

MINUTES

MONTANA HOUSE OF REPRESENTATIVES 54th LEGISLATURE - REGULAR SESSION

COMMITTEE ON HIGHWAYS & TRANSPORTATION

Call to Order: By **CHAIRMAN SHIELL ANDERSON**, on January 27, 1995,
at 3:13 p.m.

ROLL CALL

Members Present:

Rep. Shiell Anderson, Chairman (R)
Rep. Rick Jore, Vice Chairman (Majority) (R)
Rep. Patrick G. Galvin, Vice Chairman (Minority) (D)
Rep. Joe Barnett (R)
Rep. Matt Brainard (R)
Rep. Robert C. Clark (R)
Rep. Charles R. Devaney (R)
Rep. Marian W. Hanson (R)
Rep. Don Larson (D)
Rep. Rod Marshall (R)
Rep. Linda McCulloch (D)
Rep. Daniel W. McGee (R)
Rep. Jeanette S. McKee (R)
Rep. William M. "Bill" Ryan (D)
Rep. Dore Schwinden (D)
Rep. Roger Somerville (R)
Rep. Joe Tropila (D)
Rep. Jack Wells (R)

Members Excused: None

Members Absent: None

Staff Present: Valencia Lane, Legislative Council
Kim Greenough, Committee Secretary

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

Committee Business Summary:

Hearing: HJR 13, HB 294, HB 254
Executive Action: HJR 13 DO PASS

HEARING ON HJR 13

Opening Statement by Sponsor:

REP. TONI HAGENER introduced HJR 13. She said the resolution is
intended to bring attention to the importance of uninterrupted

Amtrak service to the state of Montana. She pointed out that the resolution does not ask for money. However, it indicates concern for jobs, the economy and for a public transportation system providing services to the citizens of the state. The proposed reduction of services from seven days a week to four days a week beginning in February has an immediate and significant economic impact on the tourist industry.

She noted that an estimate of 75% of annual visitation to Western Montana was in the months of February and March. One third of that estimated number of visitors arrive on Amtrak. The cutback of services interferes with connecting schedules. Amtrak is the only commercial transportation available along U.S. Highway 2. She said it is used to make short hops between connecting hi-line towns as well as other cities and towns along the northern tier. For those who cannot drive, loss of Amtrak creates enforced isolation. She pointed out the "Whereas" statements in the resolution lists the other losses that will occur to Montanans.

She discussed the safety of train travel that out-performs vehicles, especially in winter. Employment by Amtrak, as well as earnings, and corollary jobs of suppliers and related business, was discussed. She said that continued Amtrak service was important to many people and organizations. She presented testimony from the Fort Peck Tribes. **EXHIBIT 1** The discontinuance of Amtrak services would create a crisis and would further isolate the remote areas. They pointed out the need for transportation of children and the handicapped to treatment facilities in Spokane, especially in inclement weather.

Proponents' Testimony:

REP. GEORGE HEAVY RUNNER testified in favor of HJR 13. He said that because of the remote area, the cutback of the Amtrak schedule creates a hardship to the people that have to use this transportation to get to Seattle for medical needs. From the tourism perspective, Glacier Park gets a large number of visitors traveling on Amtrak. Many people use the train services for educational functions. He urged support of the resolution.

Dave Ditzel, Locomotive Engineers, whose members work on not only the Amtrak railroad, but the freight railroads in Montana, spoke in support of the resolution. He said it was appropriate that the legislature consider this resolution. The commerce, science and transportation committee in Washington, D.C. has questioned decisions that the National Railroad Passenger Corporation has made with respect to reducing service on the northern line. He pointed out that Senator Burns had his staff members try to make a reservation on that and had tried for four days to get the space, which is an indication how much the train is being used. The resolution offers encouragement in the process and it indicates to the National Railroad Passenger Corporation that their decision on where to make cuts is not good. **EXHIBIT 2**

Bob Stephens, National Association of Railroad Passengers, spoke in favor of the resolution. He discussed the recent meeting in Havre where 11 of the 12 communities served by Amtrak were represented. Petitions of thousands of signatures were sent to Washington, D.C. He discussed the national importance of the railroad transportation, especially since railroads transport heavy freight, thereby saving the highway system from the expense of deteriorating roads due to freight hauling.

Gerald Roser, Montana AFL/CIO, spoke in support of the bill. He said that the Executive Secretary, Don Judge, has been in continuous contact with Senator Conrad Burns who serves on the transportation subcommittee.

REP. GARY FELAND, HD 88, spoke in support of the resolution. He said that Shelby is one of the places where Amtrak stops. It is important to have this transportation because of the remote areas the railroad serves.

David Owen, Montana Chamber of Commerce, spoke in favor of the resolution. He said that train travel is a great transportation alternative for families. The train is an important part of Montana.

Matthew Cohn, Administrator, Travel Promotion Bureau, Department of Commerce, testified in support of the bill.

Bob Kinney, originally from Havre and now a resident of Lewis & Clark County, testified in favor of the resolution. He said that many people use Amtrak services for medical purposes. He pointed out that Montana is a scapegoat for the proposed cuts. In reducing the services by Amtrak, they are not considering that alternative services do not exist, such as the mail service. He urged support for this resolution.

REP. ROGER SOMERVILLE, HD 78, Kalispell, spoke in strong support of the resolution. He pointed out that Amtrak is an extremely important mode of transportation for people in the Flathead Valley. Skiers, tourists and students use Amtrak. This is an asset and a very convenient mode of transportation across northern Montana.

Patricia Saindon, Administrator, Transportation Planning Department, Department of Transportation, spoke in support of the resolution.

Rick Van Acken, legislative representative for the TCU, Lodgepipe Railroad Purchasing, Great Falls, spoke in support of the resolution.

Opponents' Testimony: None

Informational Testimony: None

Questions From Committee Members and Responses:

REP. DON LARSON asked how Amtrak decided on the cuts. **Mr. Ditzel** replied that he was not sure, but they felt this was an area that could be cut. He said it was an administrative decision by the National Railroad Passenger Corporation and was susceptible to change.

REP. LARSON asked Matt Cohn if there were any studies correlating ridership on the Amtrak with the bed tax. **Mr. Cohn** replied there was not.

Closing by Sponsor:

REP. HAGENER discussed the Amtrak line as being the only connection between towns along the hi-line area. She said it was extremely important to citizens from these areas as well as the reservation and especially to senior citizens. She closed on the bill.

HEARING ON HB 294**Opening Statement by Sponsor:**

REP. KARL OHS, HD 33, discussed HB 294 which raises the fine on a violation in a no-passing zone. He said the current law's fine is too low. The fine is \$10 - \$100 for a first offense. He pointed out that in Montana there were a lot of hills and a lot of people violate this law. The biggest violation area is on Highway 93. He noted that the fine in the bill is \$100 which may be a little high and should stay consistent with other fines and could be amended.

Proponents' Testimony:

REP. ROGER SOMERVILLE, HD 78, Kalispell, spoke in favor of the bill. He said this issue is very important due to the deaths which occurs from passing in a no-passing zone. The problem is very serious.

Col. Craig Reap, Montana Highway Patrol, spoke in favor of the bill. He recommended a \$50 fine rather than \$100 which would make it consistent for violations of this type. He said one of the problems that occur with the fine structure is due to the 56 counties and 56 different judicial systems, the third offenses are not always kept track of since a person can have one in another county and a judge may not always know about it. A fine would not necessarily be increased as that fine schedule sets out.

Clarence Brazil spoke in support of the bill. He said he and his wife had moved to Polson when they retired. He said there was a complete disregard for traffic laws especially in passing over

double lines and around corners. He read a letter he wrote in response to an editorial about slow drivers regarding traffic on Highway 35 near Bigfork.

{Tape: 1; Side: B; Approx. Counter: 0; Comments: None.}

He said this type of driving is a deliberate endangerment of life. He pointed out that many people had called him in support of his letter. A judge had pointed out that the fines were at most \$65 and were paid, then they go out and do it again. The state patrol and police feel the same way. He said the problem was not a lack of patrolmen or funding, but if the fine was big enough and hit the newspaper, it would make an impact. He said the bad driving had the same effect as trying to kill people and the fine should be higher. A DUI is \$350 and this fine should be \$100, \$150 or even more and include community service and points on the drivers license. He pointed out that if the fines were higher and names put in the newspaper, that people would pay attention and not drive over the double lines.

Opponents' Testimony: None

Informational Testimony: None

Questions From Committee Members and Responses:

REP. PAT GALVIN asked where the fine money went. Col. Reap said that unless the money is earmarked, all revenue from fines is divided 50/50 between the state and the county. The 50% that goes to the state is subdivided into 6 or 7 categories with the majority going to driver improvement, victim assistance and the Department of Transportation, however the majority of the monies go to the general fund.

REP. GALVIN asked what the opinion was about charging prisoners for the cost of being in jail. REP. KARL OHS replied that the purpose of the bill was to make it consistent with current law.

REP. JOE BARNETT asked who determined the amount of the fine in this situation. REP. OHS said that under that code, 61-8-711, those were general fines. Col. Reap replied that traffic violations in the codes have their own penalty. The fines are usually determined by the judge in that range. Bonds are usually collected at the scene of the violation.

REP. SOMERVILLE commented about the research done on DUIs.

REP. BOB CLARK asked Mr. Brazil to clarify the instances when there might be an opportunity to get plate numbers or file complaints. He replied he did not know, but these types of incidents occur often.

{Tape: 1; Side: A; Approx. Counter: 405; Comments: None.}

Closing by Sponsor:

REP. OHS closed on the bill. He noted that there is a deficiency in the current law that needs to be corrected by raising the fines to reflect the severity of the violations. He urged passage of HB 294.

HEARING ON HB 254**Opening Statement by Sponsor:**

REP. DAVID EWER, Helena, said HB 254 would enable local municipalities to set local speed limits that are currently set by the Department of Transportation. It takes into consideration road conditions, which is how the limits are determined now. He said in addition to reasonable conditions of a highway, additional factors could be considered such as noise and air quality, dust, pedestrian and bicycle traffic, etc. The bill takes out some of the language that was put in the last session regarding the nursing home and wildlife situation. This language would replace that. He noted that some counties have zero say on setting speed limits on arterial roads. The local government should have some input on setting speed limits.

Proponents' Testimony:

Dianne W. Johnson, Transportation Demand Management Coordinator, City of Helena and Lewis and Clark County, spoke in support of the bill. She said it was important to consider other issues such as the noise and air quality, as well as pedestrians and bicycle travel and proximity of children, seniors or the disabled who have to share the highway with automobiles. The speed of the automobile directly affect these people. The bill does not give the authority to set a statewide limit but rather in municipalities who should have a say. People drive within a speed range which feels comfortable. However, special rules are important around children, seniors or the disabled where their safety is utmost. She urged support of the bill. **EXHIBIT 3**

Cedron Jones, a member of the Helena Citizens Council, spoke in favor of the bill. He related incidents of children's deaths occurring near a school. He talked about lowering the speed limits and recommendations from the engineering department. He discussed a pamphlet called "How Fast" which is the rationale used by the engineers when studying speed limits. He said the bill would deal with situations where the limits were needed, such as around schools.

{Tape: 2; Side: A; Approx. Counter: 0; Comments: None.}

Mr. Jones pointed out the bill clarifies what is reasonable and safe. This bill shifts the decisions to the local level so people believe they have a stake in that.

REP. JOE BARNETT, HD 32, Belgrade, spoke in support of the bill. He said the 1991 Legislature had a similar bill to control the speed limit, which was not supported by the Highway Department. It passed but only benefitted one school. This bill would address other schools for the benefit of the safety of the children.

Sara Toubman from Helena testified in favor of HB 254. She said that many people walk as their mode of transportation and that high speed traffic make crossing difficult and dangerous and walking along streets unpleasant. **EXHIBIT 4**

Opponents' Testimony:

Jim Campbell, City of Billings, spoke in opposition to the bill. He noted there were emotional reactions to the changing of speed limits, which could result in a lack of uniformity of speed limits throughout local communities. It would also provide opportunities for speed trap areas as a result of pressures that claim to make roadways safer, thereby imposing an artificially-imposed speed limit. He said the city is of the opinion that speed limits should be based on sound engineering practice and traffic studies based on nationally recognized standards. He submitted a memo written by H. Terry Smith, City Traffic Engineer to Ken Haag, Billings Director of Public Works and Mark Watson, City of Helena, stating their opposition to this bill. **EXHIBIT 5**

Patricia Abiline, Highway Commissioner from District #2 from Bozeman, spoke against the bill. She said the statistics used to determine speed are from many years of study in all of the 50 states. The engineers design the roads with safety as their first priority.

Tom Barnard, Chief Engineer, Department of Transportation, spoke in opposition to HB 254. He said that safety was the most important issue. He discussed the basics of speed zoning and distributed six handouts on traffic control, speed limits, variations of speed in relationships between accident involvement, a state study of effects of raising and lowering speed limits, speed zone practices and an example of a speed profile from Neihart. He noted that pace is a significant factor and that most drivers are safe and prudent and adjust their speed to the conditions regardless of the posted limit. He discussed air quality, noise and dust. He pointed out that the language on Page 2, lines 23-26 was an attempt to allow local government to force the Montana Highway Commission to establish arbitrarily low speed zones. **EXHIBIT 6**

Informational Testimony: None

Questions From Committee Members and Responses:

REP. MARSHALL asked **Mr. Barnard** how affected cities are dealing with the problem now. **Mr. Barnard** replied that there were

several avenues available to them, the Legislature, the Highway Commission or the Transportation Department. If the cities were aware of conditions that justify lower limits then the department is willing to hear about it.

{Tape: 2; Side: B; Approx. Counter: 0; Comments: None.}

REP. LARSON asked **REP. EWER** about the fiscal note requiring about 40 investigations a year, but the note did not acknowledge the cost of signage for speed changes as a result of that. The fiscal note is probably flawed. He noted that local governments were not asked to pick up a share of the cost of the investigations which is \$221,000 a year. **REP. EWER** said he did not know the cost of the signage but that the fiscal note is flawed. He pointed out the public works department in Helena would have some costs of doing research. He said he did not advocate passing on costs to the Department of Transportation to do reviews by request of local governments.

REP. LARSON asked if local governments should assume a pro-rata share of the costs based on their requests for a traffic survey. **REP. EWER** said there was a worry about frivolous requests.

REP. LARSON asked if it was fair to offer local governments a pro-rata say in the signing and the speed zone determination based on their contribution based on the construction and maintenance of the highway. He pointed out that because the federal and state dollars build the highways the federal and state guidelines are a factor in determining speed zones. Rep. Ewer said he disagreed. The arterial roads are part of the city. As an entity, the city should have some say as to what happens within its boundaries.

REP. MCGEE asked why the sponsor did not sign the fiscal note. **REP. EWER** replied that he did not think it was appropriate and did not like the editorial comments regarding the state being exposed to additional tort liability. He said it amounted to people saying you are going to get sued for having a speed limit lower than what is supposed to be set. He has reservations about the concepts of "whatever the traffic will bear," or that "motorists know the safe speed limit," as being the prime determinate of the speed limit. He said people are saying if the speed is set for less, liability is incurred.

REP. MCGEE asked for the department to respond to the tort liability concerns if traffic accidents occur as a result of speed limits out of compliance with state and federal standards. **Tim Reardon, Chief Council, Department of Transportation** responded that Montana has adopted the national standard. He cited some legal examples.

{Tape: 2; Side: B; Approx. Counter: 232; Comments: None.}

REP. MCGEE asked **Mr. Barnard** what percentage or criteria of speed zone studies were used in establishing the speed zones. **Mr. Barnard** replied that it would vary, depending on conditions and factors that exist that are not readily recognized by the motorist, then less emphasis would be placed on the 85% percentage rule in the studies. **REP. MCGEE** pointed out that over 85% of motorists exceeded the speed limit, it seemed the limit should be raised.

REP. CLARK asked **Dianne Johnson** if she knew how strong enforcement of current speed limits are in areas of concern. **Ms. Johnson** replied that around the first days of school the enforcement is strong but after that the enforcement is not really there. They have to rely on the motorists to notice the limit, notice the children and slow down.

REP. CLARK asked **Mr. Barnard** about the Public Works Magazine handout on the before and after studies regarding no significant changes in traffic speeds following the posting of new or revised limits; it does not say anything about lowering the limit and adding stricter enforcement. **Mr. Barnard** said there were studies addressing this issue about changing the limit and adding more enforcement. He said this would, for a short period of time, reduce the speed.

{Tape: 2; Side: B; Approx. Counter: 450; Comments: None.}

REP. WELLS asked about the concerns regarding school zones vs. all city streets and speed zones. **Ms. Johnson** replied that the concerns were where children congregated, schools and playgrounds, senior centers, and areas with a lot of pedestrians who were not well protected. She said these areas should not be designed for 55 miles an hour. The city and county are concerned where there is a lot of pedestrian activity. She noted that people can't be expected to walk and bike if there are problems with a 45 mile per hour highway with a large amount of traffic in low times, like 10:00 a.m. rather than rush hour times.

Ms. Toubman discussed the problems on Euclid Avenue in Helena and the Lewis & Clark Public Library where she works. The high traffic and speed make crossing streets a problem, especially where there is also high pedestrian activity.

REP. WELLS asked about any studies requested by local governments. **Mr. Barnard** said there had been a study on Euclid and that the limits had not been changed.

REP. BARNETT asked about the concerns for moving traffic vs. safety. **Mr. Barnard** replied that safety was number one concern. **REP. BARNETT** asked about a bill four years ago dealing with the same thing, whether he perceived the problem. **Mr. Barnard** replied that there was a problem, however when there are arbitrary speed zones, there are increased accidents.

{Tape: 2; Side: B; Approx. Counter: 690; Comments: None.}

REP. BARNETT asked whether this might be a turf factor. Mr. Barnard said that was wrong, there was a battle but the only real concern was safety. REP. BARNETT said it seemed like a study had been done in Belgrade when DOT said the Legislature could do the study and present it to DOT. Mr. Barnard replied that there was controversy over the study that the department bid and an offer had been made to the City of Belgrade, which has been done consistently with any local government agencies, that if they felt DOT recommendations were improper or something had been overlooked, then the department was willing to fund an independent study. This had been the offer to the City of Belgrade, the only condition was that whoever did that study had to be qualified.

REP. MARSHALL asked if they charge for the study being done. Mr. Barnard replied they did not charge for the study. REP. MARSHALL asked if the City of Bozeman had requested a study. He said they had. The decision to do this depended on the time of year and had to have normal conditions, such as spring, and be accomplished within six months. He noted that with careful drivers, 85% of them will adjust to conditions. He said that most speed zone study results are not controversial.

Closing by Sponsor:

REP. EWER closed on the bill. He said he felt that there was still a bias for the motoring public.

{Tape: 3; Side: A; Approx. Counter: 0; Comments: None.}

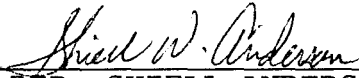
The primary factor of how fast the traffic is going is not the only one to consider. Many people are bicycling or walking to work. The local control issue is an important one. He commented that there are other variables to consider.

EXECUTIVE ACTION ON HJR 13

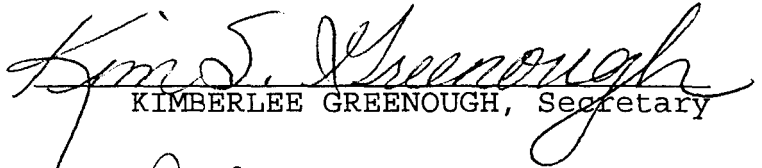
Motion/Vote: REP. MATT BRAINARD MOVED THAT HJR 13 DO PASS. A voice vote was taken. The motion carried 17 to 1 with REP. RICK JORE voting no.

ADJOURNMENT

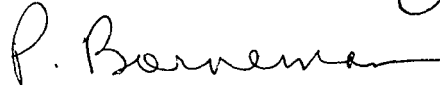
Adjournment: 5:15 p.m.



REP. SHIELL ANDERSON, Chairman



KIMBERLEE GREENOUGH, Secretary



for

DEB THOMPSON, Recording Secretary

SA/ksg/dt

HOUSE OF REPRESENTATIVES

Highways

ROLL CALL

DATE 01-27-95

NAME	PRESENT	ABSENT	EXCUSED
Rep. Shiell Anderson, Chairman	✓		
Rep. Rick Jore, Vice Chairman, Majority	✓		
Rep. Pat Galvin, Vice Chairman, Minority	✓		
Rep. Joe Barnett	✓		
Rep. Matt Brainard	✓		
Rep. Bob Clark	✓		
Rep. Charles Devaney	✓		
Rep. Marian Hanson	✓		
Rep. Don Larson	✓		
Rep. Rod Marshall	✓		
Rep. Linda McCulloch	can	Late 4:40pm	
Rep. Daniel McGee	✓		
Rep. Jeanette McKee	✓		
Rep. Bill Ryan	✓		
Rep. Dore Schwinden	✓		
Rep. Roger Somerville	✓		
Rep. Joe Tropila	✓		
Rep. Jack Wells	✓		



HOUSE STANDING COMMITTEE REPORT

January 30, 1995

Page 1 of 1

Mr. Speaker: We, the committee on **Highways and Transportation** report that **House Joint Resolution 13** (first reading copy -- white) do pass.

Signed: Kim Greengard for
Shiell Anderson Chair

Rep. Shiell Anderson

Committee Vote: Rep.
Yes 17, No 1. Yore No.

251251SC.Hbk

EXHIBIT 1
DATE 1/27/95
HJR 13

RESOLUTION #2571-95-1

TRIBAL GOVERNMENT

WHEREAS, the Fort Peck Tribal Executive Board is the duly elected body representing the Assinibone and Sioux Tribes of the Fort Peck Reservation and is empowered to act on behalf of the Tribes. All actions shall be adherent to provisions set forth in the 1960 Constitution and By-Laws, and

WHEREAS, the National Rail Passenger Corporation known as AMTRAK is considering discontinuing services on the hi-line region in Montana, and

WHEREAS, discontinuance would thus create a transportation crisis on the Fort Peck Indian Reservation located in the remote corner of North-East Montana, and

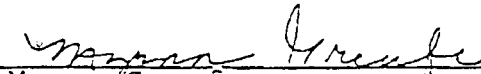
WHEREAS, rail service is used by children needing special medical treatment in Spokane, WA. as AMTRAK has handicap facilities available, travels on a daily basis through inclement weather conditions, now

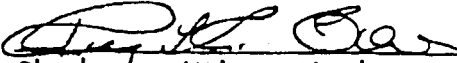
THEREFORE, BE IT RESOLVED, that because of the remote area in which the Fort Peck Indian Reservation is located and discontinuance of service would create a hardship on area residents traveling, the Fort Peck Tribes oppose AMTRAK discontinuing services in Montana.

BE IT FURTHER RESOLVED, that the Fort Peck Tribes appeal to Mr. Thomas Downs, President of the National Rail Passenger Corporation in Washington D.C. to withdraw this consideration and leave services of AMTRAK the way they are on the Fort Peck Indian Reservation and Montana.

C E R T I F I C A T I O N

I, the undersigned Secretary Accountant of the Tribal Executive Board of the Assinibone and Sioux Tribes of the Fort Peck Indian Reservation, hereby certify that the Tribal Executive Board is composed of 12 voting members of whom 11 constituting a quorum were present at a Regular meeting duly called and convened this 23rd. day of January, 1995, that the foregoing resolution was duly adopted at such meeting by the affirmative vote of 11.


Myrna Greufe, Secretary


Chairman/Vice-Chairman
Tribal Executive Board

Wyman Babby, Superintendent
Fort Peck Agency

Faxed Sharon Peterson 657-6793
Baucus' office.

Lawmakers make plea to preserve Amtrak

By MARTHA FOURCADE
Medill News Service

WASHINGTON — Sen. Conrad Burns, R-Mont, said Thursday that nationwide cuts in Amtrak's service could affect the economy of northern Montana.

Transportation executives and government officials testified before the Senate Commerce, Science and Transportation Committee on the future of the rail system. Amtrak officials recently announced major service cutbacks, including the Empire Builder, which runs from Chicago to Seattle via Montana.

"This is the only public transportation these people have," said Burns, a member

of the committee. "And I believe the Empire Builder is probably not the financial liability that some pencil pushers make it out to be."

Service between the two cities will run four days a week starting Feb. 1, instead of the current daily service. The cuts are part of a restructuring plan to save Amtrak from a projected shortfall of almost \$200 million by next June.

Sen. Trent Lott, R-Miss., urged company officials to postpone cuts until the government could help Amtrak. But Amtrak's President Thomas Downs answered: "I need time for my bankers. And they want money. M.O.N.E.Y."

The recent cuts are part of a new

"business-oriented no-nonsense approach" to a national railroad network, said Jolene Molitoris, an administrator for the Federal Railroad Administration. "The cuts in employment and service were very tough, but they were sound business decisions," Molitoris added.

In a last-minute effort to suspend the cuts, Sen. Max Baucus, D-Mont, will meet with Downs Friday morning and discuss alternatives to service cuts. The senator also invited Amtrak decision-makers to ride the Empire Builder and talk to passengers before making a final decision.

Baucus and Burns urged Amtrak to defer the cuts on the Empire Builder until

the spring, but the company still hasn't responded and the service cutback date is less than a week away.

"I don't see what 45 days are going to change, especially when you are running full trains," Burns said. "Why they would take away that window of opportunities to make money is beyond me. I just think it's a bad business decision."

Yet northern Montana residents dread the changes.

"I am not happy at all with Sen. Burns and our governor, because I think as Republicans, they are afraid to push the issue," said Darlene Jenkins, a Cut Bank resident who organized local efforts to

protest the reduction of services.

"I always see the government put money in things they believe in and take money out when it doesn't work," Jenkins added. "It's about time they got their act together and fixed something."

Amtrak is the only east-west public transportation available across northern Montana. "Northern Montana has few other types of air or ground transportation, few planes and no inter-city bus service," said John Craig, chief of the multimodal planning bureau with the Montana Department of Transportation. "The only alternative up there is the highway system, and in the wintertime it gets pretty bad."

The Billings Gazette

1/27/95



City of Helena



Lewis and Clark
County

EXHIBIT 3
DATE 1/27/95
HB 254



City of East Helena

TRANSPORTATION COORDINATION COMMITTEE

January 26, 1995

Montana House of Representatives
Capitol Building
Helena, MT 59601

RE: House Bill 254

Honored Representatives:

I am writing today to provide you with written testimony relative to the above referenced house bill. This bill is entitled "An act requiring the Department of Transportation and local authorities to consider other factors in addition to an engineering and traffic study in establishing a special speed limit; requiring concurrence by a local government for special speed limits for federal-aid highways in incorporated municipalities and towns; and amending sections 61-8-309 and 61-8-310, MCA."

I am the Transportation Demand Management Coordinator for the City of Helena and Lewis and Clark County. As such, it is my responsibility to assist in providing alternative methods of travel opportunities, and safe byways for pedestrians and bicyclists as well as automobiles, carpools, buses, etc.

This bill is extremely important to the people of Montana's many cities and towns. It will allow local municipalities utilizing the talent of informed individuals to assist in the determination of special speed limits in areas of high congregation of children, elderly, or the disabled.

When the Department of Transportation performs a speed study, reviews accident data, considers the design speed of a section of roadway, a speed limit is set which reflects the outcome of all of these reviews. There is no weight given to the fact that there is a school in this area, or that children or the elderly are crossing a portion of this roadway frequently, and these items are as important as the current speed of autos, and the design speed. What we are asking in this bill is to have the opportunity to have these factors considered along with the other items.

Realizing that motorists drive the speed at which they feel most comfortable on a roadway, we as municipalities are implementing traffic calming measures which will assist in naturally lowering the speed on roadway sections, however we need your help to set special speed limits where children's lives are at stake. We all understand that the speed limit only applies and affects law abiding citizens, however just because some people will not respond to the lower limits is no reason not to try to reach as many people as we can, and save as many children/elderly/disabled as possible.

When we place a school on a busy street, mark crosswalks, sign the area, instruct people to cross the street at these locations, these individuals place their trust in us as regulators that we have provided them the best, most safe place to cross. When we ignore the fact that they cross at this location, raise the speed limit, or refuse to lower it, we have violated that trust.

I urge you to support this bill and thereby give us one small tool to assist in the determination of speed limits set on special sections of the federal-aid highways bisecting our communities where children, the elderly or disabled are directly affected by the speed of traffic.

Sincerely,

Dianne W. Johnson
TDM Coordinator

EXHIBIT 4
DATE 1/27/95
HB 254

HB 254

My name is Sara Toubman. I live in Helena. I would like to comment in favor of HB 254. I love to walk and city streets are one of the places I walk. Many people walk for exercise, for their health, to enjoy the outdoors, to enjoy the city. Some have to walk because it is their mode of transportation. When walking, it is often necessary to cross main streets or to walk along them. High speed traffic makes crossing difficult and dangerous, and walking along the streets unpleasant. To make our cities and towns more people friendly and healthier and safer, I recommend passage of this bill. Thank you.

Sara Toubman



CITY OF BILLINGS
OFFICE OF THE TRAFFIC ENGINEER
510 N. BROADWAY - 4TH FLOOR
BILLINGS, MT 59101
PHONE (406) 657-8241

EXHIBIT 5
DATE 1/27/95
RE 254

JAN 23 1995

January 22, 1995

TO: *Mark Watson City Admin.*
Ken Haag, P.E., Director of Public Works
FROM: *H.T.S.* Terry Smith, P.E., City Traffic Engineer

I also recommend that we oppose this Bill.
Kelly

SUBJECT: House Bill 254--Modifications to the speed limit statutes

This bill implements the following major changes to the state codes covering how speed zones are established:

- I. adds additional criteria that the Highway Commission and local governments must consider in setting speed limits. In addition to an engineering and traffic study, the bill language enumerates the following as items that must be considered:
 - i. the effect of traffic speed on noise and air quality, including dust
 - ii. the effect on pedestrian & bicycle travel along and across the highway
 - iii. the proximity of concentrations of children, seniors, or disabled persons to the highway
- II. deletes existing section 61-8-310(1)(d) allowing local authorities to reduce speed limits near schools and senior centers to 80% of the value recommended by an engineering study (with a minimum of 25 MPH and certain other restrictions)
- III. states that the Highway Commission must have the concurrence of all incorporated municipalities and towns in setting speed limits on federal-aid routes in their jurisdiction. The "concurrence" is retroactive, in that proposed section 61-8-310(4)(b) provides that if the local government "ceases to concur" that the Highway Commission shall establish a new speed limit in which the local government concurs, within 180 days of being notified of the local government's nonconcurrence.

From a technical standpoint, I believe this bill (along with several others) reflects an ignorance of the factors to be considered in an engineering & traffic study. The *Manual on Uniform Traffic Control Devices* (MUTCD) enumerates the following criteria for consideration in an engineering and traffic study:

- 1) road surface conditions, shoulder condition, grade, alignment, and sight distance
- 2) the 85th-percentile speed and pace speed
- 3) roadside development and culture, and roadside friction
- 4) safe speed for curves and hazardous locations within the zone
- 5) parking and pedestrian activity
- 6) reported accidents for a recent 12 month period

Please identify concern and oppose it in bill.

Memo to Ken Haag RE: House Bill 254, January 22, 1995, Page 2

These criteria are repeated almost verbatim in the Department of Transportation's speed zone pamphlet *How Fast*. Therefore, at least two of the three new criteria proposed are part of the existing "engineering and traffic study" criteria. More importantly, the three new criteria, by being drawn out separately, are poised to give credibility to the emotional reactions that accompany proposed changes in speed limits. While hard scientific data is available on the effects of traffic speed on air quality (at least for vehicle emissions--I'm not aware of any direct scientific data for dust) and noise, the other factors are much more subjective. The net effect (both on local streets and along primary highways because of the concurrence mandate) of granting special status to these subjective factors and of removing the 25 MPH minimum for schools and senior centers, will be an increase in the number of improperly set and unreasonably low speed limits.

I recommend going on record as being **opposed** to this bill. Due to the local government concurrence requirements, it will lead to a lack of uniformity in the speed limits posted on our major highways through local communities. It will also lead to establishment of unreasonable "speed traps" in local communities as a result of political pressures to "make our roadways safe" by posting artificially low speed limits.

Thank you for the opportunity to review and comment on this legislation. Please contact me if you have questions or need additional information.

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

RE: House Bill 254

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 House Bill No. 254.

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 important issue and I think we need to spend the time now, rather than later, to present you with information that is critical to your decision.

Speed zone recommendations are based on traffic and engineering investigations. These investigations, and the items to be covered, are spelled out in the M.U.T.C.D. The MUTCD has been adopted by all 50 states, including Montana, as well as, just to name a few:

The American Association of State Highway &
Transportation Officials

The Institute of Transportation Engineers
National Association of Committees

International Association of Chiefs of Police

International Institute of Law Enforcement Officers

The Federal Government
American Bar Association and the
National Safety Council.

So you can see that this is not some arbitrary process adopted by the Montana Department of Transportation. These investigations look at several things and I'd like to refer you to hand out #1. One consideration is 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 in order to have the safest condition. 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.

I'd like you to note the highlighted area in attachment #1 which 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". Once again, this manual has been adopted by the State of Montana.

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. In the folder, which I have passed out, are documents to back that up.

2. 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 consensus that many speed related accidents results from both excessively low and high speed. This article was written by an individual from a nationally recognized traffic engineering firm.

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 when speed limits are increased or decreased. And in fact, in two cases where speed limits were increased, 85th percentile speeds actually decreased.

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. This article (highlighted on page 21) also cites 3 other studies which confirm that the 85th percentile is the safest in most cases.

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, handout #6 shows the results of before and after studies in the town of

Neihart. 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 part of the town yet the 85th percentile speed did not increase. The Department has other studies that show the same results.

Now to the specific changes proposed to the law. Section 1, subsection 2 on page 1 places an engineering and traffic investigation as only one of four elements that must be used to set special speed limits.

-Elements C and D are already part of the traffic and engineering investigation spelled out in the manual. That places noise, air quality and dust levels as the primary change to this portion of existing law.

-The traffic and engineering investigation is the only element that has any objective method related to identifying the appropriate reasonable and safe speed limit.

AIR QUALITY

-There are contradictive relationships between air quality and travel speed. CO and HC emissions drop with increased speed and NOX emissions increase as

speeds go up.

How do you weigh the increase of one type of emission against the decrease of another?

What weight do you give air quality as compared to safety?

NOISE

Traffic would have to double before we would see a noticeable change in noise level. It would take a very large change in speed to affect a noticeable change in noise level. We can place speed limit signs with well meaning intent towards lowering noise and motorist compliance will be low.

What weight would we give noise as compared to safety?

DUST

PM10 levels are affected much more by volume and surface type than speed. The amount of speed reduction required to have a significant affect on dust would have to be very large.

-There are much better and more realistic ways to deal with dust control, including sweeping, reducing sanding, and dust control chemical applications. Once again how would we weigh dust compared to safety?

But our most serious objection is the proposed changes on Page 2, Lines 23 through 26. This language is an attempt to

allow local government to force the Montana Highway Commission to establish arbitrarily low speed zones.

Let me remind you that as shown in the documents in the green folder, reduced speed limits do not cause a significant change in speeds. Arbitrary speed zones, either too high or too low do increase accidents. Arbitrary speed limits do create speed traps. A speed limit that is set only 10 mph below what prudent and safe drivers feel is reasonable will cause 70% of the drivers to become violators.

What subsection (b) Lines 23 through 26 will do is place tremendous increased liability upon the State of Montana. If the Commission is forced to establish an unrealistic speed zone, when there are numerous studies to show that these arbitrarily low speed zones increase accidents then there definitely is considerable liability.

For these reasons we are very much opposed to this bill. If this committee is not of a mind to kill this bill then amend it to delete, in particular, Subsection b.

Thank you. I'll be available to answer any questions you may have.

Our Chief Counsel is also here if you would like more information concerning the liability issue.

EXHIBIT

6

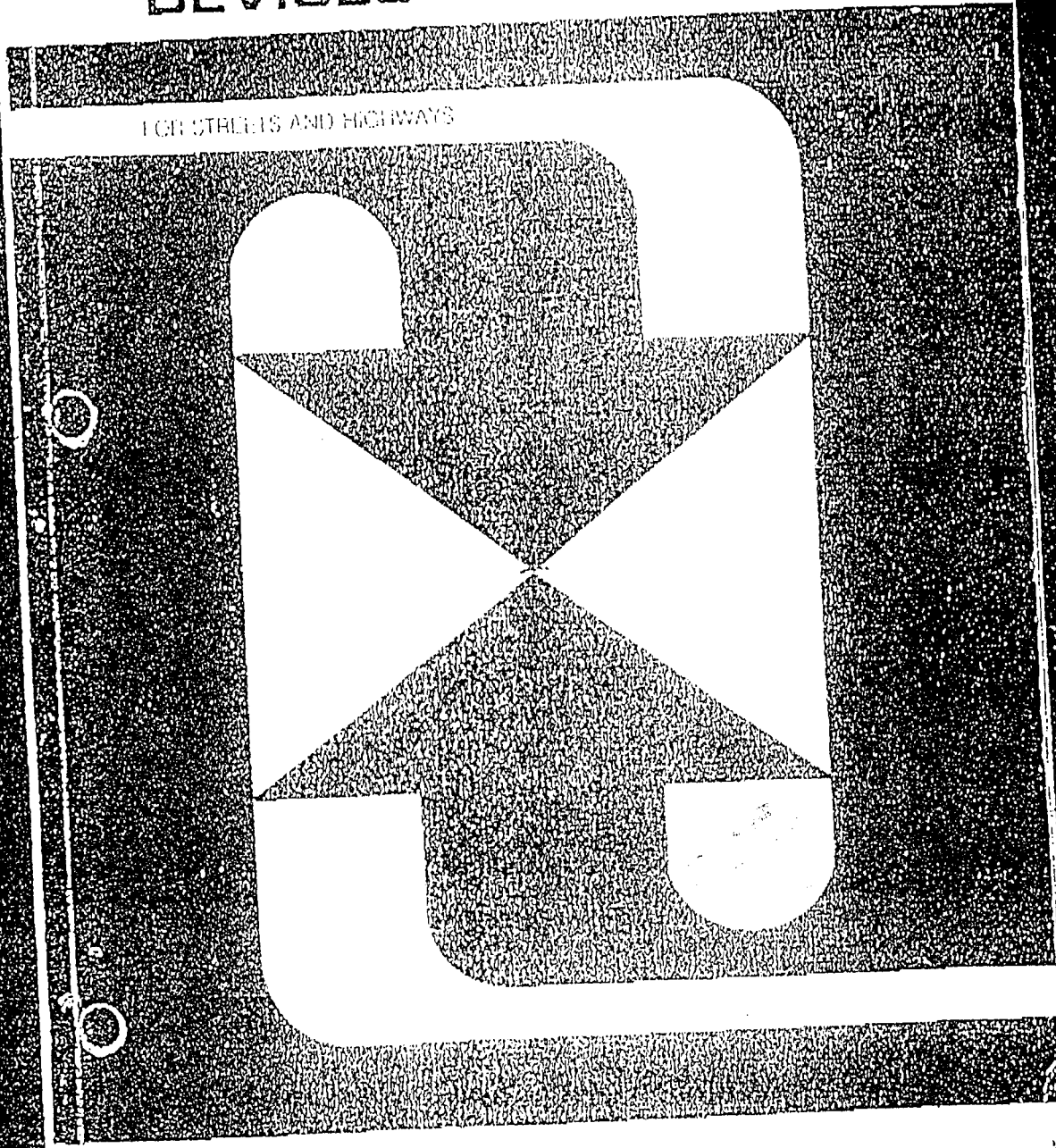
DATE

1-27-95HB 254

MANUAL
ON
UNIFORM
TRAFFIC
CONTROL
DEVICES

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.

EXHIBIT

DATE 1-27-95

HB 254

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
24" x 24"

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 flashers can be safely disregarded.

(Continued on page 94)

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EXHIBIT 6
DATE 1-27-95
HB254

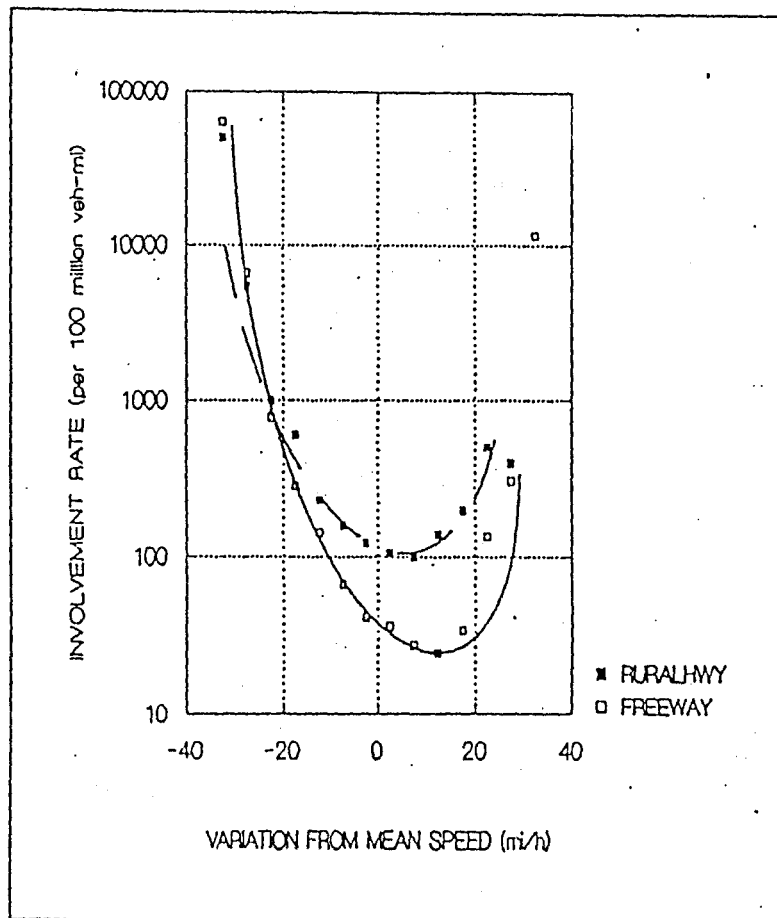


FIGURE 1. RELATIONSHIP BETWEEN ACCIDENT INVOLVEMENT AND DEVIATION FROM AVERAGE TRAFFIC SPEED (SOURCE: HARKEY, ROBERTSON AND DAVIS, "ASSESSMENT OF CURRENT SPEED ZONING CRITERIA")

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	After Posting Higher Limit	
Massachusetts	Oct. 1966	19 Two-lane 6 Dual-lane	30-45 50-55	47.5 60.7	48.3 60.3	48.0 61.0	After posting 10 mph lower and higher limits than existing zones, no difference in 85th percentile speeds were found.
Michigan	1982	4 4 4 5	25 55 55 45	37.6 56.8 57.8 49.2	48.3 54.8 56.0 47.0	36.0	Speed limit increased to 35 mph. Violations decreased from 90.4 to 19.3 percent. Speed limit lowered to 50 mph. Violations increased from 26.6 to 44.4 percent. Speed limit lowered to 50 mph. Violations increased from 29.3 to 53.8 percent. Speed limit lowered to 35 mph. Violations increased from 43.7 to 93.2 percent.
Minnesota	Jan. 1979	12 Two-lane 4 Four-lane	45 40	NA 42.0	43.6 40.3		Speed limit lowered to 30 mph. Speed limit lowered to 30 mph.
Washington	1981-82	3 1 1 3	25 50 50 40	34.7 57.0 43.0 45.0		34.3 59.0 42.0 43.7	Speed limit raised to 30 mph. Speed limit raised to 55 mph. Speed limit lowered to 35 mph. Speed limit lowered to 35 mph.

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

Source: The Traffic Institute
Northwestern University

- 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).



U.S. Department
of Transportation

Federal Highway
Administration

Report No. /RD-85/096

SYNTHESIS OF SPEED ZONING PRACTICES

Research, Development,
and Technology

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

July 1985

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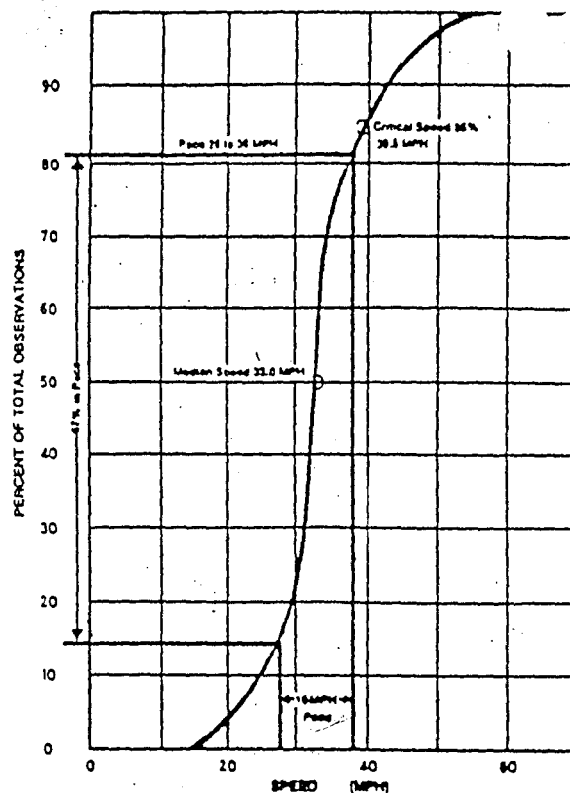


EXHIBIT 6
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 # HB 254

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

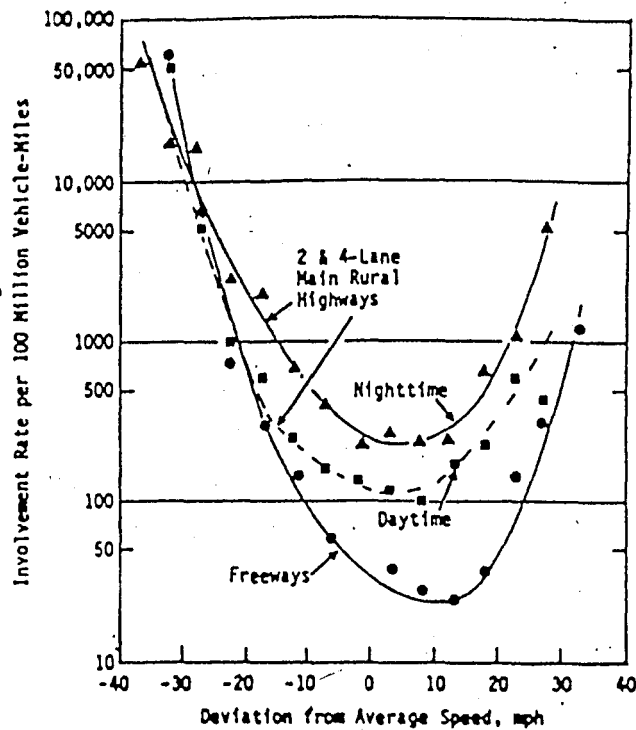


Figure 4. Relationship between accident involvement rate and deviation from mean speed.

Source: Reference [37]

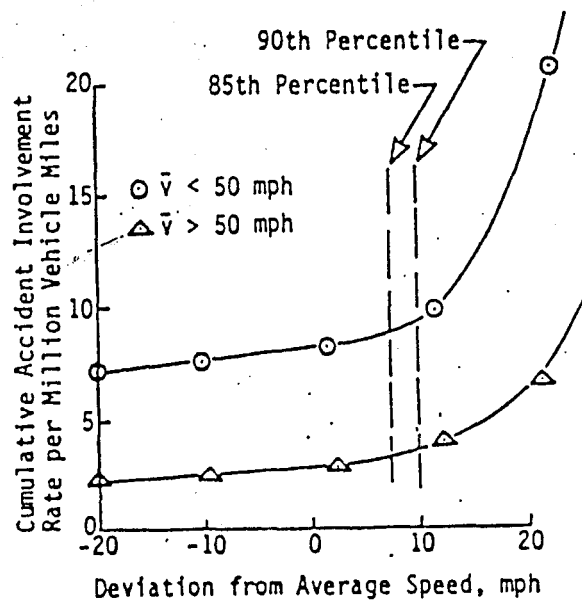


Figure 5. Relationship between 85th percentile speed, accident involvement rate, and deviation from mean speed for two levels of traffic speed.

Source: Reference [37]

Neihart Speed Profile

EXHIBIT 6
 DATE 1-27-95
 HB 254

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

6

HOUSE OF REPRESENTATIVES

VISITOR'S REGISTER

Highways COMMITTEE BILL NO. HJ 13
 DATE 1-27-95 SPONSOR(S) _____

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	BILL	OPPOSE	SUPPORT
James T. MULAR	TCU	HJ13		X
Bob Bashum	Self	HJ13		✓
Bob Stevens	NARP/AERO	HJ13		✓
Joe Brand	Self	HJ13		X
D. B. DITZEL	Bro. of Locomotive Eng's	HJ13		X
George Henry Brunner	Kalispell County	HJ13		X
WARRELL HOLZER	AFL-CIO	HJ13		X
FRAN MARCEAU	UTU (KALISPELL)	HJ13		X
MATTHEW COHN	MONTANA DEPT OF COMMERCE	HJ13		X
David Owen	mt chamber	HJ13		✓
ROGER SOMERVILLE	SELF & HD 78	HJ13		X
Rep Gary Feland	HD 88	HJ13		X
Rick Van Aken	TCU TCU 528	HJ13		X

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES

VISITOR'S REGISTER

Highways COMMITTEE BILL NO. HJ 013
 DATE 1/27/95 SPONSOR(S) _____

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	BILL	OPPOSE	SUPPORT
<i>Patricia Saundon</i>	<i>MT Dept Trans</i>			<input checked="" type="checkbox"/>

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES
VISITOR'S REGISTER

Highways & Transportation COMMITTEE

BILL NO. 294

DATE 1-27-95 SPONSOR(S) _____

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
CLARENCE BRAZIL	SELF	X	
CRAIG REAF	MHP	X.	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES
VISITOR'S REGISTER

Highways
DATE 1-27-95

COMMITTEE

BILL NO. 254

SPONSOR(S)

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
DIANNE JOHNSON CITY OF HELENA	HTC COUNTY CITY OF HELENA	X	
Patricia Abelin Highway	MT Highway Commission		X
Tom Barnard	MT Dept. of Transportation		X
W James Kembel	City of Billings		X
Sara Toubman	self	X	
CEDRON JONES	SELF	X	
Donald L. Coborn	Self		
Joe Barnett	Rep. HD32 Belgrade	X	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.