## **Baystate Roads Program**

## **Tech Notes**

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Tech Note #20

## **Dealing with Dangerous Mailboxes**

By Andrea Hart, Resource and Information Assistant, Cornell Local Roads Program

Some unfortunate rural residents have had their mailboxes knocked down a half a dozen times or more. The culprit may be a stray car, snow plow, mail carrier, delinquent juvenile, or any combination of these.

When faced with such mayhem, it is a normal human reaction to attempt to build the indestructible mailbox. Many postal patrons take their mailboxes incredibly seriously, viewing them as a creative link to, or extension of, their homes or businesses. They may resent regulations concerning their mailboxes. This dilemma sets the stage for all-too-common hazardous situations located in the rights-of-way along our highways.

It is estimated that 70 to 100 people in the United States are killed every year due to vehicles colliding with improperly designed or installed mailboxes. The ideal mailbox, consisting of a light sheet metal box securely attached to a wooden post or light gauge pipe, poses little threat to motorists when positioned correctly alongside an adequate turnout. It is the larger, more elaborate creations that cause problems. The family down the road may be the envy of the town with their perfectly scaled Eiffel Tower mailbox, but

those carefully measured angles won't be so cute after being sideswiped by the county snow plow.

The American Association of State Highway and Transportation Official's (AASHTO) manual, A Guide for Erecting Mailboxes on Highways, defines a roadside hazard as "anything alongside a street or highway that is a possible source of damage or injury if struck by an errant vehicle." Massive mailboxes mounted on tractor wheels, plow blades, concrete-filled barrels and other such devices, generally fall into this category of "roadside hazards."



Grouped or multiple mailbox installations also incur risks. The horizontal member, usually a wooden plank supported by two or more posts, is often set at windshield height, and when struck by a moving vehicle, has been known to impale or decapitate motorists. Multiple installation mailboxes have caused vehicle rollovers when the closely spaced mailboxes are pushed over on top of each other, creating a ramp that the vehicle careens off of. Another safety hazard, weak attachments between the post and box, can cause the mailbox to become airborne and potentially penetrate a vehicle.

Along with design problems, the risk factor increases due to improper placement of mailboxes, especially in rural areas where mailboxes may be on highly-trafficked roads. Often, the mailbox may not be highly visible, have enough of a turnout area for both patron and postal worker, or may be located too close to an intersection.

Mailboxes should not be placed near sharp turns where motorists would be unable to see someone approaching or leaving the mailbox. Neither patron nor postal worker should have to walk more than 200 feet along the shoulder or have to cross a busy roadway or intersection to reach a mailbox.

If a mailbox is located too close to an intersection, a car stopped at the mailbox can obstruct the view of the upcoming intersection and traffic from other vehicles, increasing the risk of an accident occurring.



Any of these nonconforming mailbox designs and installations can contribute to vehicle accident and damage. With a few precautions and adjustments, these accidents would have been entirely avoidable.

Wyoming and Wisconsin are two states that have taken an active part in reducing the amount of damage caused by the improper installation of mailboxes. The Wisconsin DOT Districts spent one summer reviewing and inspecting unsafe mailboxes. Those not meeting their requirements were recorded and photographed and a letter and pamphlet explaining the danger were left with the homeowners. The letter advised the homeowner that if a crash were to occur, he or she could be liable for damages.

Wyoming implemented a similar program under which a landowner must obtain a right-of-way permit in order to install a mailbox, thus ensuring that the mailbox meets any and all requirements. For existing unsafe mailboxes, Wyoming used much the same tactic as Wisconsin. In both states, when compliance was not met by the landowner, the highway officials worked in conjunction with the postal service to encourage cooperation from the landowner, usually discontinuing mail delivery to that location until the mailbox was corrected.





General requirements for mailboxes state that the bottom of the box should be 42 to 48 inches above the ground. It is also recommended that mailbox supports be at least three-fourths of their height away from each other and have a length equal to one-fourth of their height underground.

For example, a mailbox post of 48 inches above the ground needs to actually be 60 inches long to allow for 12 inches underground. In must be placed 36 inches away from the nearest adjacent post.

Multiple mailbox installations should adhere to the same criteria of spacing as single installation mailboxes. Certain designs, such as the cantilever, are better suited for some places depending on individual climate conditions like snow and ice. However, this design can be dangerous, since the cantilever places the box directly at windshield height. A Guide for Erecting Mailboxes on Highways, published by AASHTO, more thoroughly discusses the pros and cons of different mailbox-designs.

The placement of mailboxes depends on the type of road it is on. In general, it should have a shoulder turnout space that is sturdy





enough to withstand vehicle traffic in all kinds of weather conditions. Mailbox placement should also keep patrons and postal workers from walking too far along busy roadways, and should never, under any circumstances, project onto the usable shoulder of the road.

Highway departments can and should have an influence on the erection of roadside mailboxes when they are placed in the highway right-of-way. While it might be tempting to take out the dangerously cute Eiffel Tower mailbox with a snowplow, a better approach would be to advise the owners of the mailbox about the potential liability they have.

Check out A Guide for Erecting Mailboxes on Highways on the National Transportation Library's Web page at: http://www.bts.gov/NTL/frames/SMART-RIGHT-OF-WAY@BTS.GOV.html. This can be purchased from the AASHTO for \$16 by calling 1-800-231-3475 or by visiting the AASHTO website at http://www.aashto.org.

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