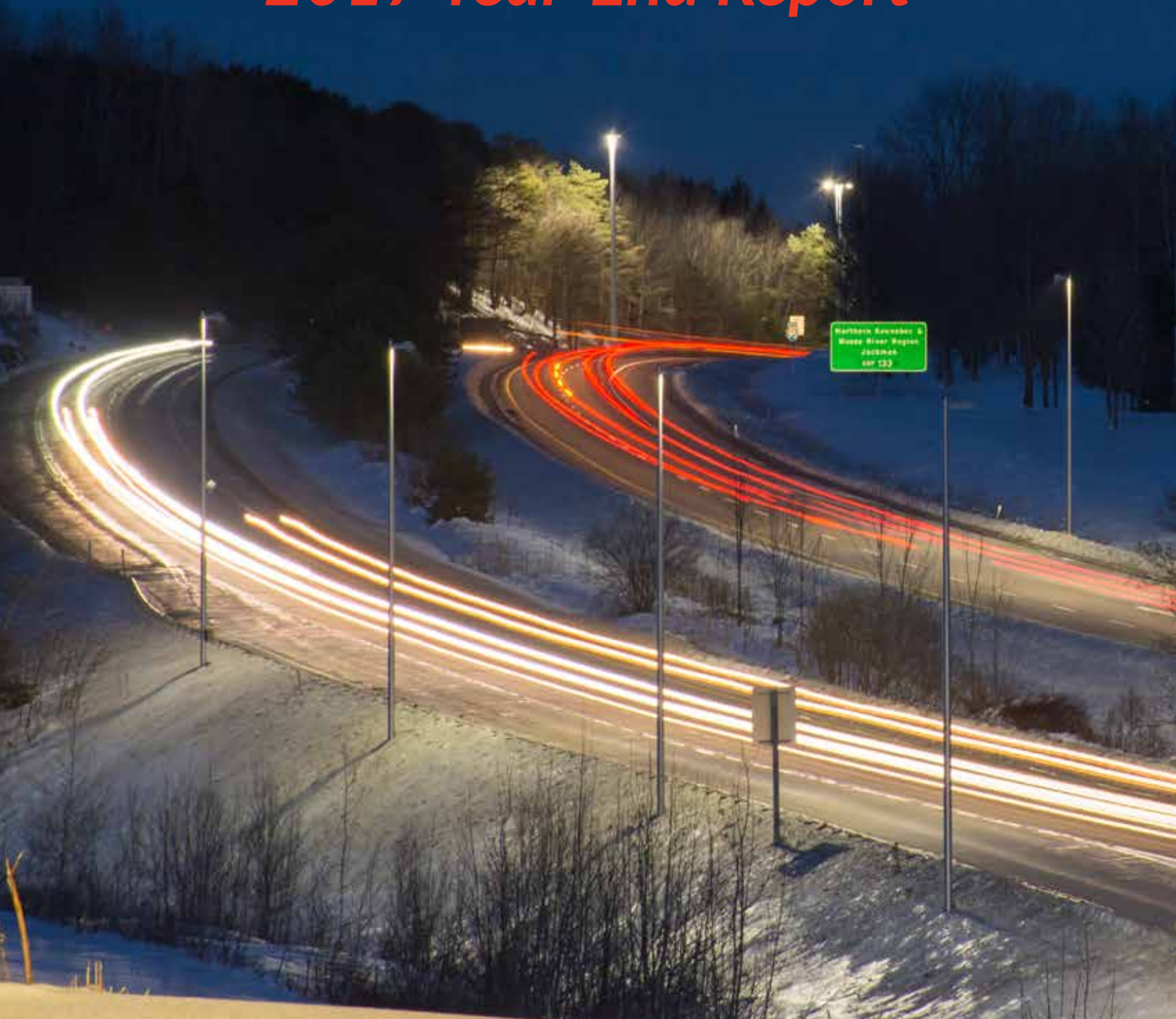


# *MaineDOT Delivers*

## *2017 Year-End Report*



Northern Kennebec &  
Moose River Region  
JACKSON  
Rte 133

# Message from the Commissioner

In 2017, I had the honor of serving as President of the American Association of Highway and Transportation Officials (AASHTO) - the largest association representing the interests of all states on transportation issues. As part of my presidency, AASHTO and MaineDOT hosted the AASHTO Spring Conference in Portland, Maine. We had a very successful week-long forum, bringing together 400 transportation leaders from more than 40 states to collaborate about our work and policies, and to discuss ideas to advance transportation funding across the country.



I learned a great deal about how other states and regions are addressing important topics such as workforce development, autonomous vehicles, safety, emerging technologies and innovative approaches to leveraging private investment to build transportation infrastructure. States across the nation are looking for new ways to address the constraints of our aging infrastructure and to ensure that our transportation investments produce the best economic results for American businesses.

One national trend we are also seeing in Maine is the rise in fatal crashes. In an effort to stem this increase in motor vehicle, bike, and pedestrian accidents—and fatalities—I convened a task force in February, 2017. Stakeholders representing municipal governments, drivers, bicyclists, truck drivers, the elderly and disabled, the Department of Public Safety, and the Maine Turnpike Authority joined MaineDOT senior personnel in forming the task force.

The report noted, “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, turning up the heat or turning 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.”

Recommendations include increased education surrounding the dangers—and penalties—of reckless driving, reducing vehicle speeds, and taking steps to encourage pedestrian and bicycle safety.

These recommendations were carefully considered and will not sit on a shelf. All of our partners in this effort plan to work to make our roadways safer and to improve the behavior and habits of all users.



**HEAD UP!**  
SAFETY IS A  
TWO-WAY STREET.

**Make Westbrook Streets SAFER!**

*Let's take the first steps together to tackle our city's most dangerous streets, intersections and crosswalks!*

Join us to address the recent spike in pedestrian/vehicle crashes. Share your thoughts and get reflective safety gear.

**May 4, 2017, 6 PM - 8 PM**  
**Westbrook Middle School**  
(471 Stroudwater Street, Westbrook)

PM: The Bicycle Coalition of Maine, 623-4511. [mainedot.gov](http://mainedot.gov)

Sponsored by: The Town of Westbrook, MaineDOT & The Bicycle Coalition of Maine

Another national trend that is playing out in Maine, as well as at MaineDOT, is an aging workforce, soaring healthcare costs and a rise in chronic health conditions such as obesity, diabetes and stress. Lost time and reduced productivity represent an even larger cost than direct medical payments. These things, combined with record-low unemployment, present serious challenges for employee recruitment and retention. That is why MaineDOT introduced “ChallengeME” in January, 2017.

ChallengeME is an initiative to promote a healthy workforce and to stabilize healthcare costs for employees as well as the State of Maine. The program fosters a healthy workplace culture to engage in wellness programs and activities at work and at home. The first year of the program included the formation of seven wellness teams across the state, training for managers, launch of a website and outreach to all employees and their families. ChallengeME, as with any employee wellness program, must be viewed as a marathon, not a sprint. In order to truly change our culture and consistently promote a healthy lifestyle, the department must be willing to steadily and, over the long haul, invest our time and resources. I am committed to doing just that to ensure a robust, healthy and enthusiastic workforce for MaineDOT.



Lastly, I can't emphasize enough that transportation, and the work of MaineDOT, matters. Our duty to use transportation funding to help ensure a vibrant Maine is more vital than ever before. Our ability to move people and freight safely and efficiently, is the backbone of Maine and the nation's economy. Now that my year as President of AASHTO is over, I am more convinced than ever that thinking not only locally, but nationally and globally, is an obligation we must all embrace if Maine is to compete.

Sincerely,

A handwritten signature in black ink, appearing to read 'D Bernhardt'.

David Bernhardt, Commissioner



Richard Hopley  
Creative Photography & Construction

## ***Sarah Mildred Long Soars in 2017***

With 88 total concrete precast segments assembled, the four towers of the new Sarah Mildred Long Bridge rose toward the sky, forever changing the vistas between Portsmouth and Kittery. The 200-foot tall precast concrete towers will support the new 300-foot long streamlined steel box girder lift span.

The tower “caps” were put in place and the “sheaves” were installed. The tower shapes, colors and the open sheaves were selected as part of a public participation process in 2013. The public wanted the sheaves and their workings to be exposed as a tribute to the nearby working waterfront.

Though the public participation in the design process has ended, public interest in the project has not. In 2017, more than 50 tours of the construction site took place, a public meeting was held in the spring and a “segment signing” event drew hundreds.

# Segment Signing Event

On Saturday, May 20th, MaineDOT sponsored a bridge segment signing event at the nearby Albacore Park and Submarine Museum. Visitors of all ages, from 8 to 80+ years old, came and signed the inside of segment V5-7U, the seventh segment in the up-station pier 5 cantilever of the vehicle bridge. This signing event was an enormous success that truly exceeded all expectations. The event was so successful, we ran out of wall space for people to sign and had to use a stepladder so that afternoon visitors could sign the ceiling.



# Enlisting the Help of the Piscataqua River

October 26, 2017 marked a major milestone for the project: the float-in of the lift span. The lift span of the new Sarah Mildred Long Bridge weighs four million pounds (or 2,000 tons), making it too heavy for cranes to lift. The contractor harnessed the power of the Piscataqua River to help float the lift span into place. The float-in had to occur during a lunar high tide which is higher than a normal high tide. At 9:30 a.m., the lift span was high enough above the bearings that barges and tugboats could start moving it into position. The crews then fine-tuned its position and started connecting the lifting cables. There are eight operating ropes (steel cables) that pull the counterweights up and down to lift and lower the bridge. If laid end to end these operating ropes would stretch over a mile and the forty counterweight ropes, that support the four corners of the new lift span, would extend over two miles.



At around 12:40 p.m., the tide started to go out again, lowering the barges and leaving the lift span sitting on the bearings. At about 3:30 p.m., there was enough clearance to remove the barges fully. Because the lift span has a larger 56-foot vertical clearance in its resting position, there will be 68 percent fewer bridge openings required.

# Heads Up! Safety is a Two-Way Street

## MaineDOT's Pedestrian Safety Project

MaineDOT's **Heads Up!** pedestrian safety project is now in its second year, and the project team continues to meet with municipal officials, concerned citizens and interested planning professionals.

The **Heads Up!** pedestrian safety project evolved in response to the increased number of pedestrian fatalities Maine experienced starting in 2015 and continuing through today. This project is focused on reducing the total number of pedestrian crashes in Maine by raising awareness of pedestrian safety issues. The project uses a data-driven strategy of addressing existing and proposed infrastructure concerns, as well as the problematic behaviors of both pedestrians and motorists. We have focused our energies on the following 21 communities which, though they represent only about 29 percent of the state's population, racked up nearly 65% of our state's pedestrian crashes. These crashes resulted in over 62 percent of the incapacitating injuries from 2011 through 2015. The 21 "Focus Communities" include:

- |              |                    |
|--------------|--------------------|
| 1. Auburn    | 12. Orono          |
| 2. Augusta   | 13. Portland       |
| 3. Bangor    | 14. Rockland       |
| 4. Bath      | 15. Saco           |
| 5. Biddeford | 16. Sanford        |
| 6. Brewer    | 17. South Portland |
| 7. Brunswick | 18. Topsham        |
| 8. Camden    | 19. Waterville     |
| 9. Hallowell | 20. Westbrook      |
| 10. Lewiston | 21. Winslow        |
| 11. Old Town |                    |



Through our efforts in these 21 communities, the **Heads Up!** project team (consisting of staff from both MaineDOT and the Bicycle Coalition of Maine) completed the following in 2017:

- » Provided project orientations to municipal staff in 20 communities. Participants in these orientations included representatives from the local school districts and municipal departments, including administration, planning, engineering, public works, economic development, and law enforcement.
- » Conducted 15 Community Pedestrian Safety Forums in 14 communities. These interactive forums provided an overview of pedestrian safety issues, a closer look at Maine's pedestrian crash statistics, and an exploration of participants' beliefs and misconceptions. The forum also provided attendees with the opportunity to identify problem areas within their community. To date, there have been 583 participants (ranging from a low of 14 to a high of 73) with the average participation being 39 residents and municipal staff.

- » Conducted six pedestrian site safety reviews in five communities. This review often included on-site visits and/or additional review utilizing mapping. The review explored the variety of factors at each location that impact pedestrian safety, as well as alternatives that may help meet the various community needs.

The *Heads Up!* pedestrian safety project also delivered the following services to Focus Communities as well as other communities throughout the state.

### *Walk or Bike to School Encouragement Events*

- » 40 schools registered their Walk or Bike to School events, from spring through fall 2017
- » The project team supported those events by supplying any requested WALK/BIKE stickers and Be a Safe Walker/Biker/Driver posters, and by following up on any safety presentation requests
- » Those schools reported that approximately 5,000 students would participate in the Walk or Bike to School activities
- » Activities ranged from one-day events to celebrate National Walk or Bike to School Day to multi-day, weekly, or monthly Walk or Bike to School events

### *Safe Routes to School Educational Events*

- » 111 unique events reaching 6,379 students in 110 different schools
- » 63 presentations
- » 24 rodeos
- » 26 instructional rides

### *Bicycle Safety Education: Rural and Focus Communities*

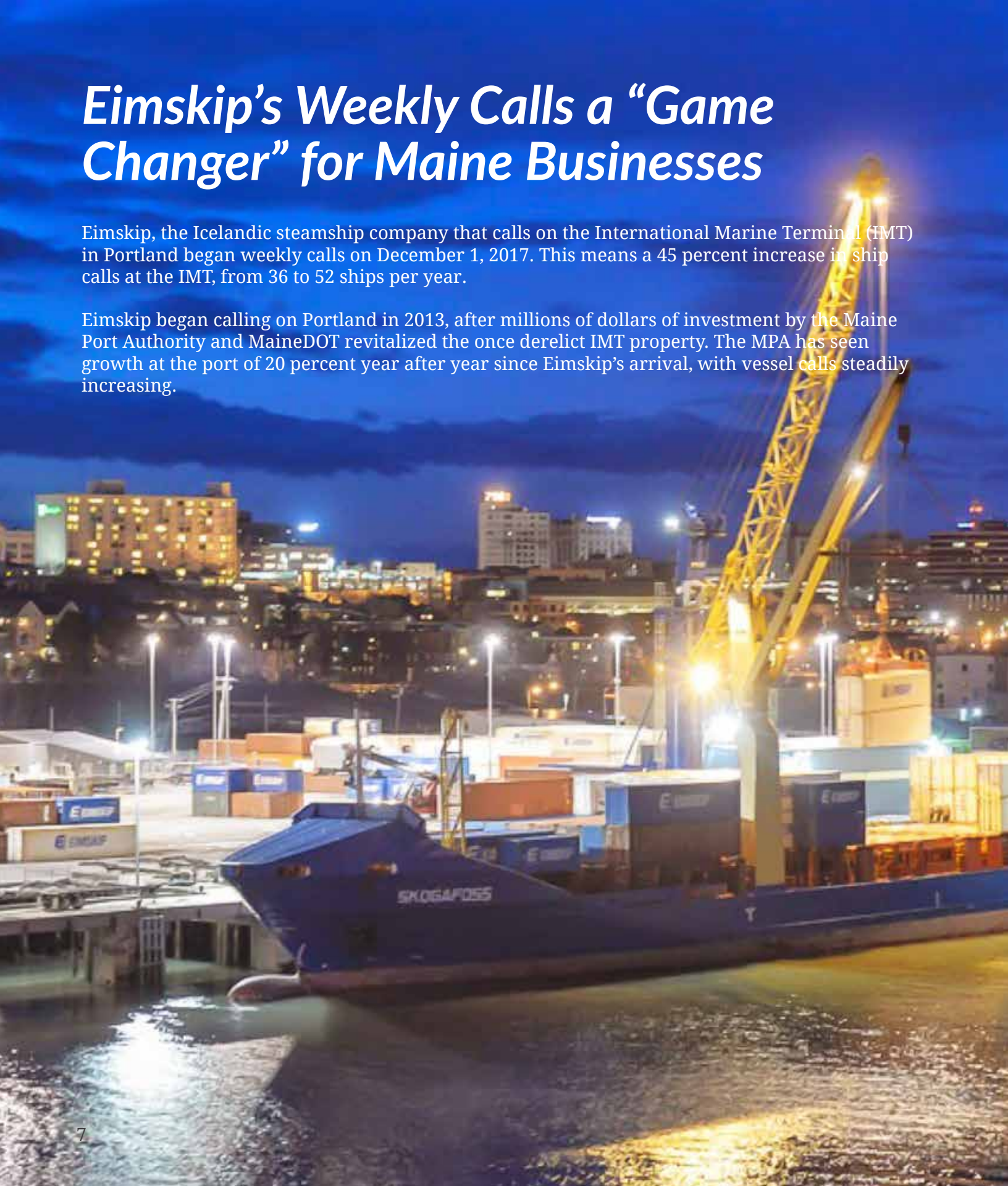
- » Adult Classes/Presentations
- » 112 unique events
- » 2,505 adults reached in person
- » 17,500 adults reached via radio/TV



# *Eimskip's Weekly Calls a "Game Changer" for Maine Businesses*

Eimskip, the Icelandic steamship company that calls on the International Marine Terminal (IMT) in Portland began weekly calls on December 1, 2017. This means a 45 percent increase in ship calls at the IMT, from 36 to 52 ships per year.

Eimskip began calling on Portland in 2013, after millions of dollars of investment by the Maine Port Authority and MaineDOT revitalized the once derelict IMT property. The MPA has seen growth at the port of 20 percent year after year since Eimskip's arrival, with vessel calls steadily increasing.





After Eimskip's operations were moved to Portland, weekly service was the goal for the company and its stakeholders. This is the first time in the company's 100-year history that it has offered weekly service to the United States. Dependable regular ship calls mean that many business now using larger ports to the south can look at the IMT as an option for their shipping needs.

MaineDOT investments at the IMT, totaling more than \$45 million in public and private funding, have reinvigorated commercial shipping to the Port of Portland, providing Maine businesses with opportunities to lower logistical costs and reach markets across the world.

In 2016, the MPA and MaineDOT announced the award of a federal FASTLANE grant to further improve IMT infrastructure and operations. MaineDOT is currently working on strengthening and enlarging the pier, building a new maintenance and training facility, purchasing a new mobile harbor crane, and further improving rail connections at the port.

With the announcement of increased ship calls, the MPA will expedite purchase of a new mobile harbor crane. This will allow ships to be loaded and offloaded more efficiently and provide for necessary redundancy in crane operations to support the additional traffic.



# MaineDOT Launches a Three-Year, \$17.9 Million Project to Reconstruct Route 3 in Bar Harbor

Working with the Bar Harbor community, MaineDOT began preparations for the reconstruction and improvement of Route 3 in 2011. Engaging with residents and business owners through a planning committee that included representatives of Acadia National Park, a vision statement for the project was developed:

*“To provide a safe, efficient and aesthetically pleasing transportation corridor that encourages multiple uses and maintains or enhances the historic standards representative of Bar Harbor and Acadia National Park.”*

As preparations for the Bar Harbor Route 3 Project unfolded, the department and the community worked hand-in-hand to ensure that this vision became a reality and to minimize the necessary disruption.

A key strategy for the success of the project is to minimize traffic impacts and to provide alternate routes so that travel to and from Bar Harbor and neighboring communities can continue with minimal disruption. Continuous, one-way loop detours have been designed to keep traffic flowing and to expedite the work.



A robust marketing campaign was designed that included print ads, radio spots, a website with weekly email alerts, social media postings, and brochures and posters at every Visitor Information Center in the state as well as regional chamber of commerce locations. Ample signage informs and guides drivers, residents and businesses.

When complete, the project will result in:

- » Paved shoulders for bicyclists and pedestrians
- » Some new sidewalks, and sidewalk improvements to meet ADA standards
- » Safer crossings, with electronic crossing signs
- » New multi-use path along part of the project span
- » Where possible, 3-foot wide esplanade between sidewalk/multi-use path and the road
- » New rock catchment area along the bluffs
- » Upgraded intersection at Mt Desert St. and West St.
- » Improved drainage and runoff management
- » New road surface and striping.





# *I-95 Overpass in Augusta Suffers Unreported Damages Leading to Emergency Bridge Replacement*

On October 3, 2017, a MaineDOT maintenance worker conducting a bridge inspection discovered that the Ramp F Bridge over I-95 in Augusta had been struck by a vehicle. This caused significant damage on the south exterior beam, including a partial crack. In addition, another recent hit had damaged the north exterior beam of the same bridge, but to a lesser extent. This bridge carries two-way traffic as part of the I-95 Exit 109 interchange as well as I-95 southbound traffic headed east to the downtown and the capitol complex. It also supports Western Avenue traffic bound for I-95 south.

MaineDOT personnel jumped into action, monitoring the damage to ensure that the bridge remained safe while planning the next steps to replace the bridge, as well as pursuing legal options to identify the vehicle responsible for the damage.

Though the department determined the bridge was safe for legal loads, construction materials act differently under cold temperatures so the department worked quickly to remove one lane of traffic from the bridge before cold weather arrived and then planned to remove all traffic from the bridge so that construction of a new bridge could move as quickly as possible.

However, Mother Nature intervened, sending record-setting high winds throughout Maine that required crews be dispatched to deal with that state emergency. Despite this natural disaster,

temporary detours went into effect, and public outreach to explain the new driving patterns and alternate routes was initiated by November 1.

Using accelerated contracting methods, a new set of temporary ramps was built from Exit 109A onto Whitten Road. MaineDOT worked rapidly to develop and execute plans to replace the entire Ramp F Bridge superstructure. As part of replacing the superstructure, the department increased the “under clearance” by over a foot to reduce the potential of future impacts and to be consistent with the clearances achieved with recent bridge projects over Interstate 95. Innovative procurement methods, contract incentives, and an effective plan by Wyman and Simpson allowed the new bridge to be opened to traffic February 15, 2018. This was less than three months after the contract was awarded and significantly ahead of schedule, despite many days of frigid temperatures and several snow events.

Though MaineDOT asked for the public’s help to identify the driver or the vehicle responsible for catastrophic damage, those questions remain unanswered. It is believed that the unreported collision took place in the northbound lanes between September 1 and October 3 of 2017. Because the responsible party has not been identified, the \$3 million cost of the emergency bridge replacement must come from the current Highway Fund. An over-height warning system will be installed in 2018 to protect other northbound bridges.



# Eastport Rededicates \$15 Million Breakwater

The original Eastport breakwater was built in 1955 by the US Army Corps of Engineers. The structure had had several rehabilitation efforts throughout its lifetime. Prior to this most recent project, the breakwater was last rehabilitated in 1986. However, in 2012, damage on the north side of the structure highlighted the need for a major retrofit and rehabilitation of the breakwater. In 2013, the Eastport Port Authority and MaineDOT were awarded a TIGER Grant through the US Department of Transportation Maritime Administration (MARAD) The MARAD TIGER Grant provided \$6,000,000 in federal funds combined with \$10,000,000 of state and Eastport Port Authority funding to reconstruct the breakwater.



U.S. Senator Susan Collins helped to secure the \$6 million TIGER Grant for the breakwater citing the pier as essential for commercial and recreational fishing, cruise ships and national security. She also noted that it serves as a base for the Coast Guard and border protection services and “lays the foundation” for the Estes Head cargo terminal, which accommodates ships up to 900 feet long.



MaineDOT led the design and oversaw the construction of the project. Design for the breakwater was complete and the project was advertised for construction on November 24, 2014 when, on December 4, 2014, the outboard leg of the structure completely collapsed. The collapse necessitated the modification of the construction contract to immediately stabilize the remaining structure to prevent further failure.

The port of Eastport is deep enough for the largest container ships. Even in the depths of a Maine winter, the port itself remains active because the 25-foot tides keep water from standing long enough to freeze. It provides vital

berthing for cruise ships, cargo vessels, fishing boats, yachts and U.S. Navy and Coast Guard boats.

On July 4, 2017 dignitaries gathered in Eastport to rededicate the new breakwater and announce that it is once again “open for business.”

## *The Wind Storm of 2017*

A powerful storm, bringing heavy winds and rain, arrived in Maine during the night of Sunday, Oct 29, 2017 and continued well into Monday, Oct 30. The winds exceeded 70 mph in various locations across the state and were recorded in excess of 90 mph offshore.

In the aftermath, Governor LePage declared a state of emergency. Nearly 500,000 Mainers were left without power, and thousands of trees and powerlines had been knocked down across the state, causing nearly \$5 million in infrastructure damage.

On the state and state-aid highway system alone (the highways that are maintained by MaineDOT) over \$2 million was spent repairing roads, and removing trees and brush. Over the course of the following two to three weeks, MaineDOT addressed and documented over 500 specific locations as part of the debris clean-up effort.

## *Pun for the Road....*

### *Highway Signs Signal Success of Lighthearted Safety Messages*

It started in December, 2016...*SANTA SEES YOU WHEN YOU'RE SPEEDING*. The changeable message signs (CMS) along I-295 and I-95 (north of Augusta) over the holiday weekend surprised and delighted motorists. Before Santa could bid his last “ho, ho, ho” MaineDOT’s Facebook page and website were lighting up with praise and enthusiasm. Motorists not only “got” the safety message, but they enjoyed being told to drive safely.



Encouraged by this success, a group was formed to see what other safety slogans could squeeze into a 32-character message – oh, and make it witty too! And why stop with the signs? Why not reinforce the signs by posting them on MaineDOT’s Facebook page?

Initially, the group focused on holiday weekends, and then scheduled clever messaging twice a month. What’s next? A public competition on MaineDOT’s website to see what tweeters and haiku enthusiasts across Maine can craft in 32 characters.

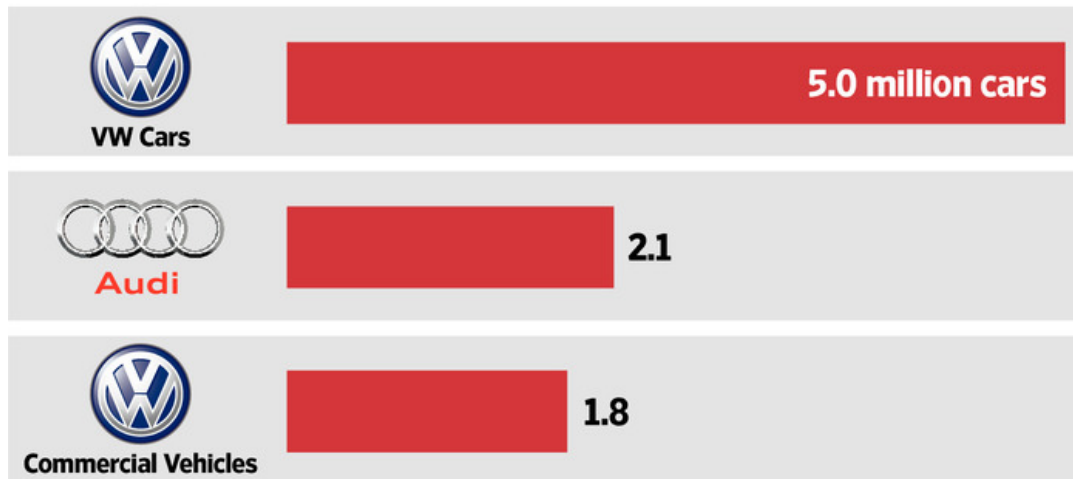
## MaineDOT Lead Agency for VW Settlement

In 2017, the U.S. District Court in Northern California finalized a partial consent decree to settle allegations that Volkswagen (VW) had installed defective devices on 2.0 and 3.0-liter diesel vehicles sold or leased in the United States. Of the \$14.7 billion total settlement, \$2.7 billion was designated as Environmental Mitigation Settlement funds, which will be distributed to designated “beneficiaries” consisting of each state, Puerto Rico, Washington DC, and the Native American tribes. Although MaineDOT has been named the lead agency for fund distribution, input from the Maine Department of Environmental Protection, the Governor’s Energy Office, and the public is critical to realizing the greatest gain for Maine’s air quality.

Each beneficiary’s settlement amount is determined by the number of registered vehicles identified as having defective devices. Maine’s allocation totals just over \$21 million. There are strict rules about how and when this money can be spent. Maine’s plan splits investments between state multimodal priorities (e.g., port handling equipment, ferry repowers, transit vehicle replacements), contributions to the state’s Diesel Emission Reduction Act Program (e.g., school bus replacements, lobster boat repowers), and actions that qualify for Section D-2 of the settlement (e.g., airport handling equipment replacement, school bus replacements, medium to heavy-duty truck repowers and replacements). In addition, the maximum allowable 15 percent of Maine’s allocation will be dedicated to expanding charging infrastructure for light-duty, zero emission vehicles strategically throughout the state. VW settlement funds should be available for distribution by late spring 2018.

### Emissions Hit

Volkswagen has said about 11 million vehicles contain software that could help them perform better in emissions tests. Five of Volkswagen’s 12 car, motorcycle and commercial vehicle brands are affected.



*The Wall Street Journal*



# Maine Communities Celebrate Project Completions

## New I-95 Interchange Opens in Waterville

On Friday, July 14th, the interchange at Exit 124 at Tafton Road in Waterville opened, fostering hope for business growth opportunities within the area. MaineDOT Commissioner David Bernhardt told the crowd at the opening ceremony “The city of Waterville and surrounding communities now have a new point of access that allows an easy connection to the interstate, saving time and direct fuel costs which will positively affect their bottom line.”



MaineDOT, along with its funding partners, the U.S. Department of Commerce, the Economic Development Administration, the City of Waterville and Trafton Properties, utilized MaineDOT’s Business Partnership Initiative (BPI) in the development and delivery of this new \$5.3 million interchange.

MaineDOT’s Business Partnership Initiative (BPI) is designed to promote public/private partnerships between MaineDOT and municipalities, public utilities, private businesses and other entities by leveraging additional resources to match limited state resources. It will make improvements to State and State-Aid highways often utilizing more flexible project delivery methods when the nature of the highway and project allow.

## Bath Viaduct Opens Ahead of Schedule

On May 3rd, MaineDOT and its contractor, Reed & Reed, opened the new Bath Viaduct to traffic approximately 25 days ahead of schedule. Plans had called for the new viaduct to open just in time for Memorial Day, but the team completed the demolition of the original and construction of the new viaduct in just 195 days. The original viaduct construction in 1959 required 729 days to complete.



The work on the new viaduct started even as the final demolition was completed. The work included:

- » Removal and replacement of the viaduct roadway, including 1,900 linear feet of roadway 20 spans, on 19 piers
- » Widening of the northbound ramp to two lanes to accommodate approximately 33,000 vehicles a day
- » Repairs to the High Street Bridge
- » Rebuilding 240 linear feet of rail line underneath the viaduct
- » Upgrading and building more than 1,200 linear feet of sidewalks
- » Completion of storm water separation work, utilizing more than 1,800 feet of pipe

## Mathew J. Lanigan Bridge Gets VIP Opening

In January 2017, construction of a \$2.7 million project to replace the Mathew J. Lanigan Bridge was launched. The bridge connects Lower Village Kennebunk and Kennebunkport, and is heavily traveled by cars and pedestrians, especially during the peak tourist season.

MaineDOT and its consultant, Stantec, coordinated extensively with the Bridge Advisory Committee, a volunteer group of town officials, community members and business owners. This process helped alleviate concerns about construction impacts to the towns and assured public input for the bridge design.



In order to accommodate tourism in the area, MaineDOT and construction contractor T.W. Buck built the new Lanigan Bridge in stages. The bridge and Route 9 in the area were completely closed for more than a month to allow the contractor to complete most the work at an accelerated pace while pedestrians used a temporary pedestrian bridge.

The charming new bridge is wider, includes 6-foot wide sidewalks on each side and attractive bridge railings. There are interpretive panels, and cantilevered viewing overlooks on each side of the bridge, giving pedestrians views up and down the Kennebunk River.

The bridge opened ahead of schedule with a festive ceremony featuring former President George H.W. Bush and First Lady Barbara Bush, and MaineDOT Deputy Commissioner Jonathan Nass, as well as local girl scouts.



# *MaineDOT Recognized Nationally for Several Initiatives*

## America's Transportation Awards Recognize MaineDOT for Two Projects

America's Transportation Awards are sponsored by AAA, AASHTO and the U.S. Chamber of Commerce as a way to recognize state DOTs and highlight the tremendous projects they deliver. The awards showcase why transportation infrastructure—and properly funding it— is so important.

### Best Use of Technology & Innovation

This category recognizes new and creative technological or other innovative solutions successfully implemented by state transportation departments. These projects focus on improving transportation infrastructure through the use of innovative technology.

### *The Gut Bridge in South Bristol, Maine*



The America's Transportation Award is the fourth major award for the Gut Bridge. It has also been honored as the ENR Regional Merit Project of the Year, was the recipient of the ACEC Maine Grand Conceptor Award, and was named one of Road & Bridges Top Ten Bridges of the Year. When MaineDOT was faced with the \$11 million replacement of an iconic swing bridge across the scenic Gut in South Bristol, the challenges were many, including conflicting community values, a highly-congested worksite, bedrock with no overburden, and heavy year-round navigation and traffic. Project work included building the actual bridge replacement, construction of an operator's house, new traffic warning systems, and approach work. MaineDOT utilized a cable-stayed superstructure (which allowed the span to be counterweighted without a cross-

counterweight), making wary residents happy with the aesthetically pleasing appearance and cutting the foundation costs. Flood-resistant machinery enclosures were installed so that the swing bridge wouldn't be shut down in higher flood tides, keeping residents connected and safer.

## Quality of Life/Community Development

These innovative projects better connect people to businesses, jobs, health care facilities, and recreational activities while encouraging a mix of transportation modes. Project nominees must demonstrate community involvement and interaction, and must illustrate the public benefit for customers/users.

### *The Ogunquit Route 1 Project*

The need to reconstruct Route 1, considered the “Main Street” of tourist-driven Ogunquit, Maine, with no viable detour options caused deep concern throughout the community. MaineDOT worked with the community to come up with a plan for the \$13.5 million project, which included reconstructing a two-mile stretch of the route, building two bridges, completing 6.5 miles of drainage work, and building 2.6 miles of brick and paved sidewalk. To help local business leaders, MaineDOT agreed to halt road construction during the peak tourist season (Memorial Day through Labor Day). The public was kept informed through a weekly public newsletter and a public information campaign. In the end, the project provided a safer, upgraded Route 1 a month ahead of schedule and under budget.



## MaineDOT and its Partners Recognized with Three National Honors for its Work with Endangered Species

Atlantic salmon were designated as “endangered” under the federal Endangered Species Act and their designated critical habitat covered about half of Maine’s geographic area. These designations require that any project with federal funding go through a consultation process with either the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service. Unfortunately, this consultation process was regularly taking two years to complete and putting many transportation projects behind schedule.



Enter FHWA’s Eco-Logical approach, which promotes landscape or ecosystem-based analysis of transportation projects’ effects on the natural environment. In 2013, MaineDOT applied for

and received a \$250,000 “lead adopter” grant with the objective of streamlining Atlantic salmon consultations. Four years, three primary agencies, two funding sources and one endangered fish later, MaineDOT’s Atlantic salmon Programmatic Biological Opinion (MAP) was put into effect.

Under this document, MaineDOT agrees to design and carry out a mutually-agreed-upon standard set of procedures. These procedures reduce USFWS review time to less than 30 days, reduce project delivery time and cost, and significantly improve predictability for both MaineDOT and USFWS.

In recognition of the standard of excellence demonstrated by MaineDOT, FHWA, and USFWS throughout this effort, three national honors have been awarded:

- » 2016 USFWS Endangered Species Recovery Champions Award
- » 2017 FHWA Excellence in Teamwork Award
- » 2018 FHWA Eco-Logical Program Implementation Assistance Program Award

## The Best Plow Drivers in the Country are Right Here in Maine!

MaineDOT’s Curtis Lewis and Mark Merrill won the 2017 American Public Works Association’s National Snow Plow Roadeo Competition at the Western Snow & Ice Conference in Colorado. Curtis and Mark were sponsored by the Maine Chapter of the APWA to compete in Colorado after winning the State of Maine competition. They competed against 45 top teams from throughout the snow belt to earn this honor. The National Snow Plow Roadeo is a very popular competition. Many equipment operators vie each year for the opportunity to compete at this event. It tests the skills and knowledge of the best equipment operators from around the country.



This competition is about proficiency, professionalism and safety. The course is a combination of challenging vehicle operation, difficult skill tasks, and limited room to place trucks near objects to gain points. Contestants must do this in a provided snow- plow that they are not totally familiar with. In turn, they must compete in a challenging National, Best-of-the-Best and Head-to-Head competition and win.

MaineDOT is very proud of Curtis Lewis and Mark Merrill. They are great representatives of the dedicated men and women the State of Maine depends on to keep our roads safe.

## David H. Stevens Award

Susan Moreau was the recipient of the 2017 David H. Stevens Award for outstanding contributions to transportation excellence in the State of Maine. Sue Moreau came to MaineDOT in 1999 from the private-sector, joining the Transit Section of the former Office of Passenger Transportation (OPT). Sue soon proved her talent in project and program management as the department's involvement in public transportation took on increased importance in Maine and across America. Sue was instrumental in developing and marketing passenger-transportation initiatives such as the Amtrak Downeaster and the GOMaine ridesharing program. Later, Sue took on management responsibilities with the state's transit program, which oversees federal grants and compliance with federal regulations for Maine's 20+ bus-service providers, as well as out partnerships with Casco Bay Lines and the Downeaster. In 2014, Sue became the Manager of Multimodal Planning, gradually taking on oversight of aviation planning, engineering and grants administration, and the bike-ped program. During Sue's tenure, MaineDOT helped develop and build bus facilities in Trenton for the Island Explorer, at Turnpike Exit 75, in downtown Auburn and for the ShuttleBus in Biddeford-Saco; conducted numerous transit studies; won federal competitive grants; helped bring new ferry vessels to the Maine State Ferry Services and Casco Bay Lines; established a high standard of compliance with complicated federal transit regulations; and developed a new department model for managing the complex array of multimodal funding that includes bonds, special revenue accounts and federal funds.



## Paul L. Lariviere Transportation Excellence Award

Eric Shepherd of MaineDOT's Bureau of Project Development was awarded the Transportation Excellence Award from the Maine Division of the Federal Highway Administration.

Eric is involved in every bridge project MaineDOT delivers, giving an important voice for construction concerns in the project delivery process. Eric is quality-minded. Despite the increasing budget and staffing pressures at the department, Eric has never been one to cut corners. He closely coordinates with the FHWA's Division Office on a multitude of issues, particularly when things deviate from the norm. Eric's commitment to quality is also evidenced by his outreach to contractors. He takes the time to educate contractor personnel on federal specifications. The Maine FHWA Division has worked with Eric to resolve several difficult issues on projects, and is always impressed by his ability to consider things from the contractor's perspective. This often leads to feasible, and economically viable, solutions. It has also resulted in the contractors having a great deal of respect for Eric so issues are negotiated and solutions developed much more easily.



Eric Shepherd is an asset to the MaineDOT and to the FHWA Maine Division. He is a partner, in the truest sense of the word, whose contributions have improved the delivery of the Federal-aid Highway Program in Maine.

# Capstone Performance Measures

MaineDOT's Capstone Performance Measures are intended to be department level measures for all work. These key performance measures and their associated goals are intended not only to monitor performance of MaineDOT, but in many cases the transportation system. The Capstones are highly dependent on subordinate measures and initiatives undertaken by individual units departmentwide. Through goal setting and measurement, the Capstones give MaineDOT the ability to monitor performance and strive for continuous improvement.



## Capstone Performance Measures:

### 1. Customer Satisfaction

- A. Customer Satisfaction Survey
  - How satisfied are customers with the transportation system?
  - How satisfied are customers with MaineDOT and the services it provides?
- B. Key Business Sector Survey
- C. Municipal Official Survey

### 2. Safety

- A. Number and rate of crashes, serious injuries and fatalities on the state highway system
- B. Incident rates and severity rates of injured employees
- C. Number of accidents, injuries and fatalities in state highway work zones

### 3. Customer Service Level (CSL) Measures for Condition, Safety and Service, Including Progress Toward Statutory Goals (23 MRSA 73 (6))

### 4. Expenditures per Lane-Mile Compared to Peer States

### 5. Work Delivered on Time

- A. Percent of capital work in the Work Plan delivered on time
- B. Percent of M&O work in the Work Plan delivered on time

### 6. Work Delivered on Budget

- A. Percent of capital work in the Work Plan delivered on budget
  - Total project programmed amount when funded for construction in Work Plan vs. total project estimate at award
  - Project construction estimate at award vs. construction estimate at construction completion
- B. Percent of M&O work in the Work Plan delivered within 20% of initial programmed estimate
- C. Percent of process WINs completed on budget

### 7. Administrative Costs as Percent of Production

### 8. Quality and Compliance

- A. Life expectancy of highway treatments
- B. Number of citations/violations
- C. Compliance with State and Federal law

### 9. Performance Management and Employee Development

- Percent of compliant performance reviews completed and submitted to Human Resources



# Capital Work Delivered

**Bridge Projects:** 90 projects, \$104.4M  
**Bridge Replacements:** 11 projects, \$55M  
**Paving Projects:** 994 miles, \$192.4M

**Highway Reconstruction:** 14.5 miles, \$46.1M  
**Highway Rehabilitation:** 48.3 miles, \$26.9M  
**Highway Spot Improvements:** 87 projects, \$57.8M



## Work Delivered On Time

**Capital Work in the Work Plan Delivered On Time**  
Target: 80%      Actual: 92%

**Maintenance and Operations Work in the Work Plan Delivered On Time**  
Target: 80%      Actual: 85%



## Administrative Costs as a Percent of Production

**Target:** Below 8%    **Actual:** 7.2%

MaineDOT strives to keep administrative costs low so the majority of expenditures go directly toward Maine’s transportation assets. The administrative costs above are calculated as a percentage of capital production costs for the calendar year.



## Expenditure Per Lane-Mile Compared to Peer States





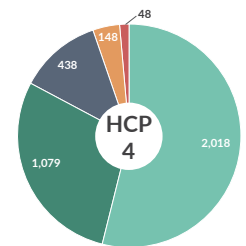
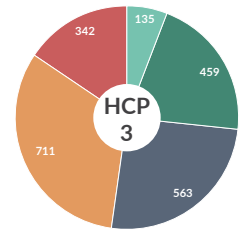
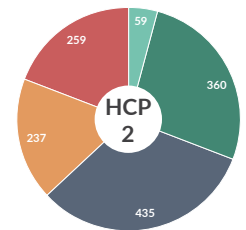
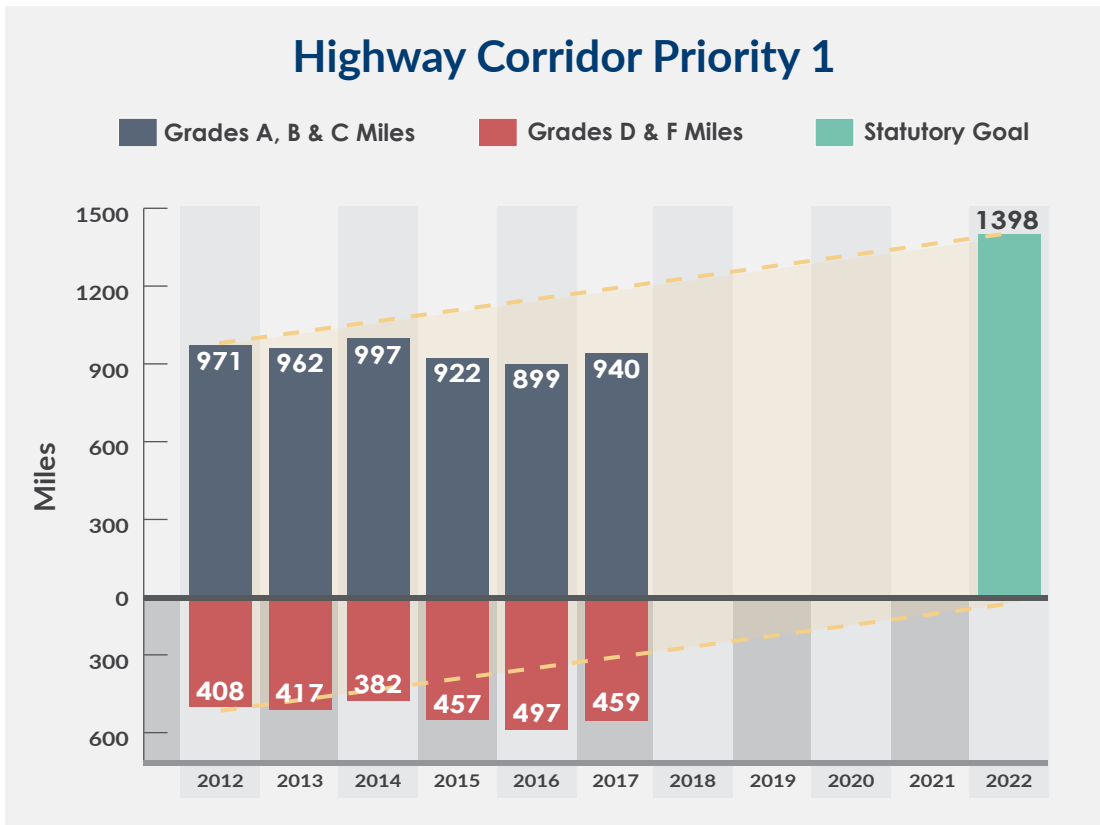


# MaineDOT Implements the Roads Report Recommendations

In December of 2016, MaineDOT released the Roads Report which highlighted process and funding recommendations for the management of Maine’s highway system. Throughout 2017, MaineDOT began implementation of these recommendations.

- » A revised Highway Corridor Priority Classification system was adopted, eliminating the Priority 5 classification.
- » Nearly \$32M in projects for Cyclical Pavement Resurfacing was programed, with nearly 17 miles completed in 2017.
- » The 2018-2020 Work Plan was developed using the funding levels and priorities recommended in the Roads Report within available resources.

Because the Priority 5 classification was eliminated, the population of Priority 2 - 4 roadways increased significantly. Therefore, the Customer Service Level trends, published in past Year-End Reports, were greatly affected and are no longer are valid.



- A=Excellent
- B=Good
- C=Fair
- D=Poor
- E=Unacceptable



After achieving a 70-year low in highway fatalities in 2014, Maine has seen increases in crash fatalities for the past three years, with 172 fatalities in 2017. Two vulnerable-user segments continue to be an increasing concern – pedestrians and motorcyclists.

In 2017, there were 27 motorcycle fatalities. Maine was averaging 19 in prior years. Pedestrian fatalities have sharply increased in the last three years as well, with 20 in 2017. That is the highest number in many years and nearly double Maine's earlier averages. MaineDOT is leading a coordinated effort, with a broad group of safety partners, to maximize effective pedestrian outreach and education.

Maine's most serious crash type continues to be lane-departure, when a vehicle leaves its proper lane and is involved in either an off-road or a head-on collision. These crash types result in 70% of the fatalities and 50% of the serious injuries on state roads. MaineDOT is aggressively installing centerline rumble strips on its top priority roads. The 2018-2019-2020 Work Plan adds about 150 more miles of rumble strip installations. MaineDOT is also evaluating systemic solutions to mitigate went-off-road crashes, especially on curves.

As the state's fatality trends increase, two significant efforts were completed in 2017 to address this safety concern:

- » Maine released a new comprehensive Strategic Highway Safety Plan (SHSP). This multi-agency plan is coordinated by MaineDOT and covers a wide variety of safety issues, including strategies that relate to pedestrians and motorcyclists.
- » MaineDOT convened a Task Force on Roadway Safety to examine those aspects specific to the MaineDOT. The Task Force included experts and a variety of different types of users of the system. Many of its recommendations are reflected in the most recent 3-year work plan and are consistent with the new SHSP.

## Work Zone Safety

Driver speed and driver distraction are the two leading causes for crashes in work zones. Work zone safety is critical, both for the traveling public and the workers positioned where high-speed traffic may be passing. These workers include not only MaineDOT crews, but utility, public works and contractor crews.

The public may be surprised to learn that motorists suffer the majority of serious injuries and fatalities in work zones – not crew members. However, MaineDOT employees, contractors and utility workers are especially vulnerable and have lost their lives in work zone crashes. MaineDOT has increased use of traffic calming devices, such as temporary rumble strips. We are also coordinating with Maine State Police to increase speed enforcement in work zones.

2017

## Crashes & Fatalities on the State Highway System



**27,848 Crashes**

25,961 5-Yr Avg Upward Trend ↑

**605 Serious Injuries**

5-Yr Avg Downward Trend ↓

**144 Fatalities**

5-Yr Avg Upward Trend ↑

## Work Zone Crashes, Serious Injuries & Fatalities



**402 Crashes** ↓ 5-Yr Avg Trend

**16 Serious Injuries** ↑ 5-Yr Avg Trend

**2 Fatalities** ↑ 5-Yr Avg Trend

*Note: Work zone crash data reflects work zone crashes that occurred on state highway and state aid roads. They include crews working for MaineDOT, utilities, public works departments and private contractors.*

# 2017 MaineDOT Stats



## Bridge Stats

**Topside Inspections:** 2,142  
**Underwater Inspections:** 157  
**Wearing Surfaces Repaired/Replaced:** 121,419 sq ft on bridges  
**Joints Repaired/Replaced:** 2,666 bridges  
**Bridges Washed:** 1,639 washed  
**Bridges Posted or Closed:** 9 posted, 1 closed



## Ridership & Visitor Stats

**Maine State Ferry Service:**  
499,725 Passengers (up from 489,080 in 2016)

**Penobscot Narrows Bridge & Observatory:**  
Visitors: 61,523 (up from 60,954 in 2016)



## Roadside Stats

<b>Roadway Striping:</b> 17,750 miles of paint	<b>Mowed:</b> 7,424 shoulder miles
<b>Ditched:</b> 730 shoulder miles	<b>Roads Posted (in spring):</b> 1,538 miles
<b>Swept:</b> 6,705 shoulder miles	<b>Guardrail Maintained:</b> 58,454 linear feet
<b>Removed Litter:</b> 3,081 shoulder miles	<b>Signs Maintained:</b> 6,269 installed



## Transit & Rail Stats

<b>6.5 Million Passengers</b>	<b>Maintained:</b> 492 miles of state-owned rail
<b>20 Regional Transit Providers</b> (including tribal governments)	<b>Inspected:</b> 1,390 miles of private lines
<b>371+ Accessible Buses and Vans</b>	<b>Leased:</b> 329 miles of track to private operators
<b>50+ Communities</b> received transit service at least 3 days per week	



# Winter Maintenance

## Snow & Ice Control 2016-2017



**36**  
SNOW EVENTS

Maine's average annual SNOWFALL is  
**60-110 INCHES**

MaineDOT Traffic Management Center  
**24/7  
365**

MaineDOT OPERATES

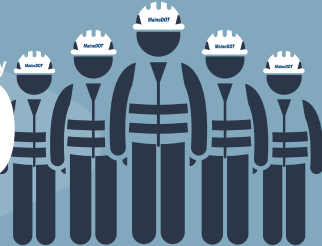
**400**

SNOWPLOWS which cost an average of **\$250K** each

MaineDOT EMPLOYS roughly

**1,000**

COMMERCIALLY LICENSED  
SNOWPLOW DRIVERS



Maintenance CREWS **48**  
Maintenance LOCATIONS **100**

MaineDOT BUDGETS

**\$36M**

for SNOW & ICE CONTROL each year

We are responsible for

**8,300**

LANE MILES of ROAD

Over the winter we used

**142,180** TONS of SALT

**15,500** TONS of SAND

WICKED WINTAH  
STOHM COMIN

MaineDOT

CHANGEABLE MESSAGE SIGNS  
advise motorists of weather conditions,  
speed limits and safety tips.

Always stay at least **4** CAR LENGTHS BACK from snowplows



A snowplow operator's field of vision is restricted.  
You may see them, but they may not see you.

**MaineDOT**

[f](#) [t](#) [v](#) [i](#) [m](#)ainedot.gov

# MaineDOT Expenditures

MaineDOT expended over \$700M in calendar year 2017. The focus of expenditures is to maintain and improve the transportation infrastructure. 46% of expenditures went directly to capital infrastructure improvements. Through these expenditures, MaineDOT strives to fulfill our mission of providing the safest and most reliable transportation system possible.

Expenditure Category	\$M Total	%
Benefits	\$56.88	8.0%
Bond Principal & Interest	\$39.22	5.5%
Capital Equipment	\$3.07	0.4%
Capital Infrastructure	\$323.19	45.6%
Commodities, Equipt, & Supplies	\$6.48	0.9%
Contracted Services	\$0.45	0.1%
Engineering Services	\$68.29	9.6%
Ferry System Operations	\$15.15	2.1%
Highway & Bridge Materials	\$24.94	3.5%
Information Technology Expenditures	\$10.66	1.5%
Insurance Related	\$0.86	0.1%
Miscellaneous	\$1.32	0.2%
Operating Grants & Agreements	\$15.71	2.2%
Payments to Municipalities (LRAP)	\$22.33	3.1%
Rentals & Repairs	\$5.15	0.7%
Salaries	\$85.22	12.0%
Services, Professional-By State	\$0.65	0.1%
State Cost Allocation (STA-CAP)	\$2.10	0.3%
Training & Licensing	\$0.53	0.1%
Travel & Expenses - In State	\$5.07	0.7%
Travel & Expenses - Out of State	\$0.19	0.0%
Vehicle & Heavy Equipment Exp.	\$22.03	3.1%
<b>Total</b>	<b>\$709.50</b>	<b>100.0%</b>

# \$709.5 Million

# MaineDOT Organization

Meet the MaineDOT Executive Team



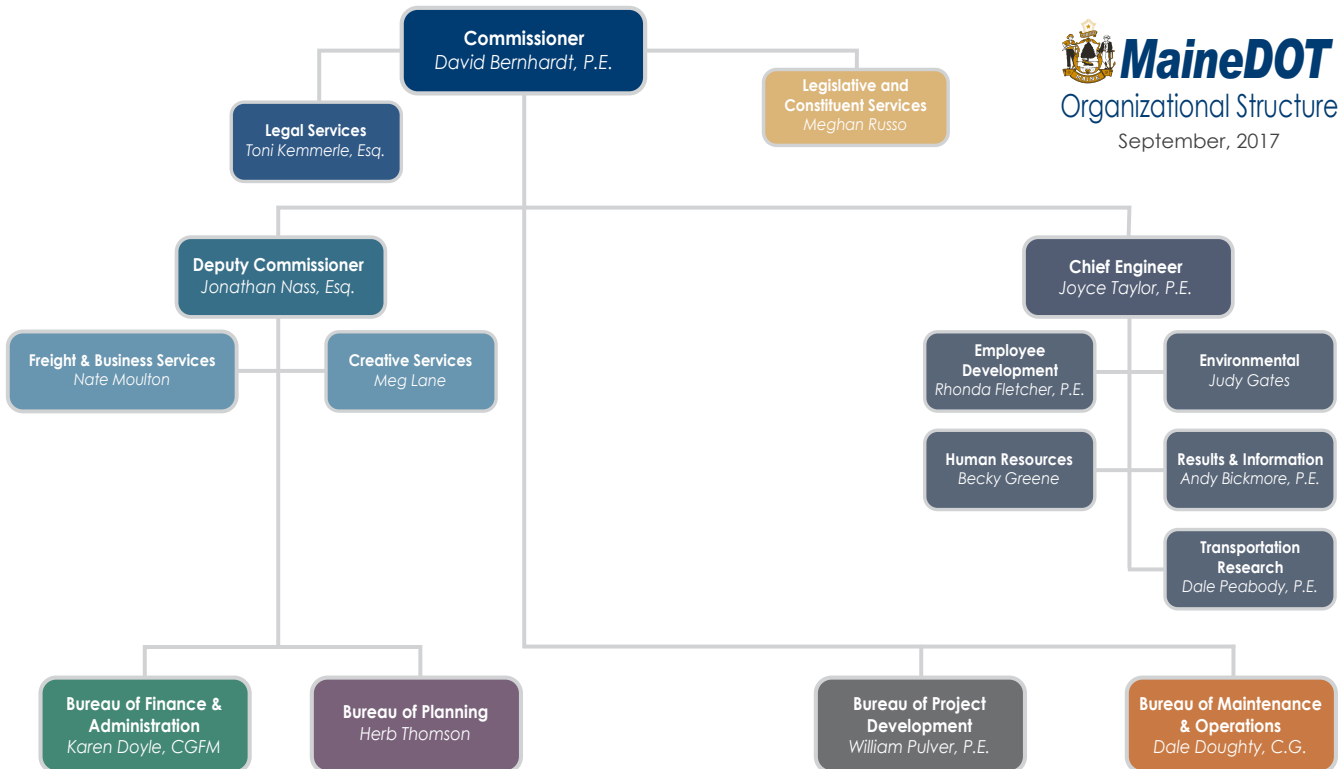
**David Bernhardt**  
Commissioner



**Jonathan Nass**  
Deputy Commissioner



**Joyce Taylor**  
Chief Engineer

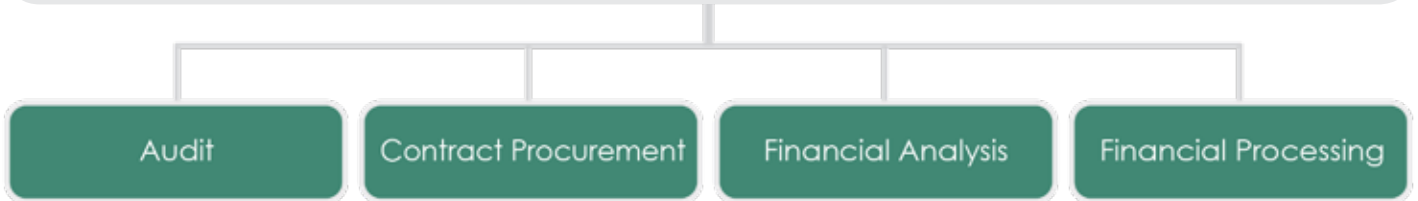




## *Bureau of Finance & Administration*

### **Karen Doyle, Director**

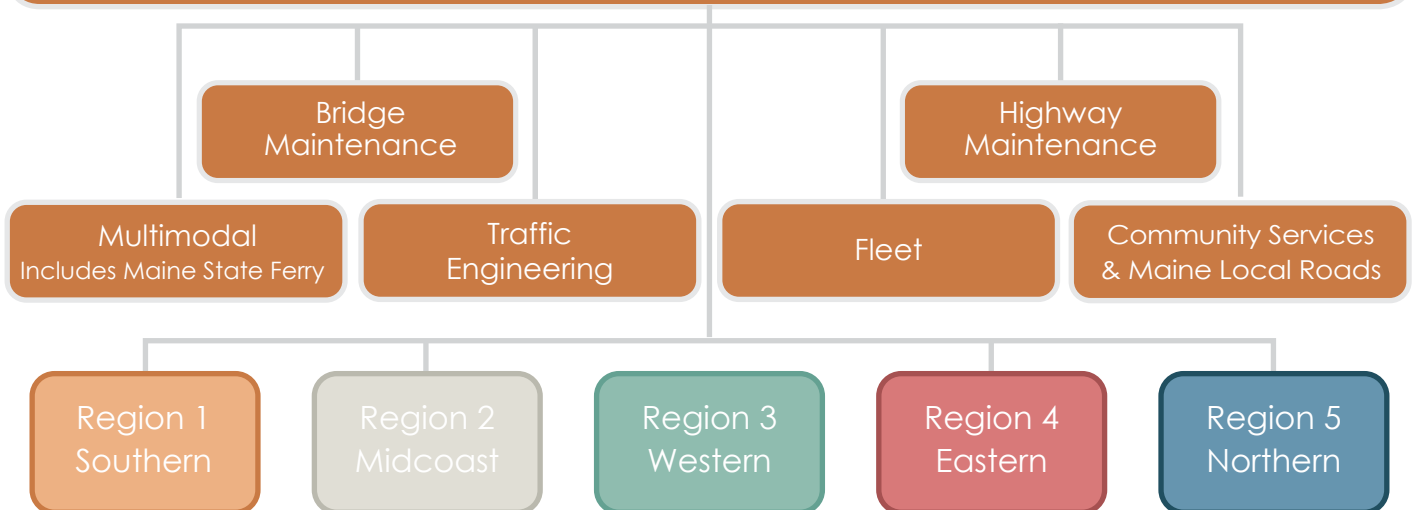
MaineDOT bureau responsible for providing administrative and financial support services to the department.



## *Bureau of Maintenance & Operations*

### **Dale Doughty, Director**

MaineDOT bureau responsible for maintaining state-owned transportation systems.



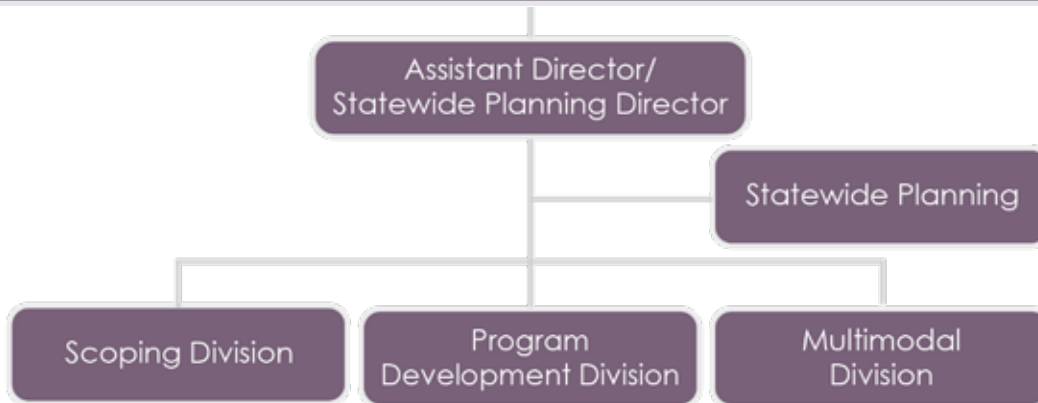




## *Bureau of Planning*

### **Herb Thomson, Director**

MaineDOT bureau responsible for developing plans and programs to address Maine's transportation needs.



## *Bureau of Project Development*

### **William Pulver, Director**

MaineDOT bureau responsible for developing and delivering MaineDOT's Work Plan projects through to completion of construction.





## **Vision**

*To be the most trusted organization in Maine  
by being open, accountable, and responsive.*

## **Mission**

*To responsibly provide our customers  
the safest and most reliable transportation  
system possible, given available resources.*

## **Core Values**

*Integrity ~ Competence ~ Service*



***MaineDOT***



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