

intersection drawings or sketches, accompanied by supporting data and recommendations, is required to initiate the request.

It is necessary that district records be complete and current.

Stop signs on approaches to the State highway system are usually located on the State highway rights-of-way and, accordingly, are installed and maintained by ITD. Stop signs may also be installed at other intersections with State highways, such as alleys or shopping centers, where it has been determined that the erection of such signs is in the best interests of safety. Refer to [Section 155.01](#) for information on installation and maintenance of needed “Stop Ahead” signs on local road approaches to State highways.

Stop signs at railroad grade crossings are covered in [Section 851.02](#).

102.02 Legal Authority. The following sections of the Idaho Code pertain to stop and yield sign installation:

- 40-310(11) POWERS AND DUTIES -- STATE HIGHWAY SYSTEM. Designates main traveled State highways as through highways.
- 49-109(5) DEFINITIONS -- H. “Highway”
- 49-110(6) DEFINITIONS -- I. “Intersection”
- 49-202(25) DUTIES OF DEPARTMENT. Railroad grade crossings
- 49-208 POWERS OF LOCAL AUTHORITIES
- 49-212 AUTHORITY FOR STOP SIGNS AND YIELD SIGNS
- 49-642 VEHICLE ENTERING HIGHWAY
- 49-651 EMERGING FROM ALLEY, DRIVEWAY, OR BUILDING
- 49-720 STOPPING -- TURN AND STOP SIGNALS. Bicyclists
- 49-807 STOP SIGNS AND YIELD SIGNS

SECTION 103.00 – SPEED ZONING

103.01 Legal Authority. Authority for speed zoning is covered in the Idaho Code as follows:

- 49-201(4) DUTIES OF BOARD. Establishment of Speed Limits on State Highway System.
- 49-202(21) DUTIES OF DEPARTMENT Special Bridge Speed Limit
- 49-202(22) DUTIES OF DEPARTMENT Minimum Speed Limit
- 49-207(2)(3)(4) MUNICIPAL REGISTRATION PROHIBITED -- POWER TO ENACT REGULATORY ORDINANCES NOT ABOLISHED Speed Limits by Local Authorities
- 49-208 POWERS OF LOCAL AUTHORITIES Speed Limits by Local Authorities

49-654	BASIC RULE AND MAXIMUM SPEED LIMITS
49-657	CONSTRUCTION DANGER ZONE SPEED LIMITS
49-1005	SPECIAL REGULATIONS AND NOTICE Breakup Speed Limits

103.02 Speed Minute Entry. Approval of permanent speed zones and speed zones within bridge limits by the Idaho Transportation Department are handled by Traffic Minute Entries. Speed Minute Entries are Traffic Minute Entries for speed zones. Routine speed minute entries are prepared by the Traffic Section ([Administrative Policy A-12-03](#)). Non-routine changes to speed zones must be submitted to the Board as separate Board Agenda Items that are prepared by the appropriate District and submitted through the State Traffic Engineer. The “MINUTE ENTRY FOR SPEED CONTROL ZONES” form and the Board Agenda Item for speed zone changes are both recognized as official entries in department records or Traffic Minute Entries. The minute entry attests to the fact that a traffic and engineering investigation has been conducted and documented, and the speed zones are reasonable and sets forth the authorized maximum speed limits that apply on a specific section of highway.

Speed minute entries are prepared in consecutive route and milepost order, with a speed zone inventory log maintained indicating the current approved speeds on all highway routes. Speed limit changes are located by milepost reference. Also, convenient references such as geographical and topographical locations, county lines, and street names are contained in the description to facilitate speed minute entry administration.

When routine speed changes are proposed, the District Traffic Engineer shall prepare a graph of the site, recommendations for speed zone changes on a “Speed Distribution Chart ([ITD-1625](#)) or approved equal, and a “Speed Zoning Worksheet ([ITD-1791](#)). All documents shall be submitted to the Headquarters Traffic Section together with the signed and sealed supporting traffic and engineering investigation report. A completed speed minute entry must cover each direction of travel. As speed limit signs must be placed within 50 ft (15.2 m) of locations shown on the speed minute entry, the District should verify sign locations prior to setting speed zone limits.

Non-routine speed changes require document submittal identical to routine speed changes, plus a Board Agenda Item.

103.03 Speed Zoning Concepts. Speed zoning is a traffic engineering tool that has been employed for many years to try to influence motorist behavior. A wide variety of regulations and methods have been used to post speed limits; however, there is not a universally adopted procedure. Based on years of experience and observation, the following fundamental concepts have been used as guidelines in establishing realistic and reasonable speed zones:

- The majority of motorists drive at a speed they consider reasonable, convenient, and safe for existing conditions. Posted limits which are set higher or lower than dictated by roadway and traffic conditions are ignored by the majority of motorists.

- A speed limit should be set so that the majority of motorists observe it voluntarily and enforcement can be directed to the minority. That speed is considered the 85th percentile speed.
- Any speed limit is reasonable only for the roadway and traffic conditions for which it was set. Limits based on prevailing speeds of free-flowing vehicles obtained during good weather will be unreasonably high for extreme weather and traffic conditions.
- Accident severity increases with increasing speeds because, in a collision, the amount of kinetic energy dissipated is proportionate to the square of the velocity. The number of accidents, however, appears to depend less on speed and more on the variation in speeds. The lowest accident involvement rate occurs when vehicles are traveling one standard deviation above the mean speed, which is approximately equivalent to the 85th percentile speed or slightly above.

Speed zones established on the basis of the above-listed concepts using a realistic traffic engineering analysis have the following benefits:

- Provide a factual, scientific basis for determining limits.
- Invite public compliance by conforming to the behavior of the majority of motorists.
- Give enforcement officials a good guide as to what is a reasonable and prudent speed.
- Assist traffic courts by providing a list of established speed limits.
- Ensure that speed zones satisfy the requirements and intent of State and/or local laws and ordinances.
- Encourage motorists to drive at or near the same speed, resulting in smoother flow and a reduction in accident risk.

The 85th percentile speed is the speed at or below which 85 percent of the vehicles are moving. On most roadways, the 85th percentile speed is one standard deviation, or approximately 6 to 8 mph above the average speed. The major reasons for using the 85th percentile speeds in establishing maximum speed limits are as follows:

- Widespread use and acceptance of the method by traffic professionals.
- The probability of accident occurrence is lowest for vehicles traveling at or slightly above the 85th percentile speed.
- The 85th percentile speed reflects a safe speed for existing conditions as perceived by the majority of motorists and is largely self-enforcing.
- When using the method, other factors such as accident rates, geometric features, etc., do not have to be considered separately or in combination with other data since the factors are reflected in the driver's choice of speed, which is altered to adjust for these conditions.
- Speed samples are easy to obtain and analyze for most roadways.

The traffic and engineering analysis should address the following factors and characteristics:

- a. Road surface characteristics, shoulder condition, grade, alignment, and sight distance
- b. Roadside development, culture, and friction
- c. Safe speed for curves or hazardous locations within the speed zone
- d. Parking practices and pedestrian and bicycle activity
- e. Reported accident experience for a minimum three-year, preferable five-year, period indicating number and type of accidents by location or accident rate compared to statewide average rates

The 85th percentile shall usually be accepted as representing a maximum speed that is reasonable and realistic to the motorist. It may be modified through analysis of the pace speed or speed distribution curve. The recommended maximum speed limit may be decreased below the 85th percentile speed based on analysis of factors noted in item 2 and justified in a traffic and engineering investigation.

The traffic and engineering investigation shall contain a summary of the purpose for the investigation, location, recommendation, a summary of the analysis, safety evaluation, and accident data. If speed transition zones are required due to a speed zone established by a local jurisdiction, an analysis referencing Traffic Manual transition zone requirements (see [Section 156.03](#)) will suffice for the investigation requirements. The investigation shall also include data on the speed characteristics and the other factors outlined in item 2. Note that there is existing PC software that can be used in place of the [ITD-1625](#) form that will compile the speed data, make necessary calculations, and provide a tabular summary and a speed distribution graph for analysis and the investigation report. The investigation shall recommend a maximum speed limit and indicate the influence of this data on this maximum speed limit. The recommended speed limit shall be supported by the data contained in the traffic and engineering investigation and attached to the speed zoning worksheets. The investigation documents shall be bound with signature and seal affixed to the cover sheet.

103.05 Speed Studies. Speed zoning revisions may be necessary because of highway improvements, route and milepost changes, jurisdictional boundary revisions, roadside development, traffic operational changes, or requests. It is important that speed minute entries be updated promptly to reflect any revisions to the existing speed zoning.

On new highway alignments or major highway reconstruction projects, it is important that the speed study be done as soon as possible after the work has been completed and close to the time that the project is opened for traffic use. Speed minute entries are the basis for speed zone enforcement and court testimony. They are not effective until the speed is posted in conformance with an approved speed minute entry. Ideally, the permanent speed zoning minute entry should be completed and available to replace any construction speed zoning minute entries. Speed limits posted in accordance with

approved construction contract documents are also considered Temporary Speed Limits until speed studies are completed and Permanent Speed Limits are established.

Promptly acknowledge all requests for speed zone changes from outside the Department and advise the person or group making the request that a traffic and engineering investigation will be made. Complete the investigation in the field, with due consideration given to all pertinent factors involved. After the investigation is completed, contact the person or group from whom the original request was received and advise them of the results of the traffic study and the Department's recommendations.

For speed limits on the State highway system within city jurisdictions, follow the procedures contained in [Administrative Policy A-12-07](#), "Speed Limits On the State Highway System Within City Jurisdictions." In an effort to study the effects of this policy, the following guidelines shall be adopted:

- A yearly follow up speed study shall be performed when a city disregards the recommendation of the district's speed study and invokes their right to adjust a State highway speed limit within their jurisdiction. At a minimum, the study will include speed information as described in item 1 of [Section 103.04](#) of this manual.
- By September each year, the follow up studies should be compiled and submitted to the State Traffic Engineer. This information will be compiled and reported to the Idaho Transportation Board annually.
- A copy of the study information should be sent to the respective city for their consideration.

The traffic and engineering investigation shall be based on a study of vehicle speeds and field investigation of the roadway-user characteristics. The order of preference for speed studies shall be as follows:

1. Compilation of a speed distribution curve, using radar equipment or speed-distance observations.
2. Use of existing average speed data, with mathematical estimation of the 85th percentile speed.
3. Car-following speed observations driving through the study area, logging the free-flow speed of other vehicles. Vehicle speeds and sample size shall be indicated in the study.

It is recognized that many rural speed zoning determinations will be constrained by the existing maximum speed limits, i.e., 55 mph and 65 mph. In these cases, it is acceptable to use the car-following field observation method to support that vehicles are traveling at or near the maximum speed limit. Special attention should be directed to suburban areas, community approaches, or roadside development areas where a reduced speed zone should be considered.

As speed limit signs must be placed within 50 ft (15.2 m) of locations shown on the speed minute entry, the District should verify sign locations prior to setting speed zone limits.

103.06 MINIMUM SPEED LIMITS. Idaho Code establishes provisions for setting minimum speed limits on the State highway system although these provisions normally have not been used as a means of raising the speed of slower vehicles. If minimum speeds are considered, the engineering study should take into account the 15th percentile speed or lower limit of the pace speed in selecting the minimum speed limit. A full traffic and engineering investigation as outlined in [Sections 103.04](#) and [103.05](#) should be prepared to substantiate a minimum speed recommendation.

103.07 Advisory Speed Limits. Advisory speed limits are posted with warning signs to provide drivers an advisory safe speed in negotiating a highway segment. Advisory safe speeds are one, but not the only, consideration in establishing maximum speed limits. The procedure for determining advisory safe speeds is outlined in [Section 165.03](#).

103.08 School Zones. Idaho does not have statutory speed limits for school zones and, accordingly, any local ordinances are not applicable to urban extensions of the State highway system. The traffic and engineering investigations noted above do address pedestrian/bicycle activity, and specific attention should be directed to school zones because of parental concerns and public perceptions of school safety. Speed zoning for school zones is only effective if the posted speed limits result in reasonable driver compliance. It is frequently more productive for driver compliance to use other school warning devices than unduly restrictive speed zoning. The speed zoning should consider the school zone in conjunction with other roadway features in establishing a speed limit that is acceptable to the driver. Recognizing the public visibility of school zones, it is necessary to work closely with local officials and school representatives in establishing a reasonable speed limit. Follow-up speed studies are usually necessary to document the reasonableness of school zone speed limits.

103.09 Differential Speed Limits. Idaho Code contains provisions for setting speed limits for various classes and types of vehicles

Pursuant to changes made to [Idaho Code Section 49-654](#), differential speed limits have been enacted on interstate highways restricting vehicles with five (5) or more axles operating at a gross weight of more than 26,000 pounds to a maximum speed of 65 mph.

103.10 Work Zone Speeds. Often it is necessary to adjust the posted speed through construction or maintenance work zones. However, a reduced speed limit should be based on good judgment, experience, and evaluation of geometrics and should not be based merely on the idea that such action will somehow absolve the State or contractor of any responsibility in case of accidents.

- Prior to establishing reduced speed zones through construction or maintenance projects, some important considerations should be evaluated:

- Is there another feasible, and possibly better, alternative than reducing the speed limit? Generally, fewer accidents are likely to occur if traffic can be safely accommodated at the prevailing speed limit.
- Based on previous experience, can a reduced speed limit be enforced by a reasonable or normal level of law enforcement?
- If roadway alignment is one of the factors involved in the need to reduce speed, has safe speed been determined by sight distance determinations and by ball bank indicator measurement of horizontal curves?
- Can the reduction in speed be held to a maximum of 10 mph less than the normal posted speed?

Temporarily reduced speed zones are often appropriate due to roadway or lane constructions, temporary surfaces, alignment revisions, construction activity interference, and numerous other reasons. [Rule 39.03.65](#) gives the District Engineer the authority to establish special speed regulations through construction and maintenance zones on the State highway system. This shall be accomplished by a letter signed by the District Engineer and directed to the District Lieutenant of the Idaho State Police and local law enforcement agencies, stating the special work zone speed limit, the location, the date the speed limit will become effective, and any special application (e.g., during working hours only, etc.). Copies of the letter shall be furnished to the Resident Engineer, district files, Traffic Section, and contractor. The work zone speed limit is not applicable until the letter has been signed and speed limits posted in conformance with the letter. When the speed zone is removed, a follow-up letter from the District Engineer should be sent to the law enforcement agencies, with copies to the Headquarters Traffic Section, informing them of the reversion to the previously approved speed limit or of the approval of a new speed minute entry.

Establishment of reduced construction speed zones on locally sponsored projects not on the State highway system shall be accomplished with approval of the appropriate governing body.

It is important that work zone speed be reasonable and elicit driver compliance. Frequently it is noted that drivers do not comply with overly restrictive work zone speeds. If driver compliance is not obtained, there should be selective enforcement, increased fines and/or penalties, additional project warning devices, or a change in the work zone speed limit. The limits of a reduced speed zone should be placed only where and when the actual work zone construction operations interfere with through traffic and may be directionally independent from one another. The following undesirable practices have been noted in work zone speed zoning:

- Speed restrictions 24 hours a day, 7 days a week, when there are no road restrictions except during normal contractor working hours.
- Speed limits for an entire project when work affecting through traffic is being done only in a very limited area or when construction has been substantially completed.
- Speed limits that are not observed by motorists.

If speed zones are structured to fit the work conditions, the zones will be readily accepted by drivers and will result in better driver compliance where restrictive speeds are necessary.

SECTION 104.00 – PARKING

104.01 General. Signs shall be installed which prohibit or restrict the stopping, standing, or parking of vehicles where a traffic investigation indicates that such actions would be dangerous to those using the highway or where such actions unduly interfere with the free movement of traffic. [See [Idaho Code Sections 49-202\(28\), 49-660 and 49-661.](#)]

104.02 Parking And Stopping Minute Entries. A Traffic Minute Entry is required on State highways to prohibit parking, standing and stopping at locations outside city limit boundaries. The minute entry is necessary before signs are erected, in accordance with [Section 49-202\(28\), Idaho Code](#). Parking prohibition within the corporate limits of a community should be covered by a local ordinance and does not require State minute entry approval except for angle parking.

Districts should submit recommendations for parking minute entries to the Traffic Section, along with all supporting data.

It should be noted that parking regulation signs have been relocated and removed without revision or revocation of the parking minute entries. At any time the parking signs are modified, the district must submit a letter to the Headquarters Traffic Section so the parking minute entry can be revised or revoked. Otherwise, the parking restriction is not enforceable.

104.03 Angle Parking Minute Entries. Angle parking is not permissible on the State highway system unless it is approved at a specific location. [See [Idaho Code Section 49-661\(3\).](#)] Angle parking is permissible only where the roadway is of sufficient width to permit angle parking without interfering with the free movement of traffic. All angle parking should be discouraged because of the hazardous backing maneuver and interference with traffic movement.

Generally, angle parking has been eliminated on most urban extensions except those locations permitted by minute entry. Efforts by community officials to reestablish angle parking should be thoroughly analyzed relative to highway purpose versus motorist needs. With the deletion of angle parking on the State highway system, the minute entry permitting angle parking shall be promptly revoked.

Submit recommendations for angle parking minute entries to the Headquarters Traffic Section, along with all supporting data.

Parking Regulations for Urban Extensions of the State Highway System, below, are provided as a guide to be followed in the determination of possible angle parking approval. Support a recommendation on angle parking approval or deletion by doing a complete study of parking characteristics, accident history, capacity evaluation, and observation of street operational problems.

**PARKING REGULATIONS FOR URBAN EXTENSIONS
OF THE STATE HIGHWAY SYSTEM**

WIDTH ft	ADT	NO. LANES	TYPE PARKING
LESS THAN 32	—	2	NONE
32 – 40	—	2	PARALLEL-ONE SIDE
40 – 60	8,000 OR LESS	2	PARALLEL-BOTH SIDES
40 – 60	OVER 8,000	4	NONE
60 – 80	2,000 OR LESS	2	ANGLE
60 – 80	2,000 - 20,000	4	PARALLEL
60 – 80	OVER 20,000	4	NONE
80 OR GREATER	8,000 OR LESS	4	ANGLE
80 OR GREATER	8,000 - 20,000	4	PARALLEL
80 OR GREATER	OVER 20,000	4	NONE
80 OR GREATER	OVER 20,000	6	NONE

104.04 Parking Studies. The modification or prohibition of parking on the State highway system requires good documentation of the existing parking characteristics, traffic operations, and accident statistics. Therefore, district recommendations for angle parking revisions or parking prohibitions should be fully covered, with data supporting the recommendations.

A number of parking studies can be conducted to analyze parking characteristics. Typical studies include parking inventories, space usage, parking demand, vehicle accumulation, accident analysis, street operational studies, and parking revenue data. Review the Manual of Traffic Engineering Studies for study methods and procedures before any data is collected. Complete and well-documented recommendations on parking are of prime importance in discussions with affected businesses or local officials.

SECTION 105.00 - TRANSPORTATION IMPACT STUDY

105.01 General. New land developments and expansions of existing developments can have a significant impact on the transportation system, particularly if there is not adequate planning and consideration of system improvements that may be needed. In accordance with ITD [Policies A-12-01](#), “Right-of-Way Use Permits” and [B-12-06](#), “Transportation Impact Study,” and the current ITD Access Management: Standards and Procedures for Highway Right-of-Way Encroachments, a Transportation Impact Study (TIS) that analyzes relevant impact issues may be required to ensure that the State highway system can satisfactorily accommodate a proposed development.

A TIS documents the extent of the impact of the proposed development on the highway system, including trips added, resulting level of service during AM and PM peaks, and the need for auxiliary lanes or other special capacity or safety features. Any required changes in traffic control, land use, access, pedestrian or bicycle usage must also be discussed.

A TIS shall be required when a new or an expanded existing development has direct access to the State highway system and adds a minimal number of new trips as described below.

- A “full” TIS shall be required for developments that will generate 100 or more new trips during the highway’s peak hour, or the total added volume will equal or exceed 1,000 vehicles per day.
- A “minor” TIS shall be required for developments that will generate between 25 and 99 new trips during the highway’s peak hour, or the total added volume will be from 250 to 999 vehicles per day.
- A TSI shall not be required for developments that will generate less than 25 added (new) trips during the highway’s peak hour, or the total added volume will be less than 250 vehicles per day.

In some cases, as determined by ITD personnel, lesser traffic volumes may warrant a “full” TIS when roadway sections are already at or near capacity. If the proposal is in an air quality non-attainment zone, then some analysis for air quality shall also be required.

The TIS shall be prepared in accordance with the latest version of the Requirements for Transportation Impact Study available from the Headquarters Traffic Section. A TIS shall bear the stamp and signature of a professional engineer registered in the State of Idaho. The engineer that performs the study must regularly consult and coordinate with the Local Public Agency (LPA) and/or the ITD District Traffic Engineer to make sure that adequate detail to assess impacts is included in the TIS without requiring unnecessary data and reports that may not be justified by the magnitude of the development. The developer is responsible for hiring the engineer to perform the TIS.

The study will be submitted by the developer to the LPA and the Idaho Transportation Department for approval before any alterations on the State highway system will be allowed.

SECTION 106.00 – CORRIDOR PLANNING

106.01 General. In order to promote commerce and move traffic efficiently and safely, the Transportation Board supports the development of alternate routes around cities. Alternate routes should be considered whenever feasible as new construction projects are programmed and designed.

106.02 Alternate Routes. Factors that should be considered when evaluating alternate route proposals include environmental feasibility, cost effectiveness, access control, traffic volume and destination, the population of the community, the local community's desire for an alternate route, existing facility capacity, the proposed alternate route's distance from town, safety and accident rates and signing. Further guidance for alternate route planning and design is available in the Design Manual.

Signing associated with alternate routes should include directing motorists to available services within the community. Motorist service signing to such "bypassed communities" is discussed in [Sections 178.00, 179.00 and 183.00](#).