Report to Commissioner David Bernhardt from

The Task Force on Roadway Safety

October 3, 2017



Prepared by

The Knight Canney Group

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Task Force on Roadway Safety

At the request of MaineDOT Commissioner David Bernhardt, senior staff at the Maine Department of Transportation formed the Task Force on Roadway Safety in an effort to address the rising number and incidents of vehicle, pedestrian, and bicycle fatalities in Maine.

Data indicate that numerous factors contribute to this trend both here in Maine and across the nation, including:

- Highway design
- Aggressive driving
- Speeding
- Device distraction

The task force was formed against the back drop of broad consensus among highway safety professionals that no single solution can slow or revers these continuing upward trends and that in order to see an actual change in trajectory, state transportation agencies will need to partner with stakeholders and act on multiple fronts.

MaineDOT, with the support of its partners, strives to be a national leader in this cause.

Task Force Members, supporting personnel, schedule, and assignment

Members of the task force are:

- Jon Nass, MaineDOT Deputy Commissioner
- Joyce Noel Taylor, MaineDOT Chief Engineer
 - o Rhonda Fletcher, MaineDOT
 - Duane Brunell, MaineDOT/Strategic Highway Safety Planning Committee
 - Patrick Adams, MaineDOT
- Chris Branch, City of Portland
- Tim Doyle, Maine Motor Transport Association
- Dennis Fitzgibbons, representing disabled community
- Nancy Grant, Bicycle Coalition of Maine
- David Jones, City of Lewiston
- Peter Merfeld, Maine Turnpike Authority
 - Erin Courtney, Maine Turnpike Authority
- Pat Moody, AAA Northern New England
- Lori Parham, AARP Maine



Bruce Scott, Maine State Police/ Department of Public Safety
The Task Force on Roadway Safety convened for the first time on February 22,
2017 and met once a month since. Each meeting consisted of briefings on roadway safety needs from constituencies as varied as senior citizens,
recreational and commuter bicyclists, municipal public works departments, and state police and delved into topics as varied as communications needs, funding, and how to prepare for autonomous vehicles.

The task force was asked to:

- Identify and evaluate pertinent data, and understand roadway safety trends
- Evaluate existing engineering guidance as it impacts roadway safety
- Exchange information, perspectives and expertise in the non-engineering aspects of roadway safety
- Develop recommendations regarding:
 - Changes to existing policies, and potential development of new policy
 - Funding levels for new or existing initiatives
 - Strengthening of roadway safety awareness and culture within the department
 - Public information and education efforts and tools
- Report back to the Commissioner by October 1, 2017 so that recommendations can be evaluated and considered for potential funding in the MaineDOT 2018-2019-2020 Work Plan

Working together, the task force arrived at recommendations, which its members unanimously support.

Safety recommendation from the Task Force on Roadway Safety

In June 2017, The Knight Canney Group was brought in to help facilitate the task force's final discussions and to distill its recommendations into a list that can be evaluated and considered for inclusion in both the MaineDOT 2018-2019-2020 Work Plan and the agency's overall culture. Over the following three months, the task force focused its recommendations to areas where MaineDOT has the authority to effect change.

The task force categorized its recommendations under the headings of:

- Engineering
- Complete Streets
- Education
- Enforcement, and
- Funding

One particular menace was pervasive in the task force's discussions and recommendations in nearly all categories seek to address it: distracted driving. Whether the focus is smart phones and texting or smart cars and swiping to turn up the heat or turn down the radio, drivers are more distracted than ever. While quantitative evidence of increased distracted driving is difficult to obtain, anecdotal evidence and personal observation by law enforcement and highway work crews indicates the problem is accelerating—and putting all roadway users at risk.

A survey released in 2016 by AAA determined that 87% of drivers "engaged in at least one risky behavior while behind the wheel in the last month" from when they were surveyed. Drivers admitted to:

- Distracted driving
- Speeding
- Drowsy and impaired driving
- Not using seatbelts
- Running red lights

Even though 80 percent of those surveyed view distracted driving as a bigger problem than three years ago,

AAA 2015 Traffic Safety Culture Index: http://newsroom.aaa.com/2016/02/87-percent-of-drivers-engage-in-unsafe-behaviors-while-behind-the-wheel/



- 70% of those surveyed report talking on a cell phone while driving
- 42% admit to reading text messages or email
- 32% admit to typing or sending a text or email
- 8% said they text or email regularly while driving

Nearly half of all drivers report going 15 mph over the speed limit on a freeway. Nearly 45% report going 10 mph over the limit on a residential street.

Along with distracted driving, motor vehicle speed—on all roadways—was cited as a safety threat to all users. A recent National Transportation Safety Board (NTSB) study found "the relationship between speed and crash involvement is complex and is affected by a number of factors, however, speed—and therefore speeding—increases crash risk both in terms of the likelihood of being involved in a crash and in terms of the severity of injuries sustain by those involved in speeding-related crashes."

A 2011 report from the AAA Foundation for Traffic Safety made it clear that in accidents involving a motor vehicle and a pedestrian, the pedestrian will be harmed far more.

The report concluded, "To reduce the number of pedestrians seriously injured and killed in crashes with motor vehicles, it is necessary to reduce the risk of crashes occurring, the risk of severe or fatal outcomes in crashes, or both. This study can inform strategies to reduce the risk of severe or fatal outcomes when pedestrians are struck. Specifically, the results of this study highlight the importance of limiting the exposure of pedestrians to vehicles travelling at high speeds." ‡

Reducing speed can come via measures as varied as road construction and paint striping.

[‡] AAA Foundation for Public Safety, Impact Speed and a Pedestrian's Risk of Severe Injury or Death https://www.aaafoundation.org/sites/default/files/2011PedestrianRiskVsSpeed.pdf



Prepared exclusively for MaineDOT Commissioner David Bernhardt

[†] NTSB "Reducing Speeding-Related Crashes Involving Passenger Vehicles. https://www.ntsb.gov/news/events/Documents/2017-DCA15SS002-BMG-Abstract.pdf

ENGINEERING

With engineering a primary responsibility at MaineDOT, many of the recommendations fall under this category and could have a measurable impact on roadway safety.

MAINEDOT should:

- Provide engineering and technical aids to affect driver behavior (including Intelligent Transportation Systems)
- Prepare for required infrastructure around autonomous vehicles
- Make improvements to work zone safety
 - Added automated trailer mounted speed limit signs
 - Portable rumble strips
- Construct longer A & D cells where needed on divided, limited access roads
- Construct more and safer enforcement platforms to facilitate easier access into high traffic areas
- Use more road designs that encourage lower speeds
 - More road diet projects
 - Explore more road painting options, including those that are more durable in Maine weather, and create guidelines for communities to better use road painting for better safety
 - Incorporate striping to create more narrow travel lanes, wider shoulders, bike lanes, into resurfacing/paving projects
 - Better safety markings on pavement at intersections
- Continue evaluating how to measure and set safe speeds

COMPLETE STREETS

While "Complete Streets" is, at its heart, a way of engineering roadway safety in communities, the task force felt it needed its own focus as a way of emphasizing the importance of integrating it into MaineDOT's culture, design, and planning for all appropriate projects, as well as educating local communities to its safety benefits.

MAINEDOT should:

- Further implement Complete Streets within the existing infrastructure on all projects as appropriate.
 - Implement comprehensive and required training program on MaineDOT's Complete Streets policy for all staff and subcontractors
 - Review and update Complete Streets Policy as necessary
 - Utilize LTAP (Local Technical Assistance Program established by the Federal Highway Administration to provide training, technical assistance, and information to those municipal and county personnel who are responsible for constructing, maintaining, and managing local roads and bridges in Maine.)
 - Purchase more equipment for use by municipalities for low-cost testing of new traffic calming ideas

EDUCATION

Because of the culture of indifference in many roadway users, the task force recommends a high level of effort be exerted in educating drivers of multiple demographics, pedestrians, and bicyclists to the need for safe and defensive practices at all times among all constituencies.

MAINEDOT should:

- Identify and review the multiple safety committees in state government, and define the purpose, need, roles, and responsibilities of each
- Convene a cabinet level meeting annually to review the recommendations from the Strategic Highway Safety Plan
- Increase use of Variable Message Boards (VMBs) for safety messaging
- Produce safety videos addressing most egregious road network user behavior (and penalties)—with sensitivity to vulnerabilities of different users and outreach to targeted groups
 - For use with driver education programs
 - For J-1 Visa holders
 - For seniors
 - For new Mainers
 - For disabled Mainers
- Continue to help provide low cost, high visibility community outreach
- Continue to educate and engineer, toward the issue of distracted driving
 - Increase MaineDOT signage (permanent and temporary) regarding distracted driving

ENFORCEMENT

MaineDOT has no authority to enforce laws or to punish those who flout them. It does, however, have the ability to promote and support the programs and laws that help law enforcement.

MAINEDOT should:

- Support development of a hands free prohibition that can be enacted into law
- Promote the "vulnerable user" law enforcement detail[§]
- Promote and support any multi-modal safety/enforcement efforts

FUNDING

Everyone on the task force recognizes that funding is in short supply. One member cited estimates that more than \$200 million is needed solely for bringing the state's roads and bridges up to date with needed maintenance. More funding is needed for full ADA compliance within municipalities. Still more is needed to make roads safe for pedestrians and bicyclists and to make other improvements aimed at moving more cars and trucks off the roads.

Requests to seek new funding streams outside the normal appropriations process came from all quarters, as well as suggestions to make existing funds go further—specifically via regulatory channels.

MAINEDOT should:

- Support and seek ways to streamline federal and state regulations that add burdensome costs and extra time to projects
- Significantly increase funding for ADA compliance on existing projects and in design and construction of new projects
- Given finite resources, seek alternative funding to ensure existing road and bridge network is maintained while also supporting alternative transportation and safety initiatives

[§] Maine is one of 11 states that have vulnerable user laws. GHSA report: A Right to the Road: Understanding & Addressing Bicyclist Safety 2017 p. 39



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- Look for more partnership opportunities, such as those offered under the Municipal and Business Partnership Initiatives (MPI & BPI)
- When building its work plan, MAINEDOT should allow towns to seek a waiver for the local match for defined safety issues or needs
- Fund more bike/ped projects in preliminary stages to make them "shovel ready" and eligible for federal or state redistribution funding
 - Including designing more bike/ped projects than are scheduled for funding, so that if a project falls off the list, another is ready to go
- Make funding available to address pedestrian safety hazards identified in the 21 communities examined by the Bicycle Coalition of Maine, via a data driven priority process
- Provide greater aid to small communities (to reduce cost sharing)
- Reduce the cost of bike/ped projects by absorbing them into larger highway projects in a municipality

CONCLUSION

As with any large group, representing even larger constituencies, with diverse—and sometimes conflicting—concerns and priorities, consensus on all ideas was not always possible. Because the overarching goal of this effort is increased and sustained public safety, however, the task force was diligent on focusing its recommendations for the greater good.

These recommendations do not encompass the entirety of the task force's "wish list," but they do represent a unanimously endorsed, comprehensive compilation of recommendations that realistically can be addressed either through the MaineDOT's 2018-2019-2020 Work Plan or through MaineDOT policy.

While MaineDOT convened this task force and the recommendations herein are meant to be presented and promoted by MaineDOT, all partner agencies and stakeholders represented by members of the task force stand ready to advocate for, support, and advance these recommendations in concert with MaineDOT.

Respectfully submitted, The Task Force on Roadway Safety

Report prepared by, Felicia Knight President



The Knight Canney Group