Connecticut’s Strategic Highway Safety Plan is a testament to a commitment by the people of Connecticut: drive down crashes and drive home safely. Keeping that commitment is the responsibility of professionals and ordinary citizens, each with a significant stake in the outcome. Many stakeholders can be found outside the conventional realm of Connecticut’s Department of Transportation (CT DOT), law enforcement, and government. From a trauma surgeon treating children to the parent of two teen drivers, the demands of the roadway safety challenge are met by a wide variety of individuals, each of whom puts a different face on the job.

Let’s meet a few of the extraordinary people on the front lines of safer roads in Connecticut.
The rules of the road are clear. Each of the teenagers took driver’s education classes that required 48 hours of classroom training and 8 hours of driving with an instructor. Both kids passed the test for their Learners Permit on the first try. Each had to pass another test for a full driver’s license. Connecticut’s graduated driving laws regulate their ability to drive with passengers and the hours they’re allowed to operate a vehicle, introducing those privileges as their experience grows.

The rules of the house are similarly straightforward. “We have tracker units in the cars that plug in under dash. We know where they are at all times, how fast they’re going, every time the car starts and stops, whether there’s a battery issue, etc. It’s hooked up to our phones. So if one of our kids is on the highway and I see a speed of 75, they’re going to get questions. If it continues to happen, they will lose their car for a certain time.”

“I work in an auto dealership,” Jen says, “and I am constantly seeing cars go into the body shop. The staff tells me it’s due to texting.” Asked if she has any way to mitigate that with her son and daughter, she says she will occasionally do a spot check. “Every so often, I’ll call my daughter and she won’t answer. I’ll look at the tracker and see that she’s on the road and think ‘good.’ We also installed satellite radio so they can change the station from their steering wheel to reduce distraction.”

When it comes to safe driving, Jen Couture makes one thing clear to her kids, Diana (17) and Timur (16): they must respect the rules of the road AND the rules of the house.

Monitor driving activity with a GPS tracking device

“Dad and I love you and want you to be safe.”
Did Jen and her husband do any research to help the kids prepare for safe driving? “When they were going through Driver’s Ed, there was a mandatory two-hour course for parents,” she says. “They were telling us all the violations and what we needed to do as parents. We had to have 30 hours in the car with them before they got their licenses.”

Jen raises a question about ways we could provide additional support to young drivers. “If you’re normal and drive okay, there’s [no additional training] out there for you. Only when you screw up do you have to get more training. I’d like to see something like: you’ve had your license for a year, so let’s go through this refresher course.”

What is the hardest part for Jen about this stage? “It’s probably just being nervous that they’re out there. Not necessarily that they will be the cause of an accident, but there’s other people out there. Friday and Saturday nights, it’s good that they have to be home by 11. They go to movies, to Friendly’s. I can’t go to sleep until they’re home.” She says that as time goes on and her young drivers have their licenses longer but stay crash-free, it’ll be easier to get to sleep.

That said, she worries. “There are certain kids who are legal right now to drive my kids and I’ve said don’t you ever get in the car with him, ever.” Jen says. “I’ve seen it: recklessness, speeding way above the limit down a road when suddenly a car pulled out, causing a crash. [That driver was] very fortunate to… walk away without injuries. [It brings up] a fear in me… now Timur is responsible for two more lives.”

Jen Couture knows, even in partnership with the DOT and law enforcement, her proactive parenting is mainly a foundation for the Couture teens’ decision-making.

“My husband and I have done as much as we can to protect them,” she says. “After that, it’s up to them.”
“Trauma is multi-faceted,” says Dr. Brendan Campbell, Director of Trauma at Connecticut Children’s Medical Center. While many think his job is all about response, he makes it clear that he considers his job to be prevention. “It is so difficult to fix this problem after it occurs. Traumatic brain injury is a lot more complex to handle” than laws and outreach, he says.

For instance, being involved in legislation and tracking the epidemiology of Graduated Driver Licensing (GDL) laws, helps all stakeholders understand where life threatening problems can be identified and prevented before they end up in his emergency room. “More than half of teen motor vehicle fatalities occur when the teen is not abiding by the GDL\(^1\),” Campbell says, “…when they are violating curfew, [or] driving with friends before graduating to that privilege.”

“Another opportunity we have is helping parents understand the laws. When parents know the restrictions and understand why they exist, they are more likely to enforce them, make a contract with the young driver, be in the car with them. The first six months is critical. That’s when parents should make sure the teen’s driving is purposeful, not joyriding.”

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Borrup entered the injury prevention field from the perspective of an advocate seeking solutions to death and injury from violence. When he learned how many children died or suffered unintentional injury, he was taken aback. “These are not numbers. They are birthdays that will never happen, weddings…” he says, “Impacts that hit everyone – family, friends – forever.”

Campbell and Borrup coordinate with CT DOT to make a difference. “The intersection with CT DOT is helping us implement mini-grants for child car seat fitting stations statewide, efforts to prevent kids being left in hot cars, and pedestrian and bicycle safety measures, in addition to teen driver safety work.”

While the challenges are steep, Borrup feels that investment is well placed for teen driving at the moment, targeting distracted driving, DUI, and other life threatening behaviors. He notes that education and awareness will be needed for new issues. “We may be starting to see the numbers go up due to opioids,” he says. “The Massachusetts medical marijuana laws bleed into Connecticut, too.”

“I don’t know how we will [ultimately address] distracted driving,” he adds. “Possibly technology, possibly autonomous vehicles.”

For more information, see www.wheresbaby.org and www.watchformect.org.

The more we can broaden outreach through the Connecticut’s Strategic Highway Safety Plan, the more we can increase the impact of our work.
Kathryn Faraci has known great challenges and significant progress in her 30 years with CT DOT. As the Supervisor of the agency’s Highway Safety Office, her job involves both professional responsibilities and considerable personal commitment. What inspires her when the work is hard and the obstacles seem insurmountable? “Pride in working with so many stakeholders who are truly dedicated to the mission of their safety programs,” she says. “Your motivational momentum increases when you are associated with individuals that have that much passion and are part of a network of people that bring so much valuable insight to the table.”

Information – finding and working with the data that she and her colleagues need – is critical in the team’s ability to zero in on and address safety issues on Connecticut’s roadways. “Pedestrians, bikes, teen drivers, occupant protection, motorcycle safety, impaired and distracted driving: we are able to target [them] in a comprehensive process, overlapping multiple countermeasures where necessary,” Faraci says. It is important that she receive a fast turnaround on data needs. “We are able to do analyses in a more expeditious manner than in years past. The core of our planning process is our annual Highway Safety Plan and Strategic Highway Safety Plan (SHSP). Both of these plans are built on performance goals, trends and timely analyses of data.”

“As a committee member of the SHSP Emphasis Areas, the Highway Safety Office has created stronger coordination with our DOT engineers. This in turn, has led to a greater understanding of each other’s roles within the highway safety arena,” she adds. “Our crash data repository is also valuable resource which provides data and heat maps within each Connecticut municipality. A repository user can run queries, crash data reports and is also able to view an intersection and review possible reasons why the crashes may have occurred – a sight line, a curve in the road, or possibly negative driver behavior. This engineering evaluation provides an informational tool for the Department’s assessment of roadway configuration and signage,” she explains.
Faraci’s team helps distribute federal transportation safety funds to her agency’s stakeholders to assist them in carrying out their safety missions. “Law enforcement is one of our biggest partners. It is encouraging to hear that if it wasn’t for the financial assistance that the Highway Safety Office provides, they would not be able to address and combat some of the traffic safety issues within their communities. The fact is we are part of a system whereby the funds are appropriated from the National Highway Traffic Safety Administration to the DOT, which assists our Office and the State in carrying out our traffic safety mission. We hear it when the officers come into our office – how appreciative they are. However, they are the ones who are the true highway safety advocates by placing their lives on the line everyday so that our Connecticut roadways are safe to travel.”

She also notes the agency’s commitment to front line officers, who are charged with capturing key information that supports the purpose of the grant funding they receive. “As a civilian, you have no idea what an officer had to endure the night before, possibly assisting with a homicide, DUI arrest, and/or a fatal crash. If supportive documentation is missing from their grant, we are here to assist them. We want to ensure that the Highway Safety Office grant process is as user-friendly as possible.”

Faraci talks about the faces of safety that help drive her and her team’s dedication. “Mothers Against Drunk Driving has a wall in their conference room that displays pictures of those killed in a drunk driving crash. Every one of those faces could be someone who would be alive today if it were not for an intoxicated driver on our State roadways.” She cites the recently-reported 5.6% increase in fatalities nationwide in 2016, which equates to 37,461 lives lost, and also identifies new challenges. “A whole new realm we’re currently addressing with law enforcement officials is the enforcement of safety for pedestrians and bicyclists. We are ramping up education, with information specific to each community, and conducting concurrent enforcement in conjunction with our “Watch For Me CT” safety initiative,” Faraci says.

She describes a coordinated response to the safety challenges, with education, enforcement, and the DOT working in concert, along with the general public. “We use multi-faceted approaches to combat negative driver behavior every way we can. Our biggest challenge is awareness. Our Highway Safety Office not only assists with law enforcement training initiative, but also provides educational outreach through public sports and concert venues, school presentations such as our ‘Save A Life Tour,’ and the media.”

“When you think of a DOT, people typically think of transportation infrastructure such as roadways, construction, transit, rails, and bridges. Here within the DOT Highway Safety Office, we deal with the human element. Our Office’s passionate mission is to prevent roadway fatalities and injuries as a result of crashes related to driver behavior.” Faraci says. Her words are another reminder of the human faces behind the SHSP, the roadmap to safer roadways in Connecticut.

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In an era of big data, privacy concerns, and inter-agency trust issues, basic collection and use of traffic safety-related data is still a big challenge nationwide.

The diversity of data sources adds significantly to the difficulty. Crash data, injury reports, treatment records, toxicology reports, driver history (including how long a person has been driving per Graduated Driver Licensing status), judicial records reflecting factors like speeding, DUI status, and legal licensure—all help researchers discern patterns that have traffic safety consequences and identify gaps where more research is needed. On the policy and mitigation front line, practitioners need evidence on which to base investments and improvements. But each of these vital information resources is stewarded by a different agency or group.

Dr. Eric Jackson, Director of the Connecticut Transportation Safety Research Center at the University of Connecticut, first recognized a chance to team with CT DOT staff to address the problem at a 2010 Traffic Records Coordinating Committee meeting. An opportunity existed for the University to join with CT DOT professionals in search of solutions. At this event, key indicators pointed to the need for access to a data warehouse for use by all.

Dr. Jackson soon travelled with DOT representatives to Louisiana State University for a peer exchange on the topic. Further discussion led, in 2012, to a formal partnership with the University that helped CT DOT gain quick and efficient access to the information it needs to cost-effectively support the safety of Connecticut motorists.
The Transportation Safety Research Center develops products for use by the DOT and its safety partners with a goal of reducing risky behaviors to prevent a crash from occurring. The Center’s research supports interventions through engineering, public awareness, and policy. It also helps address changing dynamics in the traffic safety world, such as the need to impact behavior in an era of declining law enforcement resources.

If given an unlimited budget, Dr. Jackson would hasten the development of technologies to enable successful deployment of automated vehicles. Reducing human error in driver behavior could accelerate the pace of the transportation community’s ultimate goal of zero traffic injuries and fatalities.

While aiming for a better future, the work of Dr. Jackson and his staff, and the Center’s partnership with Connecticut DOT, are making a difference today. “We can see the trends that are starting to emerge. We are learning how to look into the data and stop [a new problem] from happening or impact it,” he says.

Asked what animates his personal commitment, he says, thoughtfully...

“If I can prevent even one middle of the night knock on the door...”
Leah Morasutti, a University of Connecticut student, is no stranger to solving problems with engineering solutions. Her mother, a practicing engineer, has spent a career doing just that. But in her travels to and from class each day, Morasutti has observed a lot of issues that seem more connected to human behavior than anything else.

While she experiences few problems walking near her off campus housing, as she gets closer to school, Morasutti’s defenses go up. First, she encounters drivers on the outskirts of the campus who don’t respect the school zone speed limits or watch for pedestrians in the crosswalk. On campus, fellow non-drivers can also be a problem.

“The first day of school, I almost got run over by a cyclist. I actually had to jump out of the way,” she said, noting that cyclists and mopeds navigate on and off the sidewalk to avoid stopping with other traffic. “Everyone seems to feel they’re in the right and whoever is not them is wrong.” But it can be confusing to know what to expect. “Are they allowed to be there? Are you supposed to move or are they?”

Asked how frequently she encounters the issue, she says “At least once a day I’m dodging something on campus.” She notes, in fairness, that sometimes the problem is another pedestrian focused on a phone, bumping into others.

We're all partners in safety.
Morasutti estimates she gets around about 90% of the time on foot during the school year. What would “pedestrian utopia” be to her? “Maybe something more like what cars have. Signs and signals. Maybe something that makes drivers aware of pedestrians in the vicinity. If all the systems were more uniform, maybe it would be easier for someone to respect the fact that others are there and observe the rules. Less room to just randomly defy them.”

She also cites the value of being informed of the rules.

“Education allows me to do something, to speak up, if I know for a fact that the behavior is in conflict with the rules.”

From a student standpoint, other potential practical, short-term solutions she imagines are efforts to “…make pedestrians a priority when you enter campus. No matter where you enter campus, the speed limit drops to 30. But that doesn’t say ‘pedestrians are a priority’ it just says ‘slow down.’ If the message was ‘once you enter UConn you have entered a world in which pedestrians are a priority,’ that might send a wake-up call.”

The University notes that, on an average day, it has more than 20,000 people on its campus. That makes it “the equivalent of a very congested small city in which students, employees and guests are sharing our roads and sidewalks,” says spokesperson, Stephanie Reitz.

“As with any college campus, safety is UConn’s highest priority and it puts a great deal of thought and planning into traffic calming measures, crosswalk placement, and other precautions. We encourage our Huskies to watch out for each other and to remember that we’re all partners in safety.”
From Connecticut’s Governor to school crossing guards, from police officers to pedestrian and bicyclist advocates, on interstate highways and rural byways, a circle of safety stewards is hard at work saving lives and helping ensure that Connecticut continues to thrive. Innovation and individual commitment move Connecticut toward the goals of its Strategic Highway Safety Plan with a spirit that is, without a doubt, still revolutionary.