

APPENDIX C: TRAFFIC CALMING GUIDELINES

THE CITY OF OREM

TRAFFIC CALMING GUIDELINES



ADOPTED MAY 2015

PREPARED BY



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INTRODUCTION

The concept of traffic calming originated in the 1960s with the publication of *Traffic in Towns* by Sir Colin Buchanan. This volume described the potential damages to society and neighborhood livability caused by the motor car and methods to mitigate these impacts. These policies helped shape the development of urban landscape in many countries over the next few decades.

Since the mid 1990s, the Institute of Transportation Engineers (ITE) has seen traffic calming as an institute priority and the industry at large has seen dozens of programs implemented to address the issue of traffic calming. In 1999, ITE, along with the Federal Highway Administration (FHWA), published: *Traffic Calming: State of the Practice*. This became the authority of traffic calming methods and practices. A second, more recent publication: *U.S. Traffic Calming Manual*, was released in 2009 by the American Society of Civil Engineers (ASCE) and the American Planning Association (APA) as a companion volume to *Traffic Calming: State of the Practice*.

Today, traffic calming programs have been adopted by agencies throughout the United States, as it has become increasingly important to the public, agencies and other interested parties to develop effective neighborhood environments that adequately accommodate motor vehicles, pedestrians and bicyclists. The City of Orem is interested in applying appropriate traffic calming with the goals of improving neighborhood *safety* and *livability* while maintaining traffic circulation and overall user *mobility*.

ITE defines traffic calming as follows:

Traffic calming involves changes in street alignment, installation of barriers, and other physical measures to reduce traffic speeds and / or cut-through volumes, in the interest of street safety, livability, and other public purposes.

Based on ITE's definition, traffic calming is a methodology to influence motorist behavior and prevent undesirable driving practices. Traffic calming is generally achieved with physical measures that reduce speeds, reduce traffic volumes, discourage cut-through traffic on local streets, minimize conflicts between street users, and enhance the environment.

This document presents recommended traffic calming guidelines for use within The City of Orem. The guidelines are applicable for use on existing streets, as well as in new developments. This document presents a comprehensive program for addressing the traffic calming needs of the City, including responding to citizen requests, prioritizing traffic calming needs, selecting the most appropriate type of traffic calming, installing traffic calming measures, and evaluating the effectiveness of traffic calming already in use.

An extensive literary search was conducted of the state-of-the-practice by other agencies and organizations to gather information on the best practices for designing neighborhood traffic calming programs. This information was utilized to develop guidelines for The City of Orem.

PRINCIPLES OF TRAFFIC CALMING

There are several principles of traffic calming that should be considered when implementing traffic calming measures. The following principles are intended to provide guidance and direction for users of this document:

1.0 PROBLEM IDENTIFICATION

Identifying the real traffic problem for a neighborhood roadway is not a simple process. Sometimes the perceived nature of a traffic problem is very different from the real problem. For example, residents often mention both "traffic volume" and "speeding" as problems on their streets, but in many cases the traffic problem is one or the other. It is important to identify the real traffic problem in order to select the appropriate mitigating measure.

1.1 PROBLEM CHARACTERIZATION

In order to ensure that the appropriate traffic calming measures are implemented, it is essential that the extent of problems be characterized and quantified. Roadway information such as width of roadway and intersection dimensions should be collected. Diagrams can also be made to show such items as traffic volumes, speeds, peak hours of travel, turning movement counts, historical crash information, transit routes, bicycle routes, and pedestrian volumes.

1.2 CONSIDER MAJOR ROAD NETWORK IMPROVEMENTS

Before implementing any traffic calming measures for unwanted through traffic on neighborhood roadways, the reason for these movements need to be determined. Sometimes congestion on adjacent arterials encourages motorists to use residential streets as a shortcut. There are a wide range of low-cost options available to improve operations on the major street network, including fine-tuning signal timings, adding turn pockets, and implementing prohibitions and parking restrictions.

1.3 MINIMIZE ACCESS RESTRICTIONS

Residents, businesses, and others who live and work in the community will be more supportive of traffic calming measures that do not restrict their access into and out of a neighborhood. Problems should be addressed with other less restrictive traffic calming measures when possible.

1.4 TARGET PASSENGER VEHICLES

The purpose in implementing traffic calming measures is to minimize impacts to other modes of transportation such as transit, pedestrian and bikes. Designs for traffic calming measures should take into account these modes of transportation.

1.5 TEMPORARY IMPLEMENTATION

When possible, inexpensive temporary measures should be installed to ensure traffic calming measures will achieve the intended results prior to constructing permanent measures. A temporary installation also provides an opportunity to alter the geometrics of a measure or make other changes prior to permanent installation. Temporary measures should resemble permanent measures as much as possible.

1.6 NEIGHBORHOOD INVOLVEMENT

Residents, businesses and others who live and work in the community should be involved in developing traffic calming. Their input is essential in identifying problems and in selecting traffic calming solutions. Involving the neighborhood builds support for traffic calming plans, and enhances the credibility and effectiveness of a plan.

1.7 MONITOR CONDITIONS

Traffic patterns change and consequently it is important that traffic volumes, vehicle speeds, crashes, and other indicators of potential traffic problems are recorded and analyzed continually. Much of this information is already collected and can be stored in a Geographic Information System (GIS) or other easy to manage database. City personnel should monitor conditions on a continual basis.

2.0 TRAFFIC CALMING PROCESS

A successful traffic calming program consists of four phases: project initiation, project development, project approval, and project implementation. Each phase has several tasks associated with it. This section describes the steps in the process of implementing traffic calming in new developments and existing neighborhoods. **FIGURE 1** presents the typical traffic calming process and are described in the following sections.

Figure 1: Traffic Calming Process



2.1 PROJECT INITIATION

The first phase in the traffic calming process is project initiation. This phase begins when a resident, business owner, neighborhood group, or proactive Orem city employee identifies a potential problem area.

TRAFFIC CALMING REQUEST

Upon identifying a potential traffic problem, the concerned party then submits a formal request for traffic calming. This request can come from any concerned individual or group who sees a possible need for traffic calming.

For new developments, The City of Orem will review development plans to identify potential traffic problems such as speeding or cut-through traffic. Often traffic problems can be predicted and prevented by properly reviewing roadway and lot plans for new developments.

For existing neighborhoods, the concerned party should make their concern known to the The City of Orem Public Works Department. The concerned party should identify the location and exact nature of their primary concern such as vehicle safety, pedestrian safety, congestion, speeding, noise, or cutthrough traffic. This information should be submitted in written form via the **REQUEST FOR TRAFFIC CALMING FORM** found in **APPENDIX I**, available from the City Public Works Department or accessible via download from the City's website. Requests may also be made via the City's website.

CITY STAFF RESPONSE

Upon receipt of a traffic calming request, The City of Orem staff will have 30 days to respond to the applicant. During this time staff will identify the problem area and whether a request has already been previously submitted for the request location. If this is the case, the applicant will be notified that a study is already underway and will be put in contact with the previous applicant upon their authorization.

REVIEW

If no study is currently in process, staff will identify the limits of the study and the eligibility of the roadway for traffic calming. The **STUDY AREA** should include all streets that may be affected by traffic calming treatments and should generally be bounded by features such as roadways, topography or land use changes. The process of determining eligibility will include a review of the roadway functional type as well as meetings with key stakeholders within the City. Key stakeholders may include but not be limited to the following:

Mayor City Council Emergency Response Personnel City Administrator

Streets Superintendent
Public Works Director
Police and Fire Chief
Bike & Pedestrian Coordinator
City Engineer

PETITION

Upon notification of the study area and determination that the roadway is eligible for traffic calming, the applicant must distribute a **PETITION** to the residents/property owners in the study area for support of the traffic calming request. At least **50%** of the residents/property owners in the study area must sign the petition in order for The City of Orem to proceed with the traffic calming process.

2.2 PROJECT DEVELOPMENT

Once a request passes through phase 1 and is deemed suitable for traffic calming based on the criteria outlined, staff begins the process of selecting an appropriate traffic calming measure in corporation with the community. It is at this stage in the process where budget and resource restraints are identified.

PUBLIC INVOLVEMENT

Early in the project development phase The City of Orem will hold a widely advertised public meeting. At this meeting, staff will present the process used to develop, approve, and implement neighborhood traffic calming plans. The public is encouraged to identify and discuss the traffic problems in the study area. Staff should provide a brief tutorial on traffic calming and encourage the residents to volunteer for the **COMMUNITY TRAFFIC COMMITTEE (CTC)** and select a **NEIGHBORHOOD REPRESENTATIVE.** The CTC should consist of residents and business owners residing in the immediate vicinity of the study area as well as any surrounding affected areas. The neighborhood representative may or may not be the original applicant. City staff act as technical advisors to the CTC throughout the process. The CTC is essential to the process as they provide a contact for feedback to the City and can aid in data collection and public involvement. Data should be collected regarding traffic volume, roadway geometry, speeds, crashes, neighborhood comments, etc.

SELECTING MEASURES

Based on the character of the traffic problem and the data that has been collected, the City will develop possible traffic calming solutions. The solutions shall be evaluated to determine if they meet the required goals and objectives.

Once the measures have been selected they should be discussed with the CTC to solicit feedback and address any concerns or comments from the community. At this point a preferred alternative should be selected by City staff and the CTC.

2.3 PROJECT APPROVAL

Once a preferred alternative has been selected by City staff and the CTC it must be presented to the affected residents and approved by elected officials.

RESIDENT FEEDBACK

A public meeting will be held by the CTC where the preferred alternative is presented to the neighborhood residents and all other interested parties. A standard drawing design of the proposed traffic calming measure as well as maps showing the approximate location of the preferred alternative may be presented. The CTC with the help of the technical advisors should respond to questions and concerns from the general public at this time. Any concerns should be taken into consideration before proceeding to the next step.

ELECTED OFFICIALS

Once a final solution has been developed, the traffic calming measures will be presented to the key City stakeholders for their final input before it is presented to the City Council. **THE APPROVAL OF TRAFFIC CALMING MEASURES IS ULTIMATELY UP TO THE CITY ENGINEER AND CITY COUNCIL.** As part of the solution, a plan should also be included for implementation of the traffic calming measure. The plan should detail the design and construction costs.

PRIORITY RANKING

Due to budget planning, a priority ranking of the particular project may be performed. Founded on a point system, the solution will receive points based on various data including speed, volume, crash data, pedestrian use, and proximity to schools, hospitals, and care facilities. Projects requiring funding will be prioritized in the next fiscal year budget and only those projects with sufficiently high rankings will be implemented.

Costs can also be shared with the neighborhood. For instance, if a community requests a speed hump, which is then approved by City staff, yet it is of low priority, the community can share the burden of the cost in order for the construction to go forward. Costs not only include construction but also maintenance of landscaping. Costs shall be discussed as part of a public meeting.

2.4 PROJECT IMPLEMENTATION

Project implementation is the final phase in the traffic calming process. After the city council has approved and funding has been allocated either by the City Council or cost sharing with the neighborhood, the plan to implement the traffic calming measure can be put in place.

DESIGN

Using the guidelines discussed in this documents companion volume **THE CITY OF OREM – TRAFFIC CALMING TOOLBOX**, the selected traffic calming measure will be designed. The final design will be in accordance to the guidelines (e.g. geometric, landscaping, safety, etc.) presented in said document.

TRIAL INSTALLATION

At the discretion of The City of Orem, a temporary traffic calming measure that closely resembles the proposed solution may be installed to evaluate the potential effectiveness of the permanent measure. Trial installations should be evaluated after a minimum of 6 months of operation. Trial installations will be installed where possible. There may be situations where no trial installation is needed.

PERMANENT INSTALLATION

Once the decision has been made by The City of Orem to proceed with permanent installation of the traffic calming measure, construction will be scheduled and will commence according to the schedule and funding restrictions decided by the City Council. Care must be taken that permanent installations will be effective and are supported by the community.

EVALUATION

If after evaluation of the temporary measure, the desired results are not achieved, the permanent traffic calming measure may not be installed and the process should return to the project development phase. Each project will be eligible for a return to the project development phase one time only.

3.0 TRAFFIC CALMING MEASURES

This section introduces the six main categories of traffic calming measures and presents their studied effectiveness at mitigating traffic problems. For a more detailed description of each of the measures listed, please see the companion document **THE CITY OF OREM – TRAFFIC CALMING TOOLBOX**.

3.1 NON-PHYSICAL MEASURES

Non-Physical Measures are measures such as signage or speed enforcement that do not require any construction or physical modifications to the roadway. These items can be attempted first since they can be economical and easy to remove if they do not solve the problem.

3.1.1 Effectiveness of Non-Physical Measures

Some measures such as speed enforcement signs or trailers have temporary effectiveness. Other measures have inconclusive effectiveness and may not significantly reduce speeds.

3.1.2 Specific Non-Physical Measures

The following list are non-physical measures that can be implemented. Refer to <u>Appendix D: Traffic</u> <u>Calming Toolbox</u> for examples and photos of these measures.

- Speed Enforcement
- Radar Speed Signs
- Lane Striping
- Signage
- Speed Legends
- Raised Pavement Markings
- Angled Parking

3.2 VOLUME CONTROL MEASURES

Volume Control Measures reduce the quantity of vehicles that use the roadway. They use barriers to restrict one or more movements at an intersection. Their primary purpose is to divert traffic away from the trouble area thus reducing cut-through traffic.

3.2.1 Effectiveness of Volume Control Measures

Volume control measures are effective in reducing traffic volume by 30-40%. They have also been found to reduce travel speeds by up to 19%.

3.2.2 Specific Volume Control Measures

- Full Closure
- Half Closure
- Median Barrier
- Forced Turn Island

3.3 VERTICAL SPEED CONTROL MEASURES

Vertical Speed Control Measures are usually raised segments of the roadway that vary in height and width. These are designed to force a vehicle to slow down in order to comfortably navigate them.

3.3.1 Effectiveness of Vertical Speed Control Measures

Vertical speed control measures can reduce traffic volumes up to 22% and speeds up to 25%.

3.3.2 Specific Vertical Speed Control Measures

The following list are vertical speed control measures that can be implemented. Refer to <u>Appendix D:</u> <u>Traffic Calming Toolbox</u> for examples and photos of these measures.

- Raised Crosswalk
- Raised Intersection

3.4 HORIZONTAL SPEED CONTROL MEASURES

Horizontal Speed Control Measures are segments of roadway where the straight line of travel has been altered to cause a vehicle to change direction and slow down.

3.4.1 Effectiveness of Horizontal Speed Control Measures

Horizontal speed control measures may reduce traffic volumes as much as 20% and vehicle speeds up to 14%.

3.4.2 Specific Horizontal Speed Control Measures

The following list are horizontal speed control measures that can be implemented. Refer to <u>Appendix D:</u> <u>Traffic Calming Toolbox</u> for examples and photos of these measures.

- Traffic Circle
- Roundabout
- Chicane
- Lateral Shift

3.5 NARROWING MEASURES

Narrowing Measures are usually short segments of the roadway that have been narrowed to restrict the pavement surface.

3.5.1 Effectiveness of Narrowing Measures

Narrowings have been found to result in an approximate 4% decrease in travel speed and a 10% decrease in traffic volume.

3.5.2 Specific Narrowing Measures

The following list are narrowing measures that can be implemented. Refer to <u>Appendix D: Traffic Calming Toolbox</u> for examples and photos of these measures.

- Neckdown
- Choker
- Center Island

3.6 COMBINED MEASURES

Sometimes one traffic calming measure may not sufficiently address specific traffic problems like excess speeding. Combined Measures are a combination of two or more of the previously mentioned measures that are installed concurrently to accomplish the design goals.

APPENDIX I: PROCESS DOCUMENTATION

TRAFFIC CALMING PROGRAM INSTRUCTIONS

1 INTRODUCTION

Welcome to the Orem traffic calming program! These instructions outline the steps in the traffic calming request process. Please read and understand these instructions before filling out the Request for Traffic Calming form or Petition.

2 IMPLEMENTATION PROCESS/TIME FRAME

The implementation process and time frame depend on the number of traffic calming requests running concurrently and the complexity of the traffic analyses. The time frames shown here represent the estimated maximum time taken from neighborhood request to installation. The City of Orem will accept traffic calming requests at any time throughout the year. Requests will be processed in the order they are received. However, in order for traffic calming measures to be properly budgeted the timeframe from petition to project implementation may vary.

Request City Review/ Request submitted in person or online. Submitted to Neighborhood City Petition City to accept and review request: 1 month Petitioner completes petition: 2 months **Public** Selecting City reviews petition and confirm signatures: 2 months Meeting Measures City accepts petition and performs traffic study: 4 months City presents calming options to neighborhood Evaluation/ and presents recommendations to City Council: 4 months Approval and **Temporary** Public **Implementation Feedback** Temporary measures installed: *3-5 months Permanent installation if temporary measures are deemed effective: *2-6 months **Final** Implementation **POSSIBLE TOTAL TIME FRAME: 18-24 MONTHS**

*Some traffic calming measures may be beyond the budget of the traffic calming program and require the project to be added to the Capital Improvement Program (CIP). This could extend the project timeline by 12 months in order to be considered in the next fiscal year's CIP funding.

3 TRAFFIC CALMING REQUEST

3.1 ESTABLISHING A NEIGHBORHOOD REPRESENTATIVE

Communication with the City will be through a "Neighborhood Representative" and neighborhood meetings.

The neighborhood representative MUST BE A HOME OWNER, 18 YEARS OF AGE OR OLDER, LIVING ON THE STREET WHERE TRAFFIC CALMING IS BEING REQUESTED. Endorsement from other neighborhood residents is NOT required for someone to initiate a traffic calming request and become the neighborhood representative. The neighborhood representative fills out the REQUEST FOR TRAFFIC CALMING form and will work with his/her neighbors to sign the THE CITY OF OREM TRAFFIC CALMING PETITION.

3.2 REQUEST FOR TRAFFIC CALMING

The **REQUEST FOR TRAFFIC CALMING** form (request form) establishes communication between the City and the neighborhood representative. The request form is to be completed by the neighborhood representative and needs to be filled out completely in order for the City to review it. Please attach any other supporting pictures and/or drawings as needed to explain your traffic calming request. Written forms should be returned to the Orem Public Works Department at:

Orem Public Works 1450 West 550 North Orem, Utah 84057

3.3 MINIMUM QUALIFYING CRITERIA

Once the request form is completed and submitted to the City, the City will confirm that the request meets the following minimum criteria:

- a. The study street is classified as a neighborhood street by The City of Orem.
- b. The roadway must front residential, park, and/or schools over 66% of its length.
- c. The posted speed limit does not exceed 25 mph.
- d. The street is **NOT** a major emergency response route as determined by emergency response agencies and the City.
- e. The longitudinal grade of the roadway or intersection approaches does not exceed 5%.

For assistance, please contact the The City of Orem Public Works Department at (801-229-7070).

Once the City determines that the above minimum criteria are met, the neighborhood representative will be informed to proceed with the petition process.

3.4 NEIGHBORHOOD PETITION

The purpose of the **TRAFFIC CALMING PETITION** is to establish minimum neighborhood support to proceed with the Orem traffic calming program. One petitioner per household may sign the petition and petitioners must reside on the street where traffic calming is requested. A minimum of ten (10) signatures are required for the City to perform a traffic study and start reviewing traffic issues on the study street. A completed petition doesn't necessarily ensure that calming measures will be installed on the study street, but it does allow the City to continue with a traffic study and scoring process. The City Public Works

Department accepts traffic petitions at any time during the year and petitions are processed on a first-come first-served basis.

The neighborhood representative should be the first to sign the petition and is the liaison between the City and the neighborhood and is responsible for obtaining the required minimum number of signatures (ten) for the traffic calming request to be accepted by the City.

3.5 REVIEW AND RANKING

3.5.1 Traffic Study

The City of Orem will verify petition signatures and perform a traffic analysis to evaluate neighborhood concerns. Depending on the traffic issues in the neighborhood various traffic study components may include: traffic volumes, travel speeds, signing and striping, circulation, vehicle queuing, intersection operations, driver sight distance, accidents, proximity to sensitive facilities, pedestrian safety, etc.

3.5.2 Scoring

The purpose of the scoring process is to determine which neighborhood traffic calming project has the most need. If there are multiple traffic calming requests being processed by the City concurrently a scoring and ranking system will be used to prioritize projects. Scoring will be performed by City staff after the traffic analysis is complete.

3.5.3 Ranking

Once the traffic study is complete and the request has been scored, projects are ranked. The highest ranked projects will be accommodated first depending on the availability of funding resources.

3.6 SELECTING MEASURES

Based on the character of the traffic problem and the collected data, the City will develop possible calming measures. Public neighborhood meetings will be held to discuss the appropriate measure. The neighborhood representative, original petitioners, other impacted residents, home owner association representatives, police, fire, etc., shall be in attendance. Certain measures may affect more residents than the original petitioners. If this is the case, the City will notify the affected residents and an additional public meeting may be required.

The affected neighborhood residents (as determined by the City) will then vote on whether the chosen measure and location is acceptable. **SEVENTY-FIVE PERCENT (75%)** or more of the residents need to approve the recommended measure in order to proceed with submittal to the City Council. In instances where a temporary measure is to be installed, **FIFTY PERCENT (50%)** of affected residents must approve a temporary measure and **SEVENTY-FIVE PERCENT (75%)** are needed to approve permanent installation.

3.7 APPROVAL AND IMPLEMENTATION

The selected traffic calming measure will then be presented to the City Council for approval. Large traffic calming projects may be required to be included in the next years Capital Improvement Plan (CIP).

3.8 CONSTRUCTION

Some measures may require temporary installation in order to evaluate the effectiveness and impact to an area prior to final design. Other measures may be able to be installed permanently without a trial period. This decision is left to the discretion of the City Engineer and City Council.

3.9 EVALUATION

After the traffic calming measure has been constructed, The City of Orem may evaluate the effectiveness of the installed traffic calming device. This is to ensure the effectiveness of the measure. If ineffective, the City may decide to remove the traffic calming measure or in the case of temporary installation the City may decide not to install a permanent measure.

Please read "Traffic Calming Program Instructions" before starting the traffic calming request process!								
Date: Neighborhood Representati	ve:							
The neighborhood representative will serve as the liaison between the neighborhood and The City of Orem and is responsible for obtaining the appropriate petition signatures.								
Daytime Phone Number:	Alternate Phone Number:							
Address:								
Name and phone number of Home Owners Associat	ion Representative if applicable:							
Neighborhood Name:								
Council Representative:								
	ern the residents in your neighborhood.							
Speeding	Traffic Volumes							
Pedestrian/Bicycle Safety	Accidents							
Blocked Line of Sight	Access/Traffic Operations							
Other (explain):								
Description/Location of Problem								
Description/Location of Froblem								

Return to: The City of Orem Public Works, 1450 West 550 North, Orem, UT 84057

PETITION Please read "Traffic Calming Program Instructions" before starting the traffic calming request process! Come Now, the residents on ______ (street) located between _____ (cross street) _____ (cross street), hereinafter and referred to as the "Petitioners", hereby petition The City of Orem to consider the installation of traffic calming measures to mitigate traffic issues on our above referenced street and detailed on the submitted "Request Form". Petitioners must be at least 18 years of age and reside in separate households. By signing this petition you agree to allow traffic calming measures to be installed on your street that may permanently restrict access or parking along your street. There must be a minimum of ten petitioners to process this request. Signature Printed Name House # Phone # 4._____ 9.____

Return to: The City of Orem Public Works, 1450 West 550 North, Orem, UT 84057

14.____

SCORING			
85 th Percentile Speed (20 points maximum)			pts
The 85 th percentile speed represents the speed, at or below which, Points will be assigned based on the difference between the posteo		_	-
0 points, less than or equal to 5 mph difference 5 points, greater than 5 mph and less than or equal to 7 mph 10 points, greater than 7 mph and less than or equal to 9 mph 15 points, greater than 9 mph and less than or equal to 11 mph 20 points, greater than 11 mph	or or or or	(30 mph) (32 mph) (34 mph) (36 mph) (37 mph+)	
Traffic Volume (25 points maximum)			pts
Average Daily Traffic (20 points maximum)		pts	
Points for Average Daily Traffic (ADT) will be assigned as follows:			
0 points, less than 800 ADT 5 points, 801 ADT to 1,500 ADT 10 points, 1,501 ADT to 2,500 ADT 15 points, 2,501 ADT to 3,500 ADT 20 points, more than 3,500 ADT			
Peak Hour Volume (5 points maximum)		pts	
The percent of the daily traffic occurring during the peak hour will	be assign	ed points as follows:	
0 points, peak hour traffic is less than 10% of Average Daily Traffic 5 points, peak hour traffic is equal to or greater than 10% of Avera		raffic	
3-Year Crash Data (20 points maximum)			pts
0 points, less than 7 crashes over the last 3 years 10 points, 7 to 12 crashes over the last 3 years 20 points, more than 12 crashes over the last 3 years			
Pedestrian Facilities (5 points maximum)			pts
0 points, sidewalks are present and continuous on BOTH sides of t 2 points, sidewalks are discontinuous or do not exist on ONE side 5 points, sidewalks are discontinuous or do not exist on BOTH side	of the stre	et throughout the pro	ject limits
Sensitive Facilities (30 points maximum)			pts
Sensitive facilities include schools, senior centers, libraries, community cent	ers, and si	ites with significant pe	destrian activity.
0 points, no sensitive facilities or pedestrian crossings 10 points, roadway is within High School Safe Route to School bou 20 points, roadway is within Middle School Safe Route to School bou 30 points, roadway is within Elementary School Safe Route to Sch	oundary		
Total Points Maximum (100)		Total Score	pts