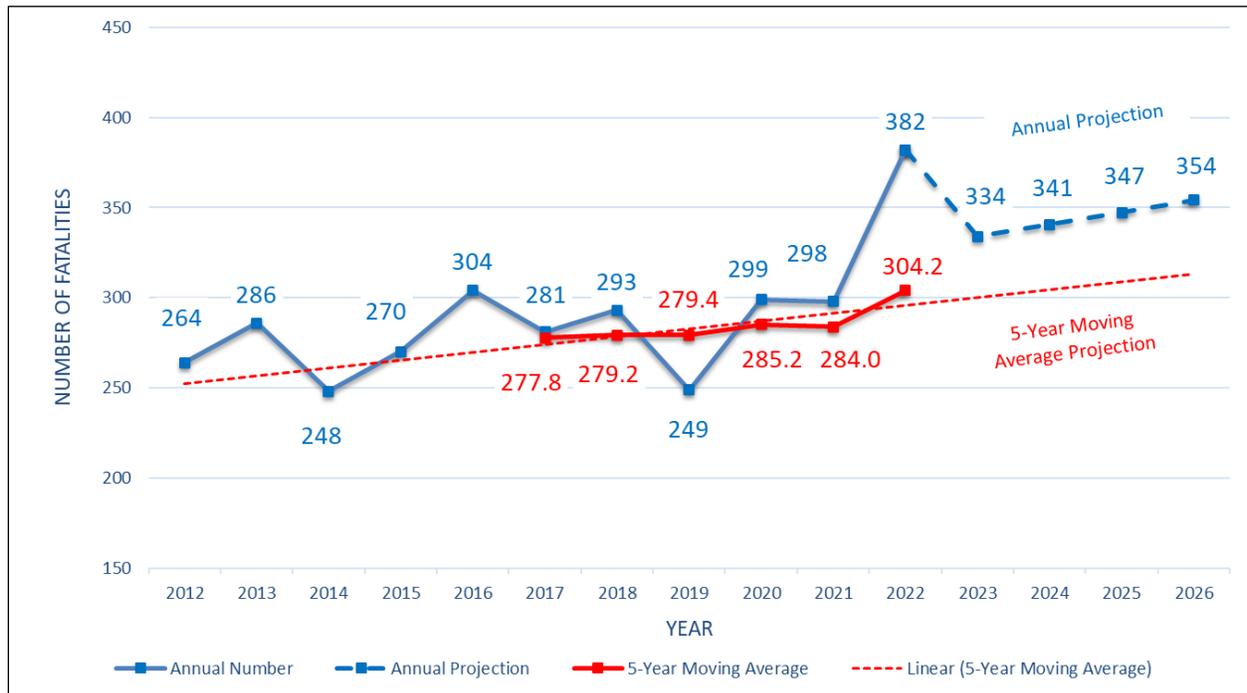
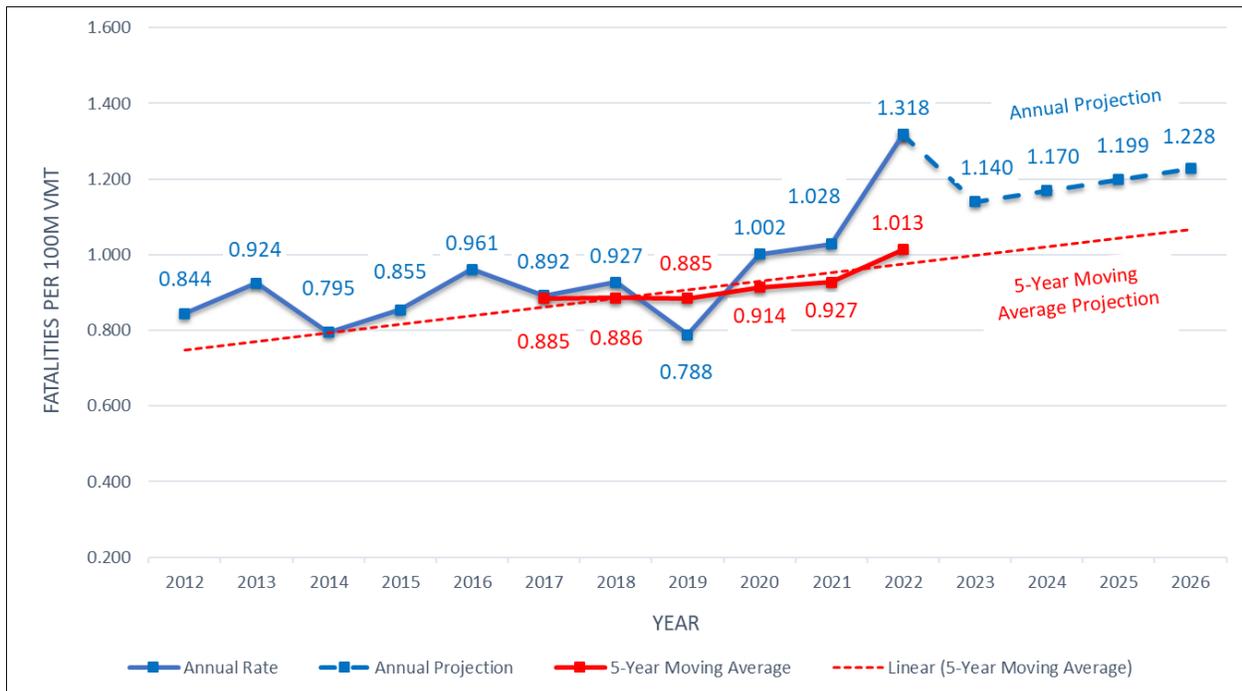Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021, Preliminary 2022 CTDOT data as of 04/10/2023
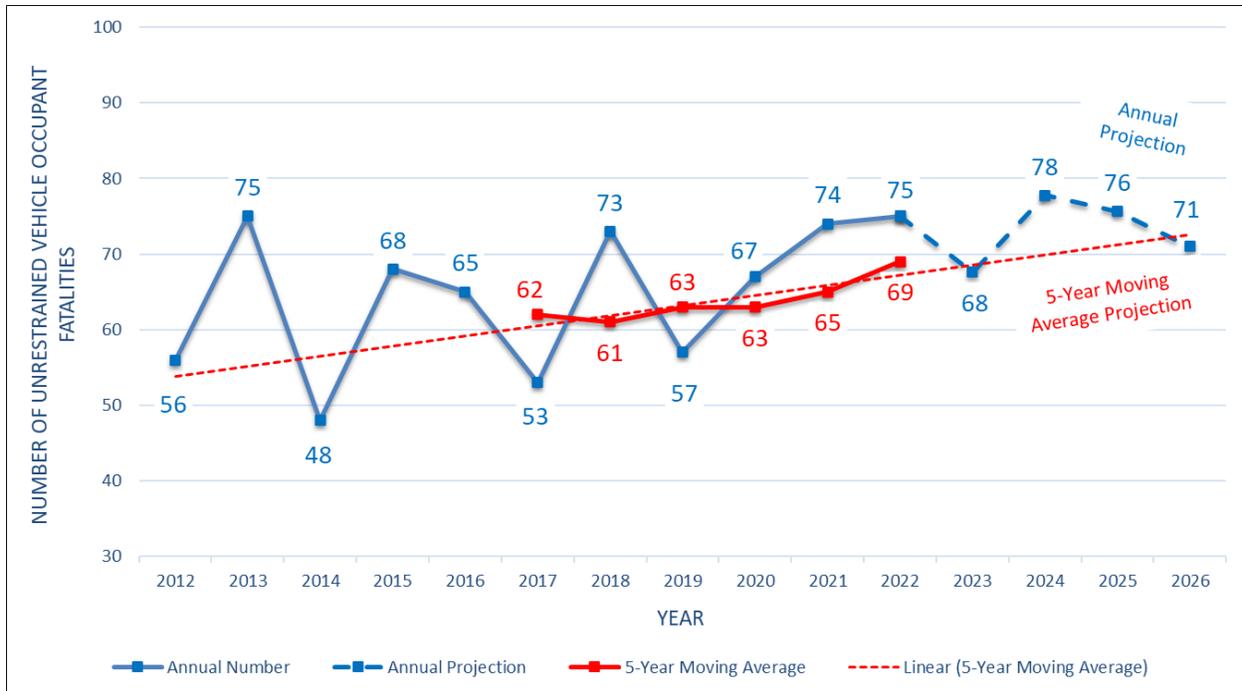
Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 270
Annual 2025 benchmark: 270 (2021-2025 five-year moving average)
Annual 2024 benchmark: 270 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	**2018**	**2019**	**2020**	**2021**	**2017-2021**	**2022**	**2023**	**2024**	**2025**	**2026**
281	293	249	299	298	284	382	131	341	347	354

Performance Target Justification: The annual number of fatalities has fluctuated from year to year. There was a declining trend until 2019 after a high point of 304 fatalities in 2016. However, the trend started to reverse in 2020 with the COVID-19 pandemic. The years 2020 and 2021 saw a spike in fatalities in Connecticut and was observed at the national level as well. The 2022 preliminary data suggest 382 fatalities, a dramatic 28.2 percent increase over 2021 in Connecticut. A time series regression analysis was conducted to project the likely number of fatalities for 2024-2026. Based on this regression analysis, the projected fatalities are approximately 354 for 2026, but there is a significant amount of statistical variance around the projection. The 5-year moving average trendline shows the projected fatalities of approximately 313 for the target year of 2026. Although the five-year moving average projection and the annual projection suggest a fatality number higher

than the target values, based on the feedback from stakeholders, including community members, CTDOT wants to set an aggressive target that will move the State back toward annual fatality levels experienced in 2019 or less.

Performance Measure C-2: Number of Serious Injuries in Traffic Crashes
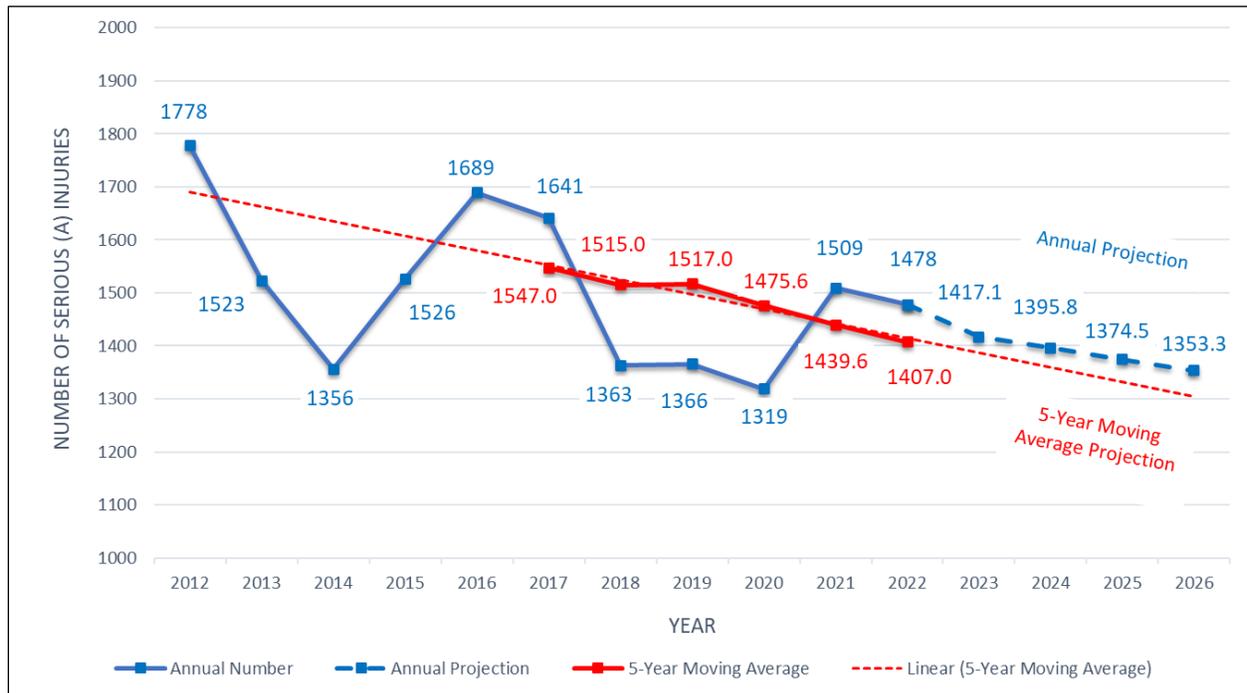
Notes: The definition of "Serious (A) Injury" was changed in 2015 to match MMUCC 4th edition. Prior to 2015, Serious (A) Injury was defined as Incapacitating Injury (prevents return to normal). In 2015, a Serious (A) Injury was defined as any injury other than fatal which results in one or more of the following: severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood; broken or distorted extremity (arm or leg); crush injuries; suspected skull, chest or abdominal injury other than bruises or minor lacerations; significant burns (second and third degree burns over ten percent or more of the body); unconsciousness when taken from the crash scene; paralysis
Source: Connecticut Crash Data Repository data as of 04/10/2023; 2022 data are preliminary

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 1300
Annual 2025 benchmark: 1300 (2021-2025 five-year moving average)
Annual 2024 benchmark: 1300 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
1641	1363	1366	1319	1509	1439.6	1478	488	1396	1375	1353

Performance Target Justification: The annual number of serious injuries showed a declining trend from 2018-2020 but the traffic serious injuries have increased over the past two years as an unexpected consequence of the COVID-19 pandemic. The five-year moving average trend is projected to decrease during the 2024-2026 HSP planning period with the annual projection of

1,353 while the 5-year moving average regression forecast is around 1,300 serious injuries in 2026. Based on the feedback from stakeholders, including community members, CTDOT wants to set an aggressive target that will move the state back toward serious injury levels experienced in 2020 and lower.

Performance Measure C-3: Fatalities/100M VMT

Note: The data points for 2022 are based on the 2021 VMT since the 2022 VMT information is not available at this time
Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021. Preliminary 2022 CTDOT data as of 04/10/2023

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 0.850
Annual 2025 benchmark: 0.850 (2021-2025 five-year moving average)
Annual 2024 benchmark: 0.850 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
0.892	0.927	0.788	1.002	1.028	0.927	1.318	-	1.170	1.199	1.228

Performance Target Justification: The annual fatality rate has fluctuated from year to year, but the annual data suggest an upward trend since the COVID-19 pandemic in 2020 and 2021. The number of fatalities continued to increase, reaching 1.028 fatalities/100 million VMT in 2021. Preliminary 2022 data suggest a further increase in the fatality rate. A time series regression analysis was conducted to project the likely number of fatalities from 2024-2026. Based on the regression analysis the projected fatality rate is approximately 1.228, but there is a significant amount of statistical variance around the projection. In parallel with the annual numbers, the 5-year moving average is exhibiting an upward trend. The trendline for the 5-year moving average suggests the fatality rate could increase to 1.065 in 2026. Based on the feedback from

stakeholders, including community members, CTDOT wants to set an aggressive target that will move the State back toward annual fatality levels experienced in 2019 or less.

Performance Measure C-4: Number of Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions

Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021, Preliminary 2022 CTDOT data as of 05/03/2023

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 65
Annual 2025 benchmark: 65 (2021-2025 five-year moving average)
Annual 2024 benchmark: 65 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
53	73	57	67	74	65	75	28	78	76	71

Performance Target Justification: The five-year moving average along with the annual projection were used as the basis for establishing the performance target using linear extrapolation. The annual preliminary State data for 2022 as well as the 5-year moving average suggest a spike in the number of unrestrained vehicle occupant fatalities. The annual as well as the five-year moving average projections for 2024-2026 suggest an increasing trend. Based on the feedback from stakeholders, including community members, Connecticut has chosen to set the aggressive target of 65 fatalities for the HSP 2024-2026 planning period.

Performance Measure C-5: Number of Fatalities in Crashes Involving a Driver or Motorcycle Operator with a BAC of 0.08 and Above
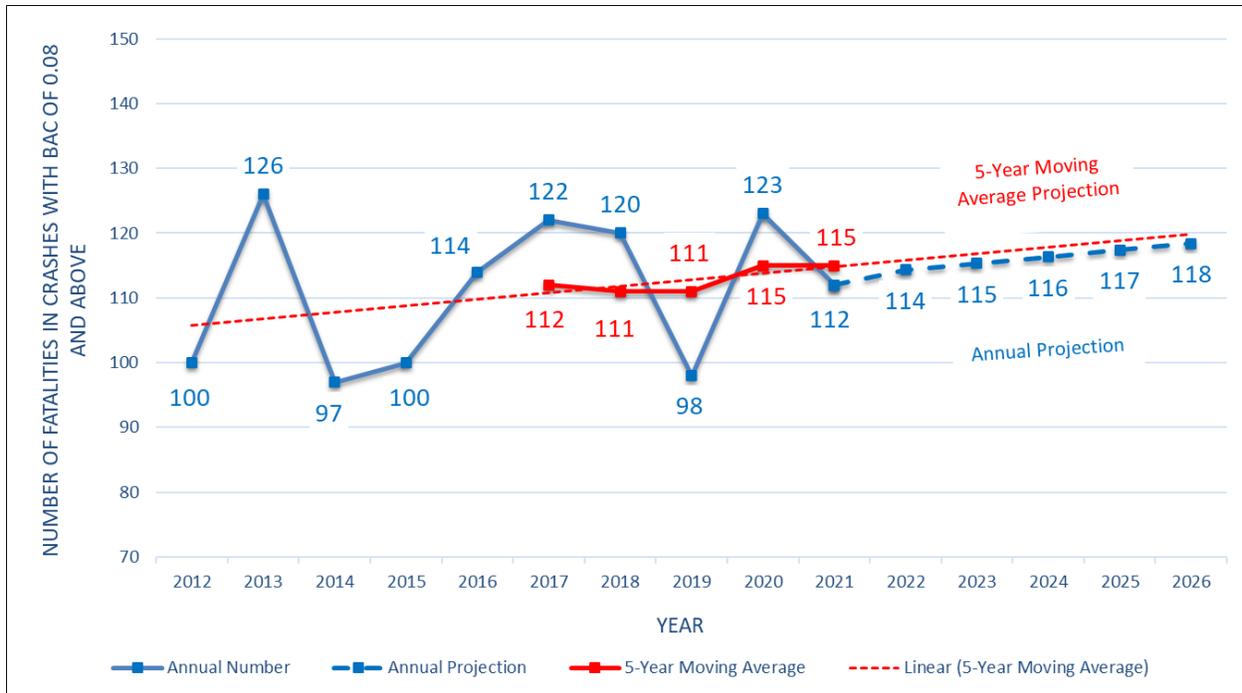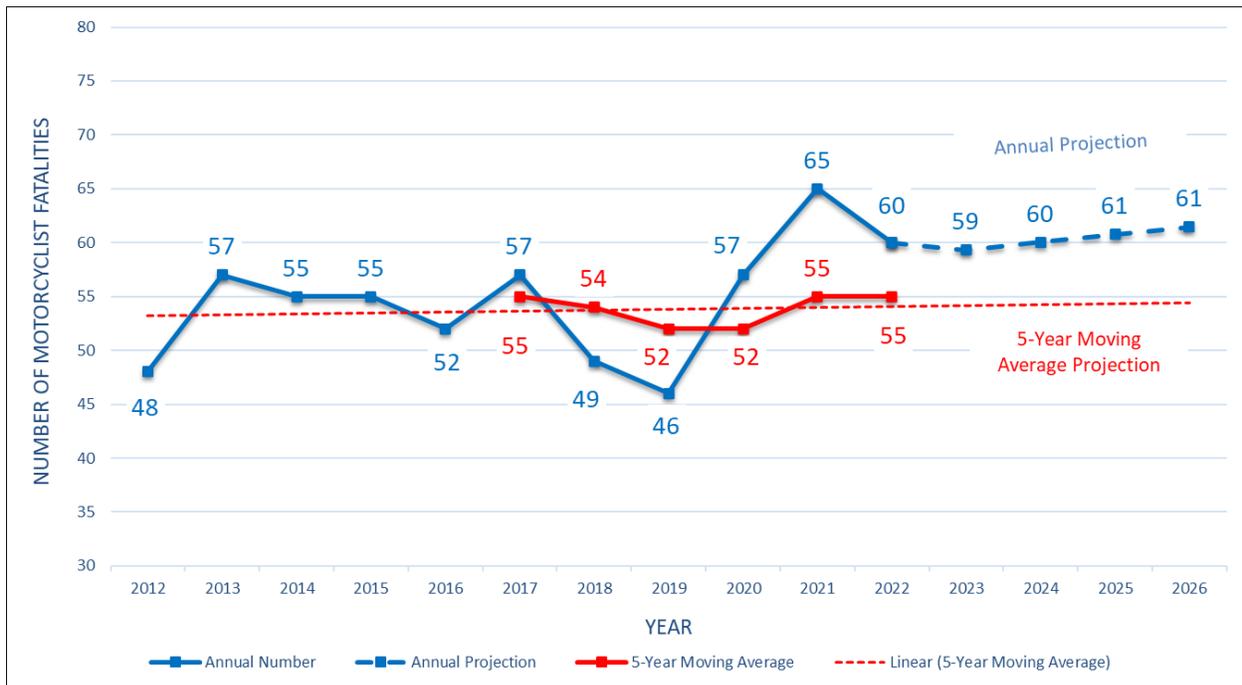

Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 110
Annual 2025 benchmark: 113 (2021-2025 five-year moving average)
Annual 2024 benchmark: 115 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
122	120	98	123	112	115	-	-	116	117	118

Performance Target Justification: The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. Although the five-year moving average projection and the annual projection suggest a fatality number higher than the target value of 115 for the 2024-2026 HSP planning period, based on the feedback from stakeholders, including community members, CTDOT wants to set an aggressive target that will move the State back toward annual fatality levels experienced in 2020 or less. Traffic fatalities have increased over the past two years as an unexpected consequence of the COVID-19 pandemic. Impaired driving has been suggested as one of the causes of increased traffic fatalities nationwide. The preliminary 2022 and 2023 State data were not included in the analysis due to uncertainty of the data for this measure at this time.

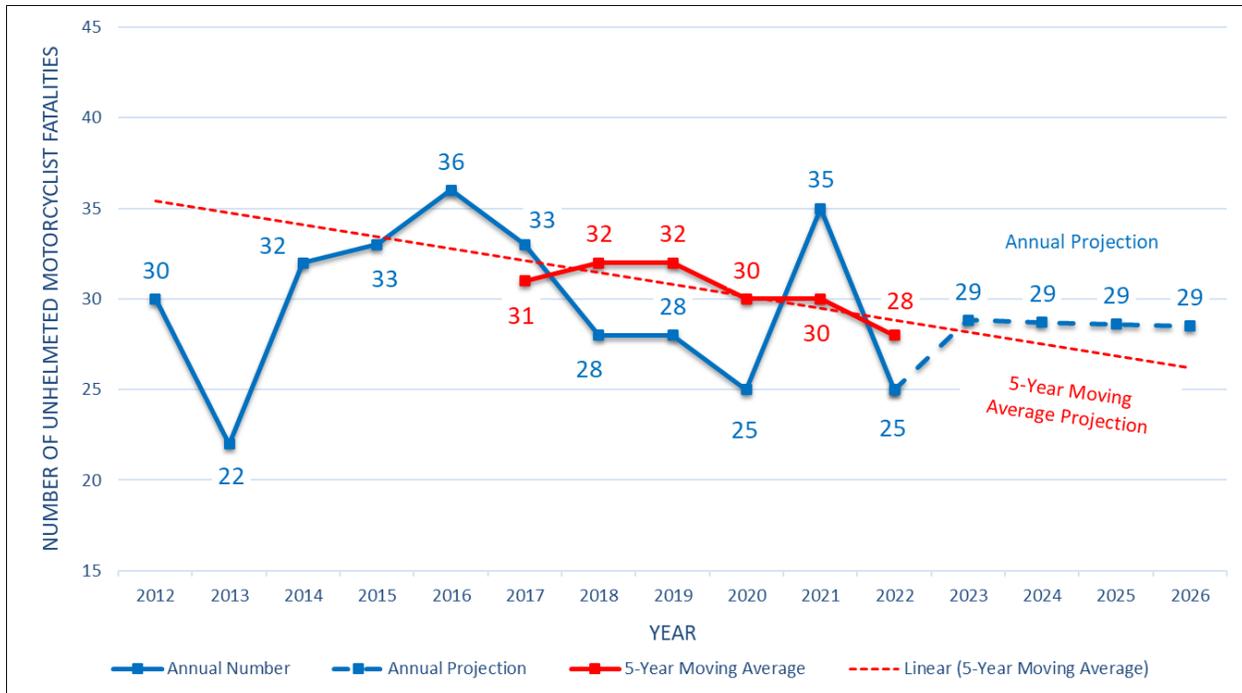# Performance Measure C-6: Number of Speeding-Related Fatalities
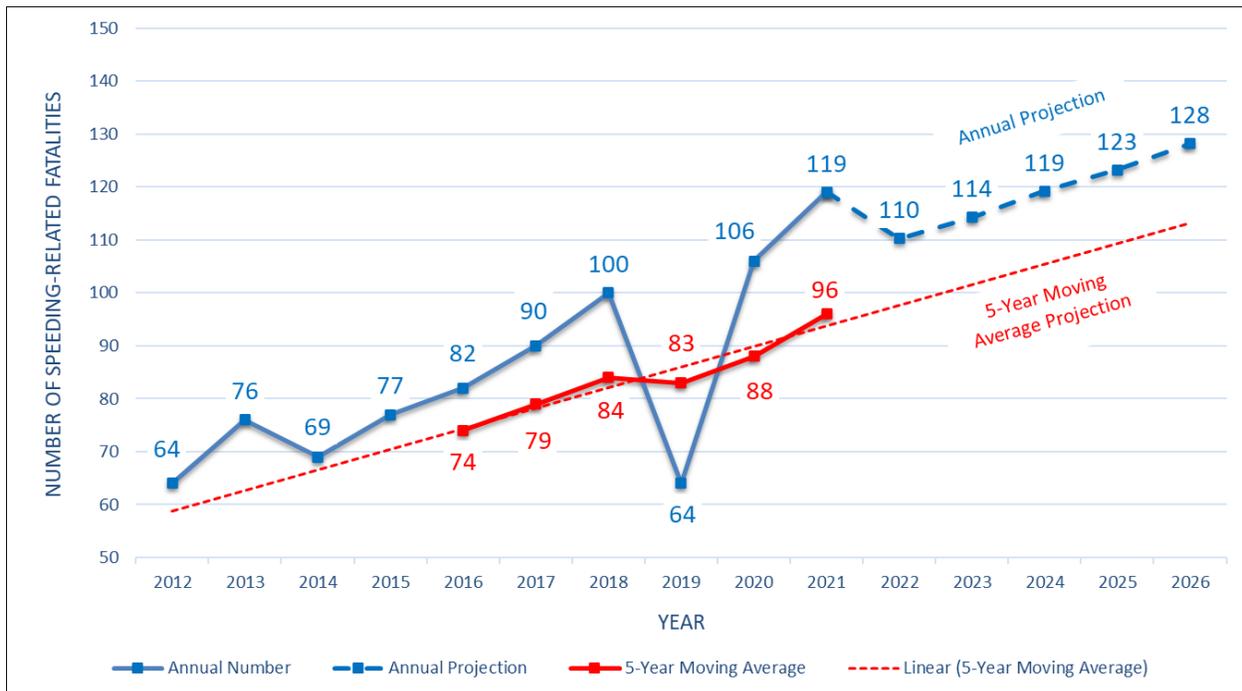
Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 96
Annual 2025 benchmark: 96 (2021-2025 five-year moving average)
Annual 2024 benchmark: 96 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
90	100	64	106	119	96	-	-	119	123	128

Performance Target Justification: The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. The five-year moving average and the annual projection suggest an increasing trend in speeding-related fatalities for the 2024-2026 HSP planning period. The annual projected number is 128 speeding-related fatalities in 2026. Based on the feedback from stakeholders, including community members, Connecticut has chosen to set the aggressive target of 96 fatalities for the HSP 2024-2026 planning period. Increased speeding has been observed nationally since the start of the COVID-19 pandemic and Connecticut has been no exception. The preliminary 2022 and 2023 State data were not included in the analysis due to uncertainty of the data for this measure at this time.

Performance Measure C-7: Number of Motorcyclist Fatalities

Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021, Preliminary 2022 CTDOT data as of 5/30/23

Performance Target: Maintain the five-year moving average ending in 2026 (2022-2026) to 55
Annual 2025 benchmark: 55 (2021-2025 five-year moving average)
Annual 2024 benchmark: 55 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	**2018**	**2019**	**2020**	**2021**	**2017-2021**	**2022**	**2023**	**2024**	**2025**	**2026**
57	49	46	57	65	55	65	12	60	61	61

Performance Target Justification: The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. The 2022 preliminary State data show a decrease in motorcycle fatalities, and the annual projection for the 2024 – 2026 planning period suggests that the motorcyclist fatalities will be 61. However, the five-year moving average trend is predicted to remain flat at 55 motorcyclist fatalities for the 2024-2026 planning period. Based on stakeholder feedback, Connecticut has chosen a maintenance target.

Performance Measure C-8: Number of Unhelmeted Motorcyclist Fatalities

Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021, Preliminary 2022 Connecticut Crash Data Repository data as of 05/03/2023

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 29
Annual 2025 benchmark: 29 (2021-2025 five-year moving average)
Annual 2024 benchmark: 29 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
33	28	28	25	35	30	25	1	29	29	29

Performance Target Justification: The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. There had been a progressive drop in the number of unhelmeted motorcyclist fatalities over the past couple of years but 2021 reversed the trend. The preliminary State data for 2022 suggest a reversal of the 2021 increase. The annual projection as well as the five-year moving average predicts fatalities between 25-30 during the 2024-2026 HSP planning period. With increased focus on public/driver education and awareness about motorcycle riders as well as efforts to increase motorcyclist training, Connecticut will strive to keep the 5-year moving average for unhelmeted motorcyclist fatalities at 29 during the 2024-2026 planning period.

Performance Measure C-9: Number of Drivers Aged 20 or Younger Involved in Fatal Crashes
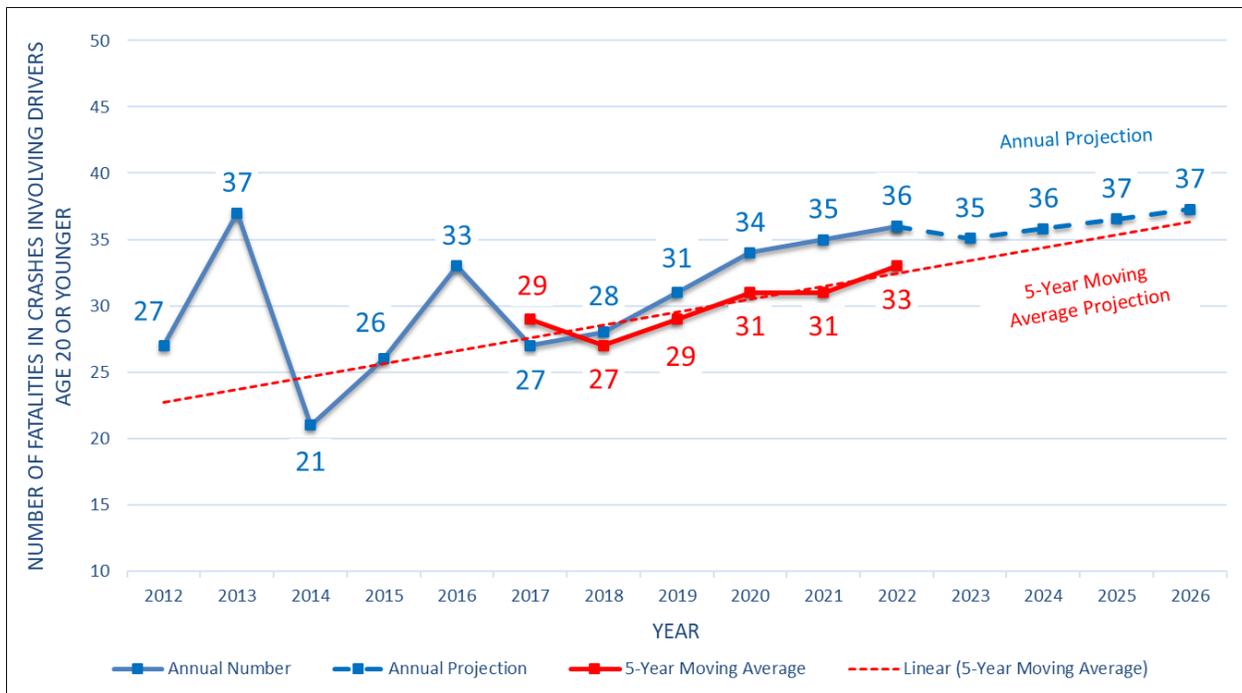
Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021, Connecticut Crash Data Repository preliminary 2022 data as of 6/22/23

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 31
Annual 2025 benchmark: 31 (2021-2025 five-year moving average)
Annual 2024 benchmark: 31 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
27	28	31	34	35	31	36	4	36	37	37

Performance Target Justification: The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. The five-year moving average and the annual projection suggest an increasing trend in young driver-related fatalities for the 2024-2026 HSP planning period. The annual projected number as well as the five-year moving average projection is approximately 37 fatalities in 2026. Based on the feedback from stakeholders, including community members, Connecticut has chosen to set the aggressive target of 31 fatalities for the HSP 2024-2026 planning period.

Performance Measure C-10: Number of Pedestrian Fatalities

Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021, Preliminary 2022 CTDOT data as of 5/30/23

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 55
Annual 2025 benchmark: 55 (2021-2025 five-year moving average)
Annual 2024 benchmark: 55 (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
49	59	54	59	53	55	75	24	74	68	79

Performance Target Justification: The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. The five-year moving average and the annual projection suggest an increasing trend in pedestrian fatalities for the 2024-2026 HSP planning period. The annual projected number is approximately 79 whereas the five-year moving average projection is approximately 68 fatalities in 2026. Based on the feedback from stakeholders, including community members, Connecticut has chosen to set the aggressive target of 55 fatalities for the HSP 2024-2026 planning period.

Performance Measure C-11: Number of Bicyclist Fatalities
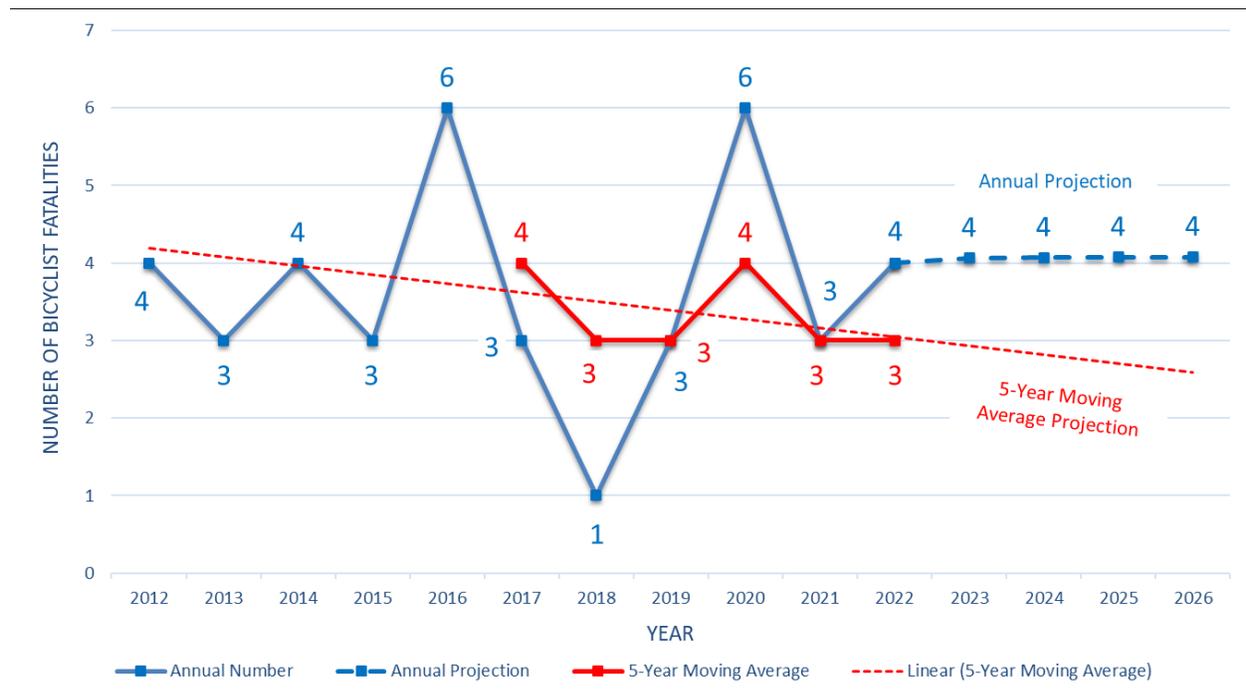
Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021, Preliminary 2022 CTDOT data as of 5/30/2023

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 3 or under
Annual 2025 benchmark: 3 or under (2021-2025 five-year moving average)
Annual 2024 benchmark: 3 or under (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
3	1	3	6	3	3	4	1	4	4	4

Performance Target Justification: The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. There was a marked increase in bicyclist fatalities in 2020 followed by a drop in 2021. The preliminary State data for 2022 show fewer bicyclist fatalities compared to 2020 but one higher than 2021. The annual projection suggests that the bicyclist fatalities will stay flat at approximately four fatalities and the five-year moving average projection suggests that the bicyclist fatalities will be approximately between 2-3 during the 2024-2026 planning period. Based on the feedback from stakeholders, including community members, Connecticut has chosen to set the target at 3 or under.

Performance Measure B-1: Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (Survey)

Belt Use, Connecticut vs. National

CT — USA
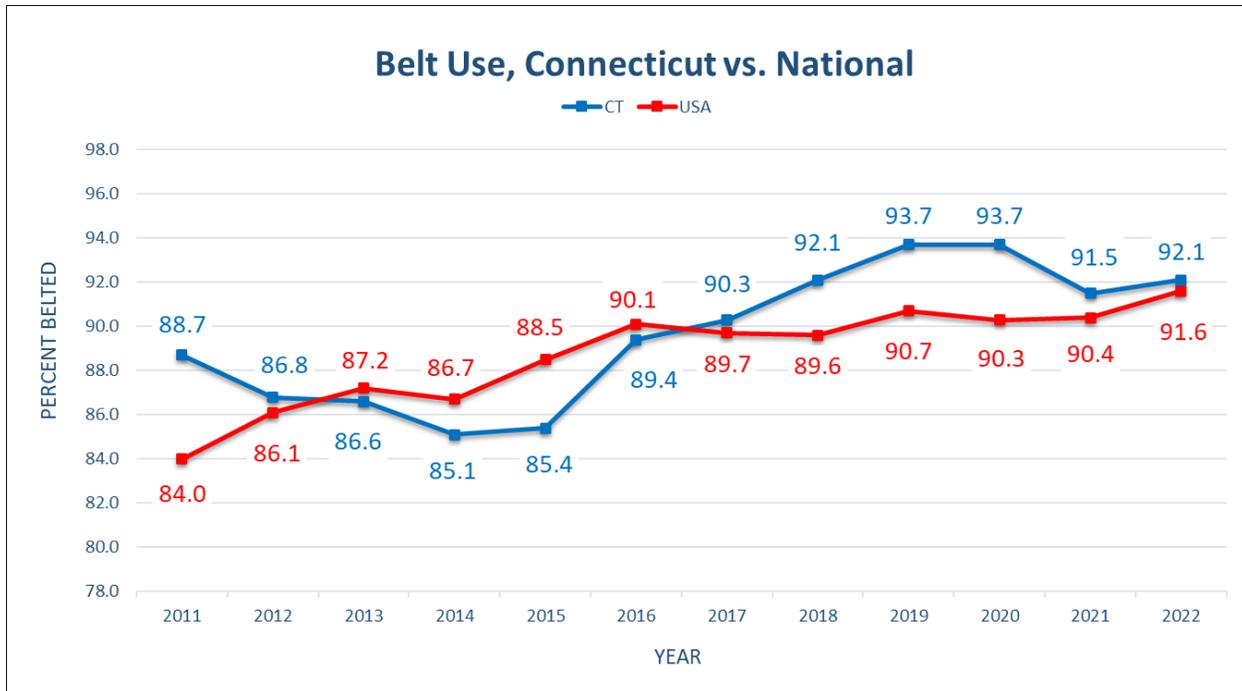
Performance Target: To attain a statewide observed seat belt use rate of 93.0 percent or above by 2026
Annual 2025 benchmark: 93 percent or above
Annual 2024 benchmark: 93 percent or above

Performance Target Justification: Observed seat belt use rate peaked in Connecticut in 2019, to 93.7 percent. The NHTSA CARES Act Waiver Notice issued on April 9, 2020, waived the requirement to conduct the annual seat belt survey in 2020. Therefore, the HSO did not conduct the 2020 seat belt survey due to the ongoing COVID-19 pandemic and used the 2019 observed seat belt use rate data. The seat belt use rate declined due to the pandemic in 2021 but Connecticut has seen a progressive increase in 2022. Connecticut chooses to attain a target of 93 percent seat belt use rate during the 2024-2026 planning period.

Performance Measure: Distracted Driver Fatalities
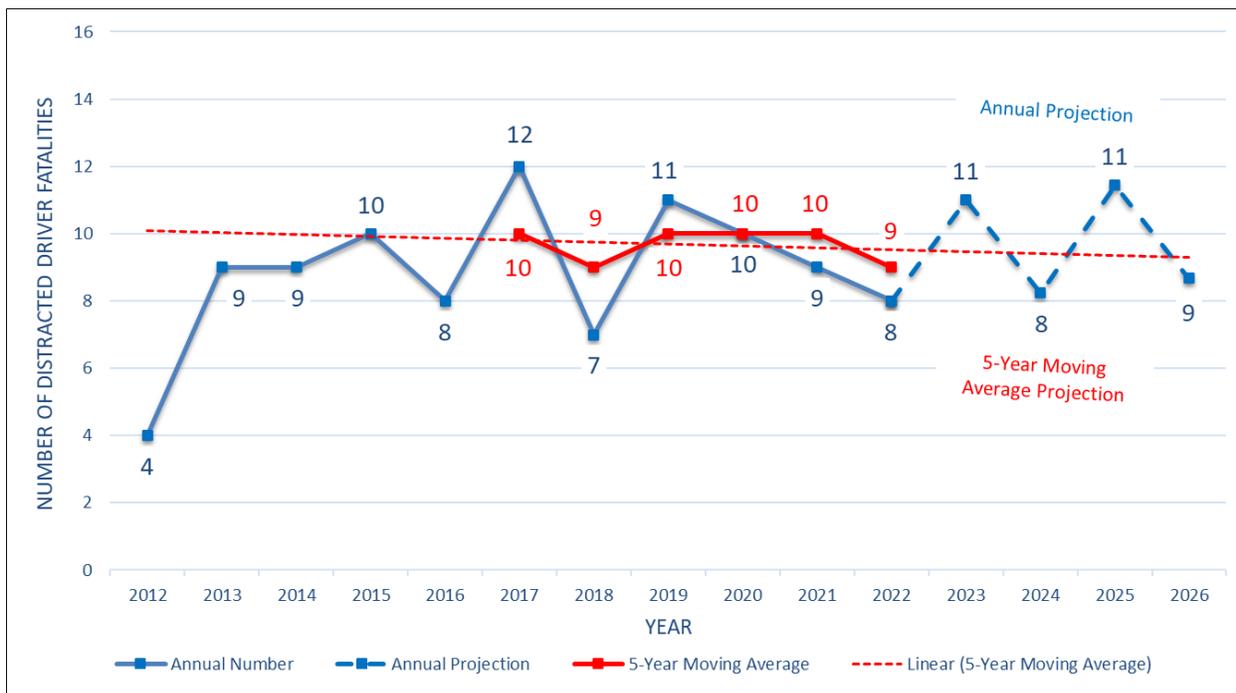
Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021, Connecticut Crash Data Repository 2022 data as of 6/22/23

Performance Target: Maintain the five-year moving average ending in 2026 (2022-2026) to 10 or under

Annual 2025 benchmark: 10 or under (2021-2025 five-year moving average)
Annual 2024 benchmark: 10 or under (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
12	7	11	10	9	10	8	0	8	11	9

Performance Target Justification: The HSO adopted this new performance measure for distracted driving in 2022. The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. The number of distracted driver fatalities has fluctuated over the years with a decreasing trend since 2020. The annual projection suggests that the number of distracted driver fatalities will fluctuate between 8-11 fatalities during the 2024-2026 HSP planning period. The five-year moving average projection shows that there will be approximately 9-10 fatalities during the same period. Based on the projections, based on the feedback from stakeholders, including community members, Connecticut has chosen a maintenance target of 10 for the 2024-2026 planning period.

Performance Measure: Percentage of Law Enforcement Agencies Participating in the Use of eCitation

Performance Target: To increase the number of law enforcement agencies using the eCitation system to 100 percent in 2026
Annual 2025 benchmark: 90 percent
Annual 2024 benchmark: 80 percent

Performance Target Justification: Connecticut's goal is to increase the number of agencies using the eCitation system from the current 68 percent to 100 percent during the 2024-2026 HSP planning period. Out of 95 law enforcement agencies, 65 agencies use the eCitation system (64 Municipal and one University Police Department) while 30 agencies continue to use paper tickets. Building on the capability to submit attachments and the expansion of eCitation to allow for direct submission of reports (both arrest and crash), the expected result is an increase in Timeliness, Accuracy and Uniformity with 100 percent participation.

Law Enforcement Agencies NOT Using eCitation (30)		Law Enforcement Agencies Using eCitation (65)		
Brookfield	Suffield	Ansonia PD	Guilford	Rocky Hill
Bloomfield	Thomaston	Avon	Hamden	Seymour
Canton	Vernon	Berlin	Madison	Shelton
Cromwell	Waterford	Bethel	Manchester	Simsbury
Darien	Weston	Branford	Meriden	South Windsor
Derby	Westport	Bridgeport	Middletown	Southington
East Lyme	Wethersfield	Bristol	Milford	Stamford
Easton	Winchester	CCSU	Monroe	Stratford
Granby		Cheshire	Naugatuck	Torrington
Groton City		Clinton	New Britain	Trumbull
Groton Long Pt		Coventry	New Canaan	Wallingford
Hartford		Danbury	New Milford	Waterbury
Ledyard		East Hampton	Newington	Watertown
Middlebury		East Hartford	Newtown	West Hartford
New Haven		East Haven	North Branford	West Haven
New London		East Windsor	North Haven	Willimantic
Norwich		Enfield	Norwalk	Wilton
Plainfield		Fairfield	Old Saybrook	Windsor
Portland		Farmington	Orange	Windsor Locks
Putnam		Glastonbury	Plainville	Wolcott
Ridgefield		Greenwich	Plymouth	Woodbridge
Stonington		Groton Town	Redding	

Performance Measure: Traffic Stop Data Collection

Performance Target: To have 100 percent of the 107 police agencies that collect and submit traffic stop records electronically at the time of the stop in 2026
Annual 2025 benchmark: 100 percent
Annual 2024 benchmark: 99 percent

Performance Target Justification: At the outset of the project in 2012, only 27 police agencies were reporting traffic stop data to the State. Of those 27 agencies, most were not reporting electronically (less than 10). The current (updated) law that went into effect on October 1, 2013, requires police agencies to submit data for each traffic stop in an electronic format on a monthly basis. Previously, there were 105 police agencies that were required to submit traffic stop records. Currently, there are 107 police agencies that must submit traffic stop records. All data are to be submitted electronically, but that does not mean that all agencies are collecting data electronically at the time of the stop. Some departments collect records on paper forms and then have a records clerk enter the information into an electronic system. At present, 106 of the 107 police agencies report data electronically at the time of the stop. Below is a breakdown of the percentage of agencies that reported data (complied with the law) and the percentage of agencies that reported data electronically at the time of the stop (in other words, the information was not entered at a later date by a records clerk).

Reporting Year	Number of agencies required to report traffic stop records to the State	Percentage of agencies reporting data	Percentage of agencies reporting data electronically at time of stop
10/1/2013 to 9/30/2014	105	96%	76%
10/1/2014 to 9/30/2015	105	100%	81%
10/1/2015 to 9/30/2016	106	97%	93%
10/1/2016 to 9/30/2017	106	99%	93%
10/1/2017 to 9/30/2018	107	100%	94%
10/1/2018 to 9/30/2019	107	100%	97%
10/1/2019 to 9/30/2020	107	100%	98%
10/1/2020 to 9/30/2021	107	100%	99%
10/1/2021 to 9/30/2022	107	100%	99%
10/1/2022 to Present	107	100%	99%

Performance Measure: Roadside Fatalities
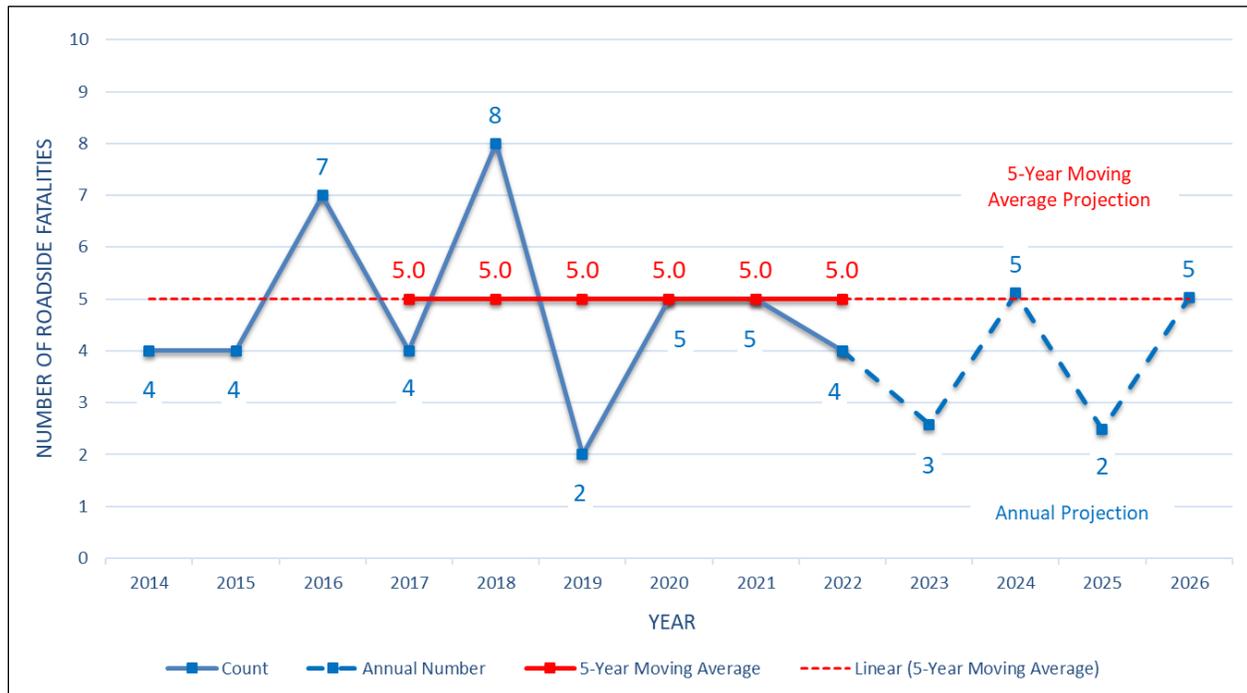
Note: 2014 earliest FARS data available
Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021;
Connecticut Crash Data Repository 2022 (as of 06/21/2023)

Performance Target: Maintain the five-year moving average ending in 2026 (2022-2026) to 5 or under
Annual 2025 benchmark: 5 or under (2021-2025 five-year moving average)
Annual 2024 benchmark: 5 or under (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	**2018**	**2019**	**2020**	**2021**	**2017-2021**	**2022**	**2023**	**2024**	**2025**	**2026**
4	8	2	5	5	5	4	0	5	2	5

Performance Target Justification: The HSO is adopting this new performance measure for roadside fatalities starting FFY2024. The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. The number of roadside fatalities has fluctuated over the years with a decreasing trend since 2018. The annual projection suggests that the number of roadside fatalities will fluctuate between 2-5 fatalities during the 2024-2026 HSP planning period. The five-year moving average is projected to be flat with 5 fatalities during the same period. Based on the projections, and stakeholder feedback, Connecticut has chosen a target of 5 for the 2024-2026 planning period.

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Performance Measure: Work Zone Fatalities
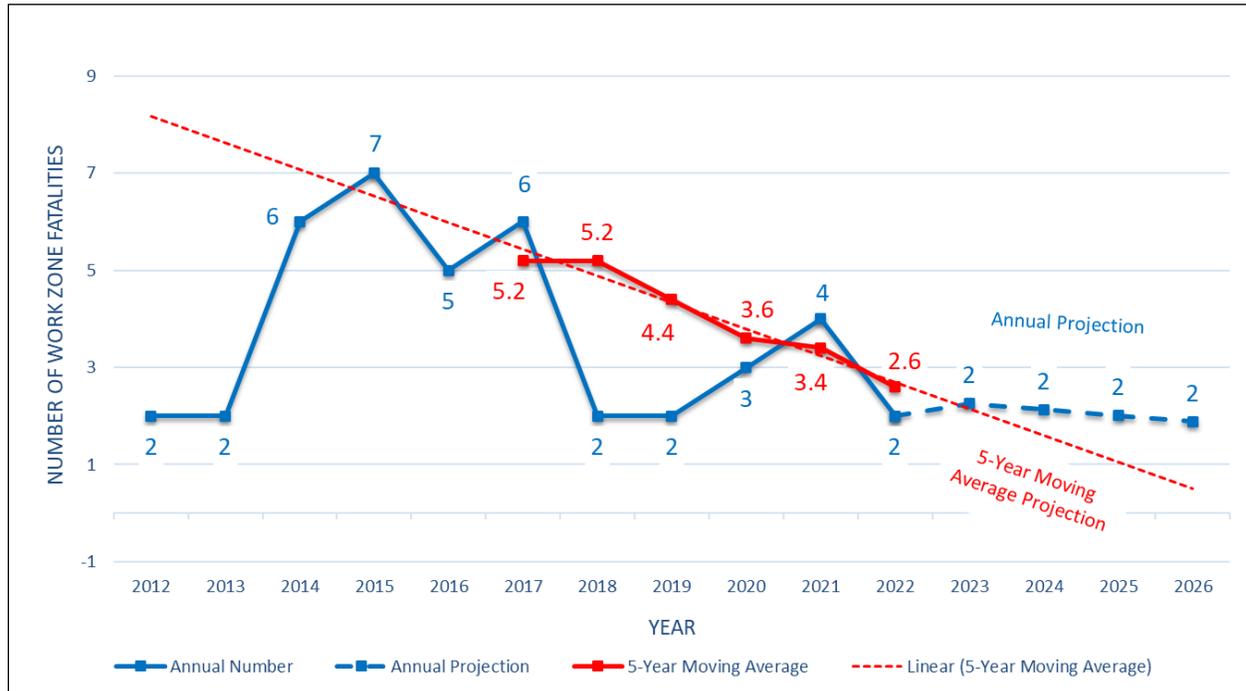
Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021, Preliminary 2022 CTDOT data as of 6/23/2023

Performance Target: Maintain the five-year moving average ending in 2026 (2022-2026) to 2 or under
Annual 2025 benchmark: 2 or under (2021-2025 five-year moving average)
Annual 2024 benchmark: 2 or under (2020-2024 five-year moving average)

Actual					5-Year Avg	Preliminary	In Progress	Annual Projections		
2017	2018	2019	2020	2021	2017-2021	2022	2023	2024	2025	2026
6	2	2	3	4	3	2	1	2	2	2

Performance Target Justification: The HSO is adopting this new performance measure for work zone fatalities starting FFY2024. The five-year moving average and the annual projection were used as the basis for establishing the performance target using linear extrapolation. The number of work zone fatalities has fluctuated over the years. The annual projection suggests that there will be approximately two (2) work zone fatalities during the 2024-2026 HSP planning period. The five-year moving average is projected to be one (1) fatality during the same period. Based on the projections, and stakeholder feedback, Connecticut has chosen a target of 2 or under for the 2024-2026 planning period.

Performance Measures Certification

For FFY2024, NHTSA and FHWA waived the requirements that the State HSP performance targets should be identical to the State DOT targets for common performance measures (fatality, fatality rate, and serious injuries). However, the CTDOT HSO certifies that the State HSP performance targets are identical to the CTDOT targets for common performance measures (fatality, fatality rate, and serious injuries) reported in the HSIP annual report, as coordinated through the State SHSP.

Grant Program Activity Report

A-1) Number of seat belt citations issued during grant-funded enforcement activities
- Seat belt citations: 2,779
- Fiscal Year: 2022

A-2) Number of impaired driving arrests made during grant-funded enforcement activities
- Impaired driving arrests: 551
- Fiscal Year: 2022

A-3) Number of speeding citations issued during grant-funded enforcement activities
- Speeding citations: 7,934
- Fiscal Year: 2022

1300.11 (b)(4) COUNTERMEASURE STRATEGY FOR PROGRAMMING FUNDS

Impaired Driving

Countermeasure Strategy ID-1

Countermeasure Strategy: To reduce deaths and injuries resulting from persons driving motor vehicles while impaired by alcohol or a controlled substance by increasing high visibility enforcement.

Problem Identification:

- Based on research by the Connecticut Department of Mental Health and Addictive Services (CTMHAS), the State is facing high misuse areas of concern including alcohol, heroin/fentanyl/opioids, cannabis/marijuana, and prescription drugs.
- Connecticut has experienced a steady rise in alcohol impaired fatalities.
- Young adults in Connecticut ages 18-25 have the highest rate of reported past month alcohol use (65.6%), followed closely by those aged 26 or older (64.6%).
- There has been a marked increase in drug-driving fatalities where drivers involved in a fatal crash tested positive for one or more drugs; many toxicology reports for drivers killed in crashes often show a mix of prescription drugs.
- Connecticut is seeing an increase in cannabis/marijuana misuse due to recreational legalization and the declining perception of associated risk; cannabis use is widespread among young adults and adolescents in Connecticut.
- Polysubstance use is also a growing concern in many age and socioeconomic groups.

Countermeasures and Justification:

- 2.1 Publicized Sobriety Checkpoints – CTW 5 stars citation
- 2.2 High-Visibility Roving Patrols – CTW 4 stars citation
- 2.3 Breath Test Devices – CTW 4 stars citation
- 2.4 Passive Alcohol Sensors – CTW 4 stars citation

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 115
Annual 2025 benchmark: 115 (2021-2025 five-year moving average)
Annual 2024 benchmark: 115 (2020-2024 five-year moving average)

Estimated 3-Year Funding Allocation: $6,500,000.00; BIL and FAST Act 154AL

Project Considerations:

- Based on data analysis, identify areas with a high frequency of DUI incidents, prioritizing the most severe problem locations; this initiative will also cover Justice40 towns, ensuring that underserved communities are included in the effort
- Sociodemographic data
- Location(s) with overrepresented impaired crashes
- Affected communities, potentially affected communities
- Public Participation and Engagement (Community members' feedback from Justice40 areas)

Uniform Guidelines: Highway Safety Program Guideline No. 8 Impaired Driving – Implementing multiple countermeasures from No. 8 under the Criminal Justice System to achieve both specific and general deterrence of impaired driving.

Countermeasure Strategy ID-2

Countermeasure Strategy: To reduce deaths and injuries resulting from persons driving motor vehicles while impaired by alcohol or a controlled substance by enforcing penalties.

Problem Identification:

- Based on research by the Connecticut Department of Mental Health and Addictive Services (CTMHAS), the State is facing high misuse areas of concern including alcohol, heroin/fentanyl/opioids, cannabis/marijuana, and prescription drugs.
- Connecticut has experienced a steady rise in alcohol impaired fatalities.
- Young adults in Connecticut ages 18-25 have the highest rate of reported past month alcohol use (65.6%), followed closely by those aged 26 or older (64.6%).
- There has been a marked increase in drug-driving fatalities where drivers involved in a fatal crash tested positive for one or more drugs; many toxicology reports for drivers killed in crashes often show a mix of prescription drugs.
- Connecticut is seeing an increase in cannabis/marijuana misuse due to recreational legalization and the declining perception of associated risk; cannabis use is widespread among young adults and adolescents in Connecticut.
- Polysubstance use is also a growing concern in many age and socioeconomic groups.

Countermeasures and Justification:

- 1.1 Administrative License Revocation or Suspension – CTW 5 stars citation
- 1.4 BAC Test Refusal Penalties – CTW 3 stars citation

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 115
Annual 2025 benchmark: 115 (2021-2025 five-year moving average)
Annual 2024 benchmark: 115 (2020-2024 five-year moving average)

Estimated 3-year funding allocation: $ 3,500,000.00; BIL and FAST Act 405d, 154AL

Project considerations:

- Location(s) with overrepresented impaired crashes
- Potential Partners, such as the Department of Mental Health and Addiction Services, CTDMV, Courts, Prosecution, etc.

Uniform Guidelines: Highway Safety Program Guideline No. 8 Impaired Driving – Implementing multiple countermeasures from No. 8 under the Criminal Justice System (for example. Laws, Adjudication, Administrative Sanctions, etc.) to achieve both specific and general deterrence of impaired driving.

Countermeasure Strategy ID-3

Countermeasure Strategy: To reduce deaths and injuries resulting from persons driving motor vehicles while impaired by alcohol or a controlled substance by restricting DUI offenders driving privileges.

Problem Identification:

- Based on research by the Connecticut Department of Mental Health and Addictive Services (CTMHAS), the State is facing high misuse areas of concern including alcohol, heroin/fentanyl/opioids, cannabis/marijuana, and prescription drugs.
- Connecticut has experienced a steady rise in alcohol impaired fatalities.
- Young adults in Connecticut ages 18-25 have the highest rate of reported past month alcohol use (65.6%), followed closely by those aged 26 or older (64.6%).
- There has been a marked increase in drug-driving fatalities where drivers involved in a fatal crash tested positive for one or more drugs; many toxicology reports for drivers killed in crashes often show a mix of prescription drugs.
- Connecticut is seeing an increase in cannabis/marijuana misuse due to recreational legalization and the declining perception of associated risk; cannabis use is widespread among young adults and adolescents in Connecticut.
- Polysubstance use is also a growing concern in many age and socioeconomic groups.

Countermeasures and Justification:

- 4.2 Alcohol Ignition Interlock – CTW 5 stars citation

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 115
Annual 2025 benchmark: 115 (2021-2025 five-year moving average)
Annual 2024 benchmark: 115 (2020-2024 five-year moving average)

Estimated 3-Year Funding Allocation: $12,000,000.00; BIL and FAST Act 405d, 154PM, 154_LET-DG

Project Considerations:

- Monitoring IID installation, calibration compliance
- Affordability for low-income users
- Potential Partners, such as the Department of Mental Health and Addiction Services, CTDMV & Vendors
- Affected communities, potentially affected communities
- This initiative will also cover Justice40 towns, ensuring that underserved communities are included in the effort
- Data analysis of recidivist drivers

Uniform Guidelines: Highway Safety Program Guideline No. 8 Impaired Driving – Implementing multiple countermeasures from No. 8 under the Criminal Justice System and Alcohol and Other Drug Misuse: Screening, Assessment, Treatment and Rehabilitation to achieve both specific and general deterrence of impaired driving.

Countermeasure Strategy ID-4

Countermeasure Strategy: To reduce deaths and injuries resulting from persons driving motor vehicles while impaired by alcohol or a controlled substance by changing social norms through education.

Problem Identification:

- Based on research by the Connecticut Department of Mental Health and Addictive Services (CTMHAS), the State is facing high misuse areas of concern including alcohol, heroin/fentanyl/opioids, cannabis/marijuana, and prescription drugs.
- Connecticut has experienced a steady rise in alcohol impaired fatalities.
- Young adults in Connecticut ages 18-25 have the highest rate of reported past month alcohol use (65.6%), followed closely by those aged 26 or older (64.6%).
- There has been a marked increase in drug-driving fatalities where drivers involved in a fatal crash tested positive for one or more drugs; many toxicology reports for drivers killed in crashes often show a mix of prescription drugs.
- Connecticut is seeing an increase in cannabis/marijuana misuse due to recreational legalization and the declining perception of associated risk; cannabis use is widespread among young adults and adolescents in Connecticut.

- Polysubstance use is also a growing concern in many age and socioeconomic groups.

Countermeasures and Justification:

- 5.2 Mass Media Campaigns – CTW 3 stars citation

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 115
Annual 2025 benchmark: 115 (2021-2025 five-year moving average)
Annual 2024 benchmark: 115 (2020-2024 five-year moving average)
Change impaired societal driving norms.

Estimated 3-Year Funding Allocation: $1,700,000.00; BIL and FAST Act 405d-ii, 154AL

Project Considerations:

- Based on data analysis, identify areas with a high frequency of DUI incidents, prioritizing the most severe problem locations; this initiative will also cover designated Justice40 areas, ensuring that underserved communities are included in the effort
- Sociodemographic data
- Complement and support national NHTSA impaired driving mobilizations
- Affected communities, potentially affected communities
- Bilingual campaign efforts
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Potential Partners, such as the Department of Mental Health and Addiction Services
- Venues selected for the presence of high-risk or overrepresented groups

Uniform Guidelines: Highway Safety Program Guideline No. 8 Impaired Driving – Implementing multiple countermeasures from No. 8 under the Communication Program to develop a communication program and materials that are culturally relevant and multilingual as appropriate to achieve both specific and general deterrence of impaired driving.

Countermeasure Strategy ID-5

Countermeasure Strategy: To reduce deaths and injuries resulting from persons driving motor vehicles while impaired by alcohol or a controlled substance by training law enforcement in the detection of drug impaired driving.

Problem Identification:

- Based on research by the Connecticut Department of Mental Health and Addictive Services (CTMHAS), the State is facing high misuse areas of concern including alcohol, heroin/fentanyl/opioids, cannabis/marijuana, and prescription drugs.

- Connecticut has experienced a steady rise in alcohol impaired fatalities.
- Young adults in Connecticut ages 18-25 have the highest rate of reported past month alcohol use (65.6%), followed closely by those aged 26 or older (64.6%).
- There has been a marked increase in drug-driving fatalities where drivers involved in a fatal crash tested positive for one or more drugs; many toxicology reports for drivers killed in crashes often show a mix of prescription drugs.
- Connecticut is seeing an increase in cannabis/marijuana misuse due to recreational legalization and the declining perception of associated risk; cannabis use is widespread among young adults and adolescents in Connecticut.
- Polysubstance use is also a growing concern in many age and socioeconomic groups.

Countermeasures and Justification:

- 7.1 Enforcement of Drug Impaired Driving – CTW 5 stars citation

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 115.
Annual 2025 benchmark: 115 (2021-2025 five-year moving average)
Annual 2024 benchmark: 115 (2020-2024 five-year moving average)

Estimated 3-Year Funding Allocation: $6,500,000.00; BIL and FAST Act 405d

Project Considerations:

- Training for law enforcement personnel to include ARIDE and DRE programs
- Training for prosecutors, judges, and toxicology staff
- Sociodemographic data
- Based on data analysis, identify areas with a high frequency of DUI incidents, prioritizing the most severe problem locations; this initiative will also cover designated Justice40 areas, ensuring that underserved communities are included in the effort.
- Affected or potentially affected communities
- Public Participation and Engagement (Community members' feedback from Justice40 areas)

Uniform Guidelines: Highway Safety Program Guideline No. 8 Impaired Driving – Implementing multiple countermeasures from No. 8 under the Criminal Justice System and Alcohol and Other Drug Misuse: Screening, Assessment, Treatment and Rehabilitation to achieve both specific and general deterrence of impaired driving.

Occupant Protection and Child Passenger Safety

Countermeasure Strategy OP-1

Countermeasure Strategy: To encourage the proper use of occupant protection devices (including the use of safety belts and child restraint systems) by occupants of motor vehicles.

Problem Identification:

- Observed seat belt use was lowest in pickup trucks, lowest on interstates, lower for males, and lower for non-Caucasians
- Connecticut's annual seat belt survey saw some locations in the state, often in densely population regions, with low usage between 70 and 80 percent
- Alcohol involvement is a factor to be considered in seat belt use by fatally injured drivers
- Some of the largest urban areas, have some of the highest counts of unrestrained fatal and serious injury crashes
- The majority of adult unrestrained fatalities fall within the ages of 21 and 24, with most unrestrained fatal crashes occur at night and on weekends

Countermeasures and Justification:

- 1.1 State Primary Enforcement Seat Belt Use Laws – CTW 5 stars citation
- 3.1 Communications and Outreach Supporting Enforcement – CTW 5 stars citation
- 2.1 High Visibility Seat Belt Law Enforcement – CTW 4 stars citation

Connecticut will implement elements of the Highway Safety Program Guideline No. 20 – Occupant Protection, which are below:

"Each State, in cooperation with its political subdivisions, tribal governments, and other parties as appropriate, should develop and implement a comprehensive highway safety program, reflective of State demographics, to achieve a significant reduction in traffic crashes, fatalities, and injuries on public roads. The highway safety program should include a comprehensive occupant protection program that educates and motivates the public to properly use available motor vehicle occupant protection systems. A combination of legislation and use requirements, enforcement, communication, education, and incentive strategies is necessary to achieve significant, lasting increases in seat belt and child safety seat usage. This guideline describes the components that a State occupant protection program should include and the criteria that the program components should meet…

II. LEGISLATION, REGULATION AND POLICY
Each State should enact and enforce occupant protection use laws, regulations, and policies to provide clear guidance to the public concerning motor vehicle occupant protection systems. This legal framework should include:

- *Legislation permitting primary enforcement that requires all motor vehicle occupants to use systems provided by the vehicle manufacturer;*
- *Legislation permitting primary enforcement that requires that children from birth to 16 years old (or the State's driving age) be properly restrained in an appropriate child restraint system (i.e., certified by the manufacturer to meet all applicable Federal safety standards) or seat belt;*
- *Legislation permitting primary enforcement that requires children under 13 years old to be properly restrained in the rear seat (unless all available rear seats are occupied by younger children);*
- *Graduated driver licensing laws that include three stages of licensure, and that place restrictions and sanctions on high-risk driving situations for novice drivers (i.e., nighttime driving restrictions, passenger restrictions, zero tolerance, required seat belt use);*
- *Regulations requiring employees and contractors at all levels of government to wear safety belts when traveling on official business;*
- *Official policies requiring that organizations receiving Federal highway safety program grant funds develop and enforce an employee seat belt use policy; and*
- *Encouragement to motor vehicle insurers to offer economic incentives for policyholders who wear seat belts and secure children in child safety seats or other appropriate restraints.*

III. ENFORCEMENT PROGRAM
Each State should conduct frequent, high-visibility law enforcement efforts, coupled with communication strategies, to increase seat belt and child safety seat use. Essential components of a law enforcement program include:
- *Written, enforced seat belt use policies for law enforcement agencies with sanctions for noncompliance to protect law enforcement officers from harm and for officers to serve as role models for the motoring public;*
- *Vigorous enforcement of seat belt and child safety seat laws, including citations and warnings;*
- *Accurate reporting of occupant protection system information on police crash report forms, including seat belt and child safety seat use or nonuse, restraint type, and air bag presence and deployment;*
- *Communication campaigns to inform the public about occupant protection laws and related enforcement activities;*
- *Routine monitoring of citation rates for nonuse of seat belts and child safety seats;*
- *Use of National Child Passenger Safety Certification (basic and in-service) for law enforcement officers; and*
- *Utilization of law enforcement liaisons, for activities such as promotion of national and local mobilizations and increasing law enforcement participation in such mobilizations and collaboration with local chapters of police groups and associations that represent diverse groups to gain support for enforcement efforts.*

IV. COMMUNICATION PROGRAM

As part of each State's communication program, the State should enlist the support of a variety of media, including mass media, to improve public awareness and knowledge and to support enforcement efforts to about seat belts, air bags, and child safety seats. Communication programs and materials should be culturally relevant and multilingual as appropriate. To sustain or increase rates of seat belt and child safety seat use, a well-organized, effectively managed communication program should:

- *Identify specific audiences (e.g., low-belt-use, high-risk motorists) and develop messages appropriate for these audiences;*
- *Address the enforcement of the State's seat belt and child passenger safety laws; the safety benefits of regular, correct seat belt (both manual and automatic) and child safety seat use; and the additional protection provided by air bags;*
- *Capitalize on special events, such as nationally recognized safety and injury prevention weeks and local enforcement campaigns;*
- *Provide material and media campaigns in more than one language as necessary;*
- *Use national themes and material;*
- *Participate in national programs to increase seat belt and child safety seat use and use law enforcement as the State's contribution to obtaining national public awareness through concentrated, simultaneous activity;*
- *Utilize paid media, as appropriate;*
- *Publicize seat belt use surveys and other relevant statistics;*
- *Encourage news media to report seat belt use and nonuse in motor vehicle crashes;*
- *Involve media representatives in planning and disseminating communication campaigns;*
- *Encourage private sector groups to incorporate seat belt use messages into their media campaigns;*
- *Utilize and involve all media outlets: television, radio, print, signs, billboards, theaters, sports events, health fairs; and*
- *Evaluate all communication campaign efforts.*

V. OCCUPANT PROTECTION FOR CHILDREN PROGRAM

Each State should enact occupant protection laws that require the correct restraint of all children, in all seating positions and in every vehicle. Regulations and policies should exist that provide clear guidance to the motoring public concerning occupant protection for children. Each State should require that children from birth to 16 years old (or the State's driving age) be properly restrained in the appropriate child restraint system or seat belt. Gaps in State child passenger safety and seat belt laws should be closed to ensure that all children are covered in all seating positions, with requirements for age-appropriate child restraint use. Key provisions of the law should include: driver responsibility for ensuring that children are properly restrained; proper restraint of children under 13 years of age in the rear seat (unless all available rear seats are occupied by younger children); a requirement that passengers be in designated seating positions, a ban on passengers in the cargo areas of light trucks; and a limit on the number of passengers based on the number of available seat belts in the vehicle. To achieve these objectives, State occupant protection programs for children should:

- *Collect and analyze key data elements in order to evaluate the program progress;*
- *Assure that adequate and accurate training is provided to the professionals who deliver and enforce the occupant protection programs for parents and caregivers;*
- *Assure that the capability exists to train and retain nationally certified child passenger safety technicians to address attrition of trainers or changing public demographics;*
- *Promote the use of child restraints and assure that a plan has been developed to provide an adequate number of inspection stations and clinics, which meet minimum quality criteria;*
- *Continue programs and activities to increase the use of booster seats by children who outgrow infant or convertible child safety seats but are still too small to safely use seat belts.*
- *Maintain a strong law enforcement program that includes vigorous enforcement of the child occupant protection laws;*
- *Enlist the support of the media to increase public awareness about child occupant protection laws and the use of child restraints. Strong efforts should be made to reach underserved populations;*
- *Assure that the child occupant protection programs at the local level are periodically assessed and that programs are designed to meet the unique demographic needs of the community;*
- *Establish the infrastructure to systematically coordinate the array of child occupant protection program components;*
- *Encourage law enforcement participation in the National Child Passenger Safety Certification (basic and in-service) training for law enforcement officers; and*
- *Consider carefully crafted and administered child safety seat subsidy and/or give-away programs.*

VI. OUTREACH PROGRAM
Each State should encourage extensive statewide and community involvement in occupant protection education by involving individuals and organizations outside the traditional highway safety community. Representation from the health, business, and education sectors, and from diverse populations within the community, should be encouraged. Community involvement should broaden public support for the State's programs and increase a State's ability to deliver highway safety education programs. To encourage statewide and community involvement, States should:
- *Establish a coalition or task force of individuals and organizations to actively promote use of occupant protection systems;*
- *Create an effective communications network among coalition members to keep members informed about issues;*
- *Provide culturally relevant material and resources necessary to conduct occupant protection education programs, especially directed toward young people, in local settings; and*
- *Provide material and resources necessary to conduct occupant protection education programs, especially directed toward specific cultural or otherwise diverse populations*

represented in the State and in its political subdivisions.

- *States should undertake a variety of outreach programs to achieve statewide and community involvement in occupant protection education, as described below. Programs should include outreach to diverse populations, health and medical communities, schools and employers.*

A. DIVERSE POPULATIONS

Each State should work closely with individuals and organizations that represent the various ethnic and cultural populations reflected in State demographics. Individuals from these groups might not be reached through traditional communication markets. Community leaders and representatives from the various ethnic and cultural groups and organizations will help States to increase the use of child safety seats and seat belts. The State should:

- *Evaluate the need for, and provide, if necessary, material and resources in multiple languages;*
- *Collect and analyze data on fatalities and injuries in diverse communities;*
- *Ensure representation of diverse groups on State occupant protection coalitions and other work groups;*
- *Provide guidance to grantees on conducting outreach in diverse communities;*
- *Utilize leaders from diverse communities as spokespeople to promote seat belt use and child safety seats; and*
- *Conduct outreach efforts to diverse organizations and populations during law enforcement mobilization periods.*

B. HEALTH AND MEDICAL COMMUNITIES

Each State should integrate occupant protection into health programs. The failure of drivers and passengers to use occupant protection systems is a major public health problem that must be recognized by the medical and health care communities. The SHSO, the State Health Department, and other State or local medical organizations should collaborate in developing programs that:

- *Integrate occupant protection into professional health training curricula and comprehensive public health planning;*
- *Promote occupant protection systems as a health promotion/injury prevention measure;*
- *Require public health and medical personnel to use available motor vehicle occupant protection systems during work hours;*
- *Provide technical assistance and education about the importance of motor vehicle occupant protection to primary caregivers (e.g., doctors, nurses, clinic staff);*
- *Include questions about seat belt use in health risk appraisals;*
- *Utilize health care providers as visible public spokespeople for seat belt use and child safety seat use;*
- *Provide information about the availability of child safety seats at, and integrate child safety seat inspections into, maternity hospitals and other prenatal and natal care centers; and*
- *Collect, analyze, and publicize data on additional injuries and medical expenses resulting from nonuse of occupant protection devices.*

C. SCHOOLS

Each State should encourage local school boards and educators to incorporate occupant protection education into school curricula. The SHSO in cooperation with the State Department of Education should:

- *Ensure that highway safety and traffic-related injury control, in general, and occupant protection, in particular, are included in the State-approved K-12 health and safety education curricula and textbooks;*
- *Establish and enforce written policies requiring that school employees use seat belts when operating a motor vehicle on the job;*
- *Encourage active promotion of regular seat belt use through classroom and extracurricular activities as well as in school-based health clinics;*
- *Work with school resource officers to promote seat belt use among high school students; and*
- *Establish and enforce written school policies that require students driving to and from school to wear seat belts. Violation of these policies should result in revocation of parking or other campus privileges for a stated period of time.*

D. EMPLOYERS

Each State and local subdivision should encourage all employers to require seat belt use on the job as a condition of employment. Private sector employers should follow the lead of Federal and State government employers and comply with Executive Order 13043, "Increasing Seat Belt Use in the United States," as well as all applicable Federal Motor Carrier Safety Administration Regulations or Occupational Safety and Health Administration regulations requiring private business employees to use seat belts on the job. All employers should:

- *Establish and enforce a seat belt use policy with sanctions for nonuse; and*
- *Conduct occupant protection education programs for employees on their seat belt use policies and the safety benefits of motor vehicle occupant protection devices.*

VII. DATA AND PROGRAM EVALUATION

Each State should access and analyze reliable data sources for problem identification and program planning. Each State should conduct several different types of evaluation to effectively measure progress and to plan and implement new program strategies. Program management should:

- *Conduct and publicize at least one statewide observational survey of seat belt and child safety seat use annually, ensuring that it meets current, applicable Federal guidelines;*
- *Maintain trend data on child safety seat use, seat belt use and air bag deployment in fatal crashes;*
- *Identify high-risk populations through observational usage surveys and crash statistics;*
- *Conduct and publicize statewide surveys of public knowledge and attitudes about occupant protection laws and systems;*
- *Obtain monthly or quarterly data from law enforcement agencies on the number of seat belt and child passenger safety citations and convictions;*

- *Evaluate the use of program resources and the effectiveness of existing general communication as well as special/high-risk population education programs;*
- *Obtain data on morbidity, as well as the estimated cost of crashes, and determine the relation of injury to seat belt use and nonuse; and*
- *Ensure that evaluation results are an integral part of new program planning and problem identification."*

Performance Target:

- Reduce the five-year moving average ending in 2026 (2022-2026) to 65
  Annual 2025 benchmark: 65 (2021-2025 five-year moving average)
  Annual 2024 benchmark: 65 (2020-2024 five-year moving average)

- To attain a statewide observed seat belt use rate of 93.0 percent or above in 2026
  Annual 2025 benchmark: 93.0 percent or above
  Annual 2024 benchmark: 93.0 percent or above

Estimated 3-Year Funding Allocation: $6,300,000.00; BIL and FAST Act 402-OP, 405b-1 (M1HVE)

Project Considerations:

- Based on data analysis, identify areas with a high frequency of unrestrained occupants, prioritizing the most severe problem locations; this initiative will also cover Justice40 towns, ensuring that underserved communities are included in the effort
- Sociodemographic data
- Complement and support national NHTSA occupant protection mobilizations and campaigns
- Affected communities, potentially affected communities
- Bilingual campaign efforts
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Potential Partners, such as Healthcare facilities, Community Programs, First Responders, Law Enforcement, etc.
- Venues selected for the presence of high-risk or overrepresented groups

Uniform Guidelines: Highway Safety Program Guideline No. 20 Occupant Protection – Implement multiple countermeasures from under the Occupant Protection program to encourage the proper use of occupant protection devices (including the use of safety belts and child restraint systems) by occupants of motor vehicles.

Countermeasure Strategy OP-2

Countermeasure Strategy: Child Passenger Safety Communications and Outreach – To encourage the proper use of occupant protection devices (including the use of safety belts and child restraint systems) by occupants of motor vehicles.

Problem Identification:

- The high volume of car seat misuse continues to be a concern
- Based on observed seat belt use, approximately 75 percent of young children were restrained when the driver was not belted
- There are deficiencies in obtaining the necessary information to identify children that are not properly restrained

Countermeasures and Justification:

- 6.2 Strategies for Child Restraint and Booster Seat Use – CTW 3 stars citation
- 7.2 Inspection Stations – CTW 3 stars citation

Performance Target: Lower the child safety seat misuse rate by increasing inspection stations, education, and community outreach.

Estimated 3-Year Funding Allocation: $3,000,000.00; BIL and FAST Act 402-CR

Project considerations:

- Based on data analysis, identify areas with a high frequency of unrestrained occupants, prioritizing the most severe problem locations; this initiative will also cover Justice40 areas, ensuring that underserved communities are included in the effort
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Non-profits
- Culture Centers
- Sociodemographic data
- Underserved communities
- Justice40 communities

Uniform Guidelines: Highway Safety Program Guideline No. 20 Occupant Protection – Implementing multiple countermeasures from No. 20 under the Communication Program to develop a communication program and materials that are culturally relevant and multilingual as appropriate to encourage the proper use of occupant protection devices (including the use of safety belts and child restraint systems) by occupants of motor vehicles.

Countermeasure Strategy OP-3

Countermeasure Strategy: Child Passenger Safety Training – To encourage the proper use of occupant protection devices (including the use of safety belts and child restraint systems) by occupants of motor vehicles.

Problem Identification:

- Not having enough certified technicians to meet the demand for service.
- The high volume of car seat misuse continues to be a concern
- Based on observed seat belt use, only 50 percent of young children were restrained when the driver was not belted
- There are deficiencies in obtaining the necessary information to identify children that are not properly restrained

Countermeasures and Justification:

- 7.2 Inspection Stations – CTW 3 stars citation

Connecticut will implement the Highway Safety Program Guideline No. 20, Occupant Protection for Children Program for details, please see below:

"V. OCCUPANT PROTECTION FOR CHILDREN PROGRAM
Each State should enact occupant protection laws that require the correct restraint of all children, in all seating positions and in every vehicle. Regulations and policies should exist that provide clear guidance to the motoring public concerning occupant protection for children. Each State should require that children from birth to 16 years old (or the State's driving age) be properly restrained in the appropriate child restraint system or seat belt. Gaps in State child passenger safety and seat belt laws should be closed to ensure that all children are covered in all seating positions, with requirements for age-appropriate child restraint use. Key provisions of the law should include: driver responsibility for ensuring that children are properly restrained; proper restraint of children under 13 years of age in the rear seat (unless all available rear seats are occupied by younger children); a requirement that passengers be in designated seating positions, a ban on passengers in the cargo areas of light trucks; and a limit on the number of passengers based on the number of available seat belts in the vehicle. To achieve these objectives, State occupant protection programs for children should:
- *Collect and analyze key data elements in order to evaluate the program progress;*
- *Assure that adequate and accurate training is provided to the professionals who deliver and enforce the occupant protection programs for parents and caregivers;*
- *Assure that the capability exists to train and retain nationally certified child passenger safety technicians to address attrition of trainers or changing public demographics;*
- *Promote the use of child restraints and assure that a plan has been developed to provide an adequate number of inspection stations and clinics, which meet minimum quality criteria;*

- *Continue programs and activities to increase the use of booster seats by children who outgrow infant or convertible child safety seats but are still too small to safely use seat belts.*
- *Maintain a strong law enforcement program that includes vigorous enforcement of the child occupant protection laws;*
- *Enlist the support of the media to increase public awareness about child occupant protection laws and the use of child restraints. Strong efforts should be made to reach underserved populations;*
- *Assure that the child occupant protection programs at the local level are periodically assessed and that programs are designed to meet the unique demographic needs of the community;*
- *Establish the infrastructure to systematically coordinate the array of child occupant protection program components;*
- *Encourage law enforcement participation in the National Child Passenger Safety Certification (basic and in-service) training for law enforcement officers; and*
- *Consider carefully crafted and administered child safety seat subsidy and/or give-away programs."*

According to the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, "*car seat and booster seat **distribution plus education programs** can also increase restraint use. These programs help parents and caregivers get new, unused car seats or booster seats and learn how to properly install and use them. These programs often include hands-on demonstrations which can help increase proper installation and use. **Incentive and education programs** reward parents or children with coupons or other prizes for correctly using car seats and offer educational print materials and videos for parents and caregivers.*"

Furthermore, according to the American Academy of Pediatrics, Transporting Children With Special Health Care Needs states, "*All children, including those with special health care needs, should have access to proper resources for safe transportation. The purpose of this policy statement is to assist caregivers and health care providers in ensuring that children with special health care needs travel in appropriate restraints and are properly positioned and secured in the vehicles in which they ride. This statement supplements the current American Academy of Pediatrics policy statements "Child Passenger Safety" and "School Transportation Safety."1,2 Primary care providers and subspecialists caring for children with special health care needs as well as parents should be aware of the resources available for proper restraint during travel so that the most appropriate and protective resources are selected for the child each and every ride. This guidance may be used to help parents, caregivers, and others responsible for the safe transportation of a child to avoid products that are inappropriate or incorrectly used, avoid discomfort, and avoid increased injury risk to children transported in motor vehicles. For many children with special health care needs, a standard car safety seat (CSS) provides the best protection for most travel needs. Federal Motor Vehicle Safety Standard (FMVSS) 213 regulates the design and performance of child restraint systems for children weighing up to 80 lb.3 Some*

children with special health care needs will need to use an occupant restraint system beyond 80 lb, and some manufacturers have tested their restraints for weights beyond those regulated by FMVSS 213. Unfortunately, the biomechanical effects of a crash on test dummies representative of children with special medical needs in any restraint system have not been adequately studied. Further research is needed, including development of such test dummies by the National Highway Traffic Safety Administration (NHTSA), to address these concerns. In March 2014, the "Hospital Discharge Recommendations for Safe Transportation of Children" was published by an expert working group convened by the NHTSA.4 This policy was endorsed by the National Child Passenger Safety Board, the Children's Hospital Association, and the National Safety Council. It recommends that hospitals that discharge children should have a hospital-based, multidisciplinary child passenger safety program. Hospital discharge policies and programs should be based on best practice recommendations by the American Academy of Pediatrics and NHTSA. Development and implementation of these policies requires planning, collaboration with appropriate staff, proper training, ongoing competency assessment, and the ability to secure funds and resources to sustain the program. Hospitals should consider having resources for conventional CSSs as well as child passenger safety restraints for children with special transportation needs related to their medical condition. All pertinent interactions between primary care providers, therapists, and child passenger safety technicians (CPSTs) should be documented in the child's medical record. The ideal child passenger safety programs should maintain an inventory of necessary child passenger restraints, have access to custom medical transportation products, and conduct program evaluations to ensure alignment with both patient needs and best practice guidelines.4 Pediatricians should consider advocating within their local health care community to promote policies so that all children have access to an appropriate, correctly used CSS. In addition, assessment of transportation needs, procurement of the most appropriate restraint, and training for the proper use of the device and its installation in the vehicle may be incorporated into hospital discharge planning for all children with special needs.4 Any child with a medical condition should have a special care plan that includes what to do during transport if a medical emergency occurs. The individual or group responsible for disseminating emergency plans can be determined at the time the child's individualized education program is developed. Plans should be shared with all individuals who have responsibility for the safety and welfare of the child during transport. Children with special needs should not be exempt from the requirements of each state's laws regarding child restraint and seat belt use. Pediatricians can serve as resources for information to legislators, policy makers, and law enforcement professionals, as well as to school officials, who may be less familiar with the importance and availability of occupant protection systems for children with special needs.

General Guidance for Safe Transportation of Children with Special Health Care Needs

All child restraint systems should meet FMVSS 213.3 Standard child restraint devices may be used for many children with special health care needs, and whenever possible, a standard child restraint is preferable. Use of a custom or "special" child restraint system for a child with special health care needs often may be postponed until a child exceeds the physical limitations of a standard CSS. CSSs with 5-point harnesses can be adjusted to provide good upper torso support for many children with special needs. American Academy of Pediatrics recommendations state

that all children should ride rear facing in a CSS as long as possible until they exceed the weight, length, and/or height of that seat as recommended by the seat's manufacturer. These recommendations are based on expert opinion, highway crash data analysis, and sled crash tests.1,5,6 Objective data from crash tests have shown that a rear-facing CSS provides support to the head and spine that significantly reduces neck loading in crashes that have a frontal component. By extension, small children with neuromuscular conditions will likely be at increased injury risk if forward facing. Thus, riding in a rear-facing CSS should be strongly encouraged as long as possible for these children until they exceed the weight and length limits of the device.

When a child has outgrown the length or weight limits of a conventional CSS with an internal 5-point harness, other resources are available for proper and secure occupant restraint. Some systems provide full support for the child's head, neck, and back, accommodate children up to 115 lb, and may be customized to meet a child's particular needs. Others, such as the conventional travel vests or specialized medical seating systems, can be used to provide additional trunk support for a child who already has stable neck control. Tethers, additional lap seat belts, or appropriate tie-down systems are required for some of these devices and may be considerations for selection and proper use.7,8

Large medical CSSs are an option for occupants who require additional positioning support once they exceed the manufacturer's weight and length recommendations of standard CSSs. Positioning accessories, such as abductor wedges, support pads, and seat depth extenders, are available to provide a child with a more customized fit.

Some older children with disabilities who have poor trunk control can be transported in a special needs belt-positioning booster or a conventional belt-positioning booster with trunk support. These booster seats help ensure proper positioning of the vehicle shoulder and the lap belt across the child's chest and pelvis. Depending on the type of booster seat, positioning accessories may be available to help maintain posture and comfort. A CPST with additional training in the transportation of children and adolescents with special health care needs could be a resource to the providers and family in choosing the most appropriate vehicle occupant restraint system. Resources to locate local CPST support are located at the end of this policy statement.7

Many older children and adolescents can be safely transported by using conventional lap-and-shoulder belt systems. Lap-and-shoulder belts should be used properly; the lap belt should be low and flat across the child's hips, and the shoulder belt should be snug across the chest. If the lap belt lies on the child's abdomen or the shoulder belt rests on the child's neck, the child must use either a belt-positioning booster or a different CSS. The shoulder belt should never be placed underneath the child's arms or behind the child's back.9

Vehicle passengers should never be transported in a reclined vehicle seat. During a crash, the lap-and-shoulder belt system will not be positioned properly, thus imperiling the occupant.9

The rear seat is the safest place for all children, and children should never ride in the front seat until they are at least 13 years of age.1 A rear-facing CSS may never be placed in the front seat of

a vehicle that has a front passenger air bag. The impact of a deploying air bag can severely injure or kill an infant or small child.1,9 Children may also be at risk for injury if they are out of position or lie against the door of a vehicle with a side air bag. For specific information, consult both the vehicle operator's manual and CSS manual.

Car restraint systems should not be modified or used in a manner other than that specified by the manufacturer unless the modified restraint system has been crash tested and has met all applicable FMVSSs approved by the NHTSA.9

For a child with special health care needs who requires frequent observation during travel and for whom no adult is available to accompany the child in the back seat, seating in the front seat may be considered; however, an air bag on-off switch should be considered for the vehicle. This can only be considered after the NHTSA approves a petition to disable the air bag.10 Recommendations and guidelines provided by the manufacturer of the vehicle and the manufacturer of the CSS should always be followed.1,9

Parents, health care providers, and educators should be encouraged to incorporate a child's special transportation needs into his or her individualized education program developed with the school.

For additional information on transporting low birth weight or preterm infants, refer to the appropriate policy statements by the American Academy of Pediatrics.11

Children with special health care needs may travel on commercial airlines. Each airline has its own policies in accordance with Federal Aviation Administration regulations regarding the use of assistive devices on a commercial aircraft. The use of medical assistive devices is allowed under the Air Carrier Access Act (14 CFR §382).12 Caregivers may be advised to refer to the Federal Aviation Administration Web site for regulations regarding air travel for individuals with disabilities (www.transportation.gov/airconsumer/disability).

Guidance for Safe Transportation of Children With Specific Medical Conditions
Although research has been limited, current information suggests the following guidance when selecting an appropriate occupant protection system and positioning a child with special needs properly in the vehicle.

Airway Obstruction
Airway obstruction may occur in infants, children, or adolescents for many reasons. Conditions encountered may include hypotonia, craniofacial abnormalities, or primary airway problems. There are many ways to maintain a stable airway during the vehicle transport of an affected child. If there is any concern about airway or respiratory compromise during vehicle transport, an evaluation should be performed before the child is discharged.11 This evaluation should include a multidisciplinary team, including someone with advanced training in the transportation of children with special health care needs. For infants and young children, a car seat study using the child's CSS at the angle recommended for use in the vehicle seat during travel should be

performed.11 Abnormal results need to be addressed by the care team and may require coordination with the child's medical home. CSSs that are only rear facing with multiple recline options are useful for infants with many medical problems, especially respiratory conditions. Sometimes a firm, lightweight object such as a rolled towel or Styrofoam pool noodle can be placed in the vehicle seat crease to adjust the angle in accordance with manufacturers' instructions.9 Convertible CSSs also can be used in the rear-facing position for children and can accommodate weights up to approximately 50 lb. These restraints may be especially useful for children with poor head and neck control. If a child has a specific medical condition such as Pierre Robin sequence and requires prone positioning for transport, the infant will need to be placed in a car bed and must be tested in the car bed before discharge.

Infants and children with a tracheostomy tube should not use child restraint systems with a harness or seat belts that could make contact with the tube and cause it to dislodge. An occupational therapist or CPST with training and experience in the safe transportation of children with special needs could provide guidance for best seat selection. Even with typically developing children, the risk of airway obstruction exists13; therefore, all children should use their CSSs only for travel and should not be left in the CSSs outside of the vehicle.9 Children with significant airway obstruction or who have a tracheostomy should have a trained person with them at all times who can relieve the obstruction and monitor the airway. These caregivers should be trained in the emergency replacement of the tracheostomy tube if it comes out during travel.7,8

Muscle Tone Abnormalities
Muscle tone abnormalities, including both hypo- and hypertonia, can affect infants, children, or adolescents for many reasons. Muscle tone varies with each child and can fluctuate during the day. Airway issues in children with abnormal muscle tone may lead to airway obstruction. (Please refer to the previous section on airway obstruction for guidance.) For most situations, the infant or toddler with hypotonia will be safest in the rear-facing orientation within the vehicle as long as the height and weight of the patient does not exceed the CSS manufacturer's recommendations. Some manufacturers allow their forward-facing CSSs to be used in a semireclined position; these can be useful for larger toddlers with poor head control. Crotch rolls, made with a rolled towel or a diaper, may be added between the child's legs and the crotch strap to keep the hips against the back of the seat and prevent the child from slumping forward in the seat.9 Lateral support may be provided with rolled blankets, towels, or foam rolls to ensure proper upright positioning of the child. However, padding should never be placed between the child and the CSS.9 Soft padding (such as blankets, pillows, or soft foam) compresses on impact and prevents harness straps from maintaining a secure, tight fit on a child's body. Only products that come with the seat or are sold by the manufacturer for use with the specific seat should be used.9 Also, head bands or stiff cervical collars may not be used to restrain the child's head. For children with increased muscle tone whose opisthotonic posturing makes sitting in a CSS difficult, a foam roll or rolled blanket under the child's knees may help with positioning.14 Children with cerebral palsy or spina bifida may have scoliosis that makes it difficult to be seated in a conventional CSS. A large medical seat or an adaptive restraint may need to be obtained. Large medical seats can be customized to suit the individual needs of occupants who require positioning support beyond that offered by a conventional restraint system. For children who have sufficient head, neck, and trunk support to

sit upright during travel but need supplemental support, adaptive belt-positioning booster seats may suffice. Like all belt-positioning booster seats, these seats must be used only with both the lap-and-shoulder belt system of the vehicle.9 These adaptive boosters are easier to transfer between vehicles and may be an option for children who often ride in many vehicles. Use of car beds, large medical seats, and adaptive boosters may require an order by a physician and a letter of medical necessity. It is important that a rehabilitation therapist with training in the safe transportation of children with special health care needs be included in the evaluation, ordering, and implementation of the seat.7

Gastrointestinal Issues
Many children with special health care needs suffer from emesis or severe gastroesophageal reflux or have gastrostomy feeding tubes. The angle at which the infant or child sits in the CSS may increase the intra-abdominal pressure and aggravate the reflux.15,–17 Solutions to addressing these issues can include waiting a period of time after feeding before traveling, optimizing the medical management of reflux, changing the angle that the infant or child travels with a CSS that allows multiple options for angle of recline, or using a car bed. Because there is potential for increased gastroesophageal reflux during the time the child is in the CSS, the restraint device should only be used for travel, and the infant or child should be removed from the CSS when at the destination. Gastrostomy tubes may affect the CSS harness fit. It is important to select a CSS that does not have a harness that rubs against the feeding tube. Families should have an emergency plan to be able to replace the tube or to cover the stoma if the tube comes out during travel.

Casts
Casts are often applied to a patient for a variety of circumstances, whether to maintain a bony alignment postoperatively or to allow a bone to heal after trauma. For most situations, the cast will not interfere with the use of a CSS. However, there are circumstances when a cast interferes with positioning the child in a CSS.
For children with spica casts, frequently the side of the CSS prevents proper positioning because of the fixed flexion and abduction of the femurs. Consultation with occupational therapists specially trained in the transportation requirements of children with special health care needs could be helpful in the selection of a CSS or an alternative that will provide protection and comfort during motor vehicle transportation. Availability of specialty CSSs can be labile, as new models are introduced and existing products are removed from the marketplace, and consultation with individuals familiar with current products will be helpful. Consideration of hospital-based loaner programs that obtain and maintain specialty seating systems should be considered to provide appropriate CSSs as needed.4 Planning for the transportation needs of the child before discharge may help prevent delays in leaving the facility.
Many older children and youth in body or hip spica casts have limited resources available for safe transport in motor vehicles. Often, these children have outgrown the weight and height limits or simply do not fit into a conventional seat. Older children who might be able to correctly use the vehicle seat belt may not be able sit upright as required. A travel vest or harness can be a reasonable alternative for many such children. Such vests can accommodate a child sitting in a vehicle seat from 2 years of age and from 20 to 168 lb. This restraint system will not be

appropriate for children with poor head, neck, or trunk control.

Another vest-style option for a child who must travel lying down is available commercially. The child must be able to fit lengthwise on a vehicle bench seat perpendicular to the direction of the vehicle. These vests are available for children 1 to 12 years of age who weigh between 20 and 100 lb. Two sets of seat belts are routed through the vest to secure the child at his or her side against the vehicle seat. An ancillary belt loops around the casted leg or legs at the knees and is routed through the other seat belt. When it is not possible to fit a child onto a vehicle seat, use of an ambulance for transport is recommended.

Challenging Behavior

Children may exhibit behaviors that preclude safe use of a particular CSS, are distracting to the driver, or otherwise place the child or passengers at risk. Although challenging behaviors can be observed among typical children, these behaviors can also be seen in children with developmental delay (or intellectual disability), autism, or emotional problems and may include impulsive, hyperactive, aggressive, and noncompliant behaviors in the vehicle, making transportation dangerous. In-depth discussions with parents or caregivers, teachers, therapists, or psychologists may be helpful to identify triggers and develop strategies to possibly avoid inappropriate behavior. Monitors or aides trained in behavioral techniques and both qualified and capable of meeting the child's specific needs may be needed to help ensure safe transport. Although many of these children can be safely transported in standard CSSs, children with severe behavioral challenges may require specialized restraints during travel. Use of standard CSSs with higher-weight internal harnesses or large medical seats may be useful for some older and larger children who will not remain seated in a booster seat or seat belt. Families should never modify the CSS to make it more difficult to escape.9 In addition, travel vests with rear back closure and a floor mount tether also may be helpful for use with children who have behavioral problems that interfere with safe travel.

Wheelchair Transportation

Any child who can assist with transfer, be reasonably moved from a wheelchair, stroller, or special seating or mobility device to the forward-facing vehicle seat equipped with dynamically tested occupant restraints or be reasonably moved to a child restraint system complying with FMVSS 213 requirement should be transferred accordingly for transportation. In these cases, "reasonably" implies that the child can be moved from the wheelchair to the bus seat or occupant restraint without significant discomfort or risk of injury to either the child or caregiver. The unoccupied wheelchair also should be secured adequately in the vehicle to prevent it from becoming a dangerous projectile in the event of a sudden stop or crash.18

If the child must travel in a wheelchair, it should be secured in a forward-facing position. It is also recommended that the child or adolescent be transported in a transit option wheelchair. Transit option wheelchairs have been specifically designed for vehicle transport and are thus safer to use in a vehicle than a wheelchair without a transit option.18 Transit option wheelchairs should comply with American National Standards Institute/Rehabilitation Engineering and Assistive Technology Society of North America WC19, a voluntary standard to ensure that the design and performance requirements for use in motor vehicles are met.19 If a transit option wheelchair is

not available, the wheelchair should have a metal frame to which tie-down straps and hooks can be attached at frame junctions. Tie-down straps, restraint belts, and wheelchairs that meet current standards should be used during transport.20 Any occupied wheelchair should be secured with 4-point tie-down devices. Lap boards or metal or plastic trays attached to the wheelchair or to adaptive equipment should be removed and secured separately for transport.21 An occupant restraint system that includes upper torso restraint (ie, shoulder harness) and lower torso restraint (ie, a lap belt over the pelvis) should be provided for each wheelchair-seated occupant. Head bands or stiff cervical collars may not be used to restrain the child's head separately from the torso or support the head.

Equipment Transportation
When transporting a child with special needs, ancillary pieces of medical equipment (eg, walkers, ventilators, pumps, oxygen tanks, monitors) should be secured on the vehicle floor or, if allowed by the vehicle manufacturer, underneath a vehicle seat or wheelchair or below the window line. These devices can become projectiles during a crash and can strike an occupant, making safe storage a critical consideration. In most passenger vehicles, the safest option is the vehicle trunk. The driver or caregiver should refer to the vehicle owner's manual or consult the vehicle manufacturer to identify proper locations and methods for the safe storage of equipment.14

Children who require electricity-powered medical equipment for use during transit should have portable self-contained power for twice the expected duration of the trip as well as a fully charged backup system with them. Additionally, the child's medical equipment should include a connector to attach medical equipment to the vehicle power source in case of an emergency. The caregiver should contact the vendor, medical equipment provider, or manufacturer for the appropriate equipment. For improved safety, lead acid batteries, electricity-powered wheelchairs, or other mobile seating devices and respiratory systems should be converted, when possible, to gel-cell or dry-cell batteries. To house and protect batteries during everyday use, transportation, and collision, the use of external battery boxes is recommended.21

Conclusions
It is essential that all children have the opportunity to be transported in the safest possible way. For children with special health care needs, life includes all the components that any other child enjoys. It must be ensured that they have access to the expertise and means to travel safely to help them achieve their greatest potential.

Resource Availability
Resources can be found at the National Center for Transportation of Children with Special Health Care Needs, Riley Hospital for Children, Indiana University School of Medicine (1-800-755-0912), or https://preventinjury.pediatrics.iu.edu/special-needs/, which includes photographs of specialized products for children with special needs.
Additional resources can be found at the Rehabilitation Engineering Research Center on Wheelchair Transportation Safety and the University of Michigan Transportation Research Institute. A detailed brochure on the use of a wheelchair as a transportation device on the bus or the family vehicle is available at http://www.travelsafer.org."

Performance Target: To increase the number of technicians from 409 to 440 by 2026

Estimated 3-Year Funding Allocation: $1,500,000.00; BIL and FAST Act 402-CR

Project Considerations:

- Based on data analysis, identify areas with a high frequency of unrestrained occupants, prioritizing the most severe problem locations; this initiative will also cover Justice40 areas, ensuring that underserved communities are included in the effort
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Underserved communities
- Community advocates
- First responders
- Justice40 communities

Uniform Guidelines: Highway Safety Program Guideline No. 20 Occupant Protection – Implementing multiple countermeasures from No. 20 under the Occupant Protection for Children Program, Health and Medical Communities, and Diverse Populations to encourage the proper use of child restraint systems by occupants of motor vehicles.

Countermeasure Strategy OP-4

Countermeasure Strategy: Child Passenger Safety Communications and Outreach – To encourage child passenger safety and educate the caregivers and public regarding the risks of leaving a child or unattended passenger in a vehicle after the vehicle motor is deactivated by the operator.

Problem Identification:

- Lack of caregiver and public education and awareness about pediatric vehicular heatstroke and leaving a child or unattended passenger in a vehicle after the vehicle motor is deactivated by the operator.
- Over 50% of pediatric vehicular heatstroke deaths nationwide occur as a result of being forgotten by the caregiver in the rear seat of the motor vehicle after the vehicle motor is deactivated by the operator.

Countermeasures and Justification:

Connecticut will implement the Highway Safety Program Guideline No. 20, Occupant Protection for Children Program for details, please see below:

"VI. OUTREACH PROGRAM
Each State should encourage extensive statewide and community involvement in occupant protection education by involving individuals and organizations outside the traditional highway safety community. Representation from the health, business, and education sectors, and from diverse populations within the community, should be encouraged. Community involvement should broaden public support for the State's programs and increase a State's ability to deliver highway safety education programs. To encourage statewide and community involvement, States should:
• Establish a coalition or task force of individuals and organizations to actively promote use of occupant protection systems;
• Create an effective communications network among coalition members to keep members informed about issues;
• Provide culturally relevant material and resources necessary to conduct occupant protection education programs, especially directed toward young people, in local settings; and
• Provide material and resources necessary to conduct occupant protection education programs, especially National Highway Traffic Safety Administration 4 Highway Safety Program Guideline No. 20 directed toward specific cultural or otherwise diverse populations represented in the State and in its political subdivisions. States should undertake a variety of outreach programs to achieve statewide and community involvement in occupant protection education, as described below. Programs should include outreach to diverse populations, health and medical communities, schools and employers.

A. DIVERSE POPULATIONS
Each State should work closely with individuals and organizations that represent the various ethnic and cultural populations reflected in State demographics. Individuals from these groups might not be reached through traditional communication markets. Community leaders and representatives from the various ethnic and cultural groups and organizations will help States to increase the use of child safety seats and seat belts. The State should:
• Evaluate the need for, and provide, if necessary, material and resources in multiple languages;
• Collect and analyze data on fatalities and injuries in diverse communities;
• Ensure representation of diverse groups on State occupant protection coalitions and other work groups;
• Provide guidance to grantees on conducting outreach in diverse communities;
• Utilize leaders from diverse communities as spokespeople to promote seat belt use and child safety seats; and
• Conduct outreach efforts to diverse organizations and populations during law enforcement mobilization periods."

Connecticut will support awareness about the State Statute *Sec. 53-21a. Leaving child unsupervised in place of public accommodation or motor vehicle. Failure to report disappearance of a child.*

"(a) Any parent, guardian or person having custody or control, or providing supervision, of any child under the age of twelve years who knowingly leaves such child unsupervised in a place of public accommodation or a motor vehicle for a period of time that presents a substantial risk to the child's health or safety, shall be guilty of a class A misdemeanor.

(b) Any parent, guardian or person having custody or control, or providing supervision, of any child under the age of twelve years who knowingly leaves such child unsupervised in a place of public accommodation, which holds a permit issued under chapter 545 for the sale of alcoholic liquor for consumption on the premises, for a period of time that presents a substantial risk to the child's health or safety, shall be guilty of a class D felony.

(c) Any parent, guardian or person having custody or control, or providing supervision, of any child under the age of twelve years who knowingly leaves such child unsupervised in a place of public accommodation or a motor vehicle between the hours of eight o'clock p.m. and six o'clock a.m. for a period of time that presents a substantial risk to the child's health or safety, shall be guilty of a class C felony.

(d) Any parent, guardian or person having custody or control, or providing supervision, of any child under the age of twelve years who knowingly fails to report the disappearance of such child to an appropriate law enforcement agency shall be guilty of a class A misdemeanor. For the purposes of this subsection, "disappearance of such child" means that the parent, guardian or person does not know the location of the child and has not had contact with the child for a twenty-four-hour period."

Connecticut will complement and support messaging by the [Centers for Disease Control and Prevention](#)

"Never leave kids in a parked car
- *Even when it feels cool outside, cars can heat up to dangerous temperatures very quickly.*
- *Leaving a window open is not enough- temperatures inside the car can rise almost 20 degrees Fahrenheit within the first 10 minutes, even with a window cracked open.*
- *Children who are left unattended in parked cars are at greatest risk for heat stroke, and possibly death.*

Tips for traveling with children
- *Never leave infants or children in a parked car, even if the windows are cracked open.*
- *To remind yourself that a child is in the car, keep a stuffed animal in the car seat. When the child is buckled in, place the stuffed animal in the front with the driver.*
- *When leaving your car, check to be sure everyone is out of the car. Do not overlook any children who have fallen asleep in the car.*

Learn how to spot heat-related illness
- *Seek medical care immediately if your child has [symptoms of heat-related illness](#)."*

Connecticut will complement and support messaging by healthychildren.org

"Prevent Child Deaths in Hot Cars

A child left in a hot car--or who gets into an unlocked vehicle unnoticed--can die of heat stroke very quickly. Dozens of U.S. children lose their lives this way each year. But these tragedies can be prevented.

Here is what parents need to know about the danger of hot cars, and steps they can take to help keep their children safe.

Facts about hot cars & heat stroke
- *Heat stroke is the leading cause of non-crash, vehicle-related deaths in children under 15. Heat stroke happens when the body is not able to cool itself quickly enough.*
- *A child's body heats up three to five times faster than an adult's does.*
  - *When left in a hot car, a child's major organs begin to shut down when his temperature reaches 104 degrees Fahrenheit (F).*
  - *A child can die when his temperature reaches 107 degrees F.*
- *Cars heat up quickly! In just 10 minutes, a car can heat up 20 degrees F.*
- *Cracking a window and/or air conditioning does little to keep it cool once the car is turned off.*
- *Heat stroke can happen when the outside temperature is as low as 57 degrees F.*
- *Because of climate change, we can expect more days to be hotter. Also, hotter days can happen throughout the year.*

Things you can do to prevent the unthinkable
Keep in mind: Any parent or caregiver, even a very loving and attentive one, can forget a child is in the back seat. Being especially busy or distracted or having a change from the usual routine increases the risk.
Here are some safety reminders from the American Academy of Pediatrics:
- *Always check the back seat and make sure all children are out of the car before locking it and walking away.*
- *Avoid distractions while driving, especially cell phone use.*
- *Be extra alert when there is a change in your routine, like when someone else is driving your child or you take a different route to work or child care.*
- *Have your child care provider call if your child is more than 10 minutes late.*
- *Put your cell phone, bag, or purse in the back seat, so you check the back seat when you arrive at your destination.*
- *If someone else is driving your child, always check to make sure he has arrived safely.*
- *Keep your car locked when it is parked to prevent a curious child from entering when no one is around. Many hot car deaths have occurred when a child mistakenly locks himself inside.*
- *Make sure children do not have easy access to your car keys. Store them out of a child's*

[reach](#).
- *Teach children that cars are not safe places to play.*
- *Keep rear fold-down seats closed to prevent a child from crawling into the trunk from inside the car.*
- *Remind children that cars, especially car trunks, should not be used for games like hide-and-seek."*

Connecticut will complement and support messaging by [NHTSA](#)

Know the Facts
- *A child's body temperature rises three to five times faster than an adult's. When a child is left in a vehicle, that child's temperature can rise quickly — and the situation can quickly become dangerous.*
- *Heatstroke begins when the core body temperature reaches about 104 degrees.*
- *A child can die when their body temperature reaches 107 degrees.*
- *In 2022, 33 children died of heatstroke in vehicles.*
- *In 2018 and 2019, we saw a record number of hot car deaths — 53 children died each year — the most in at least 25 years, according to [NoHeatstroke.org](#).*

Parents and Caregivers
1. Never leave a child in a vehicle unattended for any length of time. Rolling windows down or parking in the shade does little to change the interior temperature of the vehicle.
2. Make it a habit to check your entire vehicle — especially the back seat — before locking the doors and walking away.
3. Ask your childcare provider to call if your child doesn't show up for care as expected.
4. Place a personal item like a purse or briefcase in the back seat, as another reminder to look before you lock. Write a note or place a stuffed animal in the passenger's seat to remind you that a child is in the back seat.
5. Store car keys out of a child's reach and teach children that a vehicle is not a play area.

Everyone — Including Bystanders

Secure Your Car
Always lock your car doors, year-round, so children can't get into unattended vehicles.

Act Fast. Save a Life.
If you see a child alone in a locked car, act immediately and call 911. A child in distress due to heat should be removed from the vehicle as quickly as possible and rapidly cooled."

Performance Target: Increase child safety by increasing education, and community outreach about the risks of leaving a child or unattended passenger in a vehicle after the vehicle motor is deactivated by the operator and pediatric vehicular heatstroke.

Estimated 3-Year Funding Allocation: $800,000.00 BIL and FAST Act 402-OP

Project considerations:

- Complement and support national efforts by federal agencies and organizations such as NHTSA, CDC, NSC, American Academy of pediatrics and non-profits to increase awareness about pediatric vehicular heatstroke.
- Affected communities, potentially affected communities
- Bilingual and multilingual campaign efforts, as needed
- Potential Partners, such as Healthcare facilities, Community Programs, First Responders, Law Enforcement, Culture Centers, Non-profits, day care facilities etc.

Uniform Guidelines: Highway Safety Program Guideline No. 20 Occupant Protection – Implementing multiple countermeasures from No. 20 under the Outreach Program to develop communication and outreach program materials that are culturally relevant and multilingual, as appropriate, to increase awareness among caregivers and public regarding the risks of leaving a child or unattended passenger in a vehicle after the vehicle motor is deactivated by the operator and pediatric vehicular heatstroke.

Police Traffic Services & Distracted Driving

Countermeasure Strategy PTS-1

Countermeasure Strategies: To reduce injuries and deaths resulting from motor vehicles being driven in excess of posted speed limits. To reduce crashes resulting from unsafe driving behavior (including aggressive or fatigued driving and distracted driving arising from the use of electronic devices in vehicles). To improve law enforcement services in motor vehicle crash prevention, traffic supervision, and post-crash procedures.

Problem Identification:

- In 2021, speed-related was identified in 25 percent of fatal crashes.
- Among injury crashes in Connecticut during 2021, the predominant contributing factors related to aggressive driving were following too closely (14.8%) and failure to yield right-of-way (5.4%).
- As Highway Safety issues continue to emerge, distracted driving/handheld mobile electronic device use has been a consistently recognized factor leading to crashes, injuries and fatalities.
- More than half of speeding-related fatal crashes in the period 2017 to 2021 involved a driver with a positive BAC.
- Speeding, distracted driving, and operating vehicle in an erratic, reckless or negligent manner have been identified as top three driver related factors of motorist involved in pedestrian and bicyclist fatalities.

Countermeasures and Justification:

Distracted Driving, Speeding, and Speed Management

- 2.2 Automated Enforcement – CTW 5 stars citation
- 1.3 High-Visibility Cell Phone and Text Messaging Enforcement – CTW 4 stars citation
- 4.1 Communications and Outreach Supporting Enforcement – CTW 3 stars citation
- 2.1 Communications and Outreach on Distracted Driving – CTW 1 star citation

Highway Safety Program Guideline No. 15, Traffic Enforcement Services
Based on the Highway Safety Program Guideline No. 15, Traffic Enforcement Services, Connecticut will implement all of the following elements: *"Each State, in cooperation with its political subdivisions, tribal governments, and other parties as appropriate, should develop and implement a comprehensive highway safety program, reflective of State demographics, to achieve a significant reduction in traffic crashes, fatalities, and injuries on public roads. The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic*

crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system. This guideline describes the components that a State traffic enforcement services program should include and the minimum criteria that the program components should meet.

B. Program Elements

State, local, and tribal law enforcement agencies, in conjunction with the SHSO, should establish traffic safety services as a priority within their comprehensive enforcement programs. A law enforcement program should be built on a foundation of commitment, cooperation, planning, monitoring, and evaluation within the agency's enforcement program. State, local, and tribal law enforcement agencies should:

- *Provide the public with effective and efficient traffic enforcement services through enabling legislation and regulations;*
- *Coordinate activities with State Departments of Transportation to ensure both support and accurate date collection;*
- *Develop and implement a comprehensive traffic enforcement services program that is focused on general deterrence and inclusive of impaired driving (i.e., alcohol or other drugs), seat belt use and child passenger safety laws, motorcycles, speeding, and other programs to reduce hazardous driving behaviors;*
- *Develop cooperative working relationships with other governmental agencies, community organizations, and traffic safety stakeholders on traffic safety and enforcement issues;*
- *Maintain traffic enforcement strategies and policies for all area of traffic safety including roadside sobriety checkpoints, seat belt use, pursuit driving, crash investigating and reporting, speed enforcement, and hazardous moving traffic violations; and*
- *Establish performance measures for traffic enforcement services that are both qualitative and quantitative.*
- *Traffic enforcement services should look beyond the issuance of traffic citations to include enforcement of criminal laws and that address drivers of all types of vehicles, including trucks and motorcycles.*

II. RESOURCE MANAGEMENT
The SHSO should encourage law enforcement agencies to develop and maintain a comprehensive resource management plan that identifies and deploys resources necessary to effectively support traffic enforcement services. The resource management plan should include a specific component on traffic enforcement services and safety, integrating traffic enforcement services and safety initiatives into a comprehensive agency enforcement program. Law enforcement agencies should:

- *Periodically conduct assessments of traffic enforcement service demands and resources to meet identified needs;*
- *Develop a comprehensive resource management plan that includes a specific traffic enforcement services and safety component;*
- *Define the management plan in terms of budget requirements and services to be provided; and*

- *Develop and implement operational strategies and policies that identify the deployment of traffic enforcement services resources to address program demands and agency goals.*

III. TRAINING

Training is essential to support traffic enforcement services and to prepare law enforcement officers to effectively perform their duties. Training accomplishes a wide variety of necessary goals and can be obtained through a variety of sources. Law enforcement agencies should periodically assess enforcement activities to determine training needs and to ensure training is endorsed by the State's Police Officers Standards and Training agency. Effective training should:

- *Provide officers the knowledge and skills to act decisively and correctly;*
- *Increase compliance with agency enforcement goals;*
- *Assist in meeting priorities;*
- *Improve compliance with established policies;*
- *Result in greater productivity and effectiveness;*
- *Foster cooperation and unity of purpose;*
- *Help offset liability actions and prevent inappropriate conduct by law enforcement officers;*
- *Motivate and enhance officer professionalism; and*
- *Require traffic enforcement knowledge and skills for all recruits.*
- *Law enforcement agencies should:*
- *Provide traffic enforcement in-service training to experienced officers;*
- *Provide specialized CMV in-service training to traffic enforcement officers as appropriate;*
- *Conduct training to implement specialized traffic enforcement skills, techniques, or programs; and*
- *Train instructors using certified training in order to increase agency capabilities and to ensure continuity of specialized enforcement skills and techniques.*

IV. TRAFFIC LAW ENFORCEMENT

Providing traffic enforcement services and the enforcement of traffic laws and ordinances is a responsibility shared by all law enforcement agencies. Among the primary objectives of this function is encouraging motorists and pedestrians to comply voluntarily with the laws and ordinances. Administrators should apply their enforcement resources in a manner that ensures the greatest impact on traffic safety. Traffic enforcement services should:

- *Include accurate problem identification and countermeasure design;*
- *Apply at appropriate times and locations, coupled with paid media and communication efforts designed to make the motoring public aware of the traffic safety problem and planned enforcement activities; and*
- *Include a system to document and report results.*

V. COMMUNICATION PROGRAM

States should develop and implement communication strategies directed at supporting policy and program elements. Public awareness and knowledge about traffic enforcement services are essential for sustaining increased compliance with traffic laws and regulations. Communications should highlight and support specific program activities underway in the community and

communication programs and materials should be culturally relevant, appropriate to the audience and multilingual as necessary. This requires a well-organized, effectively managed social marketing campaign that addresses specific high-risk populations. The SHSO, in cooperation with law enforcement agencies, should develop a statewide communications plan and campaign that:

- *Identifies and addresses specific audiences at particular risk;*
- *Addresses enforcement of seat belt use, child passenger safety, impaired driving, speed, and other serious traffic laws;*
- *Capitalizes on special events and awareness campaigns;*
- *Identifies and supports the efforts of traffic safety activist groups, community coalitions, and the health and medical community to gain increased support of, and attention to, traffic safety and enforcement;*
- *Uses national themes, events, and material;*
- *Motivates the public to support increased enforcement of traffic laws;*
- *Educates and reminds the public about traffic laws and safe driving behaviors;*
- *Disseminates information to the public about agency activities and accomplishments;*
- *Enhances relationships with news media and health and medical communities;*
- *Provides safety education and community services;*
- *Provides legislative and judicial information and support;*
- *Increases the public's understanding of the enforcement agency's role in traffic safety;*
- *Markets information about internal activities to sworn and civilian members of the agency;*
- *Enhances the agency's safety enforcement role and increases employee understanding and support; and*
- *Recognizes employee achievements.*

DATA AND PROGRAM EVALUATION

The SHSO, in conjunction with law enforcement agencies, should develop a comprehensive evaluation program to measure progress toward established project goals and objectives; effectively plan and implement statewide, county, local, and tribal traffic enforcement services programs; optimize the allocation of limited resources; measure the impact of traffic enforcement on reducing crime and traffic crashes, injuries, and deaths; and compare costs of criminal activity to costs of traffic crashes. Data should be collected from police crash reports, daily officer activity reports that contain workload and citation information, highway department records (e.g., traffic volume), citizen complaints, and officer observations. Law enforcement managers should:

- *Include evaluation in initial program planning efforts to ensure that data will be available and that sufficient resources will be allocated;*
- *Report results regularly to project and program managers, law enforcement decision-makers, and members of the public and private sectors;*
- *Use results to guide future activities and to assist in justifying resources to governing bodies;*

- *Conduct a variety of surveys to assist in determining program effectiveness, such as roadside sobriety surveys, speed surveys, license checks, belt use surveys, and surveys measuring public knowledge and attitudes about traffic enforcement programs;*
- *Evaluate the effectiveness of services provided in support of priority traffic safety areas;*
- *Maintain and report traffic data to appropriate repositories, such as police crash reports, the FBI Uniform Crime Report, FMCSA's SAFETYNET system, and annual statewide reports; and*
- *Evaluate the impact of traffic enforcement services on criminal activity.*
- *An effective records program should:*
- *Provide information rapidly and accurately;*
- *Provide routine compilations of data for management use in the decision making process;*
- *Provide data for operational planning and execution;*
- *Interface with a variety of data systems, including statewide traffic safety records systems; and*
- *Be accessible to enforcement, planners and management."*

Performance Target:

- Reduce the five-year moving average ending in 2026 (2022-2026) to 96 for speed-related fatalities
  Annual 2025 benchmark: 96 (2021-2025 five-year moving average)
  Annual 2024 benchmark: 96 (2020-2024 five-year moving average)

- Maintain the five-year moving average ending in 2026 (2022-2026) to 10 or under for distracted driver fatalities
  Annual 2025 benchmark: 10 or under (2021-2025 five-year moving average)
  Annual 2024 benchmark: 10 or under (2020-2024 five-year moving average)

Estimated 3-Year Funding Allocation: $25,000,000.00; BIL 405e-DD (Flex), 402-PM, 402-PT

Project Considerations:

- Based on data analysis, identify areas with a high frequency of speed or unsafe driving behaviors, prioritizing the most severe problem locations; this initiative will also cover Justice40 areas, ensuring that underserved communities are included in the effort
- Sociodemographic data
- Complement and support national NHTSA impaired driving mobilizations
- Affected communities, potentially affected communities
- Bilingual campaign efforts
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Potential Partners, such as the Department of Transportation, CT Training and Technical Assistance Center, etc.

- Venues selected for the presence of high-risk

Uniform Guidelines: Highway Safety Program Guideline No. 15, Traffic Enforcement Services – Implementing multiple countermeasures from No. 15 under Traffic Enforcement Services (for example. Traffic Law Enforcement, Training, Communications, etc.) to reduce injuries and deaths resulting from motor vehicles being driven in excess of posted speed limits, unsafe driving behavior, and to improve law enforcement services in motor vehicle crash prevention, traffic supervision, and post-crash procedures.

Countermeasure Strategy PTS-2

Countermeasure Strategy: To improve law enforcement services in motor vehicle crash prevention, traffic supervision, and post-crash procedures.

Problem Identification:

- National Priority Program – Connecticut will submit official document(s) to qualify for the incentive grant, 1300.29 Racial Profiling Data Collection Grant. Please see below for the qualification criteria established by Congress:

"1300.29 Racial Profiling Data Collection Grants.
(a) Purpose. This section establishes criteria, in accordance with Section 1906, for incentive grants to encourage States to maintain and allow public inspection of statistical information on the race and ethnicity of the driver for all motor vehicle stops made on all public roads except those classified as local or minor rural roads.
(b) Qualification criteria. To qualify for a Racial Profiling Data Collection Grant in a fiscal year, a State shall submit as part of its annual grant application, in accordance with part 11 of appendix B to this part—
(1) Official documents (i.e., a law, regulation, binding policy directive, letter from the Governor, or court order) that demonstrate that the State maintains and allows public inspection of statistical information on the race and ethnicity of the driver for each motor vehicle stop made by a law enforcement officer on all public roads except those classified as local or minor rural roads; or
(2) Assurances that the State will undertake activities during the fiscal year of the grant to comply with the requirements of paragraph (b)(1) of this section, and projects, at the level of detail required under § 1300.12(b)(2), supporting the assurances."

Countermeasures and Justification:

Subpart C—National Priority Safety Program and Racial Profiling Data Collection Grants

§ 1300.20 General.

(a) Scope. This subpart establishes criteria, in accordance with Section 405 for awarding grants to States that adopt and implement programs and statutes to address national priorities for reducing highway deaths and injuries and, in accordance with Section 1906, for awarding grants to States that maintain and allow public inspection of race and ethnicity information on motor vehicle stops…

(d) Qualification based on State statutes. Whenever a qualifying State statute is the basis for a grant awarded under this subpart, such statute shall have been enacted by the application due date and be in effect and enforced, without interruption, by the beginning of and throughout the fiscal year of the grant award.

Connecticut will submit official document(s) to qualify for the incentive grant, 1300.29 Racial Profiling Data Collection Grant. Please see below the qualification criteria established by Congress:

"1300.29 Racial Profiling Data Collection Grants.
(a) Purpose. This section establishes criteria, in accordance with Section 1906, for incentive grants to encourage States to maintain and allow public inspection of statistical information on the race and ethnicity of the driver for all motor vehicle stops made on all public roads except those classified as local or minor rural roads.
(b) Qualification criteria. To qualify for a Racial Profiling Data Collection Grant in a fiscal year, a State shall submit as part of its annual grant application, in accordance with part 11 of appendix B to this part—
(1) Official documents (i.e., a law, regulation, binding policy directive, letter from the Governor, or court order) that demonstrate that the State maintains and allows public inspection of statistical information on the race and ethnicity of the driver for each motor vehicle stop made by a law enforcement officer on all public roads except those classified as local or minor rural roads; or
(2) Assurances that the State will undertake activities during the fiscal year of the grant to comply with the requirements of paragraph (b)(1) of this section, and projects, at the level of detail required under § 1300.12(b)(2), supporting the assurances."

Performance Target:

- Continue to develop methodologies to best identify racial and ethnic disparities in traffic stops and evaluate the results of such data
- Use the data to identify traffic enforcement techniques that will help reduce traffic related fatalities and injuries and ensure those techniques are implemented in a fair and equitable manner
- Improve the transparency of traffic enforcement to build public trust for law enforcement

Estimated 3-Year Funding Allocation: $7,200,000.00; BIL and FAST Act 1906 (F1906ER)

Project Considerations:

- Identify racial and ethnic disparities through data collection and statistical analysis of Connecticut's municipal police departments, State Police, and other special police agencies
- Affected communities and potentially affected communities
- Multilingual campaign efforts
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Potential partners, such as UConn, Connecticut Commission on Human Rights and Opportunities, New York University (NYU), Yale Justice Collaboratory, non-profits, etc.

Uniform Guideline: Highway Safety Program Guideline No. 15 – Develop cooperative working relationships with other governmental agencies, community organizations, and traffic safety stakeholders on traffic safety and enforcement issues. As well as provide the public with effective and efficient traffic enforcement services through enabling legislation and regulations to improve law enforcement traffic supervision.

Motorcycle Safety

Countermeasure Strategy MS-1

Countermeasure Strategy: To prevent crashes and reduce deaths and injuries resulting from crashes involving motor vehicles and motorcycles.

Problem Identification: To lower the instance of single vehicle crashes among motorcyclists.

Countermeasures and Justification:

- 3.1 Motorcycle Rider Licensing – CTW 1 star citation
- 3.2 Motorcycle Rider Training – CTW 2 stars citation

Effectiveness of Motorcycle Training and Licensing, December 2009, Transportation Research Record Journal of the Transportation Research Board.

"Training increases the use of personal protective equipment among motorcyclists. Motorcycle licensing procedures have been shown to have different effects on crash rates. Lower crash rates have been observed in areas with stricter regulations for obtaining a license. The studies vary greatly in both the methods used for comparison and the rigor of their evaluation methodology. No standards for evaluation exist. The findings of these previous studies may be more a reflection of the methods used to evaluate motorcycle training than the effectiveness of training itself."

Connecticut will use motorcycle operator licensing and training to prevent crashes and reduce deaths and injuries from crashes involving motor vehicles and motorcycles.

Performance Target:

- Maintain the five-year moving average ending in 2026 (2022-2026) to 55 for motorcyclist fatalities
  Annual 2025 benchmark: 55 (2021-2025 five-year moving average)
  Annual 2024 benchmark: 55 (2020-2024 five-year moving average)

- Reduce the five-year moving average ending in 2026 (2022-2026) to 29 for unhelmeted motorcyclist fatalities
  Annual 2025 benchmark: 29 (2021-2025 five-year moving average)
  Annual 2024 benchmark: 29 (2020-2024 five-year moving average)

Estimated 3-Year Funding Allocation: $450,000.00; BIL and FAST Act 402MC

Project Considerations

- Town/City where data shows areas for motorcyclist problem identification – priority to high problem areas

- Location(s) with low levels of training and licensing
- Location(s) with overrepresented single vehicle crashes

Uniform Guidelines: Highway Safety Program Guideline No. 3 Motorcycle Safety – Implementing multiple countermeasures from No. 3 under Motorcycle Rider Education and Training to reduce deaths and injuries resulting from crashes involving motor vehicles and motorcycles.

Countermeasure Strategy MS-2

Problem Identification: To lower the instances of motor-vehicle versus motorcycle collisions and intersection crashes

Countermeasures and Justification:

- 4.2 Motorist Awareness of Motorcyclists – CTW 1 star citation

"COMMUNICATION PROGRAM
States should develop and implement communications strategies directed at specific high-risk populations as identified by data. Communications should highlight and support specific policy and progress underway in the States and communities and communication programs and materials should be culturally relevant, multilingual as necessary, and appropriate to the audience. States should enlist the support of a variety of media, including mass media, to improve public awareness of motorcycle crash problems and programs directed at preventing them. States should:

- *Focus their communication efforts to support the overall policy and program;*
- *Review data to identify populations at risk; and*
- *Use a mix of media strategies to draw attention to the problem."*

Connecticut will implement the Communication Program from the Uniform Guidelines Highway Safety Program Guideline No. 3 Motorcycle Safety to reduce deaths and injuries resulting from crashes involving motor vehicles and motorcycles.

Performance Target:

- Maintain the five-year moving average ending in 2026 (2022-2026) to 55 for motorcyclist fatalities
  Annual 2025 benchmark: 55 (2021-2025 five-year moving average)
  Annual 2024 benchmark: 55 (2020-2024 five-year moving average)

- Reduce the five-year moving average ending in 2026 (2022-2026) to 29 for unhelmeted motorcyclist fatalities
  Annual 2025 benchmark: 29 (2021-2025 five-year moving average)
  Annual 2024 benchmark: 29 (2020-2024 five-year moving average)

Estimated 3-Year Funding Allocation: $300,000.00; BIL and FAST Act 405f

Project Considerations

- Town/City where data show areas for motorcyclist problem identification – priority to high problem areas
- Location(s) with low levels of training and licensing
- Location(s) with overrepresented single vehicle crashes
- Uniform Guidelines

Uniform Guidelines: Highway Safety Program Guideline No. 3 Motorcycle Safety – Implementing multiple countermeasures from No. 3 under Communications Program to reduce deaths and injuries resulting from crashes involving motor vehicles and motorcycles.

Traffic Records

Countermeasure Strategy TR-1

Countermeasure Strategy: The development of statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources and an effective record system of crashes (including resulting injuries and deaths).

Problem Identification: Improve Timeliness, Accuracy and Uniformity of Traffic Citation through Technology/Software Support to Municipal and State Law Enforcement

Traffic Records Assessment recommendations:
- Improve data dictionaries for crash data system, driver data system, citation and adjudication system and the injury surveillance system
- Improve interfaces with the Crash data system, vehicle data system, Roadway data system, citation and adjudication system and the injury surveillance system
- Improve data quality control for the driver data system, vehicle data system, citation and adjudication system and the injury surveillance system
- Improve process flows for the vehicle data system

Countermeasures and Justification: Countermeasures for the Traffic Records Section were Developed from 2021 Traffic Records Assessment

Performance Target: To increase the number of law enforcement agencies using the eCitation system to 100 percent by 2026

Estimated 3-Year Funding Allocation: $6,000,000.00; BIL and FAST Act 402TR, 405c

Project Considerations: Traffic Records projects focus on improving the six Traffic Records Systems including Crash, Vehicle, Driver, Roadway, Citation/Adjudication, Injury Surveillance. These systems improve the data availability and analysis capabilities for all the state agencies which in turn affects the entire State and all the communities in the state including communities that are underserved or overrepresented in traffic fatalities and injuries, communities of color etc. The Traffic Records Program includes several partner agencies/organizations in the State such as CTDOT, CTDMV, CTDESPP, CTJIS, CTDPH, State Attorney's Office, CT Judicial Branch, Yale New Haven Hospital, Local Law Enforcement Agencies, CT Regional Planning Organizations, UConn, the Connecticut Insurance Department, CTDMHAS, AAA, and Federal agencies including FMCSA, NHTSA, and FHWA.

The 2021 Traffic Records Assessment by NHTSA put forth the following set of recommendations to further enhance the efficiency and effectiveness of Connecticut's traffic record systems and the HSO will work with the different agencies to incorporate the recommendations during the 2024-2026 HSP period: Improve data dictionaries for crash data system, driver data system,

citation and adjudication system, and the injury surveillance system; Improve interfaces with the Crash data system, vehicle data system, Roadway data system, citation and adjudication system, and the injury surveillance system; Improve data quality control for the driver data system, vehicle data system, citation and adjudication system, and the injury surveillance system; Improve process flows for the vehicle data system.

Uniform Guidelines: The Connecticut TR Program will adhere to the NHTSA regulations as stated in 23 CFR 1300.22 and Traffic Records Assessment. Connecticut has a functioning Traffic Records Coordinating Committee (TRCC), which meets more than three times a year and an HSO designated TRCC coordinator. The State Traffic Records Strategic Plan is updated annually and approved by the TRCC. The Strategic Plan outlines specific, quantifiable, and measurable improvements to the core safety databases. The TR-1 strategy in the HSP embodies the Connecticut HSO's commitment to enhancing the accuracy, completeness, timeliness, uniformity, accessibility, and integration of the core safety databases.

Community Traffic Safety

Countermeasure Strategy CTS-1

Countermeasure Strategy: To reduce deaths and injuries resulting from persons driving motor vehicles while impaired by alcohol or a controlled substance.

Problem Identification:

- Underage drinking continues to be an issue and additional programs are needed to address this behavior
- Connecticut has experienced a steady rise in alcohol impaired fatalities
- Based on a report by the Connecticut Department of Mental Health and Addictive Services, young adults in Connecticut ages 18-25 have the highest rate of reported past month alcohol use (65.6%)
- The CTDMHAS report also noted that the prevalence of binge drinking in Connecticut has remained consistently higher than the national average; binge drinking is highest among young adults (47.6%), followed by adults ages 26 or older (27.5%), and youth ages 12-17 (5.4%)

Countermeasures and Justification:

- 6.5 Youth Programs – CTW 2 stars citation

According to "Teens and seat belt use: What makes them click?" a study published in the Journal of Safety Research found that "teens who engaged in substance use behavior were among the least likely to buckle up, and as the number of substance-use behaviors increased, the likelihood of always wearing a seat belt steadily declined. This finding is consistent with the "problem behavior" literature in that health risk behaviors tend to cluster and can reinforce each other (Catalano, Hawkins, Berglund, Pollard, & Arthur, 2002; Jessor, 1987). In recognition of this reality, positive youth development interventions have shifted away from a focus on single problems, such as seat belt nonuse, to broader factors that affect any array of risk behaviors (Catalano et al., 2002; Griffin, Botvin, & Nichols, 2004; Haggerty, Fleming, Catalano, Harachi, & Abbott, 2006; Vassalloa et al., 2008).

The study states, "[t]he Life Skills Training substance use prevention program develops skills related to resisting alcohol and drug use, including communicating effectively and managing anxiety, and yet students who participated in the program were less likely to have violations and points on their driving records, even after controlling for alcohol use (Griffin et al., 2004). Such models could be adapted to more comprehensively include a focus on motor vehicle risk behaviors, including seat belt nonuse." Based on positive youth development intervention research, Connecticut will implement youth programs that address impaired driving and comprehensively focus on motor vehicle risk behaviors amongst teens, and young adults,

especially youth within Justice40 communities.

In the period 2016-2020, 31 percent of fatal crashes involving drivers aged 20 and undertook place between July and September. July and August had the highest number of crashes (18 and 16, respectively). Fifty-seven percent (57%) of fatal crashes occurred at night, between 6pm and 2:59am (86 fatal crashes). New Haven, Fairfield, and Hartford Counties (41, 32, and 29 crashes, respectively) accounted for the highest number of fatal crashes involving young drivers.

Performance Target: Reduce the five-year moving average ending in 2026 (2022-2026) to 31
   Annual 2025 benchmark: 31 (2021-2025 five-year moving average)
   Annual 2024 benchmark: 31 (2020-2024 five-year moving average)

Estimated 3-Year Funding Allocation: $3,300,000.00; BIL and FAST Act 154-AL, 402-TSP, 402-PS, 405e

Project Considerations:

- Based on data analysis, identify areas with a high frequency of DUI incidents, prioritizing the most severe problem locations; this initiative will also cover Justice40 areas, ensuring that underserved communities are included in the effort
- Sociodemographic data
- Bilingual messaging
- Youth Educational communities
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Venues selected for high-risk groups
- Affected communities identified by organizations
- Potential Partners, such as the Department of Mental Health and Addiction Services, Local Schools, etc.

Uniform Guidelines: Highway Safety Program Guideline No. 8 Impaired Driving – Implementing multiple countermeasures from No. 8 under Prevention programs (Community-Based) that aim to reduce impaired driving through public health approaches, including altering social norms, changing risky or dangerous behaviors, and creating safer environments to achieve both specific and general deterrence of impaired driving.

Countermeasure Strategy CTS-2

Countermeasure Strategy: Improve pedestrian and bicycle safety.

Problem Identification:

- A pedestrian in a disadvantaged community is approximately 2.5x more likely to be killed in a crash than in a non-disadvantaged community
- With increasing age comes an increase in pedestrian fatalities rates, especially those 65+
- The pedestrians under age 21 are under-represented in all injury categories, while those aged 21-64 are over-represented in all injury categories

Countermeasures and Justification:

- 2.1 Safe Routes to School – CTW 3 stars citation
- 2.2 Pedestrian Safety Zones – CTW 3 stars citation
- 2.3 Walking School Buses – CTW 3 stars citation
- 4.1 Pedestrian Safety Zones – CTW 4 stars citation
- 4.2 Reduce and Enforce Speed Limits – CTW 3 stars citation
- 4.3 Conspicuity Enhancement – CTW 3 stars citation
- 3.1 Active Lighting and Rider Conspicuity – CTW 3 stars citation
- 5.2 Mass Media Campaigns – CTW 3 stars citation

"The American College of Surgeons Committee on Trauma, through its Subcommittee on Injury Prevention and Control, recognizes the importance of injury prevention in its holistic approach to trauma care. Cycling remains an important means of transportation and recreation; however, the bicycle rider has the potential to be at significant risk of serious injury.

The ACS recognizes the following facts:
- *More than 1,000 people die and 350,000 are seen in emergency departments annually due to bicycle injuries in the US. Bicycle crashes accounted for $5.4 billion in medical costs in 2020, and an additional $7.7 billion in lives lost, lost work, and productivity. Bicycling is among the top 5 leading causes of injury in people ages 5-14 years. The highest death rate from bicycling is among those aged 60-64 years.[1]*
- *Helmets reduce the risk of head injury by 48 percent, traumatic brain injury by 53 percent, facial injury by 23 percent, and fatal injury by 34 percent.[2] Pediatric non-helmeted bikers have a 3-fold higher risk of serious head injury compared to helmeted bikers;[3] one study suggests that helmet use may reduce the risk of head injury by 83 percent.[4]*
- *Bicycle-related head injuries and deaths have decreased in states that have enacted bicycle helmet laws.[5]*
- *Larger effects are found when legislation applies to all cyclists than when it applies to children only. [6]*
- *Non-legislative and legislative educational programs have been shown to improve and sustain increased helmet use by children.[7]*
- *Helmets provide benefits to both adults and children who ride bicycles. As more helmet laws target youth, the proportion of adults comprising bicycle fatalities has risen.[8]*

- *Peer and adult companion helmet use is associated with increased bicycle helmet use by children.[9]*
- *In some geographic locations with bicycle helmet laws, between 40 percent to 60 percent of citations were given to homeless individuals. Black cyclists were 4 times as likely to receive a citation for violating the helmet requirement, while Native American cyclists were just over twice as likely. These findings raise concerns about just and equitable enforcement of helmet laws.*
- *Infrastructure support for bicycling (e.g., separated bicycle lanes) is associated with decreased severity of injury and should be encouraged.[10]*
- *Future research on the epidemiology of bicycle-related injuries should focus on the prevalence of helmet use, measurement of the effectiveness of interventions to increase helmet use, and ensuring equitable enforcement of helmet laws.[11]*
- *In addition to head and facial injuries, bicycle crashes can result in significant musculoskeletal, solid organ, hollow viscus injuries related to blunt trauma, and friction with road surfaces.[12]*

Helmet use has been shown to significantly decrease the risk of both fatal and nonfatal head injuries. Based on these data, the ACS supports efforts to promote, enact, and sustain universal bicycle helmet legislation and enforcement. These efforts to promote and enforce bicycle helmet safety laws must be done with safeguards in place to assure enforcement occurs in a fair and equitable manner." Furthermore, based on our Public Participation and Engagement, Justice40 communities expressed their need for access to bicycle helmets and an educational program; and how negatively impacted they are because they do not have access to this life-saving safety equipment. Justice40 communities have unique needs, and the American College of Surgeons Committee on Trauma states that an educational program increases helmet use and its life-saving benefits.

References:

1. Centers for Disease Control and Prevention. Web-based injury statistics query and reporting system (WISQARS). Available at: http://www.cdc.gov/injury/wisqars. Accessed May 7, 2022.
2. Høye A. Bicycle helmets – To wear or not to wear? A meta-analyses of the effects of bicycle helmets on injuries. *Accid Anal Prev*. 2018 Aug;117:85-97. doi: 10.1016/j.aap.2018.03.026. Epub 2018 Apr 17. PMID: 29677686.
3. Hasjim BJ, Grigorian A, Schubl SD, Lekawa M, Kim D, Barnal N, Nahmias J. Helmets protect pediatric bicyclists from head injury and do not increase risk of cervical spine injury. *Pediatric Emergency Care* 2022 Jan; 38(1): e360-e364
4. Thompson DC, Rivara FP, Thompson R. Helmets for preventing head and facial injuries in bicyclists. Cochrane Database Syst Rev. 2000;1999(2):CD001855. doi: 10.1002/14651858.CD001855. PMID: 10796827; PMCID: PMC7025438.

5. Merrill-Francis M, Vernick JS, Pollack Porter KM. "Local All-Age Bicycle Helmet Ordinances in the United States: A Review and Analysis." *The Journal of Law, Medicine & Ethics: a journal of the American Society of Law, Medicine & Ethics*. 47.2 (2019): 283–291. Web.

6. Hoye A. Recommend or mandate? A systematic review and meta-analysis of the effects of mandatory bicycle helmet legislation. *Accid Anal Prev*. 2018 Nov;120:239-249. doi: 10.1016/j.aap.2018.08.001. Epub 2018 Aug 30. PMID: 30173006.

7. Hagel BE, Rizkallah JW, Lamy A, Belton KL, Jhangri GS, Cherry N, Rowe BH. Bicycle helmet prevalence two years after the introduction of mandatory use legislation for under 18 year olds in Alberta, Canada. Inj Prev. 2006 Aug;12(4):262-5. doi: 10.1136/ip.2006.012112. PMID: 16887950; PMCID: PMC2586783.

8. Wesson DE, Stephens D, Lam K, Parsons D, Spence L, Parkin PC. Trends in pediatric and adult bicycling deaths before and after passage of a bicycle helmet law. *Pediatrics* 2008; 122(3): 605-610.

9. Wymore C, Denning G, Hoogerwerf P, Wetjen K, Jennissen C. Parental attitudes and family helmet use for all-terrain vehicles and bicycles. Inj Epidemiol. 2020 Jun 12;7(Suppl 1):23. doi: 10.1186/s40621-020-00253-2. PMID: 32532340; PMCID: PMC7291627.

10. Smith A, Zucker S, Lladó-Farrulla M, Friedman J, Guidry C, McGrew P, Schroll R, McGinness C, Duchesne J. Bicycle lanes: Are we running in circles or cycling in the right direction? *J Trauma Acute Care Surg*. 2019 Jul;87(1):76-81. doi: 10.1097/TA.0000000000002328. PMID: 31033881.

11. Lois K. Lee, Michael R. Flaherty, Ashley M. Blanchard, Maneesha Agarwal, THE COUNCIL ON INJURY, VIOLENCE, AND POISON PREVENTION; Helmet Use in Preventing Head Injuries in Bicycling, Snow Sports, and Other Recreational Activities and Sports. *Pediatrics* August 2022; 150 (3): e2022058877. 10.1542/peds.2022-058877

12. Cheung R, Shukla M, Akers KG, Farooqi A, Sethuraman U. Bicycle handlebar injuries – a systematic review of pediatric chest and abdominal injuries. *Am J Emerg Med*. 2022 Jan;51:13-21. doi: 10.1016/j.ajem.2021.09.043. Epub 2021 Sep 28. PMID: 34649007.

Performance Target:

- Reduce the five-year moving average ending in 2026 (2022-2026) to 55
  Annual 2025 benchmark: 55 (2021-2025 five-year moving average)
  Annual 2024 benchmark: 55 (2020-2024 five-year moving average)

- Reduce the five-year moving average ending in 2026 (2022-2026) to 3 or under
  Annual 2025 benchmark: 3 or under (2021-2025 five-year moving average)
  Annual 2024 benchmark: 3 or under (2020-2024 five-year moving average)

Estimated 3-Year Funding Allocation: $3,500,000.00; BIL and FAST Act 402-TSP, 402-PS, 405e, 405g, 405h

Project Considerations:

- Based on data analysis, identify areas with a high frequency of pedestrian/bicyclist fatalities/injuries, prioritizing the most severe problem locations; this initiative will also cover Justice40 areas, ensuring that underserved communities are included in the effort
- Sociodemographic data
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Venues selected for high-risk groups
- Affected areas identified by community organizations

Uniform Guidelines: Highway Safety Program Guideline No. 14 Pedestrian and Bicycle Safety– Implementing multiple countermeasures from No. 14 under Multidisciplinary Involvement, Communication Program, and Outreach Program addressing coordination with traffic engineering and law enforcement efforts, school-based education programs, communication and awareness campaigns, and other focused educational programs such as those for seniors and other identified high-risk populations. The State will enlist the support of a variety of media, including mass media, to improve public awareness of pedestrian and bicyclist crash problems and programs directed at preventing them. Communication programs and materials will be culturally relevant and multilingual as appropriate to improve pedestrian performance and bicycle safety.

Preventing Roadside Deaths

Countermeasure Strategy PRD-1

Countermeasure Strategy: Improve roadside safety to prevent deaths and injuries.

Problem Identification: To prevent death and injury from crashes from motor vehicles striking other vehicles and individuals stopped at the roadside. These are often vehicle occupants who temporarily step out of the vehicle, but since they are fatally injured *outside* of the vehicle, these fatalities are classified as pedestrian fatalities. Fatalities related to working in the roadway, bus stops, mailbox use, or vendor trucks (e.g., ice cream truck) are also included in this category.

Countermeasures and Justification:

- 4.2 Reduce and Enforce Speed Limits – CTW 3 stars citation
- 2.1 Elementary-Age Child Pedestrian Training – CTW 3 stars citation
- 5.2 Mass Media Campaigns – CTW 3 stars citation

Performance Target: Maintain the five-year moving average ending in 2026 (2022-2026) to 5 or under
Annual 2025 benchmark: 5 or under (2021-2025 five-year moving average)
Annual 2024 benchmark: 5 or under (2020-2024 five-year moving average)

Estimated 3-Year Funding Allocation: $600,000.00; BIL and FAST Act 402CP, 405h

Project Considerations:

- Based on data analysis, identify areas with a high frequency of roadside fatality and injury incidents, prioritizing the most severe problem locations; this initiative will also cover Justice40 areas, ensuring that underserved communities are included in the effort
- Sociodemographic data
- Bilingual messaging
- Youth Educational communities
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Affected communities identified by organizations
- Potential Partners, such as AAA, CTDOT

Uniform Guidelines: The HSO will adhere to the NHTSA regulations as stated in 23 CFR 1300.27 Preventing Roadside Deaths program and Highway Safety Program Guideline No. 16 Management of Highway Incidents, item v - approaching drivers and detour them with reasonable care past hazardous wreckage or spillage.

Driver and Officer Safety Education

Countermeasure Strategy DOSE-1

Countermeasure Strategy: To improve law enforcement services in motor vehicle crash prevention, traffic supervision, and post-accident procedures.

Problem Identification: Create training program(s) for both driver's education as well as law enforcement on the expectations during a traffic stop.

Countermeasures and Justification:

- 5.2 Mass Media Campaigns – CTW 3 stars citation
- 2.1 Pre-Licensure Driver Education – CTW 2 stars citation

Performance Target: Number of students and law enforcement officers trained
2026: Student Classes – 50; Number of Police Departments – 50
2025: Student Classes – 35; Number of Police Departments – 35
2024: Student Classes – 20; Number of Police Departments – 20

Estimated 3-Year Funding Allocation: $1,500,000.00; BIL and FAST Act 402CP, 402PT, 405i

Project Considerations:

- Identify racial and ethnic disparities through data collection and statistical analysis of Connecticut's municipal police departments, State Police, and other special police agencies
- Affected communities and potentially affected communities
- Multilingual campaign efforts
- Public Participation and Engagement (Community members' feedback from Justice40 areas)
- Potential partners, such as UConn, Waterbury Police Department/Hangtime, AAA, Connecticut Department of Motor Vehicles

Uniform Guidelines: The HSO will adhere to the NHTSA regulations as stated in 23 CFR 1300.28 Driver and Officer Safety Education program and Highway Safety Program Guideline No. 15 - Traffic Enforcement Services. Develop cooperative working relationships with other governmental agencies, community organizations, and traffic safety stakeholders on traffic safety and enforcement issues.

Planning and Administration

Countermeasure Strategy PA-1

Problem Identification: The HSO, along with its traffic safety partners, must continue to identify highway safety problems and assist in developing programs to address these problems.

Countermeasures and Justification: Planning and Administration are the required activities for effective state highway safety program implementation.

Performance Target: To submit:

- 2027-2029 Triennial HSP by July 1, 2026
- 2025, 2026, 2027 Annual Grant Application and updates to the triennial HSP including Federal 402/405 application(s) by August 1, of the respective years
- 2023, 2024, 2025 Annual Report by 120 days after the end of the fiscal year
- Voucher to the Grants Tracking System (GTS) monthly

Estimated 3-Year Funding Allocation: $5,700,000.00; BIL and FAST Act 154PA, 402AL, 402CR, 402OP, 402PT, 402TR, 405c, 405e, 405f

Project Considerations: The HSO will serve as the primary agency responsible for ensuring that highway safety concerns for Connecticut are identified and addressed through the development and implementation of appropriate countermeasures. The Planning and Administration Area includes the costs necessary that are related to the overall management of the programs and projects for the 2024-2026 HSP planning period. The goal is to administer a fiscally responsible, effective highway safety program that is data-driven, equitable, includes stakeholders, and addresses the State's specific safety problems.

Uniform Guidelines: The Connecticut HSO will adhere to the NHTSA regulations as stated in 23 CFR 1300.13(a) for Planning and Administration costs.

1300.11 (b)(5) PERMORMANCE REPORT

The program level Performance Report describes the progress towards meeting State performance target(s) for each program area identified in the HSP 2023. *While the term 'Target' is used in accordance with the Federal Register, CTDOT and the HSO views these as guiding projections, and not an endorsement of any specific number of fatalities or serious injuries.*

	Performance Measure	Target Period/ Target Year(s)	Target Value 2023	Progress
1	C-1) Number of traffic fatalities (FARS)	5 years 2019-2023	270	In Progress
2	C-2) Number of serious injuries in traffic crashes (State crash data files)	5 years 2019-2023	1300	In Progress
3	C-3) Fatalities/VMT (FARS, FHWA)	5 years 2019-2023	0.850	In Progress
4	C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions (FARS)	5 years 2019-2023	63	In Progress
5	C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of 0.08 and above (FARS)	5 years 2019-2023	110	In Progress
6	C-6) Number of speeding-related fatalities (FARS)	5 years 2019-2023	83	In Progress
7	C-7) Number of motorcyclist fatalities (FARS)	5 years 2019-2023	52	In Progress
8	C-8) Number of unhelmeted motorcyclist fatalities (FARS)	5 years 2019-2023	30	In Progress
9	C-9) Number of drivers aged 20 or younger involved in fatal crashes (FARS)	5 years 2019-2023	32	In Progress
10	C-10) Number of pedestrian fatalities (FARS)	5 years 2019-2023	53	In Progress
11	C-11) Number of bicyclist fatalities (FARS)	5 years 2019-2023	3	In Progress
12	B-1) Observed seat belt use for passenger vehicles, front seat outboard occupants (survey)	Annual/2023	94%	In Progress
13	Distracted Driver Fatalities	5 years 2019-2023	10	In Progress
14	Percentage of citations adjudicated through Online Disposition System and posted to Driver History File	Annual/2023	80%	Met
15	Percentage of Law Enforcement Agencies participating in the use of eCitation	Annual/2023	80%	In progress
16	Traffic Stop data collection	Annual/2023	100%	In Progress

Performance Measure C-1: Number of Traffic Fatalities

Progress: In Progress

Program-Area-Level Report: The performance target for traffic fatalities is 270 for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is 284 fatalities and shows an increasing trend based on the current preliminary 2022 State data. Based on the five-year moving average projection using the available data, the potential to meet the target (2019-2023) looks difficult. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure C-2: Number of Serious Injuries in Traffic Crashes

Progress: In Progress

Program-Area-Level Report: The performance target for serious (A) injuries is 1,300 for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is 1,439.6 serious injuries and shows a decreasing trend based on the current preliminary 2022 State data. However, based on the five-year moving average projection using the available data, the potential to meet the target (2019-2023) looks difficult. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure C-3: Fatalities/VMT

Progress: In Progress

Program-Area-Level Report: The performance target for the fatality rate is 0.850 for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is a 0.927 fatality rate and shows an increasing trend. The data for 2022 VMT were not yet available at the time this document was prepared, thus 2021 VMT data was used for analyzing the 2022 data. Based on the five-year moving average projection using the available data, the potential to meet the target (2019-2023) looks difficult. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure C-4: Number of Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions

Progress: In Progress

Program-Area-Level Report: The performance target for the number of unrestrained passenger vehicle occupant fatalities, all seat positions, is to maintain the five-year moving average of 63 fatalities for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is 65 fatalities and is projected to increase based on the current preliminary 2022 State data. The potential to meet the target (2019-2023) looks difficult. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure C-5: Number of Fatalities in Crashes Involving a Driver or Motorcycle Operator with a BAC of 0.08 and Above

Progress: In Progress

Program-Area-Level Report: The performance target for the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of 0.08 and above, is to maintain the five-year moving average of 110 fatalities for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is 115 fatalities and shows an upward trajectory. The potential to meet the target (2019-2023) looks difficult. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis. The preliminary 2022 State data were not included in the analysis due to uncertainty of the data for this measure.

Performance Measure C-6: Number of Speeding-Related Fatalities

Progress: In Progress

Program-Area-Level Report: The performance target for the number of speeding-related fatalities is to maintain the five-year moving average of 83 fatalities for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is 96 fatalities. The potential to meet the target (2019-2023) looks difficult. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis. The preliminary 2022 State data were not included in the analysis due to uncertainty of the data for this measure.

Performance Measure C-7: Number of Motorcyclist Fatalities

Progress: In Progress

Program-Area-Level Report: The performance target for the number of motorcyclist fatalities is

to maintain the five-year moving average of 52 fatalities for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is 55 fatalities and is projected to stay flat based on the current preliminary 2022 State data. The potential to meet the target (2019-2023) looks difficult. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure C-8: Number of Unhelmeted Motorcyclist Fatalities

Progress: In Progress

Program-Area-Level Report: The performance target for the number of unhelmeted motorcyclist fatalities is to maintain the five-year moving average of 30 fatalities for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is 30 fatalities and the current preliminary 2022 State data suggest a decreasing trend. Connecticut is cautiously optimistic about achieving the five-year average target by December 31, 2023. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure C-9: Number of Drivers Aged 20 or Younger Involved in Fatal Crashes*

Progress: In Progress

*The C-9 Performance Measure in the 2023 HSP included number of drivers aged 20 or younger *killed* in fatal crashes.

Program-Area-Level Report: The performance target for the number of drivers aged 20 or younger killed in fatal crashes, is to maintain the five-year moving average of 32 fatalities for the HSP 2023 planning period. The 2017-2021 five-year moving average (red), which includes the latest five years of FARS data, is 35 fatalities and projects an increasing trend. Based on the five-year moving average projection using the available data, the potential to meet the target (2019-2023) looks difficult. The graph below shows the supporting data and data analysis.
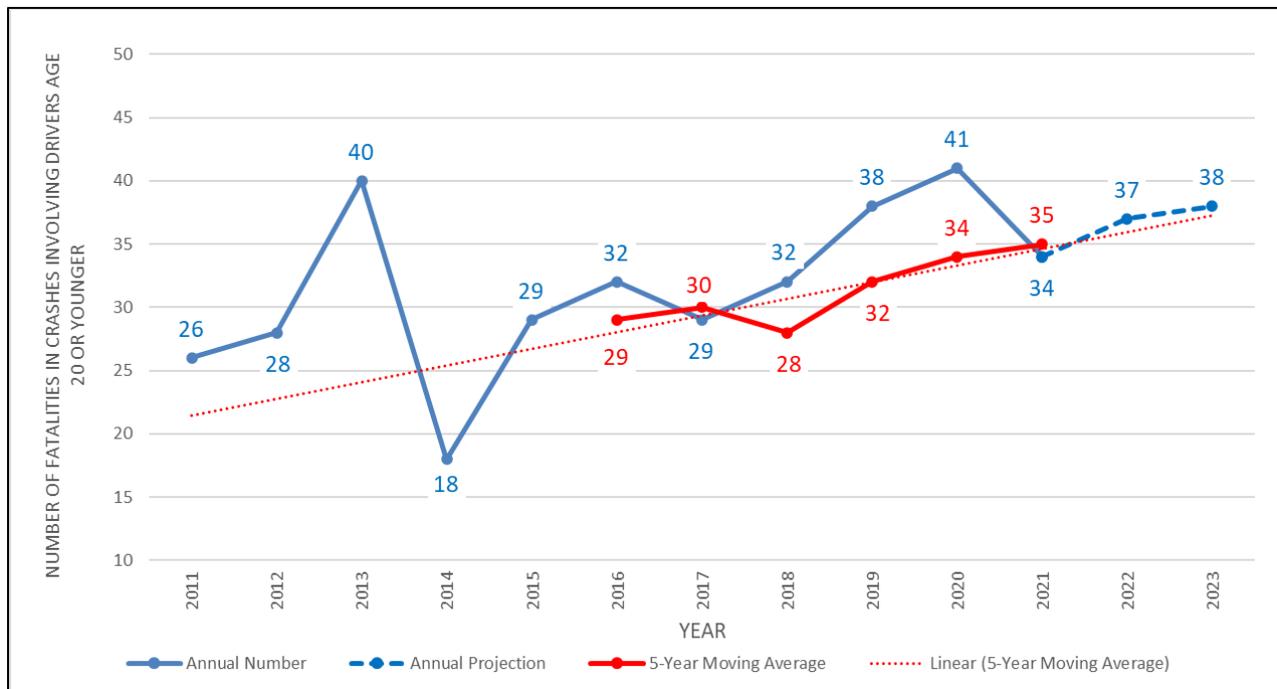
Sources: FARS Final Files 2012-2020, FARS Annual Report File 2021

Performance Measure C-10: Number of Pedestrian Fatalities

Progress: In Progress

Program-Area-Level Report: The performance target for the number of pedestrian fatalities, is to maintain the five-year moving average of 53 fatalities for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is 55 fatalities, and shows an increasing trend based on the preliminary 2022 State data. Based on the five-year moving average projection using the available data, the potential to meet the target (2019-2023) looks difficult. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure C-11: Number of Bicyclist Fatalities

Progress: In Progress

Program-Area-Level Report: The performance target for the number of bicyclist fatalities, is to maintain the five-year moving average of three (3) fatalities for the HSP 2023 planning period. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is three (3) fatalities. Based on the current preliminary 2022 State data, there has been a drop in

bicyclist fatalities compared to 2020. Connecticut is cautiously optimistic about achieving the five-year average target by December 31, 2023. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure B-1: Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (Survey)

Progress: In Progress

Program-Area-Level Report: The performance target for the observed seat belt use for passenger vehicles, front seat outboard occupants, is 94 percent in 2023.
The 2023 seat belt use survey was conducted during the months of June 2023, the results of which will not be available until the December of 2023.

Performance Measure: Distracted Driver Fatalities

Progress: In Progress

Program-Area-Level Report: The performance target for the number of distracted driving fatalities is 10 in 2023. The 2017-2021 five-year moving average, which includes the latest five years of FARS data, is 10 fatalities and the current preliminary 2022 State data suggest a decreasing trend. Connecticut is cautiously optimistic about achieving the five-year average target by December 31, 2023. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure: Percentage of Citations Adjudicated through Online Disposition System and Posted to Driver History File

Progress: Met

Program-Area-Level Report: The performance target for this measure is to decrease the time it takes to adjudicate and post the outcome to the Driver History File to 80 percent in 2023.

The Connecticut TRCC continued to focus on the eCitation and Adjudication System. An Online Adjudication System was deployed which allows for timely adjudicating and disposition of motor vehicle violations with immediate posting to Driver History Files. The Online Adjudication System enables individuals who plead "not guilty" to an infraction to participate in the court through the electronic process, rather than be required to physically appear in court (not including trials).

Currently available in all locations in the State, the online dockets have reduced costs, improved the quality and timeliness of hearings, and improved the convenience and efficiency of the process for both the court and the individual who receives the infraction. These adjudication results are subsequently available in a timely manner to members of the highway safety community for use in subsequent offender sanctioning, training, and education of high-risk driver populations. Prosecutors have real time access to driver histories, pending cases and registration information to consider when disposing infractions. Disposition results are now entered immediately to the Drive History File.

C/A-T-2 – Citation/Adjudication Timeliness – The mean number of days from the date a citation is issued to the date the citation/adjudication disposition is entered into the Driver Record File. *Connecticut's method for calculation is the total number of days and hours from citation/ adjudication disposition to posting of the disposition outcome to the Driver History File.* The mean number of days decreased from 1.227 days in 2017-2018, to 0.274 days in 2018-2019, which is a 77.62 percent improvement. The mean number of days further decreased to 0.0703 days in 2019-2020, which is a 74.40 percent improvement compared to the 2018-2019 period or a 95 percent improvement compared to the 2017-2018 period. However, due to the COVID-19 pandemic, the citation traffic violations that were disposed online by the court during this period decreased by 41.14 percent (7,890 citations in 2019-2020 compared to 4,644 citations in 2020-2021) and the time it took for the adjudication increased by 133.87 percent (0.070 days to 0.164 days per citation). During the 2021-2022 period, there was improvement of 61.33 percent from 0.16451335 in the average number of days to 0. 063615 days in 2021-2022. Current data show an improvement of 35.23 percent from 0. 063615 in the average number of days in 2021-2022 to 0.04120075 days in 2022-2023. Also, during the period of 2022-2023, the total number of online dispositions increased significantly from 11,491 to 15,024. Overall, during the period of 2022-2023, there was an improvement of 96.64 percent compared to the period of 2017-2018.

Time Period	04/01/2017 to 03/31/2018	04/01/2018 to 03/31/2019	04/01/2019 to 03/31/2020	04/01/2020 to 03/31/2021	04/01/2021 to 03/31/2022	04/01/2022 to 03/31/2023
Number of days from Citation Issuance to when Disposition is entered in Driver History File	1.227642276 days	0.274798928 days	0.07034221 days	0.16451335 days	0. 063615 days	0.04120075 days
Change	-	-77.62%	-74.40%	133.87%	-61.33%	-35.23%
Improvement (Reduction)	-	77.62%	74.40%	-133.87%	61.33%	35.23%

Performance Measure: Percentage of Law Enforcement Agencies Participating in the Use of eCitation

Progress: In Progress

Program-Area-Level Report: The performance target for this measure is to increase the number of law enforcement agencies using the eCitation system to 80 percent in 2023. Out of 95 Police agencies, currently there are 65 agencies using the eCitation system (64 Municipal and one University Police Department) and 30 agencies are still using paper tickets. 68 percent of the Police agencies are currently using eCitation. Connecticut State Police also uses eCitation. The potential to meet the 2023 target looks difficult. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.

Performance Measure: Traffic Stop Data Collection

Progress: In Progress

Program-Area-Level Report: The performance target for the traffic stop data collection performance measure is to have 100 percent of the 107 police agencies that collect and submit traffic stop records, do so electronically during 2023. At present, 106 of the 107 police agencies report data electronically at the time of the stop, equaling 99 percent of the police agencies submitting data electronically. Refer to the Performance Plan section of this triennial HSP for the supporting data and data analysis.