

**Connecticut Public Transportation Commission**  
Minutes of June 5, 2014

ConnDOT Headquarters, Conference Room A  
2800 Berlin Turnpike, Newington

**Attendance: Members:** Kevin Maloney, Richard Schreiner, Alan Sylvestre, Yvonne Loteczka, Robert Rodman, Chris Adams, Russ St. John, Ed McAnaney, Nicholas Lownes. **Ex-officio members:** David LeVasseur (OPM), Fred Riese (DEEP). **ConnDOT staff:** Sherry Osterling. **Guests:** Michael Riley, Kim Pelletier.

Chairman Maloney called the meeting to order at 1:32 p.m. The minutes of the meeting of May 1 were approved as written.

**Featured Speaker**

Chairman Maloney noted that the April 28 issue of Transport Topics contained an article about an effort led by Connecticut Motor Transport Association President Mike Riley to exempt repairs to trucks from magnesium chloride-induced corrosion from the state sales tax. He then introduced Mike Riley and asked him to discuss this effort and related issues. He also introduced Kim Pelletier who co-presented with Mike Riley.

Mike Riley said that 5-6 years ago, CMTA members began to complain about an increase in corrosion to their vehicles. This corresponded to the time Connecticut, and some other northeastern states, began to use magnesium chloride as its road treatment chemical for deicing and snow melting. Riley said CMTA first sponsored a legislative bill a few years ago to begin a discussion on this topic and has done so for four years in a row now.

Riley said that other states using magnesium chloride have also used additives to reduce or inhibit its corrosive effects. He noted that at a hearing on the sales tax bill, fire departments also came forward to complain of damage to their trucks and that cars are similarly suffering from increased rates of corrosion. Fifty or sixty letters complaining of corrosion were received after the public hearing. Riley also noted that his bill for tax relief on frame repairs necessitated by the increased corrosion did not go anywhere.

Riley mentioned that the last session of the General Assembly passed Public Act 14-199. Section 6 of this Act mandates a study by ConnDOT of the impact of the use of magnesium chloride on vehicles. [Note: The actual language of section 6 specifies “an analysis of the corrosive effects of chemical road treatments on (1) state snow and ice equipment, (2) state bridges, highways and other infrastructure, and (3) the environment.”] An interim report is due on October 1, 2014 and a final report on July 1, 2015. The Connecticut Academy of Science and Engineering (CASE) has been commissioned to do the study. Riley noted that CASE has much credibility and they would be expected to produce a thorough and unbiased study.

Riley then turned the floor over to Kim Pelletier, a truck fabricator with Truck Builders of Connecticut. Pelletier explained that magnesium chloride gets inside the frame rails of double

frame trucks and builds up there, ultimately spreading the frame members apart. When the frame can't flex, it begins to crack. Neither sealants nor epoxies can stop the formation of rust on exposed frame members, and even after sandblasting the rust off, new rust forms immediately. Pelletier also displayed a chrome plated license plate holder. Even chrome plating did not stop rust formation. Pelletier said the magnesium chloride affects anti-lock braking systems on trucks as the sensors rot out.

Pelletier next showed a highly corroded dust shield from a shoe and brake assembly. He noted that dust shields now rust out in five years. He said brake canisters have also been rusting out, which risks losing pressure on the brakes. He cited several examples of this happening. Also, the spring in the parking/ emergency brake applies 30,000 psi to the brake but the spring can rust once the brake canister rusts through. This can happen despite the canister coming from the factory zinc-coated.

Some new trucks come with painted frames. Painted frames can fare worse than unpainted frames once a corrosive agent gets through a hole or otherwise under the paint as the paint acts to keep the salt in contact with the frame. Even aluminum parts are affected by magnesium chloride, a sample of which was shown by Pelletier.

Trucks or equipment that are only used periodically are often at greater risk of corrosion than those in regular use as the corrosion can continue unnoticed while the truck is not in use. Pelletier cited construction equipment trailers as one example of this. He has seen cases of the support legs on the equipment trailer going right through the deck of the trailer and the equipment laying on the ground. He also mentioned recurring instances of the brackets on the air valves of truck brakes corroding off, leaving the air valves hanging by the brake lines and vulnerable to damage.

As an informal measure of the increased rate of corrosion-caused problems, Pelletier cited the wait times for replacement fuel tanks which have gone up from several days to several weeks or even longer due to the increased demand since the introduction of magnesium chloride as a road treatment.

Pelletier pointed out that many of the defects caused by corrosion would earn you a ticket at a DMV inspection. He also mentioned that DMV's advice for dealing with magnesium chloride on trucks is to wash it off the truck, but that DEEP considers this unacceptable because the runoff in an uncontrolled situation would constitute pollution. He then related two personal experiences. He had a truck brake freeze up on him on a truck that had not been driven for a while. When he went to use the brake, no amount of pressure would get the brake pedal to depress. He also cited 300 pounds of rust coming off the frame of a single truck when he jackhammered the rust off the frame.

When asked if surrounding states are using the same product and having the same problems, Riley mentioned that Colorado adds molasses to the magnesium chloride solution. He said the National Trucking Association was trying to develop some national standards on application rates for magnesium chloride solution. He said that up until five years ago, we were not seeing these types of problems.

Magnesium chloride replaced the sand/salt mixture previously used, which was a bulkier product and required the clean-up of the sand in the spring. Disposal of the collected sand was also an issue. Riley mentioned beet juice as an additive also being used in some states. And in Wisconsin, cheese brine is being used as a road maintenance solution.

In response to a question about building a corrosion resistant truck, Pelletier said that it costs 37% more to build a truck body with stainless steel, which is rust resistant but doesn't have the same tensile strength. The stainless steel also adds extra weight to the truck so it can't carry as much of a load.

A couple of final points mentioned by Pelletier were that Jeeps are especially susceptible to salt-induced corrosion due to their very open wheel wells. Also, the use of molasses as an additive to the road treatment mix has a couple of drawbacks. When tried in Bristol, an initial molasses additive rate was too high, causing roads, particularly at intersections, to become too slippery, which caused extra accidents due to sliding vehicles. Also, although the molasses bonds the salt to the roadway, when the solution is kicked up, the molasses also bonds the salt to the vehicles, including brake lines and shock absorber mounts, which leads to accelerating the formation of rust.

Moving on to other topics, Riley said there is no news on the Highway Trust Fund issue yet. Chris Murphy became the first senator to say that the federal government should raise the fuel tax, which currently stands at 18c per gallon for gasoline and 24c per gallon for diesel fuel. Since the federal gas tax was last raised in 1993, inflation has eaten up the value of the fuel tax revenue. There is also some talk of a tax based on ton-miles of truck transport. Riley sees the most likely outcome for the Highway Trust Fund, at least in the short term, as a continuing resolution.

In response to a question concerning new truck parking capacity due to reconfigurations at rest areas and service plazas, Riley said some small but helpful additions have occurred which do not solve the 1,500 space deficiency in Connecticut but which are appreciated. He mentioned that two recent fatal accidents involved cars hitting trucks which were parked in service plazas at the point of entry from the highway. He mentioned that recent changes to hours of service regulations have mandated more rest for truck drivers. There is often a conflict between a truck driver running out of hours and the lack of any legal area for the driver to park his rig.

### **Chairman's Report**

First, Chairman Maloney related that he had visited Commission member Rich Sunderhauf in the hospital after Rich's recent hip replacement surgery. Kevin reported that Rich is now home.

Next, Maloney discussed the issue of funding for the Highway Trust Fund. The hunt for new funding sources for the Fund is racing to address the fact that the Fund balance could go to zero in the coming months. The balance in the Highway Trust Fund account will fall to \$2 billion by September 30, with USDOT delaying payments to states by this August. President Obama has discussed easing restrictions on highway tolling by the states. A user tax based on

vehicle miles traveled (VMT) is another option under consideration, although this may be difficult to implement.

On a related note, Gov. Malloy is seeking \$1.8 billion from USDOT to implement a number of transportation improvement projects in Connecticut including rehabilitating and repaving the Merritt Parkway in Stamford, adding a lane to Interstate 95 in Norwalk, and repaving I-84 in Waterbury, among others.

Maloney also reported that taxi and livery companies have filed a U.S. District court lawsuit against Uber and Lyft for operating unregulated and unlicensed car-for-hire services in Connecticut.

Lastly, he mentioned that U.S. Representatives Rosa DeLauro, Jim Himes and Elizabeth Esty held a press conference at Union Station in New Haven to promote proposed legislation known as the Rail Safety Enforcement Act in response to recent accidents and incidents on Metro-North. The Act would require:

- every locomotive cab to have a fail-safe alerter device if the engineer appears idle,
- development by each passenger rail service of a risk fatigue plan within 60 days
- mandatory progress reports within 180 days on the implementation of Positive Train Control, and
- implementation of a system of redundant signals.

### **Old Business**

Fred Riese mentioned that he is reviewing an Environmental Assessment prepared by Amtrak and the Federal Railroad Administration for the replacement of Amtrak's moveable bridge over the Connecticut River. A new bridge would be constructed immediately to the south of the current bridge, after which the latter would be demolished. He also said that ConnDOT has now selected a site for the construction of a new bus storage and maintenance facility in Torrington for the Northwestern Connecticut Transit District. The site is the old mill of the Hendey Machine Company. Now the Torrington Trust for Historic Preservation is leading an effort to save the factory.

### **New Business**

Fred mentioned that the two major issues raised at the May 13 Stamford public hearing were the inconsistent regulatory treatment faced by the regulated taxi and livery operators versus the unregulated for-hire drivers operating through Uber, and issues related to the redevelopment of the area around the Stamford Transportation Center. At the June 2 hearing in Danbury, the Uber vs. taxi controversy and potential tolling on Interstate highways, particularly at state lines as at Danbury, were the dominant topics.

Fred also related that ConnDOT had an electric powered bus from manufacturer BYD on display here on May 28<sup>th</sup>. The bus had a stated range of 155 miles between charges but has achieved up to 300 miles between charges in operation.

UConn professor Nick Lownes noted that September 24 will be the date for the Public Transportation Data and Performance seminar to be held in Hartford. Further details will be forthcoming. He mentioned that the University Transportation Centers, including the UConn Transportation Institute, are supported by the Highway Trust Fund. Senator Barbara Boxer of California had introduced a bill to remove the centers from support by the Highway Trust Fund, moving them instead to the General Fund. He foresees additional moves of this sort to reduce the funding requirements on the Highway Trust Fund. Senator Jim Inhofe of Oklahoma deleted Sen. Boxer's amendment.

Chairman Maloney adjourned the meeting at 3:00 p.m.