

HOUSE
COMMITTEE REPORT

(7)

Date referred: 3/26/86

FURTHER REFERRALS:

DATE: 4-7-86

The FINANCE Committee has considered HB 552

"An Act relating to setting speed limits and neighborhood speed zones."

and recommends:

- do pass
- do not pass
- do pass with attached amendment(s)
- no recommendation
- replace with CS HB 552 (FIN) same title
- new title

and recommends do pass

further referral to the _____ Committee

- and attaches:
- letter of intent
 - first fiscal note
 - new fiscal note
 - zero fiscal note

SIGNING DO PASS:

[Signature]

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SIGNING OTHER RECOMMENDATIONS:

[Signature] - no Rec

[Signature]
Chairman

STATE OF ALASKA 1986 LEGISLATIVE SESSION FISCAL NOTE

Revision Date: 4/7/86

REQUEST

Bill/Resolution No.: CSHB 552 (FIN)
 Title: Re: Setting speed limits
 and neighborhood speed zones

Sponsor: Uehling, Martin, Ringstad, et al
 Requestor: House Finance Committee
 Date of Request: 4/7/86

FISCAL DETAIL

Agency Affected: DOT&PF
 BRU: Design & Construction
 Engineering & Operations Standards

Components: _____

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91
PERSONAL SERVICES	-	0	0	0	0	0
TRAVEL		0	0	0	0	0
CONTRACTUAL		0	0	0	0	0
SUPPLIES		0	0	0	0	0
EQUIPMENT		0	0	0	0	0
LAND & STRUCTURES		0	0	0	0	0
GRANTS, CLAIMS		0	0	0	0	0
MISCELLANEOUS		0	0	0	0	0
TOTAL OPERATING		0	0	0	0	0

CAPITAL		0	0	0	0	0
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REVENUE		0	0	0	0	0
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FUNDING : (Thousands of Dollars)

GENERAL FUND		0	0	0	0	0
FEDERAL FUNDS		0	0	0	0	0
OTHER		0	0	0	0	0
TOTAL		0	0	0	0	0

POSITIONS :

FULL-TIME		0	0	0	0	0
PART-TIME		0	0	0	0	0
TEMPORARY		0	0	0	0	0

ANALYSIS : Attach a separate page if necessary

The Governor's proposed FY 87 budget for DOT&PF is \$166 million. The funds needed to hold the public hearings provided for in this bill can be absorbed within that level of appropriation.

Prepared by: Al Adams, Chair *ADA* Phone: 465-3706
 Division: House Finance Committee Date: 4/7/86

Approved by Commissioner: _____ Date: _____
 Agency: _____

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

Original sponsors: Uehling, Martin,
Ringstad, et al

1 IN THE HOUSE

BY THE FINANCE COMMITTEE

2 CS FOR HOUSE BILL NO. 552 (Finance)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FOURTEENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act relating to setting speed limits and neigh-
7 berhood speed zones."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 * Section 1. AS 19.10.070 is amended to read:

10 Sec. 19.10.070. DETERMINATION OF SAFE SPEED LIMITS. The de-
11 partment may conduct investigations with the assistance of the Depart-
12 ment of Public Safety and shall determine safe speed limits and safe
13 speed zones on highways and other roadways under its jurisdiction.

14 * Sec. 2. AS 19.10 is amended by adding a new section to read:

15 Sec. 19.10.072. NEIGHBORHOOD SPEED ZONES AND LOCAL HEARING
16 PROCESS. (a) In determining safe speed limits and safe speed zones,
17 the department shall consider the following factors in the order of
18 priority listed:

19 (1) neighborhood safety, including the presence of children
20 and pedestrian traffic;

21 (2) the presence of schools, houses, parks, and crosswalks;

22 (3) the presence of driveways, parked vehicles, and multi-
23 ple turn locations;

24 (4) that speed at which safe and prudent drivers could pass
25 through the speed zone; and

26 (5) the effectiveness of local enforcement of the speed
27 zone.

28 (b) In determining safe speed limits and safe speed zones within
29 a municipality the department shall consult with that municipality.

1 In determining safe speed limits and safe speed zones on highways and
2 arterial roadways under its jurisdiction the department shall also
3 consult with community councils or other neighborhood organizations in
4 the affected area, if the community councils or other neighborhood
5 organizations request in writing to participate in the determination.
6 The department shall provide notice and opportunity for a hearing
7 before establishing a speed limit or speed zone other than as recom-
8 mended by a municipality, community council or other neighborhood
9 organization.
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**STATE OF ALASKA 1986 LEGISLATIVE SESSION
FISCAL NOTE**

Revision Date : _____

REQUEST

Bill/Resolution No. : C.S. for HB 552
 Title : "An Act Relating to Setting
 Speed Limits and Neighborhood
 Speed Zones"
 Sponsor : Uehling, Martin, Ringstad, et al
 Requestor : _____
 Date of Request : _____

FISCAL DETAIL

Agency Affected : DOT&PF
 BRU : Design & Construction
 Divisions _____
 Components : _____

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91
PERSONAL SERVICES	0	20.1	20.8	21.6	22.3	23.1
TRAVEL	0	8.4	8.7	9.0	9.3	9.6
CONTRACTUAL	0	13.2	13.7	14.1	14.7	15.2
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	41.7	43.2	44.7	46.3	47.9

CAPITAL	0	0	0	0	0	0
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REVENUE	0	0	0	0	0	0
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FUNDING : (Thousands of Dollars)

GENERAL FUND	0	41.7	43.2	44.7	46.3	47.9
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	0	41.7	43.2	44.7	46.3	47.9

POSITIONS :

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

ANALYSIS : Attach a separate page if necessary

SEE PAGE 2.

John P. Simpson, Dir. 4/2/86
 Gordon G. Hayes

Prepared by : _____
 Division : Engineering & Operations/Standards

Phone : 465-2968
 Date : April 1, 1986

Approved by Commissioner : _____
 Agency : Department of Transportation and
 Public Facilities

Date : 4/5/86

Distribution (by Agency preparing fiscal note) :
 Legislative Finance
 Legislative Sponsor
 Requestor
 Office of Management and Budget
 Impacted Agency(ies)

CONTINUATION of FISCAL NOTE ANALYSIS

For Bill/Resolution No. Committee Substitute
for HB 552 dated 3/26/86

Assumptions:

- (1) No significant implementation costs in FY 1986.
- (2) Approximately 30 hearings per year Central Region, 10 hearings per year Northern Region, 2 hearings per year Southeast Region.
- (3) Approximate cost per hearing = \$995.
- (4) Approximate inflation to costs = 3.5% per year.

Program Summary:

With approximately twenty speed zone establishments per year, and about 20 other requests to lower speed limits, it is estimated that at least 30 hearings per year would be required in the Central Region. (Some cases/locations may require more than one hearing.) Comparable rates are 10 per year Northern Region, and 2 per year Southeastern Region, with participation by about two State employees.

Most of these formal hearings would be held in the evening or weekends so more persons could attend. Formal hearings would require official transcripts, and travel by State personnel would be required in about half the hearings.

The additional costs are expected to be borne by the State.

Computations: (See attachments for detailed computations.)

Cost for first full year = 42 hearings x \$995 per hearing = \$42,790

Allowance for inflation of 3.5% per year for subsequent years.

FISCAL NOTE ATTACHMENT

Committee Substitute for HB 552

An Act Relating to Setting Speed Limits and Neighborhood Speed Zones

DETAILED COMPUTATIONS:

(Supplied by Central Region in consultation with Northern Region)

Approximately 20 speed orders were signed in 1985. At the request of local governments, community councils, and/or individuals we looked at an additional 10 to 20 locations to determine if lower speed limits would improve safety. Based on the above I would expect a minimum of 30 public hearings per year in the Central Region. The first several years after the legislation passed would most likely see more than that. Historically, community councils support lower limits (on state highways) than what are really justified. Therefore, I would expect most of these issues to go to public hearing. (In some cases more than one hearing may be necessary for a particular case or location.)

PUBLIC HEARING: Cost of transcript

(Provided by R&R Court Reporters of Anchorage)

*Recorders Time - Before 5:00 p.m. - \$30/hr
5:00 - 8:00 p.m. - \$45/hr
After 8:00 p.m. - \$50/hr
Flight Time - \$20/hr

*Transcript - \$3.75/page
40 pages/hr

The public hearing would include a 15-20 minute introduction by DOT&PF. Discussion would include safety and operational issues along the specific roadway. There would be a presentation on speed limits. Then we would give our recommendations. Next would be a questions/answer period followed by public testimony.

Based on the above, the average meeting should last approximately 1½ hours + ½ hour for the recorder to set up and take down. The hearings would normally occur after 7:00 p.m.

Recorders Time	\$45/hr x 2 hr	= \$ 90
Transcript	\$3.75/page x 40 pages/hr x 1½	= \$225
Total		\$315

Travel - Out of town travel is extra.

*DOT&PF Personnel and Travel Time Anchorage area. (This estimate is in addition to time already spent studying and working the issue.):

Public Hearing Preparation	1 hour
Public Hearing and Travel	3 hours
Analyze Transcript and Respond	2 hours
Number of DOT&PF Employees	x 2
<hr/>	
Total Hours/Public Hearing	12 hours
Cost (buffered rate)/hour	\$40
Total \$/Hearing	\$480

*Travel Time - Outside of Anchorage:

One half of the hearings would be in either Wasilla, Palmer, Kenai, or Kodiak.

Add \$200/person (DOT&PF) for any of the above locations. This would average \$100/person more for all hearings or \$200 per hearing overall for two people.

SUMMARY OF EXPENSES PER HEARING:

1. Recorders Fee	\$315
2. DOT&PF Personnel	\$680
Total	\$995 per hearing

FIRST YEAR COSTS:

30 hearings Central + 10 hearings Northern + 2 hearings Southeastern = 42 hearings per year.

42 x \$995 per hearing = \$41,790

Estimate constant hearing load per year but 3.5% cost inflation per year.



Dept. of Transportation & Public Facilities

Position Paper

BILL NO:

Transportation Committee
Substitute for House Bill 552

APPROVED:

R. J. Knapp
Commissioner

TITLE:

An Act Relating to Setting Speed Limits
and Neighborhood Speed Zones

DATE:

4/1/86

In response to the original bill, the department presented its detailed procedure for setting speed limits where they are not covered by the State's "blanket" speed laws. These procedures contain explanations of the established engineering reasons for the procedures, and indicate that they are essentially those advocated by all major highway engineering organizations in order to provide for safe, efficient movement of traffic.

It was further pointed out that the various factors in the original bill were considered in our established procedures, and that the speed limit based on objective measurements could be modified based on subjective considerations by responsible engineering professionals.

Therefore, the department was neutral on the original bill, and although it is rare that a law is costless, indicated no significant fiscal impact.

The March 26, 1986, Transportation Committee substitute for HB 552 formalizes the subjective considerations into a priority list, and relegates the accepted primary safety engineering criterion to fourth place.

Furthermore, it requires the department to provide notice and hold hearings when various organizations do not agree with objectively set speed limits.

The increased costs associated with the proposed procedures, the additional demands on personnel time at the expense of other vital activities, the increased time and paperwork to accomplish needed speed limit changes, and the possible adverse effects on public safety require the department to oppose this bill as it now stands.

Rec'd 4/7/86
R.O. 4/7/86

STATE OF ALASKA 1986 LEGISLATIVE SESSION FISCAL NOTE

Revision Date: 4/4/86

REQUEST

Bill/Resolution No.: CSHB 552 (Trsp)
 Title: An act relating to setting
 speed limits and neighborhood speed
 zones.
 Sponsor: Uehling, Martin
 Requestor: House Finance
 Date of Request: 4/04/86

FISCAL DETAIL

Agency Affected: Public Safety
 BRU: Alaska State Troopers

 Components: _____

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-

CAPITAL						
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REVENUE						
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FUNDING : (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS :

FULL-TIME	0	0	0	0	0	0
PART-TIME						
TEMPORARY						

ANALYSIS : Attach a separate page if necessary

Prepared by: T. Michael Lewis
 Division: Alaska Highway Safety Planning Agency

Phone: 465-4371
 Date: 4/4/86

Approved by Commissioner: [Signature]
 Agency: Public Safety

Date: 4/4/86

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

Alaska State Legislature

ANCHORAGE
DOWNTOWN
DISTRICT TWELVE

AIRPORT HEIGHTS
CITY VIEW
DOWNTOWN
FAIRVIEW
GOVERNMENT HILL
INLET VIEW
SOUTH ADDITION



House of Representatives

Representative

RICK UEHLING

MEMBER

HOUSE FINANCE COMMITTEE

HOUSE SPECIAL COMMITTEE
ON STATE LOANS

HOUSE FINANCE SUBCOMMITTEE ON
ADMINISTRATION, REVENUE
AND THE GOVERNOR'S OFFICE

To: Rep. Bette Cato
Chair, House Transportation Committee
From: Rep. Rick Uehling
Subject: HB 552, "An Act relating to setting speed limits and
neighborhood speed zones"
Date: March 24, 1986

I have asked staff to provide the following background and information regarding HB 552, "An Act relating to setting speed limits and neighborhood speed zones":

HB 552 would require DOT to consider the presence of neighborhoods, schools, parks, and pedestrian traffic when setting speed limits. I refer to this concept as Neighborhood Speed Zones.

Our State law charges DOT with setting speed limits but the Legislature has never given DOT any indication of what factors it should consider when setting speed limits. As a result, speed limits are decided according to DOT internal policies called policies and procedures. With the State spending hundreds of millions of dollars on new roads across the State, it is more important now than ever that there be some protections built into the system for our neighborhoods.

This legislation is the outgrowth of work spent over the interim trying to get DOT to respond to traffic problems in our Downtown district. It was extremely frustrating to realize we had no protections built into the system for our neighborhoods. Local residents have no where to turn in statute or regulation to support their attempts to get DOT engineers to respond to neighborhood concerns about the safety of streets. Neighborhood Speed Zones (HB552) will be an important protection, not just for the safety of our Streets in Anchorage, but throughout the state as well.

Changes were made by the House State Affairs Committee to insure that DOT responds to the concerns of local government and neighborhood organizations by providing for public notice and the holding of public hearings.

The House Transportation Committee Substitute reorganizes the structure of the House State Affairs Committee in a clarifying manner. I support the House Transportation Committee Substitute and would ask that the Committee adopt amendment number one. This amendment allows the title to be returned to it's original form after Legal affairs changed it without consulting anyone.

Amendment 1 to CS HB 552 (Transportation)
by Uehling

Ln. 6 and 7

Delete "safe " and insert "neighborhood"

"An Act relating to setting speed limits and [safe] neighborhood
speed zones"

This amendment returns the title to its original form. It was
changed by Legal services without the concurrence of the sponsor
or committee staff.

Ln. 15 and 16

Delete "Safety Factors" and insert "Speed Zones"

Sec. 19.10.072. Neighborhood [Safety Factors] Speed Zones And
Local Hearing Process

DEPARTMENT OF PUBLIC SAFETY

POSITION PAPER - HB 552

NEUTRAL

March 3, 1986

HB 552 - "An act relating to setting speed limits and neighborhood speed zones."

This legislation is considered unnecessary as current laws and regulations provide specific criteria for determining safe speed limits and safe speed zones. Regulations established by 13 AAC 02.275 mandate that unless otherwise posted, maximum speed limits shall be as follows:

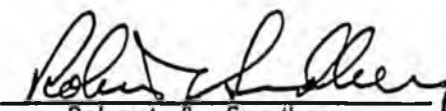
- 1) 15 miles per hour in an alley
- 2) 20 miles per hour in a business district
- 3) 25 miles per hour in a residential district
- 4) 55 miles per hour on any other roadway

Alterations of speed limits by the State and municipalities are provided for in 13 AAC 02.280 and based upon engineering and traffic investigations.

The speed limit for school, park and playground zones is established through 13 AAC 02.325.

Traffic engineer studies conducted by the Department of Transportation and Public Facilities in determining safe speed limits for a specific roadway include the already established regulations as well as the geophysical characteristics of that roadway and the presence of driveways, multi-turn locations and roadside obstacles.

Moreover, the amendment in Section 19.10.070 is redundant in that all posted highways are safe speed zones. A 55 MPH posted roadway is a speed zone that is determined as a safe speed limit for that particular highway, just as a speed zone for a school area of 20 MPH is considered a safe speed limit based upon the presence of schools, parks, crosswalks and pedestrian traffic.


Robert J. Sundberg



Dept. of Transportation & Public Facilities

Position Paper

BILL NO: HB 552

TITLE: An Act relating to setting speed limits and neighborhood speed zones

APPROVED: *W. S. [Signature]*
R. J. Knapp
Commissioner
DATE: 2-19-86

The attached Policy and Procedure (P&P) 70-7003 "Establishment: Speed Zones" provides uniform departmental guidelines when speed controls are requested or required. The Alaska Statute (19.10.070), our P&P, and 13AAC02.275-330 all provide for coordination with appropriate enforcement agencies in the establishment of restricted speed zones. Criteria from the Manual on Uniform Traffic Control Devices and a traffic engineering handbook which provide for speed zone management by the department are also attached.

The department believes these existing documents sufficiently control the establishment of speed limits and speed zones.

BILL SHEFFIELD, GOVERNOR

P.O. Box 2
Juneau, Alaska 99811

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
ENGINEERING AND OPERATIONS STANDARDS DIVISION

PHONE: (907) 465-2951

Elaboration on DOT&PF Position Paper on House Bill No. 552,
"An Act Relating to Setting Speed Limits
and Neighborhood Speed Zones"

The DOT&PF "Position Paper" on HB 552 cites several authoritative sources which explain the traffic and safety engineering concepts nationally accepted for the establishment of safe speed zones. The DOT&PF policy (P&P 70-7003) summarizes the accepted criteria, and further elaborates on the reasons that these principles insure the safest and most efficient movement of traffic.

Numbers 1 and 2 of the proposed Section 19.10.072 contain criteria that are indirectly addressed through special consideration of these factors in the requisite speed profile study (see paragraph two of Section 2.b., page 2, of P&P 70-7003).

Number 4 of the amendment is exactly what the traffic and safety engineering techniques are designed to insure. The body of engineering knowledge available indicates that a speed zone set according to our policy produces the condition indicated in Number 4. (See second and third full paragraphs of page 3 of the P&P.)

It does not appear practicable to rationally alter speed limits based on some judgement of enforcement effectiveness as recommended in Number 3. And as stated in the last paragraph on page 2 of P&P 70-7003, a limit set other than by scientific means would be difficult to enforce. Nevertheless, properly set speed limits need enforcement to control that small percent of drivers who are not reasonable and prudent as pointed out in the last paragraph of Section 2 on page 3 of the P&P.

There is no way to quantify the effects of the specific criteria in the amendment, and therefore the application of these considerations would be subject to individual judgement and ambiguous interpretation.

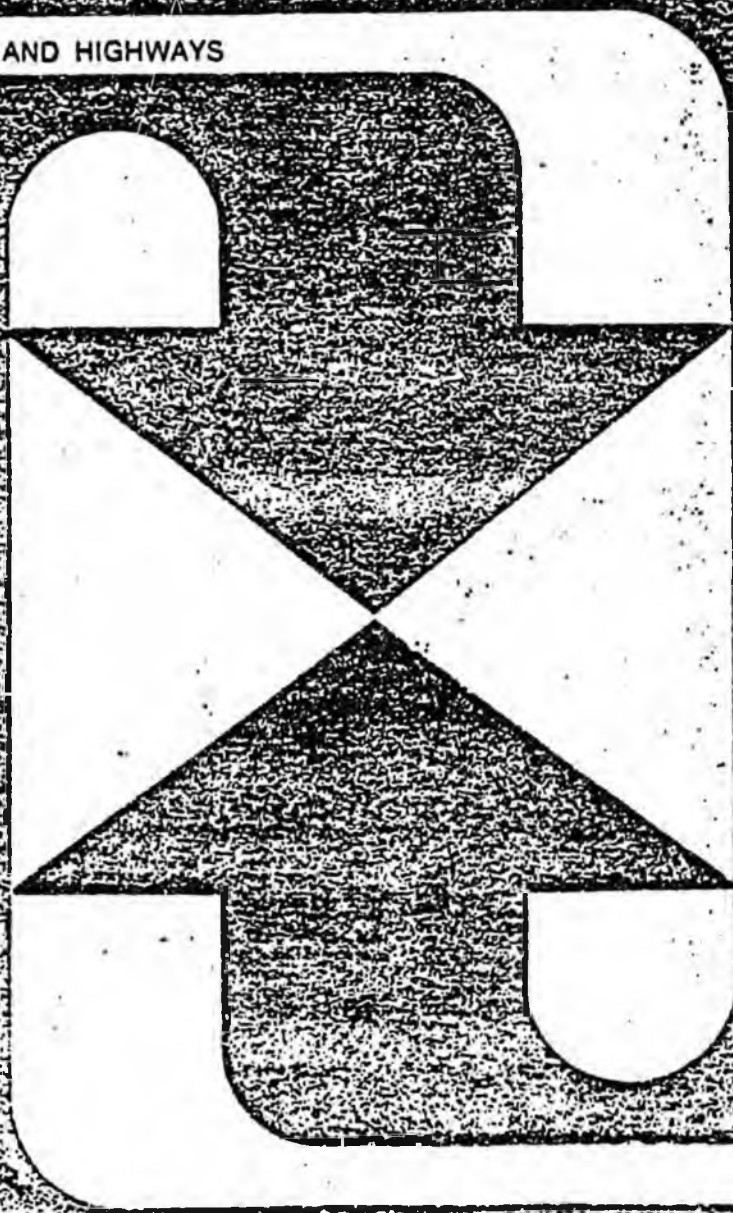
As the Position Paper points out, the essentials of the proposed amendment to AS 19.10 are already covered in our policy which, by complying to accepted safety engineering principles, provides the best protection to the public and the best defense for the State against tort claims actions.

ALASKA TRAFFIC MANUAL

UNIFORM
TRAFFIC
MUTCD WITH The Alaska Supplement
DEVICES

7/82

FOR STREETS AND HIGHWAYS



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
24" x 24"

*ALL 50 STATES
are used
when establishing
speed zones*

message or on a separate plate (R2-2). When used independently, the Truck Speed sign should carry a reference to SPEED or MPH.

Minimum speeds shall be displayed only in combination with the posted speed limit (sec. 2B-12).

Advisory Speed signs are treated under section 2C-35.

The standard Speed Limit sign shall be 24 × 30 inches. On expressways the sign should be at least 36 × 48 inches, with 48 × 60 inches prescribed for use on freeways.

2B-11 Night Speed Sign (R2-3)

Where different speed limits are prescribed for day and night, both the limits shall be posted. This may be done in either of two ways:

1. Immediately below the standard Speed Limit sign (R2-1) or combined with it, a Night Speed sign (R2-3) carrying the legend NIGHT 45 (or other suitable numerical limit) may be erected. In this case the numerals in the Night Speed sign and only the words SPEED LIMIT in the standard sign, should be reflectorized. As a special but logical exception to the general color scheme, the Night Speed sign should have its legend in white upon a black background.

2. A changeable message sign may be used, so that only the appropriate regulation is visible at a given time. The sign may have interchangeable panels, or reflectorization of the nighttime speed superimposed over the unreflectorized numerals of the daytime speed, to permit only the nighttime speed to become legible in the beam of motor-vehicle headlamps at night.



R2-3
24" x 24"

2B-12 Minimum Speed Sign (R2-4)

Where an engineering and traffic investigation shows that slow speeds on a highway consistently impede the normal and reasonable movement of traffic, signs may be used to post a minimum legal speed. Driving slower than the minimum limit is illegal except when necessary for safe operation or in compliance with the law. The minimum speed shall be displayed only in combination with the posted speed limit, and if desired, these two signs may be combined (R2-4a). The Minimum Speed sign shall have a standard, and minimum, size of 24 × 30 inches.



R2-4
24" x 30"



R2-4a
24" x 48"

2B-13 Location of Speed Limit Sign

Speed Limit signs, indicating speed limits for which posting is required by law, shall be located at the points of change from one speed limit to another. These signs shall not be erected until the speed limits are approved and officially authorized.

At the end of the section to which a speed limit applies, a Speed Limit sign showing the next speed limit shall be erected. Additional signs shall be installed beyond major intersections and at other locations where it is necessary to remind motorists of the limit that is applicable. In school areas, the END SCHOOL ZONE sign may be used as an alternate to the Speed Limit Sign.

11-45 (c)
Rev. 3

The Speed Zone Ahead sign (sec. 2B-14) may be used to give advance notice of a speed zone with a lower limit.

In rural districts on U.S. and other State numbered routes, Speed Limit signs indicating the statutory speed limits shall be erected at entrances to the State and at boundaries of metropolitan areas. A special oversize sign is often desirable at these locations.

2B-14 Sign for Reduced Speed Ahead (R2-5)

This sign should be used in rural areas to inform the motorist of a reduced speed zone when an advance notice is needed to comply with the speed limit posted ahead. The sign is not ordinarily needed in urban areas where speeds are relatively low.

This sign shall always be followed by a Speed Limit sign erected at the beginning of the zone where the altered speed limit applies.

This sign shall have a standard size of 24 × 30 inches. It shall, however, be of the same size as the Speed Limit sign at the beginning of the speed zone, shall be erected in the same manner, and shall display one of the three illustrated legends:



R2-5a
24" x 30"



R2-5b
24" x 30"



R2-5c
24" x 30"

2B-15 Turn Prohibition Signs (R3-1 to 3)

Turn Prohibition signs should be used to indicate the turns that are prohibited or restricted at a particular intersection.

The standard, and minimum, size of the No Right Turn sign (R3-1), the No Left Turn sign (R3-2), and the NO TURNS sign (R3-3) shall be 24 × 24 inches.

Turn Prohibition signs should be placed where they will be most easily seen by drivers intending to turn. Where No Right Turn signs are needed, at least one should be placed either over the roadway or at a right-hand corner of the intersection. If signals are present, the sign may be installed adjacent to a signal face viewed by motorists in the right lane.

Where No Left Turn signs are needed, at least one should be placed over the roadway or at a left-hand corner of the intersection. If signals are present, the sign may be installed adjacent to a signal face viewed by motorists in the left lane. Where No Turns signs are needed, two signs should be used, one at a location specified for a No Right Turn sign and one at a location specified for a No Left Turn sign. If signals are present, a No Turns sign may be placed adjacent to a signal face viewed by all motorists on that approach.

11-10 (c)
Rev. 3

If advance signs are used, care should be taken that no alley or public driveway exists between them and the intersection where the turning movement is prohibited. At an intersection where one or more approaches to the intersection are limited to one-way traffic, whether signalized or not, the ONE WAY sign (sec. 2B-29) shall be used, and may be supplemented by the Turn Prohibition sign (fig. 2-3, page 2A-11). A Turn Prohibition sign is not needed at a ramp entrance to an expressway where the design is such as to indicate clearly the one-way traffic movement on

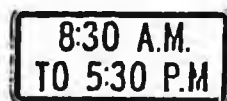
passengers, is not visible for a distance of 500 feet in advance. It shall have a minimum 30" x 30" size.

It is not intended that these signs be used everywhere a school bus stops to pick up or discharge passengers but for use only where terrain and roadway features limit the approach sight distance and where there is no opportunity to relocate the stop to another location with adequate visibility.

7B-12 School Speed Limit Signs (S4-1, S4-2, S4-3, S4-4)

The School Speed Limit sign shall be used to indicate the speed limit where a reduced speed zone for a school area has been established (in accordance with law, after an engineering and traffic investigation) or when a speed limit is specified for such areas by statute. The sign shall be either a fixed-message sign assembly or a variable display type sign.

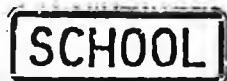
The fixed message sign assembly shall consist of a top panel (S4-3), 24" x 8" (the legend SCHOOL in black on a yellow background), a Speed Limit sign (R2-1), 24" x 36", and a bottom panel (S4-1) indicating the specific periods of the day and/or days of the week, when the special school speed limit applies. The bottom panel shall be 24" x 10" (or larger if needed) and shall have a black legend on a white background. Alternate legends such as WHEN CHILDREN ARE PRESENT (S4-2) may be used if permitted by law. The numerical speed limit displayed on the sign shall be the limit established by law.



S4-1
24" x 10"



S4-2
24" x 10"



S4-3
24" x 8"

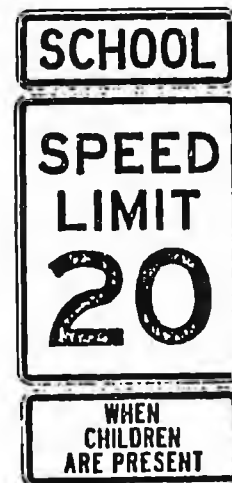


S4-4
24" x 10"

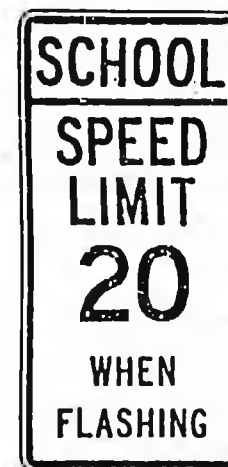
Variable display signs may be used to indicate the special school speed limit. These signs may use blank-out messages or other methods to display the school speed limit only during the periods it applies. A Speed Limit Sign Beacon may also be used, with a WHEN FLASHING sign (S4-4), to identify the periods the school speed limit is in force. The

lenses of the Speed Limit Sign Beacon may be positioned within the face of the School Speed Limit sign.

Because of special features, it may not always be practical to make variable display signs conform in all respects to the accepted standards. However, during the periods the school speed limit is in force, their basic shape, message, legend layout, and colors should conform to the standard for the fixed message sign, except that if the sign is internally illuminated, it may have a white legend on a black background.



School Speed Limit
Sign Assembly



Possible Sign
With Speed Limit
Sign Beacon

Variable display signs with flashing beacons should be used for the more critical situations, where greater emphasis of the special school speed limit is needed.

Where practical, consideration should be given to including, on the back of variable display signs, a light or device to indicate the speed limit message is in operation or visible.

The end of an authorized and posted school speed zone shall be marked with a standard Speed Limit sign showing the speed limit for the section of highway which follows or with an END SCHOOL ZONE sign.

7B-13 Parking and Stopping Signs (R7 Series)

Parking signs and other signs governing the stopping and standing of vehicles in school areas cover a very wide variety of regulations and only general specifications can be laid down here. Typical examples are as follows:

1. No Parking 8:00 AM to 5:00 PM School Days Only.
2. No Stopping 8:00 AM to 5:00 PM School Days Only.
3. 5 Min. Loading 8:00 AM to 5:00 PM School Days Only.

Textbook

Many European and other countries have tended historically either to enforce speed limits only in hazardous rural areas or in urban areas or to enact single speed limits by statute to cover all highways of a certain kind in a given area. The practice of setting special speed limits for specific roadway conditions is relatively new. In some cases (Route M-1 in England, for example) highways were or are operated with no speed limit whatever. This total lack of speed control has generally proven unsafe.

SPEED REGULATIONS

FACTORS AFFECTING SPEED REGULATIONS

Public attitude. The traffic engineer will receive many requests for establishing new speed limits or for altering existing limits upward or downward. Such requests often reflect citizen opinion that something is wrong with a particular section of highway or with the operation of traffic thereon. A request for a revised speed limit, usually lower than the limit posted, is sometimes the only immediate solution that the public can offer. Such requests often are based on the misconception that almost all motorists will automatically exceed the posted limit by 5 or 10 mph and that the only way to reduce speeds is to reduce the speed limit. Citizens, acting as individuals or groups, will frequently request lower speed limits for their own neighborhood streets than they, as drivers, would consider reasonable in similar neighborhoods elsewhere.

The consensus of traffic engineers in the United States is that motorists usually adjust their speeds according to conditions on the road and not necessarily to posted speed limits. Hence, if unreasonably low limits are posted, the limit will be violated by large numbers of drivers. This leads to disrespect of other posted limits as well.

Studies of speed in Europe have shown, almost without exception, that the speed of vehicles can be considerably reduced by installing a speed limit. Experience in the United States indicates that drivers do not drastically alter speed patterns with changes in speed limits. One possible explanation is that European experience generally deals with the application of speed limits for the first time, but the United States experience usually deals with revision of existing speed limits.¹

Public reaction to the imposition of speed limits varies. In 1971 West Germany proposed the imposition of a 100 kph (62 mph) speed limit on two-lane rural roads where previously no speed limit had been posted. The purpose was to reduce West Germany's high accident rate. The general public reaction was one of anger.² In other instances, speed limits have been welcomed.

Accident frequency and severity vs. speed. Various safety campaigns aimed at drivers have attempted to persuade them that speed is the cause of almost all accidents, and that if speed can be controlled, accidents will be prevented or reduced. Although excessive speed has often been listed in police reports as the cause or major contributing factor in accidents, the real problem is driving too fast for prevailing conditions.

Statistics have generally shown that the imposition of a speed limit in an urban

¹ DONALD C. CLEVELAND, "Speed and Speed Control," *Traffic Control and Roadway Elements—Their Relationship to Highway Safety* (Revised, Chapter 6 (Washington, D.C.: Highway Users Federation for Safety and Mobility, 1970), p. 6.

² ALICE SIEGERT, "Speed Limits Irk Germans," *Chicago Tribune*, October 11, 1971, Sec. 1-A, p. 3.

specific speed limits. This information should be gathered both in a qualitative and quantitative manner which will justify the actions taken.

Requisite studies. The *Uniform Vehicle Code* requires that an engineering and traffic investigation shall be the basis for altering any maximum speed limit set forth in the Code. Almost all state laws contain a similar provision. What constitutes "an engineering and traffic investigation" is not described in the statute or in the *Uniform Vehicle Code*. Judgment must be used to select the pertinent data. Because posted speed limits apply to normal roadway conditions (dry pavement, good visibility, roadway uninhibited by traffic congestion or accidents) those data should be collected so that they truly indicate what would be considered normal maximum speed under such conditions.

The following factors should be considered, and appropriate data gathered, in establishing speed limitations:

1. Prevailing vehicle speeds
 - a. 85-percentile speed
 - b. Pace
 - c. Average test run speeds
 - d. Speed distribution data
2. Physical features
 - a. Design speed
 - b. Measurable physical features
 1. Maximum comfortable speed on curves
 2. Spacing of intersections
 3. Number of roadside businesses per mile
 - c. Roadway surface characteristics and conditions
 1. Slipperiness of pavement
 2. Roughness of pavement
 3. Presence of transverse dips and bumps.
 4. Presence and condition of shoulders
 5. Presence and width of median
3. Accident experience
4. Traffic characteristics and control
 - a. Traffic volumes
 - b. Parking and loading vehicles
 - c. Commercial vehicles
 - d. Turn movements and control
 - e. Traffic signals and other traffic control devices that affect or are affected by vehicle speeds
 - f. Vehicle-pedestrian conflicts¹¹

The spot speed check should show whether only free-moving vehicles or whether all vehicles were recorded. A free-moving vehicle is one in which the driver is not restricted by other vehicles in selecting his speed. Observations should be restricted to those vehicles having at least from 6- to 9-sec headways from those ahead and making no apparent effort to overtake and pass them.

¹¹ For additional information on these factors and their application to speed zoning, see "An Information Report on Speed Zoning," *Traffic Engineering*, XXXI, No. 10 (1961), pp. 39-44.

The 85-percentile speed as determined by spot speed studies is the principal factor generally used by traffic engineers to determine speed limits. Although this method is highly satisfactory on streets and highways carrying moderate to heavy volumes of traffic, it is difficult to apply on low-volume roads because of the time consumed in gathering the necessary number of observations. In such cases, trial runs can serve as a satisfactory substitute.

Criteria for establishing speed limits. The Traffic Committee for the American Association of State Highway Officials adopted in 1970 the following policy statement for the establishment of speed zones:

The 85th percentile speed is to be given primary consideration in speed zones below 50 miles per hour, and the 90th percentile speed is to be given primary consideration in establishing speed zones of 50 miles per hour or above. To achieve the optimum in safety, it is desirable to secure a speed distribution with a skewness index approaching unity.

Signing for speed limits. Signing for speed limits should be consistent with the appropriate sections of the latest edition of a manual on uniform traffic control devices, or an equivalent, used in each country (see Chapter 16, Traffic Signs and Markings).

Signs for speed limits are erected at varying intervals, depending on highway type and general location. In urban areas, speed limit signs are usually erected at intervals not exceeding one-half mile if the speed limit is 40 mph or less. On freeways and in rural areas, frequency of signing varies considerably, with intervals between signs usually ranging from one to five miles.

DETERMINATION OF ADVISORY SPEED INDICATIONS

Two basically different methods are available for determining advisory speed limits on horizontal curves: (1) by trial speed runs with a test vehicle or (2) by office calculation. Either method is satisfactory, but field runs to check the office calculations are desirable in any event.

The trial speed runs method involves using a vehicle equipped with a ball-bank indicator to show the combined effect of the body roll angle, the centrifugal force angle, and the superelevation angle. Safe speeds on curves are indicated by ball-bank readings of 14° for speeds below 20 mph, of 12° for speeds between 20 and 35 mph, and of 10° for speeds of 35 mph and higher. Also, 10° is safe for 50 mph and even 60 mph, but for higher speeds a smaller reading should be used.¹²

In using the office method for determination of advisory speed, the advisory speed indication for a curve may be calculated by the following formula:

$$V = \sqrt{\frac{(e + f)R}{0.067}} = \sqrt{15(e + f)R}$$

where V = advisory speed of vehicle in mph,
 e = superelevation in ft per ft of horizontal width,
 f = transverse coefficient of friction,
 R = radius of curvature in ft.

¹² *A Policy on Geometric Design of Rural Highways* (Washington, D.C.: American Association of State Highway Officials, 1965), p. 154.

13 AAC 02.325. SPECIAL SPEED LIMITATIONS. (a) No person may drive a motor-driven cycle when lights are required to be turned on as prescribed under 13 AAC 04.010 at a speed greater than allowed by the intensity of the headlights as provided by 13 AAC 04.320.

(b) No person may drive a vehicle which is towing a mobile home at a speed greater than 45 miles per hour.

(c) No person may drive a vehicle equipped with lighted headlights described in 13 AAC 04.020(g) at a speed greater than 20 miles per hour.

School zone
(d) No person may drive a vehicle at a speed in excess of 20 miles per hour when passing a marked public school or playground crosswalk that is posted with an official school, school crossing or speed-control sign. The speed zone at the crosswalk extends 300 feet in either direction from the marked crosswalk.

(e) No person may drive a vehicle passing a school bus displaying alternately flashing yellow lights as provided in 13 AAC 04.097(b) at a speed greater than 20 miles per hour.

(f) No person may drive a vehicle or a combination of vehicles over a bridge or other elevated structure or through a tunnel or underpass constituting a part of a highway, ferry facility or city street at a rate of speed or with a gross weight or of a size which is greater than the maximum speed or maximum weight or size designated by an official traffic-control device. (In effect before 7/28/59; am 12/15/61, Reg. 3; am 8/10/66, Reg. 22; am 12/31/69, Reg. 31; am 6/28/79, Reg. 70)

Authority: AS 28.05.011

13 AAC 02.330. RACING ON HIGHWAYS. (a) No person may participate in a race between motor vehicles upon a public highway, except as provided in AS 05.35.

(b) As used in this section, "race" means the use of one or more vehicles in attempting to outgain or outdistance another vehicle or while comparing or contesting relative speeds or powers of acceleration of the vehicles over a specified or unspecified distance or route,

whether or not the speed exceeds the maximum prescribed by law. (Eff. 12/31/69, Reg. 31; am 6/28/79, Reg. 70)

Authority: AS 28.05.011

ARTICLE 8. STOPPING, STANDING, AND PARKING

Section

- 340. Stopping, standing, or parking on highway and in other locations
- 345. Officers authorized to remove vehicles
- 350. (Repealed)
- 355. (Repealed)
- 360. (Repealed)
- 365. Additional parking regulations
- 367. Loading zones
- 370. (Repealed)
- 372. Public carrier stops
- 375. (Repealed)
- 377. Parking meter zones

13 AAC 02.340. STOPPING, STANDING, OR PARKING ON HIGHWAY AND IN OTHER LOCATIONS. (a) No person may stop, park or leave standing a vehicle, whether attended or unattended, upon or within eight feet of a roadway, except where the roadway is of sufficient width and design to allow parking without interfering with the normal flow of traffic or with snow removal or other highway maintenance, and where the parking, stopping or standing is not prohibited by an official traffic-control device.

(b) This section and sec. 365 of this chapter do not apply to the driver of a vehicle performing an official duty which requires stopping, standing or parking upon or within eight feet of a roadway or to the driver of a vehicle which is disabled in a manner and to an extent that it is impossible to avoid stopping and temporarily leaving the vehicle upon or within eight feet of a roadway. The driver of a disabled vehicle shall comply with the requirements of sec. 345 of this chapter.

(c) A vehicle that is stopped, parked, or standing in violation of a statute, regulation, or ordinance, is considered to have been stopped, parked or left standing by the registered owner of the vehicle unless the registered owner is able to prove that at the time of the violation the

13 AAC 02.260. OVERTAKING AND PASSING SCHOOL BUS. (a) The driver of a vehicle meeting or overtaking a school bus stopped on a highway must stop before reaching the school bus when there is in operation on the school bus flashing red lights as provided in 13 AAC 04.097. The driver may not proceed until the school bus resumes motion, he is signaled by the school bus driver to proceed, or the flashing red lights are no longer illuminated.

(b) Repealed 6/28/79.

(c) The driver of a vehicle upon a highway with separate roadways need not stop upon meeting or passing a school bus which is on a different roadway, or when upon a controlled-access highway and the school bus is stopped off the roadway in a loading zone which is part of, or adjacent to, the controlled-access highway and where pedestrians are not permitted to cross the roadway.

(d) When a school bus is stopped on a roadway, whether or not there are in operation flashing red lights as required in 13 AAC 04.097, a driver of a vehicle shall yield the right-of-way to children crossing a roadway to embark on or disembark from the school bus, whether or not the children are crossing within a marked crosswalk, or crossing the roadway upon which the bus is located. (In effect before 7/28/59; am 12/15/61, Reg. 3; am 8/10/66, Reg. 22; am 12/31/69, Reg. 31; am 6/28/79, Reg. 70)

Authority: AS 28.05.011

13 AAC 02.265. STOP WHEN TRAFFIC MAY BE OBSTRUCTED. No driver may enter an intersection or crosswalk, or drive onto a railroad grade crossing unless there is sufficient space on the other side of the intersection, crosswalk or railroad grade crossing to accommodate the vehicle he is driving without obstructing the passage of other vehicles, pedestrians, or railroad trains, notwithstanding a traffic-control signal indication to proceed. (Eff. 6/28/79, Reg. 70)

Authority: AS 28.05.011

ARTICLE 7. SPEED RESTRICTIONS

Section

- 275. Basic rule and maximum limits
- 280. Alteration of limits by state and municipalities
- 285. (Repealed)
- 290. (Repealed)
- 295. Minimum speed regulation
- 300. (Repealed)
- 305. (Repealed)
- 310. (Repealed)
- 315. (Repealed)
- 320. (Repealed)
- 325. Special speed limitations
- 330. Racing on highways

13 AAC 02.275. BASIC RULE AND MAXIMUM LIMITS. (a) No person may drive a vehicle at a speed greater than is reasonable and prudent considering the traffic, roadway, and weather conditions.

(b) Except when a special hazard exists that requires a lower speed for compliance with (a) of this section, the limits specified in this subsection are the maximum lawful speeds throughout the state, and no person may drive a vehicle at a speed in excess of these maximum limits, unless otherwise posted:

- (1) 15 miles per hour in an alley;
 - (2) 20 miles per hour in a business district;
 - (3) 25 miles per hour in a residential district;
- or
- (4) 55 miles per hour on any other roadway.

(c) Repealed 6/28/79.

(d) Repealed 6/28/79.

(e) The maximum speed limits set forth in (b) of this section may be altered as authorized in sec. 280 of this chapter. (In effect before 7/28/59; am 12/15/61, Reg. 3; am 8/10/66, Reg. 22; am 12/31/69, Reg. 31; am 6/28/79, Reg. 70)

Authority: AS 28.05.011

13 AAC 02.280. ALTERATION OF LIMITS BY STATE AND MUNICIPALITIES. (a) When the Department of Transportation and Public Facilities with the assistance of the department, or a municipality, in their respective jurisdictions and consistent with AS 28.01.010, determines upon the basis of an engineering and traffic investigation that a maximum speed prescribed in sec. 275(b) of this chapter is greater or lesser than is reasonable or safe under the conditions found to exist at an intersection, or an arterial street, or at any other place or part of the state or municipal highway system, the respective authority may determine a reasonable and safe maximum limit at the location. The maximum speed limit is effective when signs giving notice of the maximum limit are erected.

(b) Alteration under (a) of this section may

(1) decrease the limit at an intersection or other place where a full stop is necessary;

(2) increase the limit to not more than 55 miles per hour;

(3) decrease the limit within an urban district to less than 20 miles per hour, except as otherwise provided under AS 28.01.010(b); or

(4) decrease the limit outside an urban district.

(c) A maximum speed limit may be effective at all times or at times indicated by the signs required by (a) of this section. Limits may be established for different times of day, different types of vehicles, varying weather conditions, and other factors bearing on safe speeds. The limits are effective when posted upon fixed or variable signs.

(d) The Department of Transportation and Public Facilities or a municipality, in their respective jurisdictions, may regulate the timing of traffic signals to permit the movement of traffic in an orderly and safe manner at speeds slightly at variance from the speeds otherwise applicable within the district or at intersections when they erect signs giving notice of the variance. (In effect before 7/28/59; am 12/15/61, Reg. 3; am 8/10/66, Reg. 22; am 12/31/69, Reg. 31; am 6/28/79, Reg. 70)

Authority: AS 28.05.011

13 AAC 02.285. WHEN LOCAL AUTHORITY MAY ALTER MAXIMUM LIMIT. Repealed 6/28/79.

13 AAC 02.290. SPEED LIMIT CONFLICTS. Repealed 6/28/79.

13 AAC 02.295. MINIMUM SPEED REGULATION. (a) No person may drive a motor vehicle so slowly as to impede the normal and reasonable movement of traffic, except when reduced speed is necessary for safe operation or in compliance with statutes, regulations, or ordinances.

(b) When the Department of Transportation and Public Facilities, or a municipality, in their respective jurisdictions, determines under sec. 280 of this chapter that slow speeds on a highway or part of a highway unreasonably impede the normal movement of traffic, the respective authority may determine a minimum speed limit not in excess of 55 miles per hour for that highway or part of a highway below which no person may drive a vehicle, except when necessary as prescribed in (a) of this section. The limit is effective when posted on fixed or variable signs. (In effect before 7/28/59, am 12/15/61, Reg. 3; am 8/10/66, Reg. 22; am 12/31/69, Reg. 31; am 6/28/79, Reg. 70)

Authority: AS 28.05.011

13 AAC 02.300. SPEED LIMIT ON LIMITED OR CONTROLLED-ACCESS FACILITY. Repealed 6/28/79.

13 AAC 02.305. "STOP" SIGN AT INTERSECTION WITH INCREASED SPEED HIGHWAY. Repealed 6/28/79.

13 AAC 02.310. MAXIMUM SPEED LIMIT WHEN PASSING SCHOOL OR PLAYGROUND CROSSWALK. Repealed 6/28/79.

13 AAC 02.315. MAXIMUM SPEED, WEIGHT OR SIZE - BRIDGE, ELEVATED STRUCTURE, TUNNEL AND UNDERPASS. Repealed 6/28/79.

13 AAC 02.320. SPECIAL SPEED LIMITATION ON MOTOR SCOOTER. Repealed 6/28/79.

MEMORANDUM

State of Alaska
Department of Transportation & Public Facilities

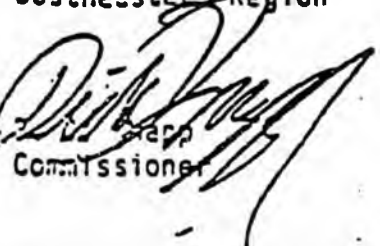
to Jon Scribner
Deputy Commissioner
Southeastern Region

DATE: May 15, 1984

FILE NO

TELEPHONE NO 465-3900

SUBJECT: Statewide Policy on
Setting Speed Zones


Commissioner

Attached is a Policy and Procedure (P&P) on the establishment of speed zones on state-maintained roadways. This P&P formalizes the general procedure used by the Regional Traffic and Safety units.

The "speed order" on page 5 of the P&P should be prepared in a form suitable for your Region's organization, with appropriate position titles inserted under the delegated approval spaces. Please send a copy of the form to be used by your Region to my Standards and Technical Services Division for their files.

Attachment

cc: John J. Simpson, Director, Standards & Technical Services Division

mdh

MAY 17 1984

STANDARDS & TECHNICAL SERVICES
DIRECTOR'S OFFICE

STATE OF ALASKA 1986 LEGISLATIVE SESSION FISCAL NOTE

Revision Date : _____

REQUEST

Bill/Resolution No. : HB No. 552
 Title : An Act Relating to Setting
 Speed Limits and Neighborhood Speed
 Zones
 Sponsor : Uehling, Martin, Ringstad, et. al.
 Requestor : _____
 Date of Request : February 24, 1986

FISCAL DETAIL

Agency Affected : DOT&PF
 BRU : Design and Construction
 Engineering and Operations Standards
 Components : Traffic and Safety

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL	0	0	0	0	0	0
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REVENUE	0	0	0	0	0	0
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FUNDING : (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

POSITIONS :

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

ANALYSIS : Attach a separate page if necessary

On-site engineering studies of varying complexity are already required in the appropriate establishment of all speed zones. Therefore, no significant impact on expenditures can be anticipated.

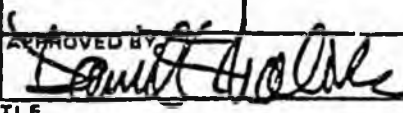
Gordon G. Hayes, Director 2/21/86

Prepared by : Gordon G. Hayes Phone : 465-2968
 Division : Engineering & Operations Standards Date : February 21, 1986

Approved by Commissioner : *[Signature]* Date : 2/25/86
 Agency : Transportation and Public Facilities

Distribution (by Agency preparing fiscal note) :

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES POLICY AND PROCEDURES		P & P No. 70-7003	Page 1 OF 6
SUBJECT ESTABLISHMENT OF SPEED ZONES		Effective Date May 15, 1984	
		Supervisor P & P no.	Dated
DIVISION Standards and Technical Services		SECTION Traffic and Highway Safety	CHAPTER TITLE Speed Zones
APPROVED BY 			

PURPOSE

To guide personnel in the uniform establishment of speed zones.

POLICY

It shall be the policy of this department to have and maintain uniform criteria statewide for the establishment of speed zones. Individuals responsible for administering this program will be required to apply these criteria according to accepted engineering practices.

DISTRIBUTION

All holders of the "Design and Construction" and "Maintenance and Operations" Policy and Procedures manual, and Regional Traffic and Safety Engineers.

PROCEDURE

ESTABLISHMENT OF SPEED ZONES

1. Legal Authority

Section 19.10.070 of the Alaska Statutes states that "The Department (of Transportation and Public Facilities)... shall determine safe speed limits on highways under its jurisdiction." Authority to act for the Department is vested in the Commissioner or his designated representative. For the purpose of establishing speed limits on State highways or State-maintained roads, the Regional Deputy Commissioners have jurisdiction in their respective Regions and, provided that the requirements set forth herein are met, may assign authority to the appropriate Regional officials to establish speed zones. Current practice is for the Regional Director of Design and Construction or the Regional Highway Engineering Chief to authorize establishment of speed zones with the concurrence of the Regional Director of Maintenance and Operations, whose division installs and maintains any required regulatory signing.

Speed limits other than as set forth herein must have the specific approval of the Regional Deputy Commissioner.

2. Engineering and Traffic Investigation

a. Speed zoning should be reserved for thoroughfares with appreciable volumes of traffic where such zoning can be shown to facilitate the orderly movement of traffic by increasing driver awareness of a reasonable speed.

Restricted speed zones shall not be used where physical conditions such as width, curvature, grade and surface conditions or any other physical condition readily apparent to the driver are the only reasons for a reduced speed. Physical conditions

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES POLICY AND PROCEDURES		P & P No. 70-7003	Page 2 OF 6
SUBJECT ESTABLISHMENT OF SPEED ZONES		Effective Date May 15, 1984	
		Supersedes P & P No.	Dated
		APPROVED BY <i>[Signature]</i>	
DIVISION Standards and Technical Services	SECTION Traffic and Highway Safety	CHAPTER TITLE Speed Zones	

which require reduced speeds are best handled with a standard warning sign accompanied by an advisory speed plate (W13-1 in the Alaska Traffic Manual).

Short speed zones, including short transitional zones, should be avoided as they are ineffective and difficult to enforce. The minimum length of posted speed limit should be such that the motorist is in the zone a minimum of 25 seconds at the posted speed. (Exception: School Zone Speed Limits.) See 13 AAC 02.325(d)

The basic intent of speed zoning is to influence as many drivers as possible to operate at or near the same speed--thus reducing conflicts created by wide differentials in operating speeds. Low-volume streets, therefore, offer little opportunity for encouraging closely grouped speeds due to the absence of traffic platoons under normal conditions.

b. Speed surveys, consisting of multiple spot speed checks shall be made in accordance with procedures set forth in the Transportation and Traffic Engineering Handbook.

A sufficient number of spot speed checks should be made so that a representative speed profile can be determined for the subject section of road. If practicable, a minimum of three checks should be made for any proposed zone (one at each end and one in the center of the zone) and additional checks should be taken at intervals, particularly in the vicinity of road elements which affect vehicular speeds (presence or absence of parked vehicles, pedestrians, multiple turn locations, etc.).

Each spot speed check should consist of recording the speed of a minimum of 100 vehicles (totaled both directions). However, where more than two hours are required to obtain the speeds of a minimum of 100 vehicles, automatic speed recording equipment may be used. Only those vehicles which are free flowing, whose speed is not appreciably affected by other moving traffic, shall be recorded. Checks should be made only during daylight hours, with clear weather and dry pavement along tangent roadway sections, inasmuch as the limit to be posted represents the highest safe speed for that portion of roadway under the best conditions. During darkness or poor road and/or atmospheric conditions, the motorist is governed by the basic speed law which requires that he always drive at a safe and prudent speed regardless of higher posted limits.

When speed checks are taken near a traffic signal, only those vehicles which move through the intersection on a green light without slowing or stopping shall be recorded. Spot speed checks shall not be taken any closer than 300 feet from a stop sign facing traffic being studied.

c. Where restricted speed limits are needed, they shall be established at or near the 85th percentile speed, which is defined as that speed at or below which 85 percent of the traffic is traveling. Regardless of the posted limit, and to a certain extent the level of enforcement, the 85th percentile speed remains the same for a given section of road. The effects of posting a zone lower than the 85th percentile is to increase the percentage of drivers exceeding the posted limit and to

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES POLICY AND PROCEDURES		P & P No. 70-7003	Page 6 OF 6
SUBJECT ESTABLISHMENT OF SPEED ZONES		Effective Date May 15, 1984	
DIVISION Standards and Technical Services		SECTION Traffic and Highway Safety	CHAPTER TITLE Speed Zones
		Supersedes P & P No.	Dated
		APPROVED BY <i>[Signature]</i>	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

IN REFERENCE TO:

State Route CDS 296000

ORDER

Establishing a Speed Limit
on a State Highway

Between Mandanah Loop Road (CDS 30.68) *

and Auke Lake Scenic Turnout (CDS 28.54)

WHEREAS Section 19.10.070 of the Alaska Statutes provides that the Department of Transportation and Public Facilities shall establish safe speed limits on the State Highways; and

WHEREAS the Department of Transportation and Public Facilities has conducted an engineering and traffic investigation; and

WHEREAS said investigation indicates that the hereinbelow ordered speed is the maximum reasonable and safe speed on the hereinbelow described State Highway or State-maintained road;

IT IS HEREBY ORDERED THAT:

Vehicles traversing the State Highway between the junction with Mandanah Loop Road (CDS 30.68) and the Auke Lake Scenic Turnout (CDS 28.54) shall not exceed a maximum speed of (fifty (50)) miles per hour.

IT IS FURTHER ORDERED that the appropriate signs be erected along said roadway to advise the motorist of the speed limits set forth herein.

This order supercedes any previously conflicting order(s) issued for that portion of the roadway where the conflict exists.

Date _____ (Appropriate Title, Design and Construction Division)

Date _____ (Appropriate Title, Maintenance and Operations Division)

Send copies to Director, Standards and Technical Services Division, and

Enforcement Jurisdiction Agency Annual or Special Posting Date

FIGURE 1

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
POLICY AND PROCEDURES

70-7003

5 OF 6

Effective Date
May 15, 1984

SUBJECT
ESTABLISHMENT OF SPEED ZONES

Supersedes P & P No. Dated

APPROVED BY
Louise Melis

DIVISION ~~Standards and~~
Technical Services

SECTION ~~Traffic and~~
Highway Safety

CHAPTER TITLE
Speed Zones

Highway" (Speed Order) using the format shown in Figure 1, which shows in italics an example of the particulars to be filled in.

The DSC representative shall forward the signed order to the Maintenance and Operations designee who, upon acknowledging concurrence, shall forward to the Standards and Technical Services Division and the appropriate enforcement agency/agencies copies indicating the actual or expected date the speed limit will be posted, and shall return the original to the DSC designee.

If the responsible parties do not agree, or in their opinion a limit other than that indicated by the speed profile is necessary, all pertinent data and recommendations shall be forwarded to the Regional Deputy Commissioner for resolution.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES POLICY AND PROCEDURES		# & P No. 70-7003	Page 4 OF 6
SUBJECT ESTABLISHMENT OF SPEED ZONES		Effective Date May 15, 1984	
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		APPROVED BY <i>[Signature]</i>	

speed zoning. The use of the black-on-orange (CW13-1) advisory speed plate with appropriate standard warning signs (curve, detour ahead, bump, etc.) is usually more effective than a reduced regulatory speed zone. To preserve the effectiveness of the advisory speed plate, it shall be mounted in conjunction with the warning sign which requires reduced speed ahead and shall be as high a speed as is reasonable and practical.

However, when construction project activities create a sufficiently hazardous condition, and such activities demand an immediate notification of and reduction in speed, the Regional Highway Engineering Chief is authorized to determine and post regulatory speed limits throughout the particular construction zone. These regulatory speed limits are temporary in nature and shall be promptly removed when the warranting hazard has been eliminated.

If special conditions within a construction project dictate that regulatory speed limits are required for an extended period of time, then a formal engineering and traffic investigation shall be conducted which encompasses the same basic information previously indicated for such an investigation.

SPEED LIMIT SIGNS

1. Legal Requirements

13 AAC 02.280 provides that speed limits other than the blanket statewide maximums shall not be effective until and unless signs are placed informing the motorist of the specific zone.

2. Speed Limit Signs

Speed limit signs (R2-1) shall be placed at the beginning of each zone and at such other locations within the zone as necessary to advise the motorist of the posted limit. On long zones of over one mile in length, intermediate signs should be placed so that the motorist receives an indication of the posted limit at least once every two minutes when traveling at the posted limit. On one-way roadways in excess of 20 feet in width, speed limit signs should be installed on the left as well as the right of traffic.

3. End of Zone

At the end of a posted speed zone, a speed zone sign (R2-1) indicating the appropriate statewide blanket speed shall be erected for motorists leaving the posted zone.

IMPLEMENTATION

After determining and documenting the reasons for an appropriate numerical limit for a proposed speed zone, the responsible Regional Design and Construction (D&C) Division representative shall issue an "Order Establishing a Speed Limit on a State



ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

February 24, 1986

MEMORANDUM

TO: Representative Rick Uehling

ATTN: David Cobb

FROM: Mary Jennings *mg*
Legislative Analyst

RE: Speed Limits in Other States
Research Request 86-113

You requested information regarding regulations and policies in other states which guide how speed limits are set, specifically, in parks, schools, and neighborhoods with children. You requested we examine policies in Arizona, California, Connecticut, Massachusetts, New York, Oregon, and Virginia.

Conclusions

Arizona, California, Massachusetts, Oregon, Virginia, and Washington have statutes that set speed limits in business, residential, and school areas.¹ In Connecticut and New York, the speed limit for state highways in these areas is set by the State Department of Transportation (DOT). Oregon was the only state that had a statute specifically applying to state highways in parks.

Arizona. According to statute, the speed limit for state highways in business or residential districts is 25 miles per hour (mph) and in school zones with children present the limit is 15 mph. Local authorities set the limits for roads within their jurisdiction, but cannot raise or lower speed limits by increments of more than 10 mph.

California. Speed limits are addressed in the California Vehicle Code. For state highways in residential or business districts the speed limit

¹For various state definitions of these areas see Attachment A.

Representative Uehling
February 24, 1986
Page Two

is 25 mph and the limit in school zones with children present is 25 mph. Local authorities may determine a different speed for roads in their jurisdiction under procedures set forth in the Vehicle Code.

Connecticut. In Connecticut, the DOT has the authority to set speed limits on state highways in residential, business, and school areas. Roads under the jurisdiction of local authorities must have speed limits approved by the DOT.

Oregon. For state highways in residential and business districts and state roads in parks and beaches, Oregon statute sets the speed limit at 25 mph. In school zones with children present the limit is 20 mph. The Oregon State Speed Control Board approves speed limits set by local authorities for roads under local jurisdiction.

Massachusetts. According to statute, the speed limit for state highways inside a residential or business district is 30 mph. In a school zone, the limit is 20 mph. Roads under the jurisdiction of local authorities must have speed limits approved by the DOT and the Registry of Motor Vehicles.

New York. The DOT sets speed limits for state highways in business, residential, and school areas. Roads under the jurisdiction of local authorities must have speed limits approved by the DOT.

Virginia. According to statute, the speed limit for state highways in business or residential districts is 25 mph. In schools zones with children present, the limit is 25 mph. Speed limits for roads under the jurisdiction of local authorities are set by the local authorities.

Washington. The Standard Speed Statute in Washington sets a limit of 25 mph for state highways in cities or towns. In school zones with children present, the limit is 20 mph. Speed limits for roads under the jurisdiction of local authority must be approved by the State Maintenance Engineer of the DOT.

I have attached pertinent statutes from California, Connecticut, Massachusetts, and Virginia. For your interest, I have also attached pertinent statutes from Indiana, Hawaii, Louisiana, and Pennsylvania. I hope you find this information useful. If you have any questions or if we can be of further assistance, please contact our office.

MJ

Attachments

Offered: 3/26/86
Referred: Finance

Original sponsors: Uehling, Martin,
Ringstad, et al

1 IN THE HOUSE BY THE TRANSPORTATION COMMITTEE
2 CS FOR HOUSE BILL NO. 552 (Transportation)
3 IN THE LEGISLATURE OF THE STATE OF ALASKA
4 FOURTEENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act relating to setting speed limits and neigh-
7 borhood speed zones."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 * Section 1. AS 19.10.070 is amended to read:

10 Sec. 19.10.070. DETERMINATION OF SAFE SPEED LIMITS. The de-
11 partment may conduct investigations with the assistance of the Depart-
12 ment of Public Safety and shall determine safe speed limits and safe
13 speed zones on highways and arterial roadways under its jurisdiction.

14 * Sec. 2. AS 19.10 is amended by adding a new section to read:

15 Sec. 19.10.072. NEIGHBORHOOD SPEED ZONES AND LOCAL HEARING
16 PROCESS. (a) In determining safe speed limits and safe speed zones,
17 the department shall consider the following factors in the order of
18 priority listed:

19 (1) neighborhood safety, including the presence of children
20 and pedestrian traffic;

21 (2) the presence of schools, houses, parks, and crosswalks;

22 (3) the presence of driveways, parked vehicles, and multi-
23 ple turn locations;

24 (4) that speed at which safe and prudent drivers could pass
25 through the speed zone; and

26 (5) the effectiveness of local enforcement of the speed
27 zone.

28 (b) In determining safe speed limits and safe speed zones within
29 a municipality the department shall consult with that municipality.

1 In determining safe speed limits and safe speed zones on highways and
2 arterial roadways under its jurisdiction the department shall also
3 consult with community councils or other neighborhood organizations in
4 the affected area, if the community councils or other neighborhood
5 organizations request in writing to participate in the determination.
6 The department shall provide notice and opportunity for a hearing
7 before establishing a speed limit or speed zone other than as recom-
8 mended by a municipality, community council or other neighborhood
9 organization.

Offered: 3/24/86
Referred: Transportation and
Finance

Original sponsors: Uehling, Martin,
Ringstad, et al

1 IN THE HOUSE BY THE STATE AFFAIRS COMMITTEE
2 CS FOR HOUSE BILL NO. 552 (State Affairs)
3 IN THE LEGISLATURE OF THE STATE OF ALASKA
4 FOURTEENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act relating to setting speed limits and neigh-
7 borhood speed zones."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 * Section 1. AS 19.10.070 is amended to read:

10 Sec. 19.10.070. DETERMINATION OF SAFE SPEED LIMITS. The de-
11 partment may conduct investigations with the assistance of the Depart-
12 ment of Public Safety and shall determine safe speed limits and safe
13 speed zones on highways and arterial roadways under its jurisdiction.

14 * Sec. 2. AS 19.10.070 is amended by adding new subsections to read:

15 (b) In determining safe speed limits and safe speed zones within
16 urban areas of a municipality under (a) of this section, the depart-
17 ment shall consult with that municipality. The department shall
18 provide notice and opportunity for a hearing before establishing a
19 speed limit or speed zone other than as recommended by the municipal-
20 ity.

21 (c) In determining safe speed limits and safe speed zones under
22 (a) of this section, the department shall consult with the community
23 council or other neighborhood organization in the affected area, if
24 the community council or other neighborhood organization requests in
25 writing to participate in the determination. The department shall
26 provide notice and opportunity for a hearing before establishi g a
27 speed limit or speed zone other than as recommended by the community
28 council or other neighborhood organization.

29 * Sec. 3. AS 19.10 is amended by adding a new section to read:

1 Sec. 19.10.072. NEIGHBORHOOD SPEED ZONES. In determining safe
2 speed limits and safe speed zones under AS 19.10.070, the department
3 shall consider the following factors in the order of priority listed:
4 (1) neighborhood safety, including the presence of children
5 and pedestrian traffic;
6 (2) the presence of schools, houses, parks, and crosswalks;
7 (3) the presence of driveways, parked vehicles, and multi-
8 ple turn locations;
9 (4) that speed at which safe and prudent drivers could pass
10 through the speed zone; and
11 (5) the effectiveness of local enforcement of the speed
12 zone.

Introduced: 2/7/86
Referred: State affairs,
Transportation and Finance

BY UEHLING, MARTIN, RINGSTAD,
FURNACE, JENKINS, MARROU,
HANLEY, COLLINS, SZYMANSKI,
SUND, TAYLOR AND BOUCHER

1 IN THE HOUSE

2 HOUSE BILL NO. 552

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FOURTEENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act relating to setting speed limits and
7 neighborhood speed zones."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 * Section 1. AS 19.10.070 is amended to read:

10 Sec. 19.10.070. DETERMINATION OF SAFE SPEED LIMITS. The de-
11 partment may conduct investigations with the assistance of the Depart-
12 ment of Public Safety and shall determine safe speed limits and safe
13 speed zones on highways under its jurisdiction.

14 * Sec. 2. AS 19.10 is amended by adding a new section to read:

15 Sec. 19.10.072. NEIGHBORHOOD SPEED ZONES. In determining safe
16 speed limits and safe speed zones under AS 19.10.070, the department
17 shall consider

18 (1) the presence of schools, parks, crosswalks, and pedes-
19 trian traffic;

20 (2) the presence of driveways, parked vehicles, and multi-
21 ple turn locations;

22 (3) the effectiveness of local enforcement of the speed
23 zone;

24 (4) that speed at which safe and prudent drivers could pass
25 through the speed zone.