

City of Coeur d'Alene Traffic Calming Policy



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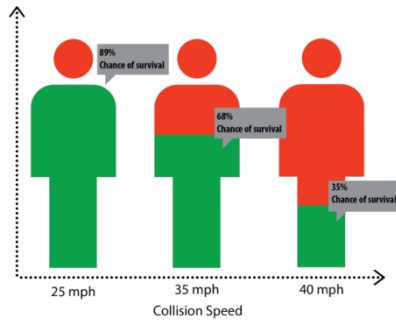
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Coeur d'Alene Traffic Calming Policy

Summary

Cities throughout the United States are learning that traffic calming (reducing motor vehicle speeds) is an important tool for improving safety and livability for their residents. Speeding is a major problem with serious consequences. Speeding increases the likelihood of being involved in a crash and increases the severity of injuries sustained in a crash. At higher speeds it takes longer for drivers to stop, increasing stopping distance, making it harder to avoid crashes, and increasing crash severity.



Pedestrians and bicyclists are particularly susceptible to increases in the severity of crashes. As speeds increase, the severity of injuries increases significantly. The chart on the left from B.C. Tefft's 2013 study, "Impact speed and a pedestrian's risk of severe injury or death" illustrates the effects of speed on pedestrian survival.

Traffic calming reduces motor vehicle speeds and improves the safety and comfort level for all: pedestrians, bicyclists, motorists, and residents. This document outlines a formal process and policy for implementation of traffic calming as well as a toolbox of various

traffic calming measures that best fit the City of Coeur d'Alene. Its purpose is to help guide decisions regarding reduction of motor vehicle speeds.

Process & Department Involvement

Speeding complaints will be addressed through the following process:

1. Speeding complaint is received by the City.
2. Streets & Engineering will discuss the concern with the property owner.
3. Speed counts are performed on the street of concern, near the property owner's location if feasible, at a time of year when weather will not likely skew results.
 - a. If the recorded 85th percentile speeds exceed the posted speed limit by seven mph or more, further consideration will be given to traffic calming measures.
 - b. If the recorded 85th percentile speed does not meet the threshold, no further speed counts or traffic calming measures will be considered for a period of two years.
4. If traffic calming is warranted, a meeting between departments potentially affected by changes to traffic patterns and operations may be held to effectively vet the potential issues and benefits of any proposed traffic calming measure and location. Departments that may wish to be involved in the review of traffic calming requests include, but are not limited to: Administration, Fire, Law Enforcement, Streets and Engineering, and Utility Departments. If traffic calming is not warranted, property owners may wish to privately fund traffic calming with City approval.
5. Warranted traffic calming measures will be chosen based on the context and character of the street, as well as the severity of the speeding problem. Traffic calming measures will be prioritized and implemented as time, funding, and resources allow. In some cases, traffic calming measures may be deemed infeasible.

The purpose of this formal process is to prevent City resources from being consumed at one location, allowing staff to address the concerns of other locations where speeding problems are deemed to be more significant. Traffic calming measures not warranted by speed counts or lower in priority may be funded by adjacent residents through a Local Improvement District (LID) or Business Improvement District (BID). All costs associated with the formation of an LID or BID and the design and construction of the traffic calming measures will be the responsibility of the property owners. Property owner buy-in, as described in Project Selection Criteria & Prioritization, is required for any implementation.

Coeur d'Alene Traffic Calming Policy

Policy Objectives

Each traffic calming opportunity, whether street construction project related or by community requests that meet the minimum requirements, shall be reviewed by City staff to assess whether the following objectives will be met:

- 1) Improving neighborhood livability and/or commercial area viability
- 2) Promoting safe and pleasant conditions for all modes of transportation
- 3) Ensuring opportunities for existing and future development
- 4) Enabling efficient use of City resources

Implementation of traffic calming measures should meet these objectives while achieving a balance between mobility, livability, emergency response, maintenance, and other City and community needs. Requests that meet the above objectives will be placed on a prioritization list for future implementation.

Application & Feasibility

Opportunities for implementation of traffic calming measures need to consider the context of each location. Street classifications, adjacent land uses, bicycle routes, pedestrian use, emergency response routes, transit routes, snow removal, school zones, and on-street parking are all factors that must be taken into consideration when evaluating the feasibility of traffic calming.

- *Arterials:* Typically, arterial streets are not conducive to traffic calming measures. Emergency response and snow removal are more critical on these streets. However, other factors such as adjacent land use and pedestrian/bicycle traffic may warrant traffic calming.
- *Collectors and Residential Streets:* Traffic circulation to and from businesses and residences should be considered when implementing traffic calming measures on collectors and residential (local) streets.
- *Street Use:* Streets that are primary routes for the Fire Department, Law Enforcement, public transportation, and/or snow removal should be analyzed for potential impacts of traffic calming.
- *On-street Parking:* The presence of on-street parking can reduce traffic speeds if highly utilized. Seldom used on-street parking creates the appearance of a wide street, encouraging higher speeds. In areas where on-street parking demand is low, consideration should be given to removing or consolidating parking to implement other forms of traffic calming and/or install bike lanes.
- *Design:* Traffic calming measures shall be planned, designed, and constructed with sound engineering practices to provide measures appropriate for the anticipated traffic speeds, volumes, and uses. Street sweeping, snow plowing, and emergency response are just a few of the considerations that should be taken into account. These concerns must be vetted with appropriate City departments.



Coeur d'Alene Traffic Calming Policy

Funding

An annual budget has been designated for the implementation of traffic calming measures through the Streets & Engineering Department. These funds shall be used explicitly for the design and/or construction of traffic calming devices. Other funds, including neighborhood contributions, may also be used as deemed appropriate. The amount of funding should be reviewed annually to assess the adequacy of available funding for needed improvements. In most cases, traffic calming implementation measures should begin with the least expensive solutions that address the problem, moving to more expensive measures if problems persist.



Private funding may also be used for traffic calming in locations that are mutually beneficial to the neighborhood and the City. Property owners may wish to form a BID or LID to fund traffic calming devices approved by the City for a given location. Traffic calming devices must be designed by an Idaho registered design professional. A meeting between City departments may be needed to determine the appropriateness of these desired traffic calming measures. All costs associated with the formation of an LID or BID and the design and construction of the traffic calming measures will be the responsibility of the property owners.

Project Selection Criteria & Prioritization

City staff will review each potential project to find a balance between need, feasibility, impacts, and available funding. Potential projects will be evaluated and prioritized based on:



Traffic Speed

- Traffic volumes and speeds will be collected and analyzed to determine the need for traffic calming as well as prioritization of projects.
- Streets exhibiting an 85th percentile speed of 7 mph or more over the posted speed limit are possible candidates for traffic calming.

Street Characteristics

- Streets with reduced sight distance due to buildings, trees, or other obstructions could benefit from reduced speeds.
- Shared streets used by pedestrians, bicyclists, and motor vehicles due to lack of separate facilities may warrant traffic calming to improve safety.
- Excessively wide streets, such as those with seldom used on-street parking resulting in speeding, should be evaluated for opportunities to incorporate traffic calming.
- As a first step, infrequently used on-street parking should be utilized to cost-effectively narrow the street where feasible.

Crash History

- Streets with a crash history identifying excess speeds as a contributing factor should be evaluated to improve safety through speed reduction.
- Crash histories involving sight distance may also warrant traffic calming.

Coeur d'Alene Traffic Calming Policy

Schools

- Streets near schools or along school walking routes are likely candidates for traffic calming, as excess speeds in school zones create an unsafe and unpleasant environment for school children and discourage walking and biking to school.

Property Owner Buy-in

- Traffic calming measures proposed for neighborhoods and business districts will require written approval from at least 2/3 of residents within two blocks or 500 feet of the proposed site, whichever is less. Buy-in from the neighborhood does not necessitate the implementation of traffic calming, but rather, should serve to demonstrate community support. A standard signature form will be provided by the City at the neighborhoods request.

Emergency Vehicle Access

- Per International Fire Code 503.4.1, traffic calming devices on emergency vehicle access streets must be approved by the fire code official.
- Speed humps, traffic diverters, and curb radii less than 25 feet may delay emergency response times.

It is important to identify and evaluate specific speeding problems occurring on a street and then find solutions that specifically address those problems. If drivers are not yielding to pedestrians at a high priority crosswalk, then a raised crosswalk or intersection may be appropriate. If turning speeds are too high at an intersection, curb radius reductions may be appropriate. If pedestrians are having difficulty finding sufficient gaps in traffic to cross a street, then median islands should be considered. In addition to reducing excessive speeding, traffic calming tools are used to address specific safety issues. City staff will work with residents to identify the problem that they are experiencing on their street, analyze the appropriateness of the available tools, and develop a traffic calming method to address the problem. In most cases, less expensive and less restrictive traffic calming measures should be implemented as a first action.

Coeur d'Alene Traffic Calming Policy

Education and Enforcement

Several methods of education and enforcement are available to change community behavior to reduce travel speeds. Various methods should be used in an attempt to reach the broadest audience. For a long-term change in driver behavior, periodic educational attempts should be made through a variety of outreach methods, such as:

- Neighborhood Meetings
 - Neighborhood meetings to discuss speeding issues will underscore the neighborhood's desire for reduced speeds and coerce neighbors to reduce travel speeds so they aren't recognized as the problem
- Community Message Boards
 - Posting educational messages on community message boards will help bring awareness to those who participate
- Yard Signs
 - Inexpensive yard signs can be placed to educate drivers and bring awareness
 - Too many signs become a sign clutter issue
 - Sign code may limit the allowable size of signs
 - Examples may be found at <https://www.drivelikeyourkidslivehere.com/> and <https://www.keepkidsalivedrive25.org/saferoutes>
- Speed Feedback Signs
 - Portable speed feedback signs may be temporarily deployed by the Coeur d'Alene Police Department or Streets & Engineering Department to educate drivers and collect speed data
 - Permanent speed feedback signs should only be used on Collectors and Arterials
- Police Emphasis Patrol
 - Speed enforcement emphasis patrols may be temporarily deployed by the Coeur d'Alene Police Department to educate drivers



Coeur d'Alene Traffic Calming Policy

Engineering Approaches

Traffic calming tools can help to reduce speeds and improve safety by making physical changes to streets. Coeur d'Alene's traffic calming program uses tools that best fit our community. City staff will work with residents to develop designs that specifically address the problems that residents are experiencing. The City may employ a variety of traffic calming tools to address the assortment of problems that exist on city streets. These tools include:

Traffic Calming Tools (Speed Reduction):

Vertical Deflection

1. Speed Humps, Speed Cushions, and Speed Tables
 - Relatively easy for bicyclists to negotiate
 - Very effective in slowing traffic speeds
 - Increase emergency response time (and increase wear and tear on emergency vehicles)
 - Increase noise for nearby residents when motorists accelerate after the hump

2. Raised Crosswalks and Intersections
 - Slow the speed of vehicles by operating similarly to speed humps
 - Make it safer for pedestrians to cross the street by improving the visibility of the pedestrians and the crosswalks
 - Make crossing with wheelchairs and strollers easier
 - Increase emergency response time (and increase wear and tear on emergency vehicles)



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Horizontal Deflection

1. Neighborhood Traffic Circles and Roundabouts

- Prevent drivers from speeding through intersections by impeding the straight-through movement
- Force drivers to slow down to yield to others
- Reduce severity of crashes
- Landscaping and/or public art can be incorporated to improve aesthetics of an intersection



2. Chokers

- Easily negotiable by emergency vehicles and buses
- Can be landscaped to improve aesthetics
- Should not be used where bike lanes are present
- Should be designed to accommodate snow plowing and street sweeping
- May affect stormwater drainage but may provide stormwater opportunities



3. Curb Extensions (Bulb-outs)

- Reduce pedestrian crossing distance
- Improve visibility for pedestrians and drivers
- Prevent illegal parking at corners
- Reduce vehicle turning speeds
- Provide opportunities for public art, street furniture, landscaping, snow storage, stormwater and/or pedestrian space
- Decrease turning radius for emergency vehicles and increase potential damage to both Fire Department apparatus and citizen vehicles
- Should be designed to accommodate snow plowing and street sweeping
- May affect stormwater drainage



4. Median Islands

- Make it safer to cross the street by allowing pedestrians to cross only one direction of traffic at a time
- Slow the speed of vehicles by breaking up straight sections of roadways
- May eliminate left turns
- Provide opportunities for public art, landscaping, snow storage, additional signage and stormwater



Coeur d'Alene Traffic Calming Policy

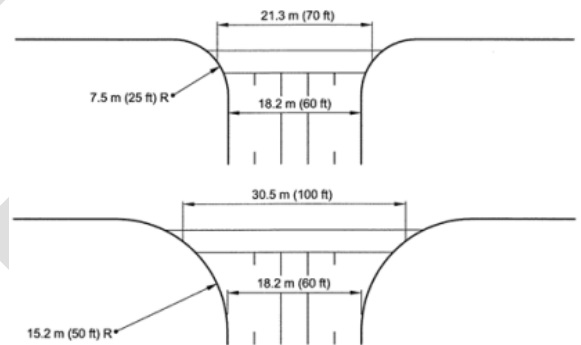
5. Pavement Striping

- Visually reduces street width without permanent changes
- Inexpensive, but requires annual restriping
- Can be used to create bike lanes
- Does not slow emergency vehicles
- Not as effective as physical traffic calming measures
- Not as effective in winter months due to snow cover, though speeding is typically less of an issue on snow covered streets



6. Curb Radius Reductions

- Reduce vehicle turning speeds
- Reduce pedestrian crossing distances
- May not accommodate emergency and other large vehicles if reduced too much



Coeur d'Alene Traffic Calming Policy

Traffic Diverters (Volume Reduction):

1. Full Diverters

- Very effective in reducing cut-through traffic volumes
- Able to maintain pedestrian and bicycle connectivity
- Divert traffic to other streets
- Increase motor vehicle trip length for residents
- May delay emergency vehicle response



2. Semi-Diverters/Partial Closures

- Effective in reducing traffic volumes
- Increase motor vehicle trip length for residents
- Able to maintain pedestrian and bicycle connectivity
- Some drivers may illegally bypass the diverter
- Present snow removal and street sweeping challenges
- Divert traffic to other streets
- May delay emergency vehicle response



3. Median Islands

- Can improve safety at an intersection
- Can reduce cut-through traffic volumes
- Make it safer to cross the street by allowing pedestrians to cross only one direction of traffic at a time
- Limit left turns for emergency vehicles and residents
- Potentially delay emergency vehicles
- Provide opportunities for public art, landscaping, snow storage, additional signage and stormwater



Coeur d'Alene Traffic Calming Policy

Measures of Effectiveness

Traffic calming projects have multiple goals and reducing speed is just one of them. Traffic calming is not implemented simply for the sake of reducing speeds. The goal of the program is to improve the safety and comfort level for all street users. For this reason, it is important to establish the goals of a project and to set corresponding evaluation criteria. The goals of traffic calming include:

- reducing motor vehicle speeds
- improving the livability of streets
- emphasizing the pedestrian nature of streets
- making it easier for pedestrians to cross the street
- reducing crash frequency and severity
- improving the comfort level for pedestrians, bicyclists and drivers



With any traffic calming implementation project, before and after studies should be conducted to measure the effectiveness of the traffic calming device. If the goals of the implementation are not met, another traffic calming tool should be considered.