

MINUTES

MONTANA SENATE
54th LEGISLATURE - REGULAR SESSION
COMMITTEE ON HIGHWAYS & TRANSPORTATION

Call to Order: By CHAIRMAN LARRY TVEIT, on January 19, 1995, at 1:00 p.m. in Room 410

ROLL CALL

Members Present:

Sen. Larry J. Tveit, Chairman (R)
Sen. Charles "Chuck" Swysgood, Vice Chairman (R)
Sen. Mack Cole (R)
Sen. Ric Holden (R)
Sen. Reiny Jabs (R)
Sen. Arnie A. Mohl (R)
Sen. Greg Jergeson (D)
Sen. Linda J. Nelson (D)
Sen. Barry "Spook" Stang (D)

Members Excused: None

Members Absent: None

Staff Present: Connie Erickson, Legislative Council
Carla Turk, Committee Secretary

Please Note: These are summary minutes. Testimony and discussion are paraphrased and condensed.

Committee Business Summary:

Hearing: SB 51
SB 96
SB 104

Executive Action: SB 47
SB 51
SB 68

CHAIRMAN TVEIT announced that sponsor SENATOR TERRY KLAMPE had recently notified him there would be no hearing on SB 51.

HEARING ON SB 96

Opening Statement by Sponsor:

SENATOR MIKE FOSTER, Senate District 20, Townsend, stated that he was primarily appearing before the Committee on behalf of the

small town of Neihart in Cascade County, which was a section of his District. He further stated that in the 1993 Session he had brought a bill before the Committee which provided a community the ability to reduce speed limits whenever a highway passed a senior center. He contended that the Committee had shown strong support for the bill which eventually became law. He contended that some interesting things had happened since passage of that bill and as a result, he was bringing forth SB 96 to address the on-going problem. He contended the community had been dealing with the Montana Department of Transportation (MDT) for several years in an effort to reduce the speed limit through their town. He asked the Committee to keep in mind that Neihart was at the base of King's Hill, on a narrow highway, with houses and businesses virtually right next to the highway. He explained that because speed was a potential killer for these people, the issue was very important to the community. He stated that some Neihart area residents were present to testify. He attested the town presented a unique situation where residences were right up next to the highway. The citizens had brought some pictures to give Committee Members an idea of what it looked like in the winter.

SENATOR FOSTER said the bill passed last Session had allowed them to reduce the 40-mph speed limit through Neihart by 15 percent within a certain distance of the Senior Center. He said the Department had informed them that desired speed limit changes through town could possibly be achieved with a request for a speed study. He said the town decided the study was a good idea if that was what was required to have the speed limit reduced. He said they proceeded with having a speed study conducted, and the Department determined that the speed limit change needed was to raise it from 40-mph to 45-mph. He stated that it could be imagined how Neihart residents were outraged by the decision.

SENATOR FOSTER said SB 96 stated that if a local government requested a speed study, for the purpose of determining whether they could get their speed limit reduced, the Department could not use that speed study to increase the speed limit. He said the second portion of the Bill dealt with the ability to reduce the speed limit near a Senior Center or a school, and identified the language on page 2, line 8 as stating two thousand feet. He conveyed his belief that the Department had decided it should be five hundred feet, and the Bill language stretched that out to two thousand feet and changed the amount of reduction from 80% to 70%. He said the first section of the Bill was made retroactive so the speed limit could be reduced to 40-mph as it had been. He said there were others present who would like to speak to the Bill and he would be available for questions and reserved the right to close.

Proponents' Testimony:

Dianne Johnson, Transportation Demand Management Coordinator for the City of Helena and for Lewis and Clark County, said she was present on behalf of both organizations. She stated Section two of the Bill basically dealt with the establishment of special speed zones around schools and Senior Citizens Centers where there were marked cross walks. She said that currently streets and highways were designed to be safe for travel at a specific predetermined speed and the safety factor was built in, but they were actually designed to safely carry a higher rate of speed. She contended that with this knowledge people were comfortable and tended to speed up. She said that when a municipality decided traffic was traveling at a speed greater than was desired, they could order an Engineering Traffic Analysis. She related that her Organizations currently hesitated to order an analysis, because they realized the chances were that the speed limit would be raised when they were actually asking the opportunity to implement traffic calming measures. She said this could be accomplished by designing projects where landscaping, medians, or other items were used to help control and slow traffic in local areas. She said another speed study could then be taken, and they could realize accomplishment of a lowered speed. She understood Department policy was to use the eighty fifth percentile speed, which was the speed that 85% or less of the motorists on that highway were traveling. She maintained that just because she drove faster on a roadway, it didn't become safer for children, bicyclists, elderly, or other motorists. She maintained they would like the opportunity to be able to help build and implement some of these traffic calming measures, which helped lower the speed naturally rather than raise it. She said it seemed counter productive to raise the speed limit every time a speed study was done just because the traffic had speeded up. She contended the speed limit could eventually rise to 80-mph or 90-mph because the road felt comfortable to drive at that speed. She said her groups were asking for the ability to request studies without the risk that the limit would be raised.

Ms. Johnson, stated Section 2 specifically asked to set distances for speed zones around schools, Senior Citizens Centers, etc. She said the Section also provided for lowering speeds in those zones to not less than 70% of the posted speed, which was typically close to the design speed, instead of the current 80%. She said they had a school located within a couple hundred feet of the roadway, and there had already been fatalities there. She stated the situation was dangerous, and they were asking to extend the maximum distance to two thousand feet on either side and sign the area at 70% to allow the 40-mph zone to be posted at 35-mph. She said she understood it was an enforcement problem. She said people typically tended to try slowing down when they saw a school zone sign, but when the sign was within 500 feet of the school, it was easy to just coast through. By the time the vehicle reached 45-mph, the vehicle was through the zone and off again. She said they needed the ability to slow drivers to the

posted 45-mph long before they reached the school. She maintained that by posting the additional 5-mph slower, it would be safer for seniors, children, and bicyclists who may be crossing the road. She said the duties of her position were to try implementing things to get people to car pool, bike, and walk, and it was hard to do when people in these types of areas weren't provided adequate safety. She said that since it was a dangerous situation around schools, especially elementary ones, her Organizations were asking for the Committee's support on SB 96.

J. D. "Sonny" O'Neill said he lived in Neihart and had brought pictures for the Committee to pass around. He stated all of the of the pictures had been taken standing on the highway. He said that when he thought of the MDT, he thought of **Mr. Dusek**, a traffic engineer who the town had dealt with over the past. He said **Mr. Dusek** had stated at a meeting two years ago "Safety is not my concern, moving traffic is my concern", and "If we keep having traffic studies in Neihart, every time we have one I'll raise the speed limit".

Mr. O'Neill said that from the last weekend of November until April, approximately two hundred to a thousand cars, trucks, and busses pass south through Neihart between the hours of 8:30 a.m. and 10:00 a.m., enroute to Showdown Ski Area. He said that at about 3:30 p.m. those vehicles all pass back through town on their return route. He said the vehicles passed within 30 to 50 feet of people's front porches at the rate of 45-mph, 50-mph, or 60-mph. He said residents didn't appreciate the situation, as the houses were built long before the highway had been built, but hadn't been able to correct the situation. **Mr. O'Neill** described numerous accidents which had occurred in Neihart over the past ten years, reported sizeable property damage, and stated it was fortunate no children or pedestrians had been hit. He reported that when traveling they had passed through a number of towns smaller than Neihart and the speed limit through those towns had been 25-mph. He stated he would really like to know why those towns could get lower speed zones when Neihart could not.

Donalene O'Neill said they lived at Neihart, a quaint little town which nested down in a valley, where there was only room for one street to go through town, and that happened to be Highway 89. She said there were about 30 full-time families, and the homes were about 50 feet from the center line of the highway. She reported that Neihart residents had appeared before the Legislature in the past. She explained they had once appeared regarding passage of a bill allowing cities and towns to pass their own speed limits, but when they tried to enforce that legislation they had been told the bill had no affect. She said they had appeared last Session to lower the speed limit past the Senior Center and that had been accomplished, but since then the speed limit through Neihart had been raised. She said **Mr. Dusek** had come to Neihart and informed the community that the survey showed that 85% of the drivers going through Neihart traveled at

40-mph. She said **Mr. Dusek** had told them the MDT could allow the speed zone to be set at five miles over or five miles under the posted speed limit. She reported that the Department had chosen to raise the speed limit by 5-mph to 45-mph. She expressed her displeasure and maintained the speed limit had been raised, while Neihart representatives had sought to have it lowered for safety's sake. She said that when safety had been questioned, **Mr. Dusek** had told them that "his Department was in charge of traffic flow and safety is not our concern". She questioned whose concern it was, and asked if they had to wait until someone was killed before they could get something done. She said that a gentleman accompanying **Mr. Dusek** had suggested the town should pursue obtaining State money and put sidewalks through town, but she maintained there wasn't enough room for sidewalks. She reported that the three men from the Department had been asked to look at the area being talked about, so they could see the problems firsthand. She also questioned why the town should have State money for something like sidewalks in Neihart.

Ms. O'Neill said **SENATOR FOSTER** had written her a letter, dated September 19, 1993, stating he had been unable to convince **MDT Director, Marvin Dye**, that the speed limit study, changing the speed limit to 45-mph all the way through town, was flawed and should be discarded. She stated **SENATOR FOSTER** wrote that **Mr. Dye** had chosen to rely on the findings of experts rather than the concerns of citizens. **Ms. O'Neill** explained they needed the Bill, so they could ask for a survey without risking that their speed limit would be raised once again. She thanked the Committee for their time and consideration.

Mike Bear said he was a poet, artist, and philosopher who had lived in Helena since about 1980. He reported receiving unemployment and welfare. Had a college degree and a master's degree. He reported having hitchhiked around the county between 1976 and 1980 and had some jail, and psychiatric experiences. He said he was for a slow down driving project and generally supported the Bill. He reported having written to the Division of Highway Traffic Safety, Governor, and the House Committee on Transportation. He handed out copies of his testimony, told of his promotional efforts for the project, and read the material contained in (**EXHIBIT # 1**).

Opponents' Testimony:

Marvin Dye, Director of the Department of Transportation, said he was appearing in opposition to SB 96 and read his testimony in (**EXHIBIT # 2**). He reported that the MDT and Highway Commission worked well together to establish the appropriate speed limits which applied the greatest margin of safety for users of the highway system. He said that occasionally communities believed the approved limit should be lower, and an unbelievable amount of pressure came forth to have that limit lowered. He stated the MDT had better things to do than simply respond to such

criticism. He said he could tell the Committee, quite frankly, that they sometimes felt like throwing in the towel, giving in, and lowering the speed limit. He reported the Department did not give in because it wasn't the right thing to do. He maintained that the Department was totally committed to the safest possible highway system and this Bill would not be in the best interest of the citizens of Montana.

Tom Barnard, Chief Engineer with the Montana Department of Transportation, said he was appearing in opposition to SB 96. He handed out numerous pieces of material which were numbered (**EXHIBIT # 3, 3A, 3B, 3C, 3D, 3E, 3F, 3G, & 3H**). He stated he would be referring to the documents as he spoke. He said that first, he would like to clearly state to the Committee that safety was their primary concern, and he took exception to statements that they weren't concerned about the citizens of Montana. He stated the reason they were opposed to SB 96 was because they were concerned about the safety of the people, and he thought that when he went through the material, the Committee would see what the cold hard facts were and agree with the Department. He read written testimony in (**EXHIBIT # 3**), and stated he wished to speak to the specific changes to current speed zone laws which the Bill called for. He wanted everyone to understand the basic issues of speed zoning. He said the issues were very critical and thought it necessary to take the time to go over the issues. He stated that first, all speed zone recommendations were based on traffic and engineering investigations which looked into such issues as the 85th percentile. He said the 85th percentile was the speed at which 85% of the drivers were driving or less. He said that if the 85th percentile was 55-mph, that meant 85% of the drivers who passed that point were driving at 55-mph or less, and the other 15% were traveling above that speed. He stated the 85th percentile was based on the principle that 85% of the drivers were safe and prudent and adjusted their speed to the conditions, regardless of what the posted speed limit was. He stated, once again, that it was a very important factor but it was not the only factor, as they also looked at the pace. He explained that to have the safest situation possible, you wanted the majority of the drivers driving very nearly the same speed. He stated the pace was the ten mile an hour increment or speed in which the majority of the drivers were driving. He said that typically it was found that the upper pace, the ten mile an hour pace, was very close to the 85th percentile. He reminded everyone that it was important to have as many vehicles as possible within that pace range. He stated that roadside conditions were also given serious consideration when addressing speed zone, and said that was why the Department goes out and spends a considerable amount of time every time we do a speed zone study. He said they didn't just drive out and say, 'It looks like it ought to be 35". He said they considered all of the existing facts present, such as the pace, the accident record, the 85th percentile, and other provisions such as the presence or absence of roadside parking or, the presence or absence of pedestrians. All of these factors

and others have to be considered in order to set the safest speed limit. He said there was a common misconception that posting reduced speed limits reduced the speed of vehicles and said it was not true. He said a second misconception was that reduced speed limits improved safety, and again stated that in a majority of cases that was not true, but often the opposite was true. He said that setting arbitrarily low speed limits increased accidents.

Mr. Barnard asked the Committee to follow the material he'd provided, and said he would show the information they had to back up his statements. He said (**EXHIBIT # 3A**) was an article from a PUBLIC WORKS magazine written by a nationally known firm which was an expert in all traffic engineering matters. He said the title of the article was "Traffic Engineering Myths and Realities" and asked them to note the highlighted area. He said the article stated two things; "Before and after studies consistently show there is no significant change in speed after posting another speed limit" and said "Speeding itself is not the major cause of accidents. In fact there is a consensus that many speed related accidents result from both excessively low and excessively high speed limits". He said (**EXHIBIT # 3B**) was a copy of pages from the MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, which was a nationally accepted traffic engineering guide and policy book that had been adopted by the State of Montana. He said it contained two particular issues; he said the highlighted area talked about the need for engineering steps, and the second page referred to speed limits, and said that "They shall display the limits established by law, or by regulation after an engineering and traffic investigation has been made in accordance with established traffic engineering principles". He stated the key word was "shall", and said it did not state "may". He said the article also explained what needed to be considered, as he had previously mentioned, in establishing speed zones.

Mr. Barnard said (**EXHIBIT # 3C**) showed the relationship between accident rates and mean speed, which was really the beginning of the meat of the issue. He stated mean speed was the speed at which 50% of the drivers were traveling in excess of that speed and 50% were driving below, which made it the average speed. He said that typically the 85th percentile was six or eight miles an hour above the mean speed, so if you looked at the graph where the yellow line is plotted, you would see that the lowest accident rate was six, eight, ten miles an hour above the mean speed. He reported that as very close to the 85th percentile. He said that if you went below that percentile, the accident rate rapidly increased, and likewise if you went above it, they rapidly increased. He said that (**EXHIBIT # 3D**) showed the comparison of the speeds before and after changing a posted speed limit; some were lowered and some were increased. He said that consistently these studies showed that you did not significantly change the speed of traffic. He stated that by looking at the graph you could quickly see what the speeds were after the speed limits were changed. He stated there was no significant change,

and in fact some of them went up after the speed limit was reduced. He said (EXHIBIT # 3E) was another study of the comparison of accident rates to mean speed from which you could project the 85th percentile. He said the information again reinforced the previous one, but stated it was a separate independent study. He said the material showed that at about ten miles an hour above the mean speed, which is very close to the 85th percentile, you got the lowest accident rate, and that rate again increased when you went above or below that 85th percentile.

Mr. Barnard said a common statement was often made that Montana was different, and said Montana was not different. He said before and after studies conducted in Montana confirm the very same thing that was defined here as to the effect on speed. He presented (EXHIBIT # 3F) and confirmed the earlier fact by presenting the speed profile on Neihart itself. He said every column was the 85th percentile, and the first one was in the fall of 1979. Below that were listed the 85th percentile speed of various locations through town. He said that the speed limit which was in place at that time was listed at the bottom. He said the speed limit was 55-mph outside of town. Entering town from both directions the limit broke down to 45-mph, and then through town it was 35-mph. He said what was significant to note was that when the area through the middle of town had a speed limit of 35-mph, the post office area had an 85th percentile of 40-mph and around the Senior Citizens Center it had been 42-mph. He said that after the speed limit through town was raised to 40-mph, the 85th percentile during the summer of 1984 near the post office had dropped one mile an hour, and the Senior Citizen Center area had increased one mile an hour. He said that for all practical purposes, increasing that speed limit did not increase the speed of traffic. He said that the column pertaining to the winter of 1993 showed the speeds beginning to increase even though the speed limit had remained the same. He said the reason for that change was that between the summer of '84 and the winter of '93, a highway improvement project had been put through town which improved the pavement. He said that possibly other changes that were made caused the public to feel that it was safer to drive at a higher speed. He said the specific changes proposed in the law were that if a local requested a speed limit study, for the purpose of lowering it, the Commission could not increase the speed limit under consideration as a result of an investigation. He asked the Committee to look at (EXHIBIT # 3G) and stated it showed examples of where unrealistically low speed zones were in place, and stated Neihart was listed. He said the numbers shown tell you the percentage of the drivers that were exceeding the posted speed limit in various locations through town. He said the list contained other locations where speeds were unrealistically low, and stated the data showed that as high as 95% of the drivers were violating the posted speed limit. He said that at the same time a majority of the drivers were violating the speed limit in these areas, the accident rates were exceptionally low. He said that when they did a speed zone study

and found the posted speed limit was unrealistically low, they had an obligation to increase that speed limit. He said that all the factors were considered. They found that the safest speed zone was the higher speed zone. They had an obligation to increase the speed limit. He said that was exactly what they found at Neihart. He stated that that posting a reasonable speed limit will reduce accidents even though the speed limit may be higher.

Mr. Barnard explained that prior to the study, all local governments were given the opportunity for a presentation explaining the principles of speed zoning, and then asked if they wanted to proceed with the study. He said Neihart also had been given that option. He reported that the local governments were clearly advised that speed zones may either go up or down. He maintained many decreases in speed zones were recommended, as well as increases, and stated the recommendation for a speed zone was the one they felt was safest.

Mr. Barnard said the Bill's second proposal for change was to decrease the speed limit within an area of two thousand feet of the school or Senior Citizens Center. He offered (EXHIBIT # 3H) and stated it was a map of the city of Helena. He said that by using a two thousand foot radius drawn around each school, virtually every street in Helena could have an arbitrarily low speed zone imposed upon them. He said those arbitrary speed limits would not improve safety and could very likely do the opposite. He explained that it would also create speed traps. He said another important issue, in regard to the two thousand foot radiuses, was that when drivers saw a speed limit sign they felt was unrealistically low, those drivers also needed to see something which reinforces the need for that low speed limit. He commented that if reinforcement is not seen with a block or two, drivers are apt to ignore the lower speed limit. He said that if signs were placed too far back, drivers tended to forget about the speed limit sign before reaching the area wishing to be protected.

Mr. Barnard said the third change proposed would allow local government to reduce the speed limit set by a traffic and engineering investigation to 70% percent, rounded down to the nearest whole number. He said this formula would allow a 55-mph speed limit to be cut to 35-mph, 45-mph to 30-mph, and 35-mph to 25-mph. He encouraged the Committee to refer to handouts which showed the accident rate versus mean speed, or 85th percentile, and plot out the effects those things would have on accident rates.

Mr. Barnard summarized by encouraging the Committee to kill the Bill on the simple basis that it did not promote safety, would very likely increase accidents, and would definitely create speed traps. He stated that some of the information he presented the Committee stated that speed zones which were 5-mph less than the 85th percentile made 25% of the safe and prudent drivers

violators. He continued that if the limit was posted 10-mph less than the 85th percentile, it made 60 to 70% of the safe and prudent drivers violators. He said these measures penalized safe drivers, increased road user costs, and when safe drivers got tickets, their insurance rates went up. He said the Bill also left the responsibility and liability for speed zones with the State of Montana, particularly the Montana Department Of Transportation, and yet gave the authority to local government. He said that if the Committee wasn't prepared to kill the Bill, he suggested modifying it to give the responsibility to local government and require them to establish speed zones based on traffic engineering and investigations, as the State was required to do. He said the Bill should require that local governments have someone qualified and experienced to establish those speed zones they were going to have liability for. He summarized his suggestions by stating that the responsibility for studies, authority for establishing speed zones, and the liability for those actions needed to all rest with the same entity. He stated his availability to answer any questions the Committee may have.

Harry Lauer, Department of Justice, Highway Traffic Safety Division, said the Division's basic concern, in reference to the Bill, was the possibility of not having the ability to raise speed limits when it was needed. He showed the Committee a very large aerial map, which he said was an example of a study they had just completed. He stated the study was done at the request of local officials and reviewed by County Commissioners, the public, and people who lived along the road. He said that all facets of local government had joined forces to help with the study by collecting the accident history, inventorying all traffic control devices, doing a "ball bank study" to determine the safe speed for every curve, and taking speed samples of the traffic. He pointed out areas on the aerial map which showed speed sample results of the 85th percentile and how they varied along the route, as well as the middle area with the accident history. He said that middle area showed a high accident history during night conditions with a high severity. He stated they had proceeded with the results of the study to try developing a traffic control system specific to the area which best related to safety and traffic operations for the public. He stated that analysis of the study resulted in increasing the speed limit along some portions of the road while leaving it the same in other portions. He said the solution was arrived at by a long lengthy review of concerned, involved, and experienced people who determined what was appropriate for this particular roadway. He said, therefore, legislation which would not allow such a process to take place would probably set up roadways which could potentially have speed traps, increase the accident rate, and basically not conform with the desires of a majority of the people. He stated having wanted to share the example with the Committee as it was recent related to the Bill, and showed the need to take more than just speed samples and state the 85th percentile was this. He said there were a lot more considerations used in these studies, even though the 85th

percentile was the first and most important approximation you worked from.

Mr. Lauer said his other concern with the Bill was regarding school crossings being proposed for two thousand feet. He said that a limit of two thousand feet tied the hands of an engineer, because two thousand feet may apply in some situations but not in others. He said there were schools which virtually didn't have students crossing streets, and smaller school zones that weren't ever occupied by children. He said that by actually setting a specific figure like two thousand feet, it may not be applicable in all situations and didn't allow them the latitude to make a decision.

Mr. Lauer said they did not know about the proposed 70% of the 85th percentile. He said he thought most states agree, as did The MDT, that speed limits in school zones were a concern and should be lower than the speed limit for the same roadway in different situations. He said he didn't know who would know what the right percent would be. He stated that when they did a study or took traffic samples, they took speed samples when the children were visibly present to get an idea of the speed which felt comfortable to drivers when children were there. He stated that gave them a potential idea of what the specific speed limit should be. He said that when they set speed limits for school zones, they were typically lower than the regular speed limit but were actually based on drivers' reaction to the situation. He said every situation was different, and concluded he was not able to support the Bill, because it tied everyone's hands in regard to doing a good job at their daily work place.

Tom Forseth, Chairman of The Montana Highway Commission, said they were the ultimate villains of this piece of legislation as the MDT had brought the Neihart situation to the Commission two years ago. He said the Commission had, given the supporting evidence, adopted the Department recommendations as far as speed zones were concerned. He said that beyond those facts, he believed the community had reduced the speed limit past the Senior Citizen Center, as they were allowed under the law. He reported the Commission was just a citizen commission, not bureaucrats; just people that did other things in their real lives. He said the Commission was called upon to make decisions as defined by law, and one of those was to make the ultimate decision on speed zones. He expressed the thought that the Commission had responsibility for the speed zone decision because the Department didn't want it. He stated it disturbed him to hear that citizens felt the Department was being arbitrary in their decision to raise the speed limit, but said he could see where some of that concern would come from. He said the Neihart situation was actually a neighborhood street which was also a U.S. highway, and he thought everybody felt discomfort when the street was fifty feet away with people driving 45-mph. He said he would feel uncomfortable if people were driving 10-mph over the speed limit on his street. He said that with a highway there

was a question of ownership, and contended that, in his mind, it was probably owned by everybody in Montana. He said there were thirty full-time families in Neihart, but the two hundred to one thousand vehicles a day were proprietors in their own way and were going to feel a residential type speed zone was an inconvenience to them. He stated that if law enforcement was used to back that slower speed zone up, you were speed trapping. He said it also had to be considered that other communities along the roadway in question had not been heard from. He posed there would be a problem with area business if their customers came down that hill and found themselves under intense scrutiny by law enforcement regarding a reduced speed limit. He stressed these as points needing to be considered before movement was made to essentially strip responsibility from the hands of citizen representatives of the State. He said removal to local representatives would naturally result in their first looking at local considerations without taking consideration for others in the State.

Questions From Committee Members and Responses:

SENATOR ARNIE MOHL asked what speed limit was felt to be appropriate through Neihart? **Sonny O'Neill** said he felt 35-mph through the entire town would be appropriate.

SENATOR MOHL asked if the speed limit had been 35-mph at one time? He stated there had been testimony regarding some near accidents, and asked if they occurred when the speed limit was 35-mph or when at 40-mph? **Sonny O'Neill** said the speed limit had once been 35-mph, and the potential accidents had occurred when the limit was at 45-mph and 40- mph.

SENATOR MOHL asked if there had been near accidents when the limit was 35-mph? **Sonny O'Neill** said that was quite awhile ago, and he couldn't answer that.

SENATOR MOHL stated he felt that was an important question which needed to be answered.

SENATOR LINDA NELSON asked what size Neihart was? **Sonny O'Neill** said it was approximately a mile long through the valley.

SENATOR NELSON asked if they had a deputy in their town or would they be counting on the Highway Patrol for enforcement? **Sonny O'Neill** said they seldom saw a Highway Patrolman or a deputy because Neihart was clear out on the county line. He stated they were a long way from nowhere, and signs were the only protection they had. He said that whether there was enforcement or not, they were still the only protection and people did pay attention to signs.

SENATOR NELSON asked if they indeed planned to count on people paying attention to the signs? **Sonny O'Neill** answered yes.

SENATOR MACK COLE asked if Neihart was looking for the limit to be year round, or was there a time when the situation was worse in the winter or summer? He expressed a desire to know if the seasons had anything to do with the problem? **Sonny O'Neill** said it was worse in the wintertime because there was a solid line through the entire town and it was covered with ice and snow. He stated that in summertime the passing was not so terrible, but there was still a lot of traffic. He said their recommendation would be for the speed limit to be 35-mph year round.

SENATOR BARRY "SPOOK" STANG referred to testimony which stated the Commission was responsible for setting these speed limits by law, and asked if that was state or federal law? **Tom Forseth** said he thought it was in Montana Codes Annotated, and said one of their duties was passing on speed zone changes.

SENATOR STANG asked if the 85th percentile rule was a state law or was it a federal mandate? **Tom Forseth** said he was not sure whether that was a mandate at all. He stated it was just a procedure used to bring some sort of scientific objectivity to setting the speed limits.

SENATOR STANG asked if a study was requested on the State's Interstates and Secondary Highways and it showed that the speed limit should be 65-mph and 75-mph, why couldn't the State set their own speed limits on the Secondary roads? **Tom Forseth** responded that was mandated by the federal government through the fact that the State received highway funds from the federal government, which would be withheld if the speed limit was raised.

SENATOR STANG said that if the State was going by their rules to set these speed limits, then why didn't they go by their own rules to set our speed limits? **Tom Forseth** said he could see what the Senator was speaking to and stated that was a good question.

SENATOR RIC HOLDEN said he wished to speak to the Bill, not the particular circumstance which brought it. He said the Bill stated that if a local authority wanted a study done it could be requested; but testimony had stated that if a study was done, the Department would have to recommend raising the speed limit. He maintained that in reading the Bill, it merely said that if the local authority had a problem with the speed limit, they ask the Department look at the situation and have it studied. He said that after the study, the Department recommended that they thought the limit needed to be raised, and the residents were just asking that it not be raised. **Tom Barnard** said he had tried to point out that if their study found the speed limit was unrealistically low, there were facts which showed that created accidents, and therefore we have an obligation to raise it. He stated they were not being fair to the traveling public if they didn't raise the limit. He said that if it was shown that by

raising the limit you reach your safest conditions, we have an obligation to do it.

SENATOR HOLDEN said he thought there was a need to say common sense ruled in some situations. If there was an outcry of people stating the speed limit needed lowered he didn't think that would infringe on the rights of other people. He stated that if people living in the area said they needed the speed limit lowered, and expressed the thought that SB 96 made that point, then he didn't think it was going to be any detriment to society. **Tom Barnard** said again, if lowering the speed limit caused an unrealistic speed zone, it brought up all the factors he mentioned. He said it does not improve safety, very likely it causes accidents, and causes speed traps. He asked to not create that situation and to find solutions to the problems which existed, not some arbitrary speed limit which was going to be contrary to what you wanted accomplished. He suggested doing improvements in the area, like cleaning up the parking or other things, as he felt there were a lot of other opportunities for improvement than establishing arbitrary speed limits.

SENATOR STANG asked what the possibility would be on weekends when there was heavy traffic going through the speed area of putting extra Highway Patrolmen patrolling the area, so that the existing speed limit was at least enforced? He asked if it would be a big problem to have a highway patrolman spend a little time there on weekends and make people slow down? **Colonel Reap** said that would be a very good idea and they did try to do that. He said the problem the Patrol had, particularly during that time of the year, was that the Officers many times were on cases, accidents, and other calls. He said they did try to patrol that particular road and all roads that were off the main Interstate. He stated that the Officers who covered that area were from Great Falls; one Officer was assigned in White Sulphur Springs and one in Belt. He said those Officers could get into that area at times, but said a limited number of Officers was the main the problem. He said they if they were available, they certainly would have Officers in the area. He stated knowing that the area was patrolled at times, particularly during the ski season.

SENATOR NELSON stated that **Mr. Dye** had indicated he felt like having to hassle with these things was kind of a waste of time. She asked how often do you get asked to lower speed limits? **Marvin Dye** said he didn't know how often. He stated that in his two years in the Department he thought they had gone through four speed zone studies that he could remember. He said that two of those had frankly resulted in numerous discussions with **SENATOR FOSTER**, plus an accumulation of letters to the Department, Governor, and everyone who would listen and visits made to the Governor's Office by those parties. He reported that a lot of effort was expended to get back to the people, stating why the limit had been raised. He said they had known it would be a controversy, and after the Department did the study they had the opportunity to have the Northwest Traffic Institute of Montana

review everything which had been done, just for a second opinion. He said that everything they had done was absolutely clean. It still took a whole lot of effort to communicate why we did what we did, and reported they had spent a lot of time doing it.

SENATOR NELSON asked if the Department was at all afraid that you would be setting precedent by just allowing these people to do what they want to do? **Marvin Dye** stated he guessed, like he had said, at times they felt like throwing up their hands and just letting it happen. He said that would remove a lot of burden from the Department because people wouldn't be calling the Department when they were dissatisfied with speed zones which were set by the Commission. He maintained that would not be looking out for the best interest of Montana's citizens if we allowed that to happen. He said that everything you read definitely stated that the engineering and methods the Department used were deliberately made to establish speed zones, so they continued to fight the battle. He said that from a liability standpoint, when there are accidents on our State Highways there was always an issue that we were liable for it. He explained it would not take a lot of imagination to see what was going to happen when there were accidents in areas where the speed limit was set arbitrarily low.

Closing by Sponsor:

SENATOR FOSTER thanked the Committee for the hearing and said he appreciated **Mr. Forseth's** coming. He expressed the thought that it was very good for the Chairman of the Highway Commission to take time out his life to come and tell us how we're wrong. He said he would have to be honest with the Chairman and tell him that, even though he said he was representing the citizens, if I represented the citizens like the Highway Commission had on this issue, I wouldn't be here. He said that **Director Dye** was correct, there had been a lot of conversations and he personally thought **Mr. Dye** was doing a great job. He contended there had been many conversations and letters exchanged, letters which even included Senator Burns, as this issue had gone on for a long time. He said it was frustrating to have the voice of the people rarely heard. He stated that when you listened to all of the different factors considered, which **Mr. Barnard** listed, you didn't hear the factor regarding the people who have to live there. He contended that others didn't care as they were talking about safety.

SENATOR FOSTER maintained that the Bill was just going to take the situation back to what it was. He said one of the keys to some of the discussion he had heard was that authority was going to be taken away. He stated that was only in instances where a local government requested the ability to reduce the speed limit. He said that if the study showed that the speed limit shouldn't be reduced, then that was where the authority would lie. He related having driven through other, less dangerous, towns which

had lower speed limits, and said it was amazing this very dangerous town couldn't also have a reduced speed limit. He said he thought the Bill would allow the people to have a voice in getting that speed limit reduced to where personal danger wasn't so great. He said that all he was asking was that the people of Neihart be listened to because the people themselves would tell the story best.

ACTING CHAIRMAN SWYSGOOD ANNOUNCED THE HEARING ON SB 96 AS CLOSED.

HEARING ON SB 104

Opening Statement by Sponsor:

SENATOR DON HARGROVE, SD 16, Belgrade, said he had the pleasure of bringing SB 104 which had been requested by the Montana Department of Transportation (MDT). He said it was basically a housecleaning bill which he didn't believe would take you very long. He said that when the Intermodal Surface Transportation Efficiency Act (ISTEA) came into affect in 1991, it made some changes which basically incorporated all surface modes of transportation under the Department. He said the Department had been busy cleaning all those things up for the last three years now. He said one thing which had been omitted was the Commission; and they were still called the Highway Commission. He said the purpose of SB 104 was to change the name of the Highway Commission to the Transportation Commission. He said the Bill established a few new responsibilities for the Commission and provided for some authority to transfer funds. He said the those funds were now administered by the Department. He stated there was a little clean up language in the Bill, but was basically to provide for the Commission by bringing it under the ISTEA Act. He said he would leave further explanation to others who were present to testify and reserved the right to close.

Proponents' Testimony:

Pat Saindon, Administrator, Transportation Planning Division, Department Of Transportation, reiterated that when the Department Of Transportation was originally established in 1991, it was intended that the Department operate as a modally independent department. She explained that each particular transportation mode sort of operated independently. She said that after the Department was formed, ISTEA required that departments of transportation be intermodally operated. She reported that during the past three years the Department had been working very hard, when determining transportation issues, to look at all transportation modes. She said SB 104 was intended to change the name of the Highway Commission to the Transportation Commission. By so doing, it would also give them the authority to administer

rail funds and transit funds. She said there were transit funds which came to the Department from the Federal Transit Administration, and there was a limited amount of rail funds which also came to the Department. She stated there was also a small amount of money, about \$600,000, in the MDT for use as a loan program for short-line operations for the purpose of doing some small basic repairs.

Ms. Saindon said a couple of people had expressed concerned about particular language in the Bill which said the Commission may authorize the transfer of funds between qualified programs, including highway and transit programs. She stated a desire to explain that language, and said it was not talking about diverting highway funds to transit nor was it talking about diverting transit funds to highways. He said that what the language was doing was authorizing the State to have the same authority as was available through ISTEA which said that in certain situations you could move those moneys. She gave an example of where those moneys were currently being moved. She said there was a portion of ISTEA, called Congestion Mitigation Air Quality (CMAQ), which was money that went to areas that had high CO2. She said that in the State of Montana that pertained to Missoula. She stated CMAQ dollars could be used to come up with projects to reduce CO2. She explained that the City of Missoula, and the County of Missoula had agreed they wanted to utilize some of those CMAQ dollars to purchase low emissions busses for their transit service to reduce the air quality conditions. She said federal law currently allowed such a use. She stated that the Department was currently handling these functions because the Department had the authority. She said the Department was asking to give the Commission the ultimate authority in this language. She said that rather than having staff people make those decisions, it would give the Commission the absolute authority on being able to transfer those CMAQ dollars to the transit program to purchase low emissions transit vehicles. She said it was not the intent of SB 104 to take highway dollars and move them into the transit program.

Ms. Saindon said the Commission had just currently gone through a state-wide transportation plan which involved all modes of transportation. She said the plan required the Commission, operating with the Department, to look at what the ramifications of everything involved with any particular project that it had regarding a transportation issue in the State of Montana. She expressed the hope that SB 104 would accomplish that goal. She said that if there were any further questions she would be happy to answer them.

Ben Havdahl, Montana Motor Carriers Association, said they stood as a proponent of the Bill and to what the overall thrust of the Bill would do as far as changing the Highway Commission to a Transportation Commission. He said there had been testimony relating to the allocation of funds. He said that as a major highway user, a trucking industry concern would be the use of

those funds for any kind of rail facility or non-highway use. He said the language raised a question, whether or not the language would include the kind of allocation which took funds from one area of transit and gave to another. He said that even though that may not be the present intent, at some time in the future somebody may well interpret the language to give that flexibility. He said they might suggest more clarification of the language, in Section 4, to make sure that was not accomplished.

Steve Turkiewicz, Executive Vice President for the Montana Auto Dealers Association, also a Board Member of the Montana Highway Users Federation, said they rose in support of the Bill and echoed Mr. Havdahl's comments and concerns. He said they wanted to make sure this Committee and this Legislature was very clear that funds referred to in this Section were only those funds that were allowed to be transferred in such a way, and that those Constitutionally protected funds in the Montana Constitution are not diverted without the Legislature's specific knowledge, and intent.

Carl Schweitzer, Montana Contractors Association, and President of the Montana Highway Users Federation, said they would also like to support the Bill but had the same concerns that Mr. Havdahl and Mr. Turkiewicz stated. He said he didn't know if just inserting the word "federal" or "federal funds" would solve the problem. He said they certainly didn't want to see the ability to take highway money and put it in the transit program without this Legislature making that decision.

Opponents' Testimony:

Maureen Cleary-Schwinden, representing Women Involved In Farm Economics (WIFE), said they were a grass roots organization protecting small family farms in the State, predominantly with a lot of members who are grain growers. She said that today she had to stand as an opponent to SB 104. She said their Organization's Transportation Chairwoman had called her with concerns about the Bill. She stated the desire that the Committee clearly understand that she appreciated the language on page 5, line 12, which included the rail and transit programs in the Transportation Commission. She said their concerns involved looking at the entire language in the Bill, as they had a problem with the number of times highway appeared versus the number of times railroad appeared. She said she was sure the Committee had heard numerous times that grain growers were held captive in this State by the only railroad that ships grain. She said their farm was in the far northeast corner, and they paid some of the highest shipping costs to get their grain moved. She said that many of them had probably heard about the dilemmas farmers faced when trying to move their grain across the State, specifically regarding the lack of available cars to move grain. She said that with those thoughts under consideration, she would offer

some recommendations for changing the language to include agricultural concerns. She said Section 1 contained the makeup of the Commission, and said she would appreciate the Committee's consideration of agricultural representation on the Commission. She said their Organization would appreciate that consideration. She asked them to also look at Section 3, page 4 & 5, and encouraged stronger language regarding the rail and transit programs. She said she had to stand opposed to this Bill, although she did appreciate **SENATOR HARGROVE'S** intent in writing the Bill to include rail concerns. She said they just felt that there could be some stronger language.

Questions From Committee Members and Responses:

SENATOR MOHL asked the Department how they felt about the way the Bill was written? He said he guessed he had a little bit of a problem on the wording, "Director of Transportation or the Director Designee shall act as liaison between". **Pat Saindon** said that currently that was a Highway Commission, and the person who was responsible for being the liaison between the Highway Commission and the Department was **Tom Barnard** who was the Chief Engineer of the Department. She said that with a Transportation Commission, the Director of the Department would be the liaison between the Commission and the Department, or may have a designee. **Mr. Barnard** is sort of the official designee between the Department and his staff, takes minutes of all the meetings, and keeps records for the Highway Commission. She said that under a Transportation Commission that probably would not change. She said that what they were saying was that the Director would actually have the authority to formally appoint whomever the Department wanted to do that.

SENATOR MOHL asked if this would affect the Commission, and would they need to perform in any different way than they are now? **Pat Saindon** said no it would not.

SENATOR NELSON said she had to agree with the WIFE stance, as she felt like rails have been woefully neglected when we changed from Department of Highways to Department of Transportation. She said that at one time we had an ICC specialist who looked out for agriculture interests and things like that. She said that in 1991 when it went to the Department of Transportation, she thought they were assured that rails would get equal treatment and we really haven't seen that. She said they had felt neglected, especially up in the northeast corner of the State where rails were very important and where they were only served by a branch-line. She asked **Tom Forseth** for a reaction to some of the things that our Transportation person had to say. She said that if he thought the Commission would be able to incorporate a little bit more interest in the Department for rails. She said her support for the Bill would hinge a little bit on that. **Tom Forseth** said that of course rail was an integral part of the transportation system in Montana. He thought one of the problems that we would

have as a Transportation Commission would be trying to exert any influence on how rails operate. He said that under the Staggers Act, railroads were pretty much deregulated; so the Commission was not in a position to control what the railroads do. He said he thought her interest was probably more along the lines of the branch-line railroads and what we can do there. He said part of the problem there was that you wanted to start working with short-line rails, where would the money come from? He said there would be some powerful resistance to using highway funds. He said that within any portion of the rail, other than perhaps funds that were allocated from the federal government, there was a reality of exactly what you could or could not do. He stated he was personally involved in the transportation business himself, one of the three remaining city bus lines, and felt the Commission would certainly like to work with Amtrak, for instance. The Amtrak Board of Directors had said they were going to cut down to four days a week. He said that as a Transportation Commission, he supposed they could talk to the Board and try to influence them, but as far as anything beyond that the Commission was rather handicapped. He said that regarding what the Commission could do for rail in the transportation system, that could probably be better answered by **Pat Saindon** who had dealt with that extensively.

SENATOR NELSON said she guessed she was looking for the possibility of some clout that could be had if there was a good rail division within the State. She stated that in the case of ICC hearings, other states had representation when they rail problems but Montana had no representative. She thought that was deplorable. They were not looking to take highway moneys for rails, but stated they just wanted good representation. She stated that if someone was going to be a commissioner for the Department Of Transportation, she said they wanted to know that they would speak for us too, and that they would see that we're covered. **Tom Forseth** said that was within the realms of how it would be set up and as it was pretty technical, he asked to refer that to **Pat Saindon**.

Pat Saindon said one of the things that the Department of Transportation had gone through was the state-wide plan. She said that one of the responsibilities of the Department of Transportation was to do an extensive survey on what's going on in the State in terms of transportation, and to try to come up with a balanced plan for the next 20 years of how we're going to deal with transportation. She said they heard a lot of things about rail, particularly up in the northeast corner of the State where people were saying that they wanted to see better representation from the Department of Transportation on rail issues. She said that as a result of the state-wide plan, on that particular issue, the Department did agree to assume some additional responsibilities for rail, to become a better advocate for rail. She said there were no real dollars in terms of doing anything significant. Other than doing some minor rehabilitation of rail roads they did not have any money in that area, and said

they could not transfer any of the highway funds into doing something like that. She said the Department had agreed that we were going to look at trying to be better advocates for the rail program. She said that on the other hand, the Department had a responsibility to balance all of the modes, and as you've heard here there are highway advocates, transit advocates, rail advocates, bicycle pedestrian advocates, and a lot of environmentalists who don't want us to do anything, anywhere on any project.

SENATOR STANG said it always made him rather nervous when there was a statement of intent with the Bill which gave any department rule-making authority. He requested the Department give the Committee a list of their proposed rule changes, so they could be looked at before voting on the Bill, and asked if that could be done? **Pat Saindon** stated yes.

SENATOR TVEIT asked **Tom Forseth** if he had stated the Commission didn't want to be involved in the rail portion of transportation, while the Bill made it quite clear that "the Commission shall establish and determine priorities and projects for rail and transit programs" He further identified language on page 5, lines 23-25 which stated that within the program "the Commissioner shall allocate all federal transit administration funds, freight assistance funds, or any funds or grants available by legislative appropriation for the study, design, construction, repair, or improvement of rail and transit intermodal transportation systems". He said his point was that as a Commissioner he would be involved in the area of rail transportation and its agenda. **Tom Forseth** said that was right; he did not mean to indicate he was not a believer in rails. He said we certainly depend on rails for our bulk commodities' movements. He said one of the serious problems we had as a Highway Commission was the amount of traffic with bulk commodities that has had to go onto the highways because of the loss of short-lines. He thought what he was indicating was that there was a funding problem, perhaps even a problem of how much money could you get to preserve short-lines. He said they certainly would be involved with that, yes.

SENATOR TVEIT said he guessed money was in there too that was limited. He had been referring to the damage caused by branch-lines shutting down in different parts of the State and tremendous damage and road repair due to the large number of trucks having to move this grain. He said that as a Commissioner, he would play an important role in trying to save the highways, which was part of his job. **Tom Forseth** stated yes, if they could save some short-lines they could save the highways. He said that was especially true with some of the traffic that came out of Canada. As he understood, there had been some serious damage that way. He said it was certainly a transportation system, as indicated, but although they had been educated in the other modes of transportation, they currently

were just Highway Commissioners and said they needed to move beyond that.

ACTING CHAIRMAN SWYSGOOD said he had a real problem with page five, line 27, as it related to the language. He asked **Pat Saindon**, even though she had addressed that it was not the Department's intent, if she could come up with some language which would alleviate the fears of **Mr. Havdahl** and the others who spoke to the language? He asked if there was some way to incorporate their concerns into the Bill when executive action was done? **Ms. Saindon** stated that could be done.

Closing by Sponsor:

SENATOR HARGROVE said this was a very simple bill, and in it's simplicity he believed it did address all of the concerns of the opponents and the questions of the members of the Committee. He said the Constitution itself now protected the funds that were a real concern to a number of people. However, there may need to be reference in the Bill to make sure there are no complications. He said he believed that could be done. He said that as far as having more representation, it was is a regional board with five regions in the State with a member from each region on the Commission. He said the Bill brought the Commission into the fold under ISTEA and there should be more representation, more ability for people to be able to have their voice heard. He said the purpose, which had been stated, was to bring railroads into the Transportation Commission. He said that by virtue of the Bill, and a simple change, railroads should have a better say, as was the very necessary incorporation of all intermodal service transportation.

ACTING CHAIRMAN SWYSGOOD CLOSED THE HEARING ON SB 104, AND TURNED THE GAVEL BACK TO THE CHAIRMAN.

EXECUTIVE ACTION ON SB 51

CHAIRMAN TVEIT said **SENATOR KLAMPE** had stated he didn't want his Bill any more and wasn't going to present it. He had expressed his interest in another bill and said to do whatever the Committee wished to do with it.

Motion/Vote:

SENATOR SWYSGOOD'S MOTION TO TABLE SB 51 CARRIED UNANIMOUSLY.

EXECUTIVE ACTION ON SB 47

Motion:

SENATOR SWYSGOOD MOVED SB 47 DO PASS.

Discussion:

SENATOR SWYSGOOD said the Bill allowed for pro-rated fleets to stagger registration, by their plates, at four different periods in the year. He said it alleviated their financial burden from occurring all at one time. He said that if they elected to stagger their registrations, then they had to buy the plates all at one time and couldn't put it in a quarterly payment, like was currently done with the GVW fees.

Vote:

SENATOR SWYSGOOD'S MOTION THAT SB 47 DO PASS CARRIED UNANIMOUSLY.

EXECUTIVE ACTION ON SB 68

Discussion:

SENATOR HOLDEN asked if the Department had brought the information he had asked about? **Dave Galt** said he had a number of citations which had been issued to beet transporters from July 1, 1994 through December 1994, and there were 19 citations issued. He stated three citations were to commercial beet haulers and 16 were to agricultural beet haulers, for a total amount of fines of about \$3,565.

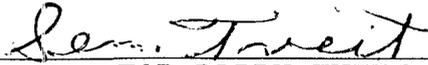
SENATOR HOLDEN asked if it had been determined if the percentage in the Bill was increased to 7%, if that would have reduced those tickets to those farmers? **Dave Galt** said some, and stated there were some minor tickets in the group but there were also some substantial tickets. He said 7% would have reduced the amount some, but stated he hadn't had the opportunity to determine how much.

Motion/Vote:

SENATOR MOHL'S MOTION THAT SB 68 DO PASS CARRIED UNANIMOUSLY.

ADJOURNMENT

Adjournment: The meeting was adjourned at 2:56 p.m.



SENATOR LARRY TVEIT, Chairman



Carla Turk, Secretary

LJT/cmt

SENATE STANDING COMMITTEE REPORT

Page 1 of 1
January 19, 1995

MR. PRESIDENT:

We, your committee on Highways and Transportation having had under consideration SB 68 (first reading copy -- white), respectfully report that SB 68 do pass.

Signed: Sen Larry Aveit
Senator Larry Aveit, Chair

 Amd. Coord.
Sec. of Senate

161538SC.SRF

SENATE STANDING COMMITTEE REPORT

Page 1 of 1
January 19, 1995

MR. PRESIDENT:

We, your committee on Highways and Transportation having had under consideration SB 47 (first reading copy -- white), respectfully report that SB 47 do pass.

Signed: Sen. Larry Tveit
Senator Larry Tveit, Chair

 Amd. Coord.
Sec. of Senate

161534SC.SRF

How to end country hwy. crashes, 50 mph limit at night straight-aways 155 w/in or 150 mph ^{SENATE HIGHWAYS}
 25 mph no view hills-tops, 20 → 45 mph hwy. curves limits. Taking 50 mph plus dark straight-aways, 45 plus curves & hills days/overnights causes dazes, attention fades & crashes as speeding
 CONSCIOUSNESSES ACCUMULATE; the yearly statistical facts of dazes, casualties, continue to occur
 IN EXPERIENCED, elderly, to other drivers.

THE HUMAN SENSORY ACCUMULATIONS OF NATURAL + MIXED ENVIRONMENTAL CONCIOUSNESSES (NO STANDARD DEER STOPPING DISTANCE)

ENDING DRIVING CASUALTIES + UNDERSTANDING SIMPLE + RIGHT PSYCHOLOGY

7-95
 BILL NO. 5896

GOOD DRIVING HABITS, UNIFORM CUSTOMS, + EXERCISE, PREVENT DAZES [or BLANK] + BAD REFLEXES

Young drivers, inexperienced + others, overconfidence from dozens or 100's of PLEASANT, SAME + FAMILIAR ROADS, fun, high AND RELAXATION CAN CAUSE DAZES... should be preventable by the above, + speedometer glances frequently. REPORT TAILGATER WEAR SEATBELTS, TRAIN DETAILMENT ENERGIES CAN HAPPEN ON HWYS. THERE ARE MORE FISH, BIRDS, ETC. ON THE PLANEET THAN PEOPLE. NATURAL POWERS GROW MILLIONS OF POUNDS + INCHES EVERY YEAR. WILD NERVES CAN CATCH ONE HANDED DRIVING FOR E. hooks can happen, KEEP TWO HANDS ON THE WHEEL. Don't underestimate natural powers + variance, one small GLASS OF ALCOHOL OR ONE (BITE) PILL CAN CAUSE NEARLY IMMEDIATE UNCONSCIOUSNESS IF OUR STOMACHS EMPTY (2 → 5 hrs. since a meal) BLOODIES + NERVES SOMETIMES ARE INTERCONNECTED. COUNTRY HWY DRIVERS ARE A MINORITY OF CITY + THRUWAY EASIER MORE RELAXED ACCUMULATED CONCIOUSNESSES, AND 1000's OF PRISONERS' BOREDOM CAN ACCUMULATE BADLY, "CAUSE + EFFECT" -1 → -1 -1 → -1, CAUSING DAZES OR HURRIED ERRORS. UNWANTED TRIGGER FINGER REFLEXES OCCUR.

THE GOAL OF A 100% END OF CRIME + DRIVING CASUALTIES (PERMANENTLY) DEPENDS ON 100% AGREEMENT + FREQUENT (TV) COMMUNICATION (+ alertness) OF SIMPLE RIGHT PSYCHOLOGY, THAT BAD, NON-HUMAN FEELINGS + OR REFLEXES CAUSE VIOLENT RESPONSES, MISERY OVER DAYS OR WEEKS COMPELLS VIOLENCE, EVERYONE CAN UNDERSTAND ABNORMAL PSYCHOLOGY, IF YOU FEEL TRAPPED IN UNHAPPINESS THE VERY GOOD WAY TO RETURN TO HAPPINESS IS VERY VIGOROUS EXERCISE, COLD OR HOT BATHS, + OTHER ENJOYMENTS. VIOLENCE IS A → 99.99% EMOTIONAL DISORDER WHICH HAS A NEAR 100% PHYSICAL + EMOTIONAL REMEDY (VIGOROUS EXERCISE + BATHS), MODERATE EXERCISE IS A PREVENTATIVE TO BAD FEELING. WISE CONTROL/EXERCISES FOR ALERTNESS TO PREVENT BAD REFLEXES. -1 (bad feeling, boredom, confusion, misery) + (+1) (exercise, bath) → even happy. 59601, JAN 1994 (NOV) MIKE B., POET, PHILOSOPHER mph: 25/35/45 CURVES; < 5000 night straight-aways; 25 NO VIEW HILL TOPS. 1225 wilder

The best (wisest) philosophy of law depends on the right + natural psychology explained in paragraphs 1 + 2 above, cats, dogs, fish, etc. CAN CAUSE TRIGGER FINGERS TO REFLEX (UNFORTUNATELY), A SIXTEEN COMMERCIAL psychology + law project FOR TV WAS REJECTED BY MAJOR (ABC, NBC, CBS) TV EXECUTIVES (DOZENS) WHO I WROTE, SENT THE PROJECT TO TWICE, IN '92 + '94. I FILED (WROTE) 'NEGLECTED HOMICIDE' CHARGES WITH THE FBI + THE ATTORNEY GENERAL BUT GOT NO AFFIRMATIVE REPLIES. THE FUNDAMENTAL CLEARST + RIGHT DEFINITION OF OUR NATIONAL + CONSTITUTIONAL (+ IMPLE, C, T, Y) SOME % INTERNATIONAL IDEAL + LAW OF FREEDOM IS: FREE EXPRESSION, HAPPINESS, SHARING AND TRUST. INTERNATIONAL (100%) CAUSE + EFFECT (DVID HUME, ENGLISH PHILOSOPHER, 1649) LOGIC, (1 + 1 = 2) A BAD PHENOMENON USUALLY CAUSES A SECOND BAD PHENOMENON, + A GOOD PHENOMENON USUALLY CAUSES A SECOND GOOD PHENOMENON (1995; 2 + 2 = 4). BELIEF INCLUDES MEDIA, ART, LANGUAGE, SPORTS, ENTERTAINMENT, + DAILY EXPERIENCE. THE BEST REALITY IS DEPENDENT ON THE BEST BELIEFS, + OPTIMISM ABOUT HUMAN NATURE, INCLUDING PRACTICAL, FACTUAL, + STATISTICAL CONSIDERATIONS. IN THE BEST POLICY + LAW, ONE DAY → 6 WKS. FOR DISORDERLY CONDUCT IS A GOOD RULE OF LAW, + HOMICIDE PARDONS OF A FEW YRS PRISON, THEN 1 → 2 → 5 → 10 → 20 → LIFE FOR RETIREMENT AT ~ 55/65 YRS OLD, CLOSE SUPERVISOR + TIGHT SCHEDULES ON MILITARY BASES, WITH GRADUALLY INCREASING PRIVILEGES WITH GOOD BEHAVIOR, DEPENDING ON HOW BAD THE KILL(S) WAS, FAMILY CIRCUMSTANCES WEAPON SECURITY + CONTROL, UNDERSTANDING + DISTRIBUTING THE IDEAS HERE, PEOPLE FUNDAMENTALLY ARE GOOD + SHOULD NOT BE BLAMED FOR VIOLENCE. MISDEEDS SHOULD BE UNDERSTOOD, USUALLY FORGOTTEN, + FORGIVEN... THOUSANDS OF BORED PRISONERS CAN CAUSE DAZES + ERRORS BY DRIVERS, BIOLOGIES + NERVES SOMETIMES ARE INTERCONNECTED... EVERYONE CAN SHARE + ENJOY GOOD PURPOSE + COMMUNITY SERVICE... TOWARDS AN END TO VIOLENCE + PRISONS, ALWAYS, WITH MORE UNDERSTANDING OF THE TRUTHS HERE. MIKE B. "WARDEN PARDON MILITARY PERSONNEL COPIES FORK, COMING" BELIEF WILL DETERMINE REALITY. LAW BOOKS ARE WRONG BUT TRUE. FREEDOM IS THE BEST LAW. BA 70 MLST 75 POET, PHILOSOPHER 1-95 I posters (dozens) + notes (100's) HERE + WHERE I

SENATE HIGHWAYS

EXHIBIT NO. 2

DATE 1/19

BILL NO. SB 96

SENATE BILL 96

GOOD AFTERNOON MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE.
FOR THE RECORD I AM MARV DYE, DIRECTOR OF THE DEPARTMENT OF
TRANSPORTATION. I APPEAR BEFORE YOU TODAY IN OPPOSITION TO
SENATE BILL 96.

THE DEPARTMENT OF TRANSPORTATION AND THE HIGHWAY COMMISSION
WORK TOGETHER TO ESTABLISH SPEED LIMITS THAT PROVIDE THE
GREATEST MARGIN OF SAFETY FOR USERS OF THE HIGHWAY SYSTEMS.
OCCASIONALLY COMMUNITIES BELIEVE THAT THE APPROVED LIMITS
SHOULD BE LOWER AND UNBELIEVABLE PRESSURE COMES TO BEAR ON
MYSELF, DEPARTMENT EMPLOYEES AND THE COMMISSION TO ALLOW FOR
ARBITRARY LOWER LIMITS. WE HAVE BETTER THINGS TO DO THAN
RESPOND TO THIS CRITICISM. I CAN TELL YOU QUITE FRANKLY THAT
SOMETIMES WE FEEL LIKE THROWING IN THE TOWEL, GIVING IN AND
ALLOWING COMMUNITIES TO HAVE THE LOWER SPEED LIMITS. BUT WE
DON'T, AND THE REASON WE DON'T IS BECAUSE IT IS NOT THE
RIGHT THING TO DO. WE ARE TOTALLY COMMITTED TO THE SAFEST
POSSIBLE SYSTEM AND THIS BILL WOULD NOT BE IN THE BEST
INTEREST OF THE CITIZENS OF MONTANA.

Testimony of Thomas J. Barnard, P.E.
Chief Engineer, Montana Department of Transportation

RE: Senate Bill No. 96

Mr. Chairman, Members of the Committee. For the record my name is Tom Barnard, I am the Chief Engineer with the Montana Department of Transportation. I am here in opposition to Senate Bill No. 96.

I will speak to the specific changes to current speed zone laws which this bill proposes and the reasons why they are inappropriate. But first of all I need to provide you some basic information concerning speed zones. I'll try to keep this as brief as possible but this is a very critical issue and many items therefore need to be addressed.

Speed zone recommendations are based on traffic and engineering investigations. These investigations look at several things. One being the 85th percentile. The 85th percentile is the speed at which 85 percent of the drivers are traveling at or below. The 85th percentile is based on the principle that 85 percent of the drivers are safe and prudent and adjust their speed to the conditions regardless of the posted limit. The 85th percentile is a very important factor but it is not the only factor. Pace is also a significant factor. Pace is the ten mile an hour increment in which the most drivers are traveling. The upper end of the pace range is very near the 85th percentile. Pace is important. It is important that vehicles all travel as close to the same speed

as possible. Roadside conditions are also given serious consideration when addressing speed zones. Accident records are looked into, not only the numbers of accidents but the cause of those accidents. Other conditions such as the presence or absence of roadside parking, presence or absence of pedestrians must be considered. All of these factors must be considered in order to establish the safest speed limit.

There is a common misconception that posting reduced speed limits reduces the speed of vehicles. This is not true. Secondly, that reduced speed limits improve safety. This again, in the majority of cases, is not true. Often the opposite is true. I have passed out a folder which includes documents to back that up.

1. This is an article from the Public Works Magazine, the title of it is Traffic Engineering Myths and Realities. Please note the highlighted areas, but it says two things. Before and after studies consistently show there is no significant change in speeds after posting a new speed limit. It also says speeding itself is not the major cause of accidents. In fact there is a concensus that many speed related accidents results from both excessively low and high speed.

Number 2 is a copy of pages from the Manual of Uniform Traffic Control Devices, which is the Nationally accepted Traffic

Engineering Guide and Policy and has been adopted by the State of Montana. Two particular issues. First of all, the highlighted area talks about the need for engineering studies. On the second page under speed limit signs, it says that they shall display the limit established by law or by regulation after an engineering and traffic investigation has been made in accordance with established traffic engineering principles. The key word is 'shall'. This manual has been adopted by the State of Montana. This article also goes on to explain to you what needs to be considered, as I previously mentioned, in establishing speed zones.

3. It shows the relationship between accident rates and mean speed. Mean speed is the average speed people are traveling or the 50th percentile. The 85th percentile is typically about 6-8 miles per hour higher than the mean speed, near where the yellow line is drawn. This clearly shows that the lowest accident rate is near the 85th percentile. Speeds higher or lower increase accidents.

4. Shows a comparison of speeds both before and after changing a posted speed limit. Some were lowered and some increased. Consistently these studies show that you do not significantly change the speed of the traffic.

5. Another study of the comparison of accident rates to mean speed, from which you can project the 85th percentile,

shows the same thing. Speeds higher or lower than the 85th percentile increase accidents.

6. A common statement is that Montana is different. Montana is not different. Before and after studies confirm the same things exist here in the state. For example, look at the town of Neihart itself. At the top the dates when speed zone studies were conducted is shown. For instance the fall of 1979. Below the date the 85th percentile at various locations within the town is listed and at the very bottom the speed zone that was in place at the time of the study. Notice that between the fall of 1979 and summer of 1984 the speed limit was increased from 35 mph to 40 mph in the area around the post office yet the speed did not increase. Yet when the study was done in the winter of 1993 speeds had increased even though the speed limit had not changed. The reason being a highway improvement project between the summer of 1984 and the winter of 1993 which made drivers feel it was safe to travel faster. The point being that, even in the town of Neihart, 35 mph arbitrary speed zone did not slow the traffic down.

Now to the specific changes proposed to the law. One change is that if the locals request a speed zone study the Commission may not increase the speed limit under consideration as a result of the investigation. I refer you to handout No. 7. What this shows is, where unrealistically low speed zones were in place. It lists, Neihart, Fairfield,

EXHIBIT 3
DATE 1-19-95
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Reserve Street-Missoula, West Reserve Drive-Kalispell, and Hungry Horse where speed zones were unrealistically low. The range of drivers violating this posted speed limit is shown. You can see that as high as 95 percent of the drivers were violating the posted speed limit. The reason is because it was an unrealistic speed zone. Yet at the same time accident rates in these corridors were low. Of particular interest is Fairfield. It was recognized by the locals that this was nothing more than a speed trap. Reserve Street in Missoula the same applies. West Reserve in Kalispell, the locals wanted it increased because the speed limits were unrealistic. If we go out and do a speed zone study and we find that the speed posted is unrealistically low we have an obligation to increase that speed limit, if after all factors are considered, the safest speed zone is higher. The reason we have an obligation is that posting a reasonable speed limit will reduce accidents even though it may in fact be a higher. In all cases local government, prior to doing the studies, is given the opportunity to have a presentation made explaining how and why speed zones are established. They are clearly advised that the speed zones may go up or down.

The second proposed change is to decrease the speed limit within an area within 2000 feet of a school or of a senior citizens center. Handout #8 shows you what the effect would be in the city of Helena. Virtually all of the streets within

the city of Helena could be arbitrarily reduced to 70 percent of the safest speed zone creating nothing but speed traps. Secondly, and more important, is that when a low speed limit is posted, drivers must see something, within a relatively short distance, to reinforce the need for that low speed limit. Otherwise they forget about it. Typically in an urban area they will forget about it within one or two blocks unless they see reinforcement such as children adjacent to the roadway. To post the speed limit 2000 feet away without any reinforcement will cause drivers to ignore the speed limit where it is most critical and that is near the school where children are present. By the time they have reached the school or crosswalk they will have forgotten about the speed limit.

The third change is to allow local government to reduce the speed limit set by a traffic and engineering investigation to 70 percent of the recommendation rounded down to the nearest whole number. This would allow a 55 mph speed zone to be arbitrarily reduced to 35 mph, a 45 mph reduced to 30 mph, and a 35 mph reduced to 25 mph. I would encourage you to go back to the handouts I showed you which compare the 85th percentile or mean speeds with accident rates. Plot on there what a 15 percent arbitrary reduction in speed zones does to accident rates.

In summary, I would encourage you to kill this bill very

EXHIBIT 3
DATE 1-19-95
SB 96

simply because it does not promote safety.

What this bill does do is very likely increase accidents. It will definitely create speed traps. Some of the information I presented to you states that a speed zone which is 5 miles an hour less than the 85th percentile makes 25 percent of the safe and prudent drivers violators. Now include the 15 percent who are not safe and 40 percent violate the posted limit. If 10 mph low, we typically find 60-70 percent become violators. This penalizes safe and prudent drivers and increases road user costs. Safe drivers get tickets and their insurance rates go up.

This bill also leaves the responsibility and the liability for speed zones with the State of Montana, particularly the Department of Transportation and yet gives the authority to local government. If you are not of a mind to kill this bill then modify it to give the responsibility to local government and require them, as we are required, to establish speed zones based on traffic and engineering investigations. Require that they have someone qualified and experienced establish those speed zones and place the liability upon local government. Responsibility for studies, authority to establish speed zones and the liability for those actions must all rest with the same entity.

I will be available to answer any questions you may have.

realize that signals can also cause a significant increase in rear-end collisions.

Normally, traffic engineers are willing to trade off an increase in rear-end collisions for a decrease in the more severe angle accidents; however, when there is no angle accident problem at an intersection and a signal is not needed for traffic control, there is nothing to trade off and the installation of traffic signals can actually cause a deterioration in the overall safety at the intersection. This situation sometimes prompts the remark, "You mean you won't do anything until somebody gets killed!" What is not fully understood is that traffic signals are not a "cure-all" and that the primary goal of the traffic engineer is to attain the safest and most efficient traffic flow feasible.

In addition to an increase in accident frequency, unjustified traffic signals can also cause excessive delay, disobedience of signals, and diversion of traffic to residential streets.

Traffic signals are more costly than is commonly realized, even though they represent a sound public investment when justified. A modern signal can cost taxpayers between \$50,000 and \$100,000 to install — depending on the complexity of the intersection and the characteristics of the traffic using it. On top of this, there is a perpetual cost that is almost never considered — the cost of the electrical power consumed in operating a signalized intersection 24 hours a day. This now averages about \$1,400 per year.

Speed Limits

One of the most prevalent myths around is that motorists will adjust their speed in response to the numbers posted on speed limit signs regardless of roadway and traffic conditions.

Before-and-after studies consistently demonstrate that there are no significant changes in traffic speeds following the posting of new or revised speed limits. Furthermore, no published research findings have established any direct relationship between posted speed limits and accident frequency, although short-term reductions have resulted from saturation enforcement efforts directed at speed and other traffic law violations. Police agencies necessarily rely on reasonable and well recognized speed laws to control the unreasonable violator whose behavior is clearly out of line with the normal flow of traffic.

Contrary to popular belief, speed in itself is not a major cause of accidents. In fact, there is a consensus of profes-

sional opinions that many speed-related accidents result from both excessively low and high speeds.

Then why have speed limits? Realistic speed limits — that is, speed limits that reflect the normal actions of the reasonable driver, are useful for several reasons:

- They invite public compliance by conforming to the behavior of the majority.
- They give a clear reminder of reasonable and prudent speeds to non-conforming violators.
- They offer an effective enforcement tool to the police.
- They tend to minimize the public antagonism toward police enforcement that results from obviously unreasonable regulations.

On the other hand, unrealistic speed limits can be detrimental:

- They do not invite voluntary compliance, since they do not reflect the behavior of the majority.
- They make the behavior of the majority unlawful.
- They create public antagonism toward the police, since the police are enforcing a "speed trap."
- They create a bad image for a community in the eyes of tourists.

Flashing Beacons

Do they really cause motorists to reduce their speeds? Flashing beacons (commonly called flashers or flashing lights) are frequently requested by communities in the belief that they will reduce vehicle speeds. Unfortunately, this is not necessarily the case. A flasher is generally installed at an intersection or in conjunction with a warning sign in advance of an area requiring greater than normal care by the average driver. Flashing beacons serve a useful purpose where the flashing yellow is used to alert drivers to unusual conditions that are not readily apparent, such as obstructions in the roadway, uncommon roadway conditions, narrow bridges, or unusual conditions hidden from the motorist's view.

One of the more common locations where a flasher can be used effectively is at a signalized intersection located just beyond a vertical or a horizontal curve, when the intersection is hidden from the view of approaching motorists.

For any flasher to be effective, it must command the respect of the motoring public. In other words, immediately after seeing a flasher, the driver must consistently see an unusual condition that is being singled out for attention. Furthermore, the condition that motorists see must be viewed as serious enough to justify their having been alerted.

When flashers are used improperly and installed at locations where they are not warranted, they soon lose much of their effectiveness. They simply cease to command the respect of the drivers. What happens is that after continually being alerted to a condition which seldom, if ever, appears to be truly unusual, drivers actually stop "seeing" the flasher. When this happens, flashers that are truly needed may well be disregarded by drivers who have become conditioned to believe that flashers are just "window dressing." Because of this normal human reaction, even one improper usage greatly reduces the effectiveness of essential flashers.

Quite often, community requests for flashers are emotional responses to symptoms, rather than attempts to solve underlying problems. To put this into perspective, let's use an appropriate analogy: the case of measles. Obviously, to cure a patient who has measles, the disease itself (measles must be treated — not the symptom (rash). In traffic control, it is not uncommon for public responses to be directed at treating symptoms. For example, in cases where concerned parents are requesting flashers on pedestrian warning signs, a traffic investigation all too frequently reveals that:

- There is no "safe route to school" plan in the community.
- There is no pedestrian safety program in the schools.
- Very young children are allowed to wander to school by whatever route their youthful minds prefer.
- Parents are willing to abdicate their responsibilities by placing the entire burden for pedestrian safety on a traffic control device.
- Local law enforcement officials turn a blind eye to youthful pedestrian traffic violations.
- Where traffic laws are enforced by conscientious law enforcement officials, outraged parents explain away the irresponsible behavior of their children by claiming that the fault lies in inadequate traffic control devices, not in their children.

Flashers that are installed when these conditions exist result in the following:

- The flasher soon becomes part of the normal driving environment and is ignored.
- Parents continue to ignore their responsibilities to their children.
- The community continues to avoid treating the real problem.
- Other flashers, which are justified, are frequently disregarded by motorists conditioned to believe that flashers can be safely disregarded.

(Continued on page 94)

MANUAL
ON
UNIFORM
TRAFFIC
CONTROL
DEVICES

SENATE HIGHWAYS

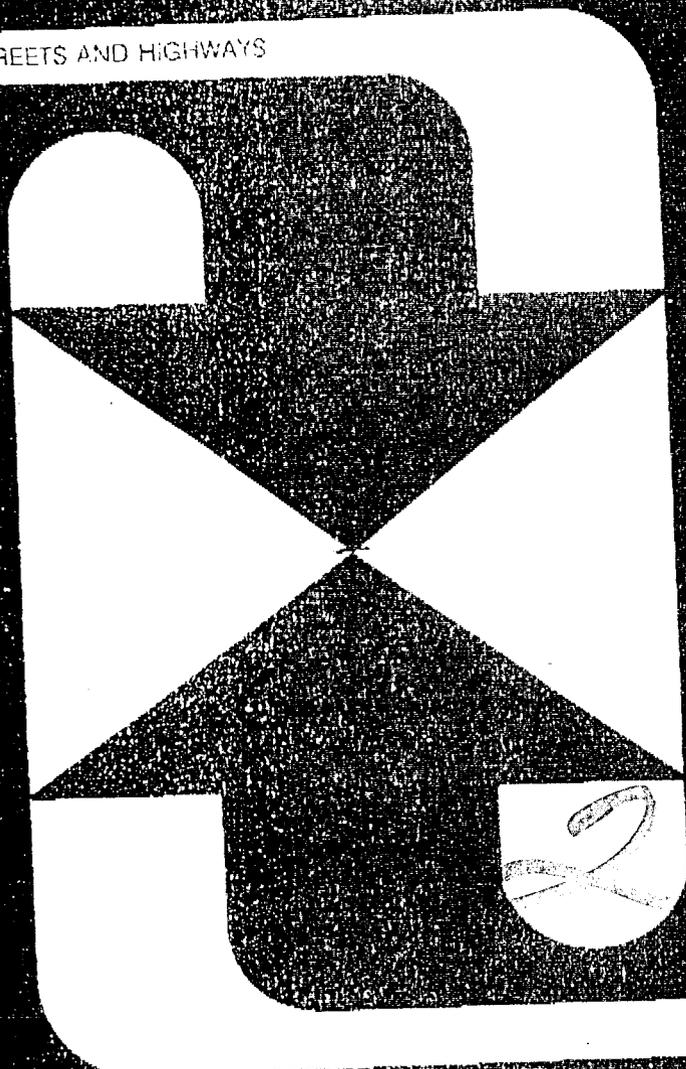
EXHIBIT NO. 3B

DATE 1/19/95

BILL NO. SB 96

1988 EDITION

FOR STREETS AND HIGHWAYS



All traffic islands shall be installed by the authority of the public body or official having jurisdiction. For those islands that are elements of street and highway design and are included in the design of the street or highway, no specific authority is required.

All regulatory devices, if they are to be enforced, need to be backed by applicable laws, ordinances, or regulations. Effective traffic control depends not only on appropriate application of devices, but on reasonable enforcement of regulations as well. Standards in this Manual are based on that concept.

1A-4 Engineering Study Required

The decision to use a particular device at a particular location should be made on the basis of an engineering study of the location. Thus, while this Manual provides standards for design and application of traffic control devices, the Manual is not a substitute for engineering judgment. It is the intent that the provisions of this Manual be standards for traffic control devices installation, but not a legal requirement for installation.

Qualified engineers are needed to exercise the engineering judgment inherent in the selection of traffic control devices, just as they are needed to locate and design the roads and streets which the devices complement. Jurisdictions with responsibility for traffic control, that do not have qualified engineers on their staffs, should seek assistance from the State highway department, their county, a nearby large city, or a traffic consultant.

1A-5 Meanings of "Shall," "Should" and "May"

In the Manual sections dealing with the design and application of traffic control devices, the words "shall," "should" and "may" are used to describe specific conditions concerning these devices. To clarify the meanings intended in this manual by the use of these words, the following definitions apply:

1. **SHALL**-a *mandatory* condition. Where certain requirements in the design or application of the device are described with the "shall" stipulation, it is mandatory when an installation is made that these requirements be met.

2. **SHOULD**-an *advisory* condition. Where the word "should" is used, it is considered to be advisable usage, recommended but not mandatory.

3. **MAY**-a *permissive* condition. No requirement for design or application is intended.

1A-6

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In the event the visibility of a STOP sign or a YIELD sign at any location is restricted, the sign shall be located as specified, and a Stop Ahead sign (sec. 2C-15) or a Yield Ahead sign (sec. 2C-16) shall be erected in advance of the STOP or YIELD sign.

Figures 2-2, 2-7a, 2-7b, and 2-7c (pages 2A-10 and 2D-16 to 2D-18) show typical STOP and YIELD sign installations.

2B-10 Speed Limit Sign (R2-1)

The Speed Limit sign shall display the limit established by law, or by regulation, after an engineering and traffic investigation has been made in accordance with established traffic engineering practices. The speed limits shown shall be in multiples of 5 miles per hour.

In order to determine the proper numerical value for a speed zone on the basis of an engineering and traffic investigation the following factors should be considered:

1. Road surface characteristics, shoulder condition, grade, alignment and sight distance.
2. The 85-percentile speed and pace speed.
3. Roadside development and culture, and roadside friction.
4. Safe speed for curves or hazardous locations within the zone.
5. Parking practices and pedestrian activity.
6. Reported accident experience for a recent 12-month period.

Two types of speed limit signs may be used: One to designate passenger car speeds including any nighttime information or minimum speed limit that might apply, and the other to show any special speed limits for buses and trucks. No more than three speed limits should be displayed on any one speed limit sign or assembly. Where a special speed limit applies to trucks or other vehicles, the legend TRUCKS 40, or such similar message as is appropriate, shall be shown below the standard



R2-1
24" x 30"



R2-2
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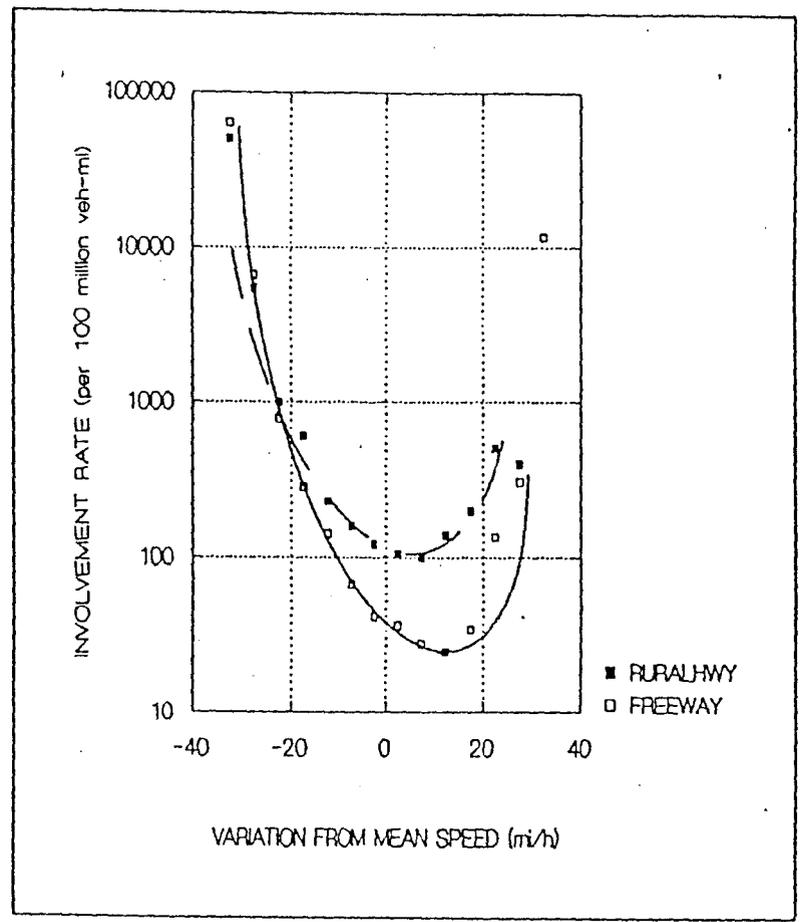


FIGURE 1. RELATIONSHIP BETWEEN ACCIDENT INVOLVEMENT AND DEVIATION FROM AVERAGE TRAFFIC SPEED (SOURCE: HARKEY, ROBERTSON AND DAVIS, "ASSESSMENT OF CURRENT SPEED ZONING CRITERIA")

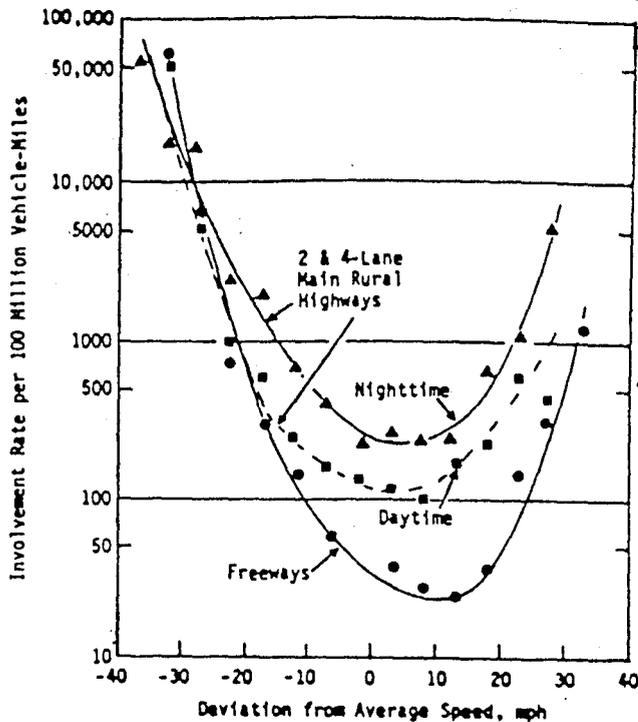


Figure 4. Relationship between accident involvement rate and deviation from mean speed.

Source: Reference [37]

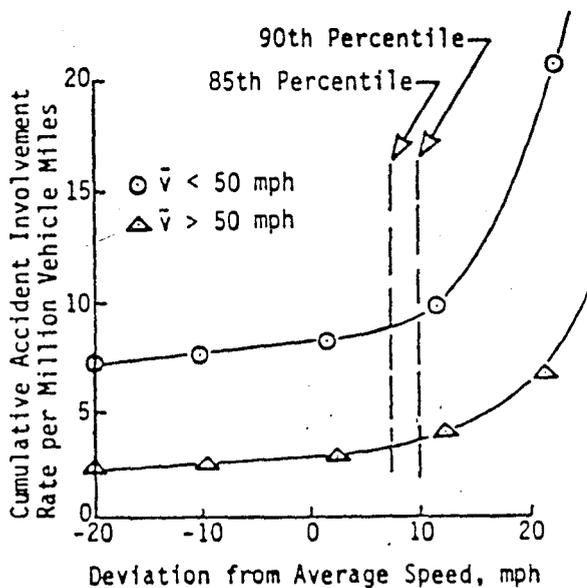


Figure 5. Relationship between 85th percentile speed, accident involvement rate, and deviation from mean speed for two levels of traffic speed.

Source: Reference [37]

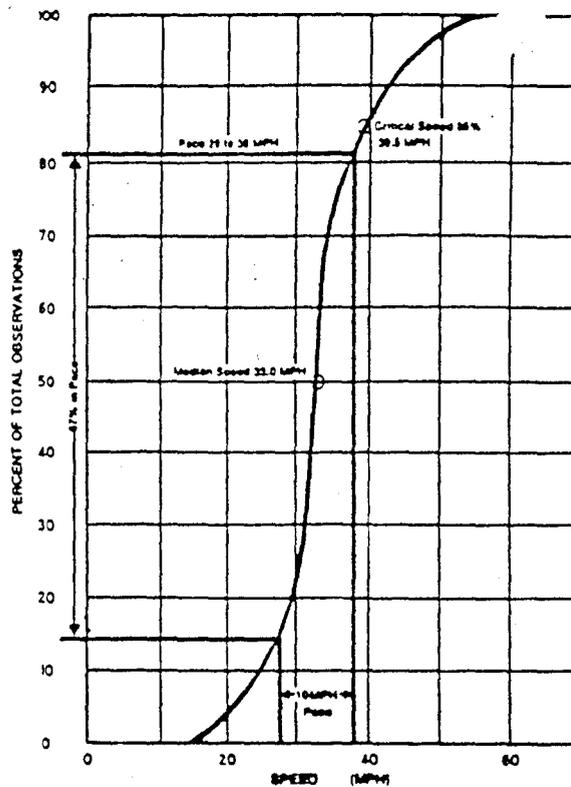


Figure 3. Typical cumulative speed distribution curve.

Source: Reference [7]

however, little research was conducted at that time to substantiate the effects of the method on traffic speeds and safety.

Kessler was one of the first to state that the 85th percentile speed may be related to accident risk.[36] In 1959 he wrote "the 85-percentile speed is based upon the theory that the majority of motorists traveling upon a city street or highway are competent drivers and possess the ability to determine and judge the speed at which they operate safely; further, that motorists are responsible and prudent persons who do not want to become involved in an accident and desire to reach their destination in the shortest possible time".[36]

Studies conducted by Solomon[9] and Cirillo[10] indicate that the 85th percentile speed is in the speed range where the accident involvement rate is lowest. The relationship between the accident involvement rate and the deviation from average speed is shown in Figure 4. On most roadways, the 85th percentile speed is one standard deviation or approximately 6 to 8 mph (10 to 13 km/h) above the average speed. A study conducted by West and Dunn provided further evidence that the 85th percentile speed had the lowest accident involvement.[11] As shown in Figure 5, Joscelyn, et al., analyzed speed and accident data on Indiana highways and found that accident risk begins to increase significantly beyond the 85th percentile speed.[13] These data indicate that the 85th percentile speed is not only reasonable for the majority of drivers, but also the safest. The findings support the



U.S. Department
of Transportation

Federal Highway
Administration

SYNTHESIS OF SPEED ZONING PRACTICES

SENATE HIGHWAYS

EXHIBIT NO. 3 E

DATE 1/19/95

BILL NO. SB 96

Research, Development,
and Technology

Turner-Fairbank Highway
Research Center
6300 Georgetown Pike
McLean, Virginia 22101

July 1985

- a. Twenty-two vehicle detector stations were used to sense vehicles and speeds, and to activate warning signs. Twelve configurations of signs were tested.
 - b. A sign configuration with one sign stating "Flashing Means you Violated" received the highest percentage of compliance. Average speed with this configuration for the day-auto sub-group was 42.0 mph (67.6 kph) as compared with 44.5 mph (71.6 kph) for the usual signing. (Sign condition 3).
4. Taylor (Ref. 9) studied relationships between normality of speed distributions and accident occurrence over a two-year period for a 15-mile (24.1 km) section, with analyses made for twenty-two 500 ft. (152.3 m) sub-sections.
- a. The average number of accidents per subsection with non-normal (skewed) speed distributions was 4.62, compared with 1.36 for subsections with normal speed distributions.
 - b. Fifty-one speed zones were analyzed later, with studies made also for adjacent control sections. The zones were segregated into groups according to whether speed distributions changed from non-normal to normal after speed zoning.
 - c. Results showed that the accident rate reductions for sections changing from non-normal to normal speed distributions were about twice the reductions for any other set of before-and-after conditions.
 - d. It was concluded that the "before" speed distribution alone was not adequate as a warrant for speed zoning.
5. A 1984 AASHTO survey compiled the results of studies where the effects of raising or lowering the speed limits were examined. Figure 3 summarizes this information. Little change in the 85th percentile speed was realized. One important point to note is that even a small decrease in the speed limit (5 mph) increased the motorists' non-compliance rate by about 25%. (Ref. 13).

FIGURE 3. Summary of State studies of the effects of raising and lowering speed limits.

State	Date of Study	Number of Sites	Existing Speed Limit	Average 85th Percentile Speed		Remarks	
				Before	After Posting Lower Limit		
Massachusetts	Oct. 1966	19 Two-lane	30-45	47.5	48.3	After posting 10 mph lower and higher limits than existing zones, no difference in 85th percentile speeds were found.	
		6 Dual-lane	50-55	60.7	60.3		
Michigan	1982	4	25	37.6	36.0	Speed limit increased to 35 mph. Violations decreased from 90.4 to 19.3 percent.	
		4	55	56.8	54.8	Speed limit lowered to 50 mph. Violations increased from 26.6 to 44.4 percent.	
		4	55	57.8	56.0	Speed limit lowered to 50 mph. Violations increased from 29.3 to 53.8 percent.	
		5	45	49.2	47.0	Speed limit lowered to 35 mph. Violations increased from 43.7 to 93.2 percent.	
Minnesota	Jan. 1979	12 Two-lane	45	NA	43.6	Speed limit lowered to 30 mph.	
		4 Four-lane	40	42.0	40.3	Speed limit lowered to 30 mph.	
Washington	1981-82	3	25	34.7		34.3	Speed limit raised to 30 mph.
		1	50	57.0		59.0	Speed limit raised to 55 mph.
		1	50	43.0	42.0		Speed limit lowered to 35 mph.
		3	40	45.0	43.7		Speed limit lowered to 35 mph.

Note: 1 mph = 1.6 km/h
NA = Not Available

Source: *The Traffic Institute
Northwestern University*

Neihart Speed Profile

<u>Location</u>	<u>85th % Fall '79</u>	<u>85th % Summer '84</u>	<u>85th % Winter '93</u>
South end of town	55 mph	57 mph	59 mph
Maintenance Yard			50 mph
Senior Center	42 mph	43 mph	49 mph
Post Office	40 mph	39 mph	46 mph
Bar & Grill			44 mph
40/50 split (north end)			50 mph
North end of town	51 mph	51 mph	58 mph
(Speed limit in place)	(55/45/35)	(55/50/40)	(55/50/40)

6

SENATE HIGHWAYS

EXHIBIT NO. 3 G

DATE 4/9/95

BILL NO. SB 96

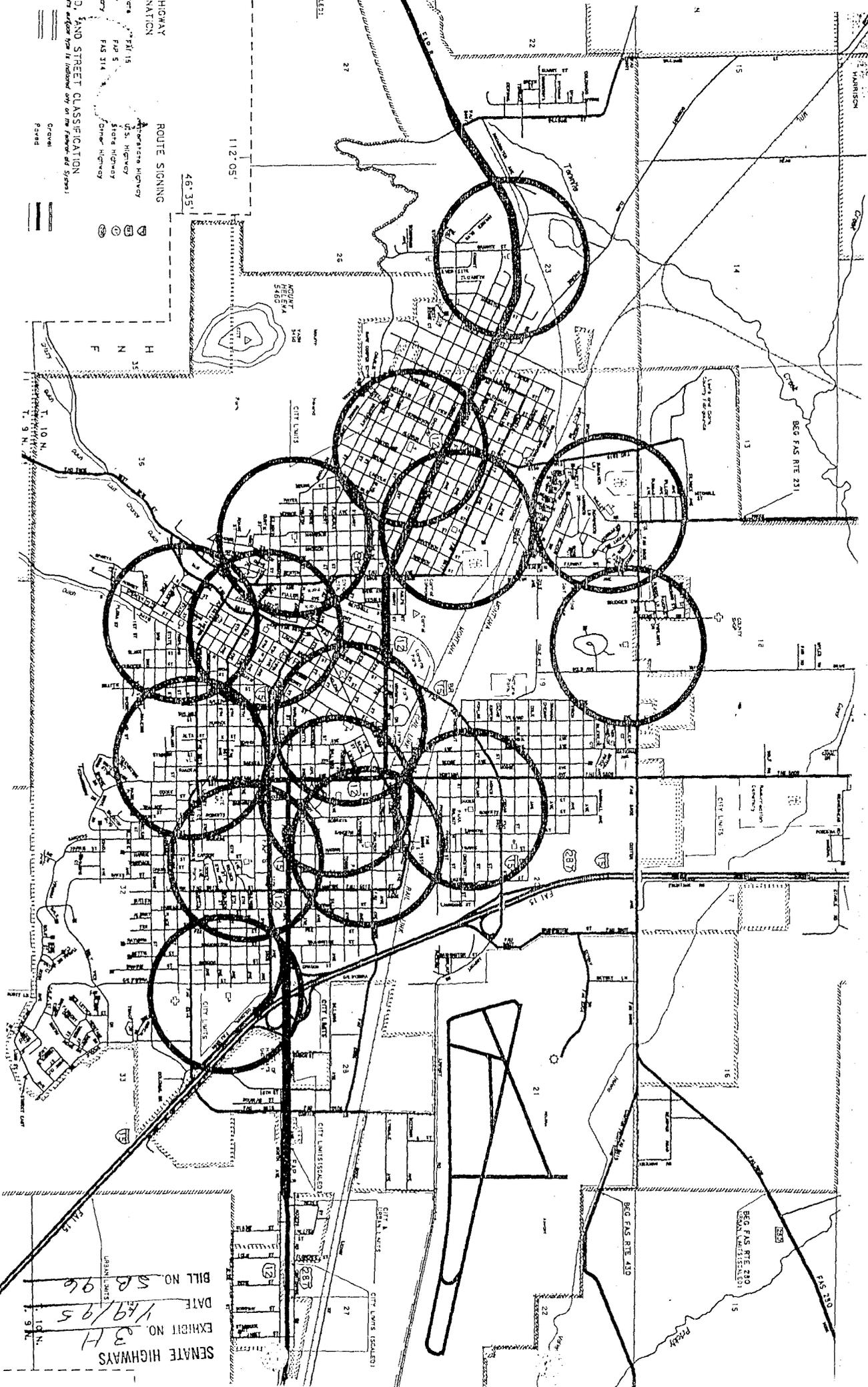
PERCENTAGE OF MOTORIST POPULATION
NOT IN COMPLIANCE WITH THE EXISTING SPEED ZONE
DURING SITE INVESTIGATION

NEIHART (US-89)	29-60%
FAIRFIELD (US-89)	45-95%
RESERVE STREET - MSLA	55-93%
W RESERVE DRIVE - KALISPELL	30-92%
HUNGRY HORSE (US-2)	24-93%

7

ROUTE SIGNING
 FEDERAL HIGHWAY
 STATE HIGHWAY
 COUNTY HIGHWAY
 LOCAL HIGHWAY

LAND STREET CLASSIFICATION
 Paved
 Gravel



SENATE HIGHWAYS
 EXHIBIT NO. 3 H
 DATE 1/19/95
 BILL NO. SB 96

BEG. FAS. RTE. 231

BEG. FAS. RTE. 430

415 390

DATE 1/19/95

SENATE COMMITTEE ON Highways

BILLS BEING HEARD TODAY: SB-51 SB 96 SB104

< ■ > PLEASE PRINT < ■ >

Check One

Name	Representing	Bill No.	Support	Oppose
DIANDE W. JOHNSON	CITY OF HELENA & LEWIST CLARK Co.	96	X	
Clayton Fiscus	1111 Main Bldg Mt	51		X
Tom Barnard	Mont Dept. of Trans	96		X
PATRICIA SAINDON	MDT	104	X	
HANK HONEYWELL		96		X
Harry Lauer	Dept. of Justice HWY Safety	96		X
Gwin Currie	MDT			X
Maureen Clary - Shwinder	women in Forum ECD	104		X
MARV Dye	MDT	96		X
Mike Barrett (13c. paper included)	CITIZEN ARTISTS (4432195) (491078)	96	✓	
Donalene O'Neill	Box 35 Meibart	96	✓	
J. D. "Sammy" O'Neill	Box 35 Meibart	96	✓	
THOMAS R FORSETH	MONTANA HIGHWAY COMMISSION	96		✓
Steve Turkiewicz	MT Highway Users Fed. MDTA	96	L	

VISITOR REGISTER

PLEASE LEAVE PREPARED STATEMENT WITH COMMITTEE SECRETARY

DATE 1/19/95

SENATE COMMITTEE ON Highways

BILLS BEING HEARD TODAY: SB 51 SB 96 SB 104

< ■ > PLEASE PRINT < ■ >

Check One

Name	Representing	Bill No.	Support	Oppose
Carl Schweitzer	Mont Cont Ass'n	104	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Thomas R Forsgren	MT HIGHWAY council	104	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ben Howard	MT Motorists	104	<input checked="" type="checkbox"/> Amend	<input type="checkbox"/>

VISITOR REGISTER

PLEASE LEAVE PREPARED STATEMENT WITH COMMITTEE SECRETARY