

STATE OF MINNESOTA  
DEPARTMENT OF TRANSPORTATION  
OFFICE OF MAINTENANCE

Concerning the Proposed )  
Adoption of Rules of the ) STATEMENT OF NEED  
State Department of Transportation ) AND REASONABLENESS  
Relating to Standards for Mailbox )  
Installations and Supports )

The Commissioner of Transportation presents facts showing the need for and reasonableness of the proposed rules relating to standards for mailbox installations and mailbox supports.

INTRODUCTION

The Commissioner of Transportation, under Minnesota Statutes, section 169.072, subdivision 2, proposes to adopt rules governing the standards and permissible locations of mailbox installations and mailbox supports on streets or highways in Minnesota. This assignment was given to the Commissioner under legislation enacted during the 1991 legislative session.

These rules are meant to address the potential hazardous conditions that are created when, either by location or design, an inappropriate mailbox installation is constructed. Health and safety of the traveling public are at risk, inasmuch as these mailbox installations are generally immediately adjacent to roadway surfaces carrying traffic. Any occurrence of a vehicle inadvertently straying from the roadway could potentially involve a collision with these fixed structures. Therefore, these standards, governing the location and design of mailbox installations and supports, were drafted to reasonably minimize the severity and potential of vehicle/mailbox collisions, without unduly interfering with mail delivery and public access.

To develop these rules the Minnesota Department of Transportation (Mn/DOT) assembled a special multi-disciplinary task force of department employees and a representative from the Federal Highway Administration (FHWA). In addition to conducting literature searches, surveying the practices of other states, and soliciting public opinion, this task force utilized information contained in the publication "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" in developing these rules. This publication, dated May 24, 1984, was prepared by a task force of the American Association of State Highway and Transportation Officials

(AASHTO) - an association of highway and transportation officers from the states and the Federal Highway Administration. This publication can be obtained by contacting AASHTO at 444 North Capitol Street, N.W., Suite 225, Washington, D.C. 20001.

Solicitation of public opinion concerning the proposed adoption of these rules was done through an official "Notice of Solicitation of Outside Information or Opinions" which was published in the State Register on February 3, 1992. From this solicitation 25 people responded either orally or in writing. The vast majority (21) of those responding represented county and city public works officials who expressed general support for our efforts to adopt rules governing safety of mailbox installations. All comments received were considered by the multi-disciplinary task force.

Minnesota Statutes, section 169.072, subdivision 2 cited a January 1, 1993 completion date for adoption of these rules. This completion date was not met due to the extensive amount of research, task force activity, consensus building, and drafting that was necessary to prepare the rules for publication. The Department of Transportation is committed to completing this rulemaking directive as expeditiously as possible while ensuring that these rules accomplish their legislative intent and objectives.

The Minnesota Department of Transportation believes that these proposed rules address the need for safer highways for the traveling public by providing standards for safe mailbox installations with full consideration of the relative expense and convenience to the owners of nonconforming mailbox installations.

#### SMALL BUSINESS CONSIDERATIONS

In proposing these rules, the Commissioner of Transportation has considered the provisions of Minnesota Statutes, section 14.115, concerning the impact of these rules on small business. The Commissioner of Transportation has determined that the only effect the proposed rules have on small business is an indirect one. Like any other member of the public, some small businesses may have mailbox installations and supports which are not in conformance with these rules. Thus, these mailbox installations and supports would have to be removed in accordance with Minnesota Statutes, section 169.072, subdivision 3. Since these rules do not have a direct effect on small businesses, Minnesota Statutes, section 14.115 is not applicable to this rulemaking proceeding because of the exemption given in Minnesota Statutes, section 14.115, subdivision 7, clause (2).

## IMPACT ON AGRICULTURAL LAND

Adoption of the proposed rules will not have a direct or substantial adverse impact on agricultural land. Therefore, Minnesota Statutes, section 14.11, subdivision 2, is not applicable to this rulemaking proceeding.

## EXPENDITURE OF PUBLIC MONEY BY LOCAL PUBLIC BODIES

The adoption of the proposed rules will not require a total expenditure of public monies by local public bodies of more than \$100,000 in either of the two years immediately following adoption. Therefore, Minnesota Statutes, section 14.11, subdivision 1, is not applicable to this rulemaking proceeding.

Minnesota Statutes, section 169.072, subdivision 3 allows the commissioner and local road authorities to recover their costs (up to \$75), for removal and/or replacement, from owners or residents who do not remove nonconforming installations or supports within 60 days of notification. Therefore, because the proposed standards for mailbox installations and supports, as prescribed in these proposed rules, can be met by removal and/or replacement of any installation or support found to be nonconforming for under \$75, the net cost to the commissioner or road authorities would be \$0.

## PART-BY-PART STATEMENT OF NEED AND REASONABLENESS

### 8818.0100 DEFINITIONS.

Subpart 1. Airspace. This definition describes the location requirements of mailbox installations. This definition is needed to address the above ground location requirements. Although a mailbox support may meet the ground at a point that doesn't encroach the usable roadway surface itself, it could encroach the space above the usable roadway if any part of the mailbox installation protruded laterally toward the roadway. This definition is a critical component of measuring compliance with these rules. This definition is reasonable because it is normally understood by the average person and is consistent with the overall purpose of the rules - to protect the traveling public without unduly interfering with mail delivery and access.

Subp. 2. Cross-sectional area. This definition describes the physical limits on the design of certain mailbox support structures. This definition is needed to address the maximum allowable strength of supports. Because a support's physical size

is related to, and is easier to measure than a support's strength, this described method of size measurement was selected. This definition allows for a simple, reasonable description of how to determine strength limits for certain support structures. This definition is a critical component of measuring compliance with these rules. This definition is reasonable because it is normally understood by the average person and is consistent with the overall purpose of the rules - to protect the traveling public without unduly interfering with mail delivery and access.

Subp. 3. Encroaches. This definition describes the location requirements of mailbox installations. This definition is needed to describe the limits for positioning a mailbox installation so as to eliminate installations from areas normally recognized to be used by motor vehicles, such as driving lanes, shoulders, turn lanes, and parking lanes. This definition is a critical component of measuring compliance with these rules. This definition is reasonable because it is normally understood by the average person and is consistent with the overall purpose of the rules - to protect the traveling public without unduly interfering with mail delivery and access.

Subp. 4. Mailbox installation. This definition identifies the physical components of the mailbox structure to which various parts of these rules apply. This definition is needed to convey that when this term is used it means that all components of the structure are included or considered. This definition is a critical component of measuring compliance with these rules. This definition is reasonable because it is normally understood by the average person and is consistent with the overall purpose of the rules - to protect the traveling public without unduly interfering with mail delivery and access.

Subp. 5. Mailbox support. This definition identifies the physical components of the mailbox structure to which various parts of these rules apply. This definition is needed to convey that when this term is used it means that only the components defined, "the part of the mailbox installation that holds up the mailbox, excluding hardware and auxiliary attachments", are to be included or considered. This definition is a critical component of measuring compliance with these rules. This definition is reasonable because it is normally understood by the average person and is consistent with the overall purpose of the rules -to protect the traveling public without unduly interfering with mail delivery and access.

Subp. 6. Neighborhood delivery and collection box units. This definition describes a specific mailbox installation type that is deemed to be nonconforming under these rules. This definition is needed to provide a clear understanding of what this nonconforming mailbox installation type is. This definition is a critical component of measuring compliance with these rules. This

definition is reasonable because it is normally understood by the average person and is consistent with the overall purpose of the rules - to protect the traveling public without unduly interfering with mail delivery and access.

Subp. 7. Pounds per foot. This definition describes the physical limits on the design of certain mailbox support structures. This definition is needed to address the maximum allowable strength of supports. Because a support's weight is related to, and is easier to measure than a support's strength, this described method of weight measurement was selected. This definition allows for a simple, reasonable description of how to determine strength limits for certain support structures. This definition is a critical component of measuring compliance with these rules. This definition is reasonable because it is normally understood by the average person and is consistent with the overall purpose of the rules - to protect the traveling public without unduly interfering with mail delivery and access.

Subp. 8. Usable roadway. This definition describes the location requirements of mailbox installations. This definition is needed to describe the limits for positioning a mailbox installation in order to eliminate installations from locations that have a high likelihood of being impacted by motor vehicles. The location described is one that is normally recognized as the area used by motor vehicles. This definition is a critical component for measuring compliance with these rules. This definition is reasonable because it is normally understood by the average person and is consistent with the overall purpose of the rules - to protect the traveling public without unduly interfering with mail delivery and access.

#### 8818.0200 PURPOSE AND SCOPE.

Subpart 1. Purpose. The purpose of subpart 1 is to explain the reason for the proposed rules. This explanation is necessary so that the public is aware that the rules are intended to protect the traveling public by minimizing potentially hazardous fixed roadside appurtenances that could lead to serious injury if impacted by vehicular traffic. This subpart is reasonable because the purpose for these rules is stated in the governing legislation, Minnesota Statutes, section 169.072, subdivision 2, and therefore, this subpart reflects the legislative intent of this rulemaking mandate.

Subp. 2. Scope. The purpose of subpart 2 is to describe the scope of the proposed rules. These rules are only applicable to installations located on streets or highways that have a speed limit of 40 miles per hour or greater. This subpart is needed so that the public is aware of the streets and highways to which these rules apply. This subpart is reasonable because severity of

accidents with fixed objects decreases with reduced speeds. The choice of 40 miles per hour as the cut off criteria speed is consistent with Minnesota Department of Transportation safety design standards that call for guardrail protection of fixed objects along highways with speed limits of 40 miles per hour or greater.

#### 8818.0300 PROHIBITED MAILBOX STRUCTURES; EXCEPTIONS.

Subpart 1. Unlawful installations and supports. The purpose of subpart 1 is to describe mailbox installations and supports that are considered to be hazardous and thus, unlawful. These are listed under items "A" through "I" of this subpart. Mailbox installations and supports that fall within these descriptions are considered to be "nonconforming" to the rules and would be subject to removal as prescribed under Minnesota Statutes, section 169.072, subdivision 3. This subpart is needed to inform the public which mailbox installations and supports are considered a danger to the health and safety of the traveling public, and thus not legally acceptable. Except as otherwise noted, the criteria used to develop these standards is based on "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" published May 24, 1984 by the American Association of State Highway and Transportation Officials (AASHTO). This guide, prepared by the Task Force for Roadside Safety of the Standing Committee on Highways Subcommittee on Design, is recognized by the highway community (federal, state and local) as authoritative and is often relied upon in developing and setting standards. Using this resource is reasonable because the governing legislation, Minnesota Statutes, section 169.072, subdivision 2, states that "The commissioner shall base the rules substantially on federal highway administration regulations or recommendations, or other national standards or recommendations regarding the location and construction of safe, breakaway mailbox installations or supports".

A. Item A of 8818.0300, subpart 1 states that an installation containing more than one vertical support is unlawful. This item is meant to prohibit mailbox support structures that consist of two or more vertical supports that support a horizontal plank for the placement of several mailboxes. This item is needed because horizontal planks are extremely dangerous due to the fact that they are at vehicle windshield height and if struck by an errant vehicle could seriously impale a vehicle occupant. This item is reasonable because it conforms to "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" and does not unduly interfere with mail delivery and access.

B. Item B of 8818.0300, subpart 1 states that an installation containing more than two mailboxes is unlawful. In addition to the reason stated in "A", above, this item is needed because as

the number of mailboxes increase so does the potential for serious injury if struck by a vehicle. This item is reasonable because it conforms to "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" and does not unduly interfere with mail delivery and access.

C. Item C of 8818.0300, subpart 1 establishes a maximum mailbox support size for all wooden support structures. Wooden supports larger than stated are unlawful. This item is needed to address the maximum allowable strength of wooden supports. Because a support's physical size is related to, and is easier to measure than, a support's strength this subpart establishes a maximum for support size to determine whether or not a support is considered nonconforming under these rules. This item allows for a simple, reasonable description of how to determine strength limits for wooden support structures. Cross-sectional area refers to the resultant area exposed by an imaginary horizontal plane being sliced through the vertical support. The upper limit for this area is 16 square inches for any above-ground point along the support. Because wood, when impacted, will break at its weakest point; and given that from a motorist safety standpoint this break point should ideally be near the ground, the critical point for meeting the 16 square inch requirement was determined to be four inches above ground. One method which could be used to reduce an otherwise excessive wooden support design would be to drill holes of an appropriate diameter horizontally through the support at a point 4 inches above the ground. This item is reasonable because it conforms to "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" and does not unduly interfere with mail delivery and access.

D. Item D of 8818.0300, subpart 1 establishes a maximum mailbox support size for all metal support structures. Metal supports larger than stated are unlawful. This item is needed to address the maximum allowable strength of metal supports. Because a support's weight is related to, and is easier to measure than, a support's strength this subpart establishes a maximum support weight for determining whether or not a support is considered nonconforming under these rules. This item allows for a simple, reasonable description of how to determine strength limits for metal support structures. The unit of measure described is "pounds per foot" which refers to the weight of a one foot vertical section of the support structure. The upper limit for this weight is 4 pounds per foot. In "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" the criteria for a metal support calls for a support no greater in strength than a 2-inch diameter standard strength steel pipe. For simplicity and because a standard 2-inch pipe weighs 3.68 pounds per foot, it was decided to use the next highest even number - 4 pounds per foot. Because metal, when impacted, will bend or break at its weakest point; and given that from a motorist safety standpoint this point should ideally be

near the ground, the critical point for meeting the 4 pounds per foot requirement was determined to be within the first 3 inches above the ground. Three inches is a reasonable segment length because it is large enough to provide the breakaway or bending that is required to reduce the severity of a vehicle/mailbox support collision. Also the 3 inch segment provides for simplicity and ease of measurement in determining compliance with these rules. This item is reasonable because it conforms to "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" and does not unduly interfere mail delivery and access.

E. Item E of 8818.0300, subpart 1 states that if a mailbox is not approved by the United States Postal Service it is unlawful. This item is needed so that mailboxes are of a design that has been reviewed and deemed appropriate for mail delivery. Such a requirement also promotes understanding and ease of compliance with the rules. This item is reasonable because the Minnesota Department of Transportation, through research, has concluded that all United States Postal Service approved mailboxes meet minimum safety standards called for in these rules, with the exception of neighborhood delivery and collection box units explained in item "G". This item is also reasonable because United States Postal Service approved mailboxes are easily recognized, found and purchased by members of the public, and thus postal patrons are not unduly inconvenienced.

F. Item F of 8818.0300, subpart 1 states that if the mailbox supports of adjacent mailbox installations are spaced closer than 30 inches, as measured from center to center, they are unlawful. This item is needed because spacing closer than 30 inches can lead to vehicle rollover as documented in "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" during vehicle crash tests. This item is reasonable because "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" calls for mailbox support spacing of no closer than three-fourths of support height above ground. Since the average support height is very near 40 inches, 30 inches was selected as an easier to interpret standard. This simplification for spacing is easy to understand by the average person and thus promotes compliance with the rules.

G. Item G of 8818.0300, subpart 1 states that neighborhood delivery and collection box units are unlawful even if they are United States Postal Service approved. This item is needed because these installations have failed to meet safety requirements under vehicle crash testing as documented in "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS". Therefore, these boxes were determined to be nonconforming under these rules. This item is reasonable because it conforms to "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" and does not unduly interfere with mail delivery and access.



H. Item H of 8818.0300, subpart 1 establishes a maximum mailbox support size for all supports comprised of materials other than solely wood or metal, which were addressed in items "C" and "D". Supports larger than stated are unlawful. Wood or metal supports comprise the vast majority of all mailbox supports. This item is needed to cover all the other possible supports that may be used. Although relatively low in total number, the variety of unique types makes standards for these supports more difficult to quantify. This item is reasonable because it simplifies the standards for these unique mailbox installations by requiring the maximum support size to meet both the "cross-sectional" and "pounds per foot" requirements as described in items "C" and "D", and does not unduly interfere with mail delivery and access. In addition, this item helps the public identify the types of supports that this item is meant to address by providing some examples of supports that could be nonconforming.

I. Item I of 8818.0300, subpart 1 states that an installation that encroaches the usable roadway or its airspace is unlawful. Mailbox installation must not be located in such a manner as to encroach areas normally recognized to be used by motor vehicles such as driving lanes, shoulders, turn lanes and parking lanes. This item is needed because these locations are all subject to vehicular travel, and therefore, any fixed object that is located in this area increases the likelihood of vehicle/mailbox collisions. This standard applies to closed mailboxes only. If the only part of a mailbox installation that encroaches the described area is a mailbox door in the open position, then the installation would be considered conforming. The reason for not including the mailbox door in the open position in this standard is because mailbox doors are rarely left open. If open mailboxes were included in this standard, all mailboxes would have to be that much further away from the usable roadway thus making it more difficult for vehicular postal delivery. This item is reasonable because it conforms to "A GUIDE FOR ERECTING MAILBOXES ON HIGHWAYS" and does not unduly interfere with mail delivery and access.

Subp. 2. Exceptions. The purpose of subpart 2 is to describe exceptions to the requirements for mailbox installations and supports set forth in subpart 1. The Minnesota Department of Transportation has taken the position that the installations defined as hazardous and nonconforming in subpart 1 would not pass an accredited crash test. However, this subpart allows mailbox installations that pass an accredited crash test to be considered lawful and conforming even if they were considered as nonconforming under subpart 1. This subpart is needed because Minnesota Statutes, section 169.072, subdivision 2, states that,

"the commissioner shall consider the safety of the traveling public relative to the convenience and expense of owners of nonconforming mailbox installations or supports." (emphasis supplied). This subpart provides nonconforming mailbox owners with an alternative standard in order to foster compliance with these rules. This subpart allows anyone to produce documentation showing that their particular mailbox installation design passed an accredited crash test. This subpart is reasonable because it cites the National Cooperative Highway Research Program report entitled, "Recommended Procedures for the Safety Performance Evaluation of Highway Appurtenances," as the standard for determining what an accredited crash test is. Also, Minnesota Statutes, section 169.072, subdivision 2, states, "The commissioner shall base the rules substantially on the federal highway administration regulations or recommendations, or other national standards or recommendations" (emphasis supplied). This report is considered authoritative and is a national standard in this matter.

#### WITNESSES AND SUMMARY OF TESTIMONY

A. Expert witnesses. If a hearing is required, the Minnesota Department of Transportation (Mn/DOT) does not intend to use expert witnesses to provide evidence establishing the need for and reasonableness of the proposed rules. The Department may, if necessary to adequately address evidence and argument presented by the public, arrange for the testimony of expert witnesses.

B. Mn/DOT witnesses. If a hearing is required, the Department will introduce its Statement of Need and Reasonableness as an exhibit into the record in accordance with Minnesota Rules, part 1400.0500, subpart 3. The following Department personnel will be available at the hearing, if one is required, for questioning by the Administrative Law Judge and other interested persons or to briefly summarize all or a portion of the Statement of Need and Reasonableness if requested by the Administrative Law Judge.

1. Jerry L. Miller. Jerry L. Miller is the Assistant District Engineer, Maintenance for Mn/DOT District 4B. He chaired the task force that developed these rules. He may be called to testify about the need for and reasonableness of any of the proposed provisions.

2. John E. Howard. John E. Howard is the Maintenance Standards and Operations Engineer with the Office of Maintenance. He was a member of the task force that developed these rules and served as the principal drafter of these rules. He may be called to testify about the need for and reasonableness of any of the proposed provisions.

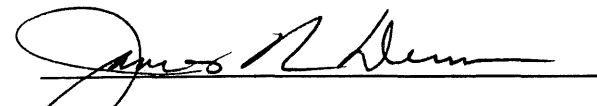
C. Task force members. The department may, if necessary to adequately address evidence and argument presented by the public, call members of the task force that developed these rules to testify about the need for and the reasonableness of any of the proposed provisions. The members of the task force, not mentioned above, that may be called to testify are:

Glen Ellis	Mn/DOT, Final Design Engineer
Mark Flygare	Mn/DOT, District Traffic Engineer
Richard Klobuchar	Mn/DOT, Area Maintenance Engineer
Ron Canner	Mn/DOT, Geotechnical Engineer
Dennis Carlson	Mn/DOT, State Aid Engineer
Mike Gillen	Mn/DOT, Assistant State Traffic Engineer
Dennis Redig	Mn/DOT, Maintenance Superintendent
John Hale	Mn/DOT, Retired
Henry Grothaus	FHWA, Safety/Traffic Operations Engineer

#### CONCLUSION

Based on the above part-by-part justification, these rules are needed to establish standards and permissible locations for mailbox installations and supports on streets or highways, as required by the Minnesota Legislature in Minnesota Statutes, section 169.072. The Department's proposed rules are a reasonable means of meeting the need to protect the health and safety of the traveling public because they fulfill the commissioner's statutory rulemaking mandate without unduly interfering with mail delivery and access. Only those provisions necessary to achieve the legislature's objectives in enacting Minnesota Statutes, section 169.072, or those that are required to effectively implement, administer, and enforce that section have been included in these rules.

DATE: 11/12/93

  
James N. Denn, Commissioner  
Department of Transportation