

Approved: 2/8/94
Date

MINUTES OF THE SENATE COMMITTEE ON TRANSPORTATION AND UTILITIES

The meeting was called to order by Chairperson Ben Vidricksen at 9:00 a.m. on February 4, 1994 in Room 254-E of the Capitol.

All members were present except:

Senator Burke - Excused
Senator Brady - Excused
Senator Rock - Excused

Committee staff present: Hank Avila, Legislative Research Department
Ben Barrett, Legislative Research Department
Bruce Kinzie, Revisor of Statutes
Martha Ozias, Committee Secretary

Conferees appearing before the committee:

Frank B. Hempen, Jr., Douglas County Director of Public Works

Others attending: See attached list

HB 2425 - Relating to motor vehicles; providing license plates for recipients of the purple heart

The Committee reviewed and discussed this bill. It was the opinion that it would indeed be an honor to recognize the recipients of the purple heart in this manner. Senator Tiahrt made the motion that the distinctive license plates should be provided for these veterans at the regular license plate charge as the National Guard. This was seconded by Senator Papay. Motion Carried.

A motion was made by Senator Jones to amend the bill to say that any new distinctive license plate authorized for issuance on and after July 1, 1994, shall be subject to the personalized license plate fee prescribed by subsection (c) of K.S.A. 8-132, and amendments thereto. This section shall not apply to any distinctive license plate authorized prior to July 1, 1994. This was further amended by striking the words "statute book" and inserting "Kansas register". A second was made by Senator Harris. Motion carried.

A motion was then made by Senator Papay to recommend **HB 2425** favorable for passage as amended. Senator Harris seconded this. Motion carried.

SB 597 - Relating to railroad crossings; concerning the grade thereof;

Discussion was opened for this bill. The Chairman asked Pat Hubbell, of The Atchison, Topeka, and Santa Fe Railway Company, to make a statement. He pointed out that the original intent was to have the entire section, that was noted in the bill, stricken but now suggested that it should be amended. Jim Reardon, General Counsel for the Kansas Association of Counties pointed out that there were instances when the county was at fault at railroad crossings and it was their liability. A letter was distributed from Frank Hempen in opposition to K.S.A. 66-229 saying it would have the effect of shifting all liability for railroad/county road crossings to townships and counties. He suggested that the Committee substitute the language of AASHTO (American Association of State Highway and Transportation Officials) for maintenance and improvement standards. (Attachment I). Paul Hoferer, General Attorney for the Atchison, Topeka and Santa Fe Railway, stated that the concern should not be about shifting liability but rather to get a standard that is realistic and workable, one that would be flexible, and you could live with and abide by. He pointed out that if the KDOT standards were adopted they would still have safe crossings. He suggested that the Committee let KDOT decide the regulations and standards.

A motion to approve the minutes of the February 2 meeting was made by Senator Harris. A second was made by Senator Tiahrt. Motion carried.

The meeting was then adjourned by the Chairman.

GUEST LIST

SENATE TRANSPORTATION COMMITTEE

DATE: February 4, 1994

[illegible]

Douglas County

Department of Public Works

Frank B. Hempen, Jr., P.E.
Director of Public Works/County Engineer

February 4, 1994

The Honorable Richard Rock
Transportation Committee
Kansas State Capitol
Topeka, Kansas 66612

RE: S.B. 597

Dear Senator Rock:

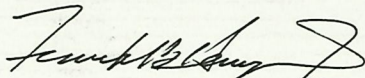
I am writing this letter in opposition to the referenced amendment to K.S.A. 66-229. It has the effect of shifting all liability for railroad/county road crossings to townships and counties. Under current Statute, railroads have responsibilities for ensuring a transition of 5,143 township and county roads crossing railroad "trackage". S.B. 597 releases those responsibilities. Who then assumes those responsibilities and all associated liability? In conferring with our county counselor, we believe the answer is townships and counties.

You recently heard testimony regarding the difficulty of interpreting these standards. If that is the case, I suggest the Transportation and Utilities Committee substitute language which calls for maintenance and improvement standards as outlined in "A Policy on Geometric Design of Highways and Streets" published by the American Association of State Highway and Transportation Officials (AASHTO).

The standards for railroad/public road crossing were incorporated in law to protect the traveling public. Eliminating these standards "weakens" those safety requirements and, as noted above, creates a "transfer" of liability to townships and counties. We need to ask ourselves if this Bill is good public policy.

Your consideration of the issues noted above will address the liability of townships and counties and continue to provide safe railroad crossings.

Very truly yours,



Frank B. Hempen, Jr., P.E.
Douglas County Director of Public Works/County Engineer

cc: Chip Woods, P.E. & R.L.S., Kansas County Highway Association President

ATTACHMENT A

SEN. TRANS. 2/4/94

A-1

SEN TRAVIS
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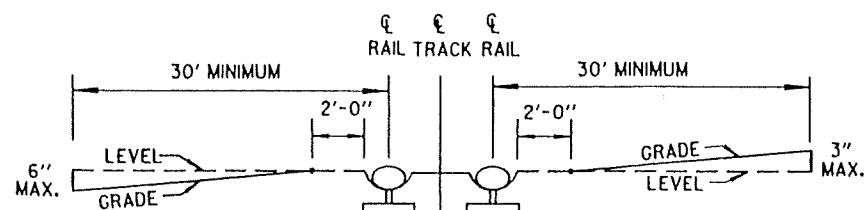


Figure IX-75. Railroad highway grade crossing.

control devices, for example, closing lightly used crossings and installing active devices at other more heavily used crossings, should be given prime consideration.

If it is established that active grade crossing traffic control devices are needed, the basic active device, flashing light signals, is used. When additional warning is desirable, the criteria or warrants recommended for evaluating the need for automatic gates at a grade crossing in addition to the above, include the existence of multiple main line tracks; multiple tracks at or in the vicinity of the crossing which may be occupied by a train or locomotive so as to be sure the movement of another train approaching the crossing; a combination of high speeds and moderately high volumes of highway and railroad traffic; and a substantial number of school buses or trucks carrying hazardous materials using the crossing.

These guidelines are not all inclusive. There will always be situations that are not covered by these guidelines and must be evaluated using good engineering judgment. Additional information on railroad-highway grade crossings can be found in References (12) (13) (14) (15) and (16).

Numerous hazard index formulas have been developed to assess the relative potential hazard at a railroad grade crossing on the basis of various combinations of its characteristics. Although no single formula has universal acceptance, each has its own values in establishing an index, that when used with sound engineering judgment, provides a basis for a selection of the type of warning devices to be installed at a given crossing.

The geometric design of a railroad-highway grade crossing involves the elements of alignment, profile, sight distance, and cross section. The requirements may vary with the type of warning devices used. Where signs and pavement markings are the only means of warning, the highway should cross the railroad at or nearly at right angles. Even when flashing lights or automatic gates are used, small intersection angles should be avoided. Regardless of the type of control, the roadway gradient should be flat at and adjacent to the railroad crossing to permit vehicles to stop when necessary and then proceed across the tracks without difficulty.

Sight distance is a primary consideration at crossings without train-activated warning devices. A complete discussion of sight distance at-grade crossings can be found in Reference (14).

As in the case of a highway intersection, there are several events that can occur at a railroad-highway grade intersection without train-activated warning devices. Two of these events related to determining the sight distance are:

1. The vehicle operator can observe the approaching train in a sight line that will safely allow the vehicle to pass through the grade crossing prior to the train's arrival at the crossing.

2. The vehicle operator can observe the approaching train in a sight line that will permit the vehicle to be brought to a stop prior to encroachment in the crossing area.

Both of these maneuvers are shown as Case I on Figure IX-76. The sight triangle consists of the two major legs, that is, the sight distance, d_H , along the highway and the sight distance, d_T , along the railroad tracks. Case I of Table IX-21 indicates values of the sight distances for various speeds of the vehicle and the train. These distances are developed from two basic formulas:

$$d_H = 1.47 V_v t + \frac{V_v^2}{30f} + D + d_e$$

and

$$d_T = \frac{V_T}{V_v} \left[(1.47) V_v t + \frac{V_v^2}{30f} + 2D + L + W \right]$$

where:

- d_H = sight distance leg along the highway allows a vehicle proceeding to speed V_v to cross tracks safely even though a train is observed at a distance d_T from the crossing or to safely stop the vehicle without encroachment of the crossing area, ft;
- d_T = sight distance leg along the railroad tracks to permit the maneuvers described as for d_H , ft;
- V_v = velocity of the vehicle, mph;
- V_T = velocity of the train, mph;
- t = perception/reaction time, which is assumed to be 2.5 sec; this is the same value used in Chapter III to develop the minimum safe stopping distance;
- f = coefficient of friction, which is assumed to be same values used and shown in Table III-1 for the development of the minimum safe stopping distance;
- D = distance from the stop line or front of the vehicle to the nearest rail, which is assumed to be 15 ft;
- d_e = distance from the driver to the front of the vehicle, which is assumed to be 10 ft;
- L = length of vehicle, which is assumed to be 65 ft; and
- W = distance between outer rails; for a single track, this value is 5 ft.

Corrections must be made for skew crossings and other than flat highway grades.

When a vehicle has stopped at a railroad crossing, the next maneuver is depart from the stopped position. It is necessary that the vehicle operator