Chapter 8: Reduce Speed

8.1 Introduction

Speed Reductions

Speed Reductions are intended to be used as a traffic operational tool. Reduced speed limits should be used only in the specific portion of the work zone where special conditions or restrictive features are present. However, frequent changes in the speed limit should be avoided.

A traffic control plan should be designed so vehicles can reasonably and safely travel through the work zone. That design may or may not require a speed limit reduction. If a speed reduction is required, it should be no more than 10 mph. A reduction of more than 10 mph in the speed limit should be used only when required by restrictive features in the work zone. Where restrictive features justify a speed reduction of more than 10 mph, additional driver notification should be provided. The speed limit should be stepped down in advance of the location requiring the lowest speed, and additional traffic control devices should be used.

Lowering the regulatory speed limit should be avoided as much as practical because drivers will reduce their speeds only if they clearly perceive a need to do so.

Speeding Penalty

Speeding Penalties are intended to be used to strengthen the existing speed limit or a reduced speed limit in a work zone. Speeding Penalties should be used only when a speeding problem exists or is anticipated.

Speeding Penalties should be used sparingly to ensure enforcement and credibility. If used everywhere, the penalty would lose its worth with the administrative parties and the public.

8.2 Guidelines

Speed Reductions

Speed Reductions require a speed ordinance signed by the State Traffic Engineer in order for the reduced speed to be legally enforced. It is the Work Zone Traffic Control Section's responsibility to make sure the motorist is aware of the speed reduction by using advance warning signs. It is also our responsibility to make sure an ordinance is written for speed reductions before the traffic control associated with the speed reduction is incorporated into a traffic control plan.

Speeding Penalties

Speeding Penalties require an ordinance signed by the State Traffic Engineer in order for the penalty to be legally enforced. It is the Work Zone Traffic Control Section's responsibility to make sure the motorist is aware of the speeding penalty by using advance warning signs. It is also our responsibility to make sure an ordinance is written for speeding penalties before the traffic control associated with the speeding penalty is incorporated into a traffic control plan.

Best Practice

North Carolina Department of Transportation has two different methods and criteria for establishing work zone speed limit reductions. The most commonly used method is temporary speed reduction using portable devices such as portable changeable message signs and portable signs to reduce the speed limit. This method is a short term solution, as it can only be applied for up to 30 days. This first method is typically used during lane closure activities on freeways or interstates with speed limits of 60 MPH or higher to improve worker safety. The second approach is to use standard speed limit signs to reduce speed for a more long term impact on a larger project. This second approach is normally used where significant changes in lane geometry have occurred, lane widths are significantly reduced, and/or the shoulders have been essentially eliminated. This method is typically used to improve motorist safety due to work zone conditions on freeways or interstates with a speed limit of 60 MPH or higher which have significant lane geometry alterations and/or shoulder restrictions throughout the length of the project. For both applications, $250 fine signs are implemented in addition to the speed reduction signs. All of these types of signs must be approved first by the State traffic Engineer before they can be implemented. These methods improve driver compliance with work zone speed limits and lead to a smother traffic flow and less speed variance in the work zone which ultimately contributes to fewer crashes.

8.3 Procedures/Standard Practice

8.3.1 Work Zone Ordinance Request Form (Click to Retrieve Form)

8.3.2 Guidelines for WZ Speed Limit Reduction Ordinances

Standard Practice For Work Zone Speed Limit Guidelines for NC Highway Construction and Maintenance Activities on High Speed Facilities

Purpose: This guideline provides guidance and uniformity on the establishment of work zone speed limits for highway work zones.

Objective: The objective of this guideline is to identify conditions where it's appropriate to reduce the speed limit on freeways with existing speed limits of 65 MPH and above for work being performed in construction and maintenance work zones.

Guideline: The Work Zone Traffic Control Section in consultation with the Regional Traffic Engineering staff has developed these guidelines to provide guidance and uniformity in the implementation of reducing the speed limit in work zones. The intent is to coordinate and implement "best strategies" to address work zone speed limits for construction and maintenance activities. In accordance with the provisions described in Chapters 6B,C and D of the MUTCD, this guideline has been crafted to ensure thorough engineering study prior to implementation of interim speed limit reductions.

Speed limit reductions are made in the interest of safety for the motoring public due to active project conditions, or they can be made if the reduction is intended for the safety of the construction worker. Before a speed limit reduction is implemented, an analysis is to be made by the engineer to determine if a speed limit reduction strategy is the best solution.

This guideline has been developed to address the need and application for "Work Zone" speed limit reductions, which focus on the 'static' type of construction zones. These projects generally contain restrictive features throughout their entire length, which may require added decision making, increased reaction times, and other driver focused actions where slower speeds can allow for better driver recognition and reaction.

However, this guideline can not cover every situation that may be encountered in construction and maintenance work zones. There are many factors that can come into play that are not covered in this guideline which may justify the use of a Work Zone speed limit reduction. Therefore exceptions can be made on a case by case basis which may justify the use of a "Work Zone" speed limit reduction. Appropriate judgment must be used in applying the guidelines**.** Exceptions to the required criteria below will be considered on a case by case basis. Whenever these arise, the Work Zone Traffic Control Section will coordinate with the Regional Traffic

Engineers to evaluate the conditions and associated operations to recommend the most appropriate course of action.

The State Traffic Engineer will have the final decision making authority as to whether the "Work Zone" speed limit is implemented. Below are the definition, criteria and application for work zone speed limits.

A **"Work Zone" Speed Limit** is one that reduces the existing speed limit with standard stationary mounted speed limit signing and enacted ordinances for freeways with speed limits of 65 MPH and above. These speed limits are intended for continuous posting with regulatory signs on projects with long duration work (greater than 30 days).

Also, these speed limits should be used where it is imperative for the motorists to reduce speeds in order to safely navigate through lane restrictions and other potential obstacles encountered in the construction zone. These speed limits should only be posted when and where the roadway construction environment continuously dictates the need for a reduced speed. The factors that led to the need to establish a lower speed limit should also be present 24 hours a day. Only the specific portion of the work zone where conditions warrant or restrictive features are present shall receive consideration for the speed reduction. In addition, only certain phases of construction may warrant this reduction.

After the State Traffic Engineer signs the ordinance, the "Work Zone" speed limit signs can be installed on the project according to the drawings. In addition, if a project warrants a "Work Zone" Speed Limit reduction, it automatically qualifies for the $250 speeding penalty. This additional speed fine is also to be ordinanced by the State Traffic Engineer.

After the restrictive feature or features necessitating the "Work Zone" speed limit are mitigated, the State Traffic Engineer is to be notified to rescind the ordinance, the work zone speed limit signs are to be removed, and the existing speed limit restored. In addition, the State Traffic Engineer will also rescind the $250 speeding penalty ordinance and the $250 speeding penalty signing will be simultaneously removed.

The Work Zone Speed Limit criteria is defined below. In order for a project to "qualify" for this treatment, it must meet all of the warrants in Section I and at least 1 warrant in Section II. If Section II warrants aren't met, the project must meet at least 2 warrants in Section III to qualify.

ORDINANCE CRITERIA

SECTION I

The work zone must meet **ALL** of the following warrants to be considered for the "**Work Zone Speed Limit**" Reduction ordinance. If Section I warrants aren't met, the project doesn't qualify for a "**Work Zone Speed Limit**" reduction ordinance.

1. Existing Speed Limit is 65 MPH or greater

2. Speed reduction applies to an area 1 mile in length or greater.

3. Work zone is of longer duration (Greater than 30 days) where there are continuous obstacles which may create difficult navigation for the motorists. Some of these include long-term median cross-overs, continuous lane closures, on-site detours, narrowed lanes, non-usable shoulders, sharp roadway curvature, etc.

AND

SECTION II

The work zone shall meet **at least one** of the following warrants to be further considered for the "**Work Zone Speed Limit"** Reduction ordinance:

1. **The work zone is adjacent to other project/s where the "Work Zone" speed limit reduction is ordinanced.**

2. Long-term median cross-overs (In continuous use for a period longer than 30 days) where the design speed is lower than the existing posted speed limit

3. Long-term Stationary Lane Closures (In continuous use for a period longer than 30 days) where traffic queuing is expected to be at least ½ mile or more

4. On-site detours (continuously in use longer than 30 days) where the design speed is lower than the existing posted speed limit.

5. The work zone utilizes traffic shifts of more than 6 feet while using a **Minimum** shifting taper and/or the alignment design speed is less than the posted speed limit

6. The work zone eliminates a usuable outside shoulder (less than 8') **AND** either permanent barrier/guardrail/guiderail or temporary barrier/guardrail/guiderail prevents vehicle pull-off into the median for a distance greater than ½ mile.

7. The work zone creates travel lane widths less than 11' for a distance that exceeds ½ mile.

8. Work zone includes a minimum of one interchange per mile of length.

OR

SECTION III

The work zone shall meet **at least two** of the following warrants in Section III to be further considered for the Work Zone Speed Limit reduction ordinance.

1. Site conditions are such that safe navigation requires consideration of a speed limit reduction, examples may include an old concrete pavement experiencing structural failure with construction joints and pavement marking alignment conflicts. Another may be adverse roadway geometry (below current standards) or sight distance due to grade or alignment changes, tunnels, etc.

2. The accident rate and/or severity crash rate for the facility (prior to construction) is higher than the statewide rates as compared to other similar facilities.

3. The work zone crash rate and/or work zone severity crash rate for the corridor (prior to construction) is higher than the 5 year average as compared to similar facilities.

4. Current Truck Traffic levels greater than 15% of the AADT in the work zone

SECTION IV-IMPLEMENTATION PROCESS

1. Process initiated by contract from the Work Zone Traffic Control Section of the Transportation Mobility and Safety Division to the Regional Traffic Engineer's office requesting an engineering investigation. The initiation may come from the Division office or others.

2. Engineering Investigation will include a review of the existing posted speed limit and the 85th percentile speeds.

3. In addition, the Work Zone Speed Limit Reduction Criteria will be reviewed by the Work Zone Traffic Control Section to determine if the project meets the above criteria.

4. The Work Zone Traffic Control Section and the Regional Traffic Engineer will discuss and collaborate on the results of the review and determine whether to implement the Work Zone Speed Limit Reduction.

5. If it is determined the existing speed limit should be lowered, then the $250 fine for speeding should also be used.

6. If the ordinances are approved, the Regional Traffic Engineer will notify the Resident Engineer and the Work Zone Traffic Control Section.

7. Also, if implemented, it may only be for a specific segment of the work zone, or it may only be for a specific phase for the work zone.

8. In order for the Work Zone Speed Limit to be a valid and enforceable speed limit, the ordinance has to be approved and signed by the State Traffic Engineer. No work zone speed limit signs are to be installed before the ordinance is in effect.

9. Notify the Regional Traffic Engineer to rescind the ordinance once the Work Zone Speed Limit is no longer warranted.

10. Once the ordinance is rescinded the existing posted speed limit shall be returned.

11. See attached drawings for the correct signs and sign locations for this application.

SECTION V- SIGNING APPLICATION

Whenever a project warrants a “Work Zone” speed limit reduction, the existing speed limit signs are to be removed and the work zone speed limit displayed with appropriate supplemental signing attached, to include the $250 fine signs. Typical speed limit reductions are 10 MPH below the existing posted speed limit. In 70 MPH speed zones, a maximum 15 MPH speed reduction may be used. It is strongly recommended that no speed limits below 55 MPH be posted on fully controlled access facilities. The Regional Traffic Engineer, after consulting with the Division, will determine the speed limit with the final approval being made by the State Traffic Engineer.

The advance warning for the upcoming “work zone” speed limit will be the speed reduction warning signs W3-5 and W3-5A. The “begin” location for the $250 fine is the place where the “BEGIN ROAD WORK” sign is located and the associated “BEGIN $250 FINE” sign is mounted below it. The beginning location for the “work zone” speed limit will typically be at the project limits and most often will be signed as 55 MPH. The “work zone” speed limit signs with have a black on orange “WORK ZONE” panel above the speed limit sign (R2-1) and a black on white “250 FINE” sign mounted below. However, this location does not always have to begin at the project limit. It may initiate inside the project if the conditions warranting the reduction are located well inside the project. Also, the project may warrant the “work zone” speed limit for a certain phase of work instead of the entire project duration. When this occurs, the speed limit shall be returned and the $250 fine signs removed when the conditions warranting the “work zone” speed limit are mitigated. The termination point for the “Work Zone” speed limit will

typically be at the ending project limit and will be indicated with a regulatory, speed limit sign with the in-place speed limit for the roadway ahead. This is to inform the drivers that the "Work Zone" speed limit has ended. However, it's possible the "work zone" speed limit may end before the end of the project limit. When this occurs, the "in place" speed limit for the roadway ahead shall be displayed at the location where the conditions warranting the "work zone' speed limit are mitigated. The end location for the $250 fine is the place where the "END ROAD WORK" sign is located and the associated "END $250 FINE" sign mounted below it. The required signing is shown on a separate drawing.

8.3.2.1 Drawing for WZ Speed Limit Reduction (Link to PDF)

Contact Work Zone Traffic Control for CADD files if necessary.

8.3.3 Guidelines for "Variable" Speed Limit Reduction Ordinances

Guidelines For Work Zone "Variable" Speed Limits For NC Highway Construction and Maintenance Activities on High Speed Facilities

Purpose: This guideline provides guidance and uniformity on the establishment of "variable" speed limits for highway work zones.

Objective: The objective of this guideline is to identify conditions where it's appropriate to reduce the speed limit on freeways with existing speed limits of 65 MPH and above for specific, short-term work being performed in construction and maintenance work zones.

Guideline: The Work Zone Traffic Control Section in consultation with the Regional Traffic Engineering staff has developed these guidelines to provide guidance and uniformity in the implementation of reducing the speed limit for specific, short-term activities in work zones. The intent is to coordinate and implement "best strategies" to address appropriate work zone speed limits for construction and maintenance activities. In accordance with the provisions described in Chapters 6B,C and D of the MUTCD, this guideline has been crafted to ensure thorough engineering study prior to implementation of interim speed limit reductions.

Work zone "variable" speed limit reductions are implemented in the interest of safety for the construction worker and/or they can be applied if the reduction is intended for the safety of the motoring public due to active project conditions or a combination of both. The focus for this type of application is the short term and/or moving type of work zones which generally have traffic controls implemented such as lane closures, temporary shortterm cross-overs, short-term onsite detours and other temporary patterns and or conditions which may last from 1 to 30 days. During these operations, lane merging, traffic queuing, and non-standard patterns may require added decision making time, increased reaction times, and other driver focused actions where slower speeds can allow for better driver recognition and reaction.

However, this guideline can not cover every situation that may be encountered in construction and maintenance work zones. There are many factors that can come into play which may not be covered in this guideline which may justify the use of a Work Zone "variable" speed limit reduction. Therefore exceptions can be made on a case by case basis. Appropriate judgment must be used in applying the guidelines. Exceptions to the required criteria below will be considered on a case by case basis. Whenever these arise, the Work Zone Traffic Control Section will coordinate with the Transportation Mobility and Safety Division and Division personnel to evaluate the conditions and associated operations to recommend the most appropriate course of action.

The State Traffic Engineer will have the final decision making authority as to whether the work zone "variable" speed limit is implemented. Below are the definition, application and criteria for work zone "variable" speed limit reductions.

A Work Zone "Variable" Speed Limit is one that temporarily reduces the existing speed limit for short-term activities in work zones. These speed limits are intended for passive temporary traffic control activities such as lane closures and other temporary traffic pattern alterations lasting from 1 day up to 30 days at a given location. The Work Zone "Variable" Speed Limit can not be in operation continuously (24/7) for a period exceeding 30 calendar days. If the conditions warrant a longer period, the Work Zone Speed Limit shall be used.

These "variable" speed limits are intended for use where it is imperative to reduce high speed entry into a work area where passive traffic controls are in place or where traffic controls significantly alter the existing traffic patterns. These speed limits should only be posted when and where the traffic controls necessitate a slower speed entry to either provide the workers an environment with fewer high speed encroachments into their work space or for the motorists to safely navigate the temporary traffic controls in place.

Only the specific portion of the work zone where conditions warrant or restrictive features are present shall receive consideration for the work zone "variable" speed reduction. In addition, only certain phases of construction may warrant this reduction.

After the State Traffic Engineer signs the ordinance, the Work Zone "Variable" Speed Limit signs/sign messages can be installed on the project according to the drawings. In addition, if a project warrants a Work Zone "Variable" Speed Limit, it automatically qualifies for the $250 speeding fine. This additional speeding fine is also to be ordinanced by the State Traffic Engineer.

The Work Zone "Variable" Speed Limit warrants are defined below. In order for a project/activity to "qualify" for this treatment, it must meet all of the warrants in Section I and at least 1 warrant in Section II.

ORDINANCE CRITERIA

SECTION I

The work zone must meet of the **ALL** following warrants to be considered for the Work Zone "Variable" Speed Limit ordinance**.** If Section I warrants aren't met, the project doesn't qualify for the "Work Zone Speed Limit" ordinance.

1. The existing Speed Limit is 65 MPH or greater.

2. Work at a "spot location" is of short duration (1 day up to 30 days) with the traffic control usually removed within the same day. A Work Zone "Variable" Speed Limit can NOT be in operation continuously (24/7) for a period exceeding 30 calendar days.

SECTION II

The work zone shall meet **at least one** of the following criteria to be further considered for the **Work Zone "Variable " Speed Limit** ordinance.

1. The work requires temporary 'significant' alterations in the existing traffic pattern such as continuous lane closures (up to 30 days), temporary median cross-overs, temporary on-site detours, and/or temporary "All Exit" road closures and or temporary road closures that involve the stopping of traffic.

2. The worker is actively and visibly performing work behind the passive lane closure.

3. Multiple lane closures on a mega-multi laned facility

4. Night work requiring the use of temporary lane closures.

5. Uneven pavement elevations between travel lanes greater than 2"

6. Work that involves the changing the traffic pattern/s where markings are placed in a revised location and the old markings removed.

If the above criteria are met, the existing speed limit may be reduced. The Division, Work Zone Traffic Control Section and the Traffic Safety Unit will coordinate and provide the required analysis and final determination if a work zone "variable" speed limit is the appropriate action.

When appropriate, the Work Zone "Variable" Speed Limit will be ordinanced by the Regional Traffic Engineer and signed by the State Traffic Engineer. No speed limit information is to be displayed on any device without a signed ordinance by the State Traffic Engineer.

Once the ordinance is signed by the State Traffic Engineer, the Regional Traffic Engineer will contact the Resident Engineer's Office and the Work Zone Traffic Control Section for notification and approval for its use.

SECTION III- IMPLEMENTATION PROCESS

1. Process initiated by contact from the Work Zone Traffic Control Section of the Transportation Mobility and Safety Division to the Regional Traffic Engineer's office requesting an engineering investigation.

2. Engineering Investigation will include a review of the existing posted speed limit and the 85th percentile speeds.

3. In addition, the Work Zone "Variable" Speed Limit Criteria will be reviewed by the Work Zone Traffic Control Section to determine if the project meets the above criteria.

4. The Work Zone Traffic Control Section and the Regional Traffic Engineer will discuss and collaborate on the results of the review and determine whether to implement the Work Zone "Variable" Speed Limit reduction.

5. If the ordinance is approved, the Regional Traffic Engineer will notify the Resident Engineer and the Work Zone Traffic Control Section.

6. Also, if implemented, it may only be for a specific segment of the work zone, or it may only be for a specific phase for the work zone.

7. If it is determined the existing speed limit should be lowered, the $250 fine for speeding should also be used.

8. In order for the Work Zone "Variable" Speed Limit to be valid and enforceable, the ordinance has to be approved and signed by the State Traffic Engineer. No work zone speed limit messages/signs are to be installed in the work zone before the ordinance is in effect.

9. The Resident Engineer will notify the Regional Traffic Engineer to rescind the ordinance once the Work Zone "Variable" Speed Limit is no longer warranted.

10. Once the ordinance is rescinded, the existing posted speed limit shall be returned.

11. See attached drawings for the correct signs and sign locations for this application.

SECTION IV-SIGNING APPLICATIONS

Since these speed limit reductions are utilized for short-term activities, the recommended application is the use of either portable/dynamic message signs or portable speed limit signs. Changeable message signs, due to their size and greater visibility, provide the largest target value possible. In addition, these devices can provide the motorists more information concerning the upcoming conditions and expectations. Messages pertaining to the upcoming speed limit reduction, conditions related to the speed limit reduction and finally the reduced speed limit message are all possible through their usage. These portable devices are also capable of being moved along the project as work progresses, as well as having their messages either changed and/or removed.

However, portable speed limit signs (R2-1) are also a valid and less expensive technique to reduce the speed limit for short-term activities. The Regional Traffic Engineer, the Division and the Work Zone Traffic Control Section will collaborate on the technique used for each work zone.

If changeable message signs are utilized, the messages reducing the speed limit and/or $250 speeding fine are to be displayed when workers are visibly present and active work is taking place.

At the end of the work period, when the temporary traffic control devices are removed, so shall the work zone "variable" speed limit and $250 fines by removing the reduced speed limit and $250 fine messaging on the portable/dynamic message signs. However, if lanes are to be reopened to uneven elevations, the work zone "variable" speed limit reduction and $250 fine may remain in place until this situation is mitigated.

If portable speed limit signs are utilized, they shall be removed along with the $250 fine signs when the temporary traffic control devices are removed and traffic returned to their normal patterns. However, if lanes are to be reopened to uneven elevations, the work zone "variable" speed limit reduction and $250 fine may remain in place until this situation is mitigated.

When a work zone "variable" speed limit is in affect, all existing stationary speed limit signs shall be covered. Immediately upon completion of the work activity necessitating the speed limit reduction, all existing speed limit signs shall be uncovered at no cost to the Department.

After the project/work activity is complete, the State Traffic Engineer is to be notified so the work zone "variable" speed limit ordinance will be rescinded.

Typical speed limit reductions are 10 MPH below the existing posted speed limit. In 70 MPH speed zones, a maximum 15 MPH speed reduction may be used.

It is strongly recommended that no speed limits below 55 MPH be posted on fully controlled access facilities. The Regional Traffic Engineer, after consulting with the Division, will determine the speed limit with the final approval being made by the State Traffic Engineer.

The concluding sign should be a portable, regulatory Speed Limit sign with the in-place speed limit for the roadway ahead. This is to inform the drivers the work zone "variable" speed limit has ended. Each of these signing applications is shown on separate drawings.

8.3.3.1 Drawing for WZ "Variable" Speed Limit Reduction (Link to PDF)

Contact Work Zone Traffic Control for CADD files if necessary.

8.3.4 Guidelines for $250 Speeding Fine Ordinances

Standard Practice For $250 Speeding Fine Guidelines for NC Highway Construction and Maintenance Activities on High Speed Facilities

Purpose: This document provides guidance and uniformity on the establishment of $250 speeding fines in work zones.

Objective: The objective of this guideline is to identify conditions where it's appropriate to implement a $250 speeding fine on roadways with existing speed limits of 60 MPH and above for work being performed in construction and maintenance work zones.

Guideline: The Work Zone Traffic Control Section in consultation with the Regional Traffic Engineering staff has developed these guidelines to provide guidance and uniformity in the implementation of the $250 speeding fine in work zones. The intent of the $250 speeding fine is to increase the impact of receiving a speeding citation whenever road conditions and/or site conditions dictate a need for the driver to be more focused on maintaining a safe speed. Another component of the $250 speeding fine is to encourage "uniform" speeds by reducing speed differential in the travel stream through the work zone. Therefore, it's imperative this application only be used whenever it's appropriate.

The $250 penalty can be applied to work zones where the existing speed limit remains, or it can be implemented during times when the speed limit is reduced. Work Zone speed limits can be reduced in two (2) methods. The first is the long term type where the speed limit signs (R2-1) are changed to a lower speed limit and are displayed continuously. This method is referred to as the "Work Zone Speed Limit Reduction". The other method is done for specific activities during the project and the lower speed limits are displayed only for the activities that warrant the lower speeds. The speed limits are displayed on either portable speed limit signs or displayed as a number on changeable message signs. This method is referred to as the "Work Zone Variable Speed Limit Reduction".

This guideline has been established to ensure thorough engineering review and analysis prior to implementation of the $250 speeding fine. Typically, road conditions that warrant this strategy have been altered and generally contain restrictive features throughout its length, which may require added decision making, increased reaction times and other driver focused actions. Adhering to the speed limit allows for better driver recognition and reaction and hopefully the negative consequence of an added $250 speeding fine will obtain the desired result of uniform speeds through the work zone. However, this guideline can not cover every situation that may be encountered in a work zone; therefore, appropriate judgment must be used in applying the guidelines. Exceptions to the criteria below will be considered on a case by case basis.

The $250 speeding fine ordinance warrants are defined below. In order for a project to "qualify" for this treatment, it must meet all warrants in Section I and at least 1 warrant in Section II. If Section II warrants aren't met, the project must meet at least 2 warrants in Section III to qualify for the $250 fine. If Section I warrants aren't met, the project doesn't qualify for the $250 Fine.

ORDINANCE CRITERIA

SECTION I

The work zone **must meet all** of the following warrants to be considered for the $250 fine ordinance:

1. The work zone is located on a facility where the existing posted speed limit is 60 MPH or higher.

2. The work zone is greater than 1 mile in length.

3. The work zone is long term duration (greater than 30 days)

AND

SECTION II

The work zone shall meet **at least one** of the following warrants to be further considered for the $250 fine ordinance:

1. **The existing Posted Speed Limit within the work zone is reduced during construction by either a Work Zone Speed Limit Reduction or by a Work Zone Variable Speed Limit Reduction.**

2. The work zone is adjacent to other work zones where a $250 ordinance is in effect.

3. Significant amount of work requiring "frequent use" of Short-term stationary lane closures (daytime work occupying a particular location for more than 1 hour) and/or Intermediate-term stationary lane closures during construction (work occupying a particular location for more than one daylight period up to 3 days or night work lasting more than 1 hour).

   Note: "*frequent use*" pertains to more than 25% of total duration of project

OR

SECTION III

The work zone shall meet **at least two** of the following warrants in Section III to be further considered for the $250 fine ordinance:

1. The 85th percentile speeds within the work zone are 10 miles per hour or higher than the posted speed limit (speed study should be done during off-peak hours and prior to beginning of work).

2. The accident rate and/or severity crash rate for the facility (prior to construction) is higher than the statewide rate as compared to similar facilities

3. The work zone crash rate and/or work zone severity crash rate for the corridor (prior to construction) is higher than the 5 year average as compared to similar facilities

4. Current Truck Traffic levels greater than 15% in work zone.

SECTION IV- IMPLEMENTATION PROCESS

AUTHORIZATION

Senate Bill 649 amended Senate Bill 30 to allow flexibility in the designation of segments of Work Zones subject to the $250 speeding penalty. It became effective on December 1, 2009. This Bill rewrote Section (j2) of General Statue 20-141. In this Bill, it says "the additional penalty imposed by this subsection applies only if sign (signs) are posted at the beginning and end of any segment of the highway work zone stating the penalty for speeding in that segment of the work zone. The Secretary shall ensure that work zones shall only be posted with penalty signs if the Secretary determines, after engineering review, that the posting is necessary to ensure the safety of the traveling public due to a hazardous condition. Described below is a process to implement this Bill.

IMPLEMENTATION

1. Process initiated by contact from the Work Zone Traffic Control Section of the Transportation Mobility and Safety Division to the Regional Traffic Engineer's office requesting an engineering investigation. The initiation may come from the Division office or others.

2. Engineering Investigation will include a review of the existing posted speed limit and the 85th percentile speeds and the need for the increased penalty of up to $250 for speeding in the work zone.

3. In addition, the $250 fine ordinance criteria will be reviewed by the Work Zone Traffic Control Section to determine if the project meets the criteria.

4. The Work Zone Traffic Control Section and the Regional Traffic Engineer will discuss and collaborate on the results of the review and determine whether to implement the $250 speeding fine.

5. If it is determined that the increased fine for speeding in the work zone applies to this location, it can be used without a speed limit reduction.

6. Further, if it is determined in a separate review, the existing posted speed limit should be lowered in the work zone, the $250 fine for speeding should also be used.

7. If the ordinance is approved, the Regional Traffic Engineer will notify the Resident Engineer and the Work Zone Traffic Control Section.

8. In order for the $250 speeding fine to be in effect, the ordinance has to be approved and signed by the State Traffic Engineer. No "$250 fine" signs are to be installed in the work zone before the ordinance is in effect.

9. See attached drawings for the correct signs and sign locations for this application.

10. Once the conditions that warranted either the $250 alone or in conjunction with a speed limit reduction are removed, so shall the ordinance. The Resident Engineer will notify the Regional Traffic Engineer to rescind the ordinance. For example, once traffic is placed in their final pattern, the $250 fine signs need to be removed.

SECTION V- $250 Signing Applications

The $250 Speeding Penalty can be applied in a variety of applications and scenarios within an application. The Traffic Control Designer, the Division and Regional Traffic Engineer need to evaluate to determine which application is the best method for the project. The first scenario is when the $250 fine implemented without reducing the speed limit. The others are when the $250 fine is implemented where the speed limit **IS** reduced through a Work Zone Speed Limit Reduction or a Work Zone "Variable" Speed Limit Reduction. Each is shown on separate drawings.

8.3.4.1 Drawing for $250 Speeding Fine (Link to PDF)

Contact Work Zone Traffic Control for CADD files if necessary.