APPENDIX A: APPEALS

All actions and decisions are final unless appealed under the requirements stated in this section.

In the event that there is a disagreement between City staff and any party with respect to any final NTM Program decisions including, but not limited to: the scope of the traffic mitigation area, vote outcomes, and/or voting methods, the following appeal process shall apply:

1. The aggrieved party shall file their grievance in writing to the City Engineer within fourteen days from the date the Neighborhood Traffic Mitigation Program Coordinator's action is received by the resident. The appeal shall specify the reasons why the action should be amended or reversed. The City Engineer shall take action within thirty days from the close of the appeal period.

2. Should the aggrieved party disagree with the City Engineer's decision, they may file an appeal with the Department of Public Works & Water Utilities for presentation to the Transportation Advisory Board within thirty days from the date of the City Engineer's decision. Appeals to the Transportation Advisory Board must be in writing and must state the reasons behind the original grievance and why the City Engineer erred in his assessment. The TAB shall take action on the appeal within sixty days from the date the appeal is received.

3. Should the aggrieved party disagree with the decision of the Transportation Advisory Board, they may file an appeal with the Department of Public Works & Water Utilities for presentation to City Council within thirty days from the date of the Transportation Advisory Board's decision. Appeals to the City Council must be in writing and must state the reasons behind the original grievance and why the City Engineer and Transportation Advisory Board erred in their assessments.

4. The Longmont City Council shall take action on the appeal within sixty days from the date the appeal is received. The City Council's action shall be final with respect to any and all disputes resulting from the Neighborhood Traffic Mitigation Program process.

APPENDIX B: LEVEL 1 TRAFFIC MITIGATION TOOLS

Citizen Volunteer Patrol

Using a radar gun, Longmont citizen teams that have successfully completed the Citizen's Police Academy training record the speeds of motorists. Motorists found to be speeding will be contacted by the police department via a warning letter.

This program has been found to be an effective deterrent to speeding in other communities. It is especially effective in neighborhoods with predominantly local traffic.

Benefits:

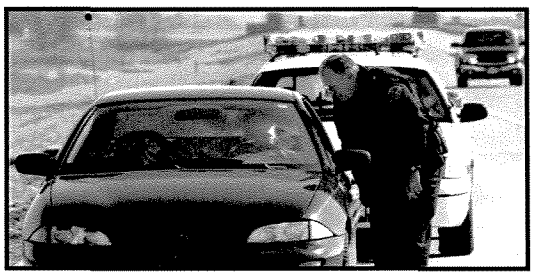
- Peer pressure makes drivers more conscientious about their speed
- Can serve to unify neighbors
- Can be a good first step toward building consensus on other mitigation measures
- Parents (who are the registered owner of a vehicle caught speeding) find out about improper teen driving behavior
- Radar users are educated about vehicle speeds

Negatives:

- Some potential for conflict between radar operators and motorists
- Not as effective on non-local traffic
- May make some neighbors feel they are being spied on

Police Patrols

The police would enforce traffic laws in the complaint area as time and resources permit. Police patrols may be best used where there is a need for quick action. For Example, when a specific driver is repeatedly speeding or driving in an unsafe manner. Police patrols may be used in combination with radar speed trailers to enhance the effectiveness of the trailers.



Benefits:

- Positive citizen response to police presence in their neighborhoods
- Serves to remind people that speeding and unsafe driving are undesirable behaviors for which there are consequences

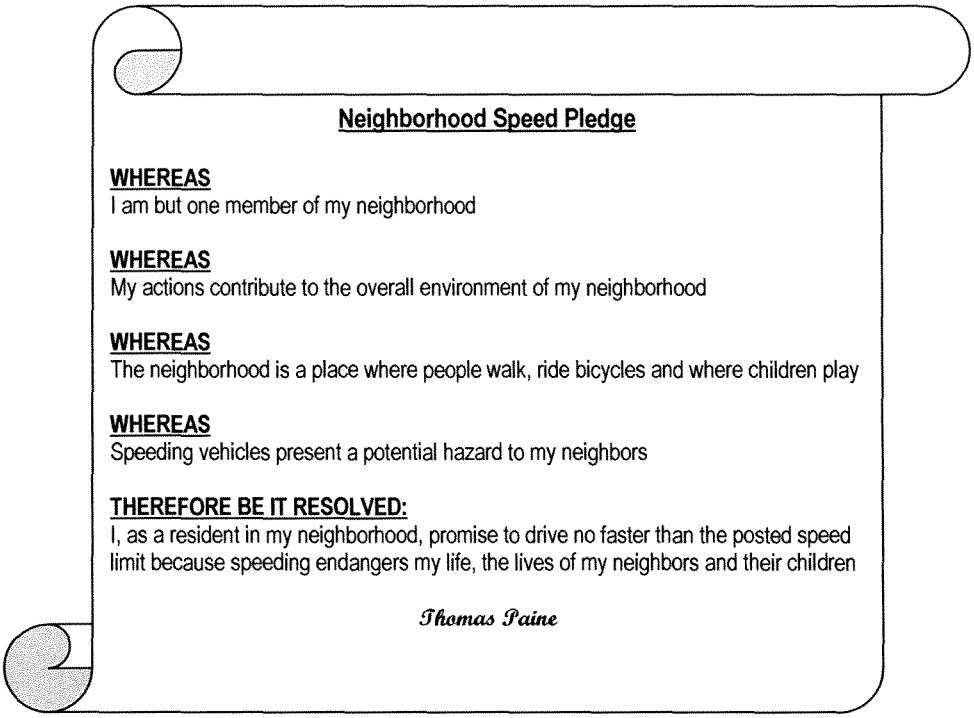
Negatives:

- Effect is not permanent
- Limited by available time and manpower at the police department

APPENDIX B: LEVEL 1 TRAFFIC MITIGATION TOOLS

Neighborhood Speed Pledge

Oftentimes, especially on local streets, many traffic offenders are from the neighborhood. One way to deal with this is through a neighborhood speed pledge where residents actually sign an agreement to drive the speed limit in residential areas. By raising awareness and getting buy-in from residents, some neighborhoods have effectively reduced speeds in their neighborhoods.



Neighborhood Speed Pledge

WHEREAS
I am but one member of my neighborhood

WHEREAS
My actions contribute to the overall environment of my neighborhood

WHEREAS
The neighborhood is a place where people walk, ride bicycles and where children play

WHEREAS
Speeding vehicles present a potential hazard to my neighbors

THEREFORE BE IT RESOLVED:
I, as a resident in my neighborhood, promise to drive no faster than the posted speed limit because speeding endangers my life, the lives of my neighbors and their children

Thomas Paine

Benefits:

- Can serve to unify neighbors
- Can get more people involved in problem solving
- Can be a good first step toward building consensus on other mitigation measures
- Peer pressure can be effective at changing driving behavior

Negatives:

- Not as effective on non-local traffic

APPENDIX B: LEVEL 1 TRAFFIC MITIGATION TOOLS

Neighborhood Speed Campaign

A neighborhood can organize a neighborhood-wide speed campaign. This may include education efforts, a speed pledge, initiating the Citizen Volunteer Patrol, etc. This program has been found to be an effective deterrent to speeding in other communities. It is especially effective in neighborhoods with predominantly local traffic.

Benefits:
- Can serve to unify neighbors
- Can get more people involved in problem solving
- Can be a good first step toward building consensus on other mitigation measures
- Can be effective at changing driving behavior

Negatives:
- Not as effective on non-local traffic

Yard Signs

Yard Signs are temporary signs suitable for quick installation by residents in their yards. The signs say "Please Slow Down" and act as a reminder to drivers that they are in a residential area and should drive accordingly

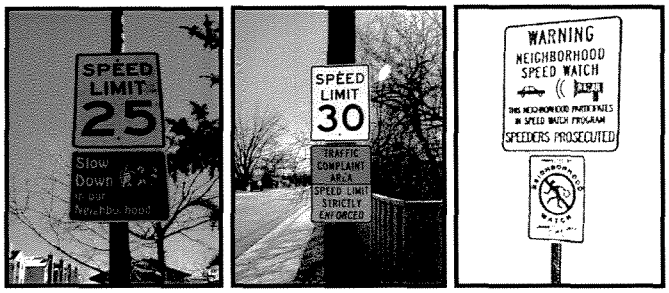
Benefits:
- Inexpensive
- Unique design stands out more than traditional traffic control devices

Negatives:
- Unknown effect on vehicle speeds

APPENDIX B: LEVEL 1 TRAFFIC MITIGATION TOOLS

Innovative Permanent Signage

Various options for innovative permanent signage in neighborhoods to encourage compliance with the speed limit are available. Permanent "Slow Down in our Neighborhood" signs can be installed. "Traffic Complaint Area" signs are also available. Also, Neighborhood Speed Watch Signs can be posted in neighborhoods where the neighborhood signs a neighborhood speed pledge and participates in the citizen volunteer patrol program.



Benefits:

- Unique design stands out more than traditional traffic control devices
- Permanent mounting will prevent theft and reduce vandalism of signs
- May alert drivers of the neighborhood's heightened awareness of traffic problems and may serve as a warning to drivers that they should not speed

Negatives:

- Unknown effect on vehicle speeds

APPENDIX B: LEVEL 1 TRAFFIC MITIGATION TOOLS

Radar Speed Trailer

These trailers show the speed limit on a street and the actual speed of approaching vehicles. They remind drivers to watch their speed and as such are effective in slowing drivers down. The City currently owns four radar speed trailers. They are put out on streets for approximately one week.

Benefits:

- Citizen response is positive
- Documented speed reduction while trailer is present
- Operating costs are low
- Trailers are mobile and can be used throughout the community

Negatives:

- No long-term benefits have been documented in Longmont

Speed Limit 25 Signs

Speed limit signs are official regulatory signs that inform drivers of the maximum legal driving speed under normal conditions.

Many residential streets are not posted with speed limit signs. That being the case the legal speed limit on those streets is 25 mph. Signs are an option to alert drivers who may not be aware of the legal limit.

Benefits:

- Inexpensive

Negatives:

- Unattractive in neighborhoods
- Limited effect on vehicle speeds

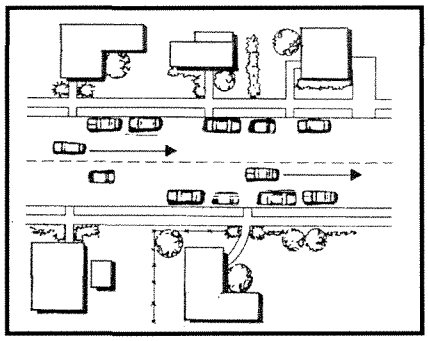
Considerations: State Law or City Ordinance does not allow posting of artificially low speed limits. 25 mph is the lowest speed limit allowed. The exception being temporary 20 mph zones near schools that are installed as part of the City's School Safety Program.

"Speed Limit 25" signs are reserved for isolated local streets where the street is independent of a larger subdivision. Neighborhood collector streets are not eligible for this tool.

"Speed Limit 25 Except as Posted" Signs are usually installed at the entrances to large subdivisions to remind drivers of speed limits within the larger neighborhood and where it is impractical to install signs on every street in the subdivision.

APPENDIX B: LEVEL 1 TRAFFIC MITIGATION TOOLS

One-Way Streets



Streets with cut-through traffic can be restricted to one direction of travel to reduce the amount of non-local traffic.

Benefits:
- Can reduce the amount of cut-through traffic
- Can allow for more on-street parking on narrow streets

Negatives:
- Can be an inconvenience for some residents
- Can increase trip lengths

Turn Prohibitions

Turn prohibitions include signs such as "No Left Turn," "Do Not Enter," or "Wrong Way" that prohibit a particular turning movement to reduce the amount of non-local traffic.

Benefits:
- Can reduce the amount of through traffic

Negatives:
- Can be an inconvenience for some residents
- Can increase trip lengths

Considerations:
- Trash pickup routes, mail routes, etc. will be taken into account when making the final decision on turn prohibitions
- Turn prohibitions can be implemented on a temporary basis to ascertain if benefits outweigh disadvantages.

APPENDIX B: LEVEL 1 TRAFFIC MITIGATION TOOLS

On-Street Parking Modifications

Changes to on-street parking can be used to change the width of the street available for travel. Some possible parking strategies include:

- Angle parking
- Parking additions
- Parking restrictions
- Other parking changes may also be considered as needed

Benefits:
- May slow traffic by narrowing travel way
- Creates buffer between pedestrian areas and the street
- Addition of parking can change the character of the street from wide open straight-away to a smaller scale neighborhood environment
- Elimination of parking enhances visibility of child pedestrians

Negatives:
- Addition of parking reduces visibility of child pedestrians
- Addition of parking may present a fixed object accident risk to motorists
- Addition of parking may be considered unattractive by some motorists
- Elimination of parking may pose an inconvenience to residents without adequate private parking

Considerations: On-street parking is advocated by some experts as a positive for neighborhood traffic calming. The benefits most often noted are that it reduces the amount of pavement available for travel thereby reducing speeds. It also provides a buffer between the street and sidewalk areas creating a more comfortable space for pedestrians.

On the other hand, other experts express concern about on-street parking because of the potential increase in risk to child pedestrians that results from poor visibility. The chances for pedestrian accidents where a child suddenly darts out into the street from between parked cars may be increased as the amount of parking increases.

In Longmont, the most frequent motor vehicle accident type on local streets involves motorists striking a parked car. Many of these accidents are hit and run accidents that occur at night. Additional on-street parking – especially on narrower streets, may exacerbate this problem.

These things should all be taken into consideration when deciding if this is a tool that should be used in a particular neighborhood.

APPENDIX B: LEVEL 1 TRAFFIC MITIGATION TOOLS:

Street Striping

Center lines and bike lanes, etc. can be used to narrow the travel lanes and encourage slower speeds. In addition, street striping may be used to create variations in the driving path on normally straight roads.

Benefits:
- Perception of narrower lanes may slow traffic
- Helps define traffic paths which may provide a safety benefit

Negatives:
- Ongoing maintenance is required
- Long term effects on speeds are not known

Considerations: The City contracts out street striping. Streets are striped once in the spring and once in the fall. Any proposed striping will be done as part of this bi-annual street striping.

Psycho Perceptive Pavement Markings

These include markings or messages placed on a street that heighten driver response or induces the desired behavior. For example, transverse marking (stripes) with inconsistent spacing that gives the illusion of increased speed. Psycho-perceptive markings should create the impression that driving fast is less safe, but they should not actually increase danger to motorists or other street users.

Benefits:
- Allows the neighborhood to be creative with their response to traffic concerns
- May reduce speeds

Negatives:
- Ongoing maintenance required
- Long term effect on speed is unknown

APPENDIX C: LEVEL 2 TRAFFIC MITIGATION TOOLS:

Permanent Speed Display Unit

These units are similar to the radar speed trailers. They use the same technology to display the speed limit and actual speed of approaching vehicles. They remind approaching drivers to watch their speed and as such are effective in slowing drivers down.

Benefits:

- Speed reductions have been documented with existing portable units
- Operating costs are low

Negatives:

- Unknown long-term benefits
- They are expensive. Each unit can cost up to $6000 with installation.

Neighborhood Identification Island

These are islands in the center of a street that includes a monument or sign of some type identifying a neighborhood and marking the entrance to the neighborhood.

Benefits:

- Alert drivers that they are in a neighborhood and should drive accordingly
- Gives neighborhood a sense of identity
- Allows neighborhoods creativity in design
- If designed to reduce lane width can reduce speeds in the vicinity of the island

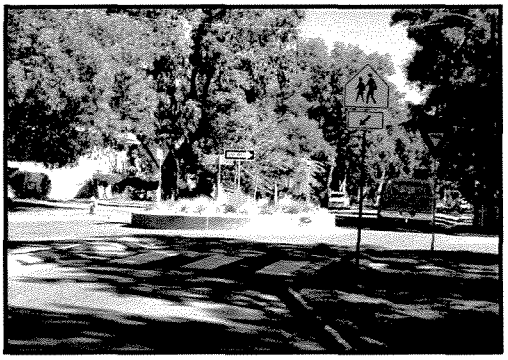
Negatives:

- Presents a fixed object accident risk
- Can require elimination of some on-street parking in the vicinity of the island

APPENDIX C: LEVEL 2 TRAFFIC MITIGATION TOOLS:

Traffic Circles

Traffic circles are raised circular areas (similar to a median with more restriction of lane width) placed in the center of an intersection. Drivers must travel in a counter-clockwise direction around the circle. Vehicles entering the circle must yield to traffic already in the circle (traffic to their left); speed reductions are achieved by forcing vehicles to slow and shift horizontally to negotiate the circle.



Benefits:

- Can reduce speeds in the vicinity of the device
- Some cities have reported significant reductions in accidents when installed at high accident intersections
- Makes it easier for side street traffic to enter the main street, especially when the main street traffic volume is high and insufficient gaps in traffic exist
- Can accommodate landscaping and other beautification amenities

Negatives:

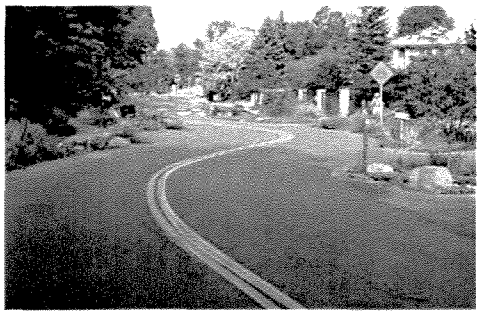
- Some traffic diversion likely
- Can increase emergency response time
- Noise and air pollution will increase in the vicinity of the circles
- Fuel consumption may increase due to acceleration/deceleration
- Can cause maintenance problems for snow plows, sanitation and maintenance vehicles
- Presents fixed object accident risk
- Not friendly to bicyclists or pedestrians. Cars traveling on a parallel path have to swerve into cyclists and pedestrians while negotiating the circles
- All vehicles affected to some extent – even those not speeding

Considerations: Traffic circles are generally placed at 4-way intersections and there is a notable learning-curve on how to appropriately use traffic circles. For example, many believe that traffic approaching from the higher volume street has a preferential right-of-way over the traffic approaching from the lower volume street. This is not the case. Right-of-way is equal for all approaches

APPENDIX C: LEVEL 2 TRAFFIC MITIGATION TOOLS:

Roadway Path Deviations (Chicanes)

Chicanes are intended to change a straight road into a curving road and thereby reduce travel speeds. To be effective, significant lateral shifts over short distances are required. Total pavement, curb and walk reconstruction can be required, as well as revisions to adjacent landscaping.



Benefits:

- Can result in significant long-term speed reductions
- Can accommodate landscaping and other neighborhood beautification amenities

Negatives:

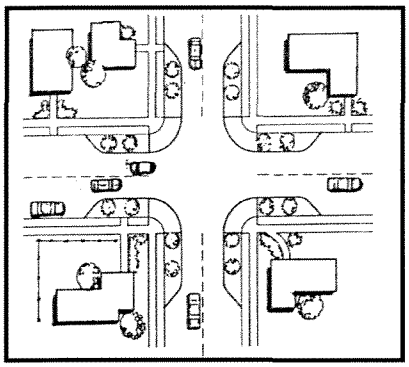
- Potentially very high cost

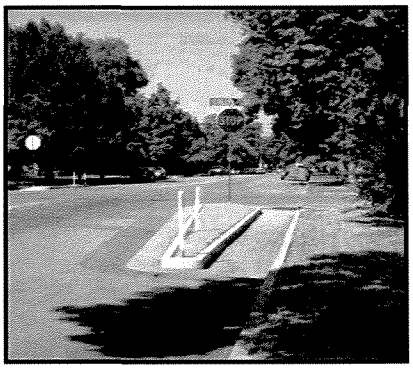
Cost Consideration: The cost will vary depending on the extent of the project. Chicanes can be similar to neckdowns (see page 28). However, in some cases, total reconstruction of the street may be necessary. Significantly varying costs will be seen depending on the design and location. For purposes of estimating, pavement and curb walk replacement for one mile of street could be estimated at $620,000. That does not include costs for revising driveways, landscaping and storm drainage improvements that may be required.

APPENDIX C: LEVEL 2 TRAFFIC MITIGATION TOOLS:

Neckdowns

Neckdowns are physical reductions in road width at intersections or mid-block locations. The primary purpose of neckdowns are: 1) to improve pedestrian safety by reducing the crossing distance and exposure time and by making pedestrians and motorists more visible to each other, 2) to move a STOP sign further out into a driver's field of vision to reduce the chances of running the STOP sign and causing an accident, or 3) to reduce the speed of traffic. To do this neckdowns are built to physically restrict the width of the travel lane, and create a physical appearance of a narrower street making it less comfortable to go fast.





Benefits:

- Enhances pedestrian safety
- Can reduce speeds if built to narrow the actual travel lanes
- When used to improve STOP sign visibility, they reduce the chances of right angle accidents

Negatives:

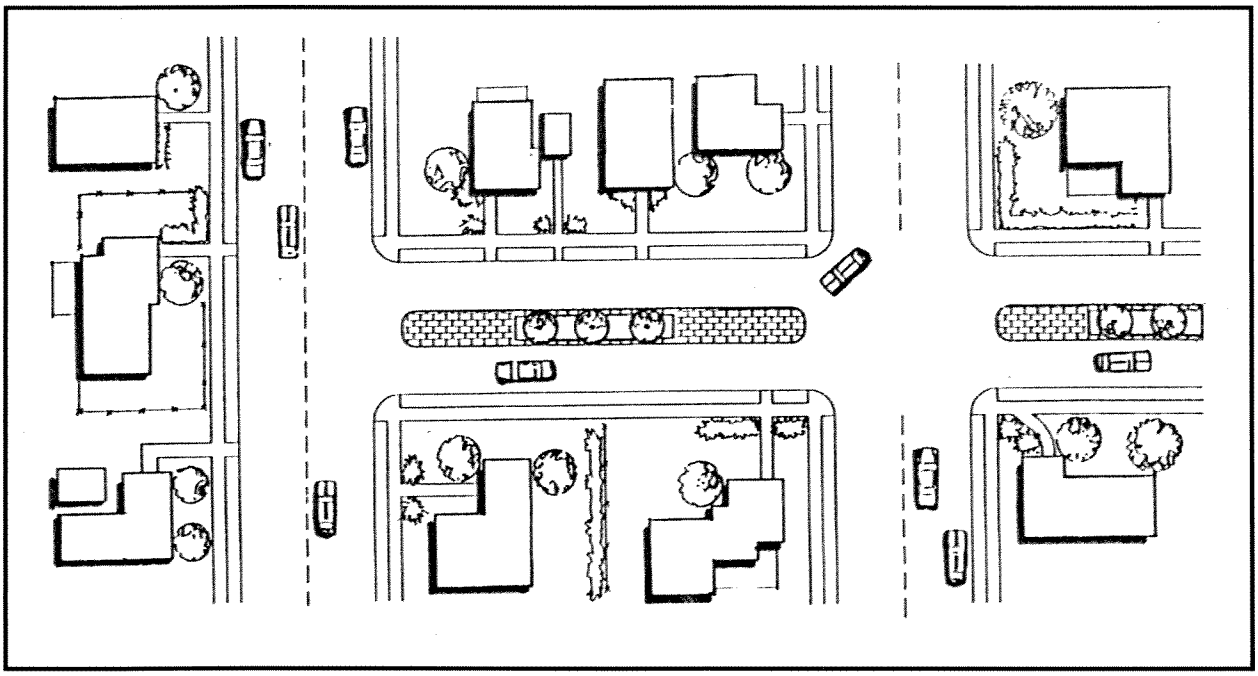
- Presents a fixed object accident risk – especially when used to narrow travel lanes for speed control
- Not bicycle friendly – eliminates excess road width that is normally available for bicyclists
- Can require elimination of some on-street parking and impact driveways

Cost Considerations: Neckdowns vary significantly depending on the specific locations, with storm drainage creating the greatest variation in costs. Full intersection neckdowns could vary from $15,000 to $50,000 per intersection. Placing a neckdown every 500 feet would result in a cost ranging from $150,000 to $500,000 per mile.

APPENDIX C: LEVEL 2 TRAFFIC MITIGATION TOOLS:

Medians

Medians are installed in the middle of a road. They can be used to reduce road width, limit turn movements and better define travel paths. When lane widths are reduced, speeds can be reduced. Medians can provide a safety benefit to pedestrians by providing them with a refuge part way across the street.



Benefits:

- Can provide a refuge to pedestrians crossing the street
- Can reduce speeds when designed to narrow lane widths

Negatives:

- Presents a fixed object accident risk
- Not bicycle friendly – eliminates excess road width that is normally available for bicyclists
- Can require elimination of some on-street parking and impact driveways
- Will limit left turns
- May inconvenience some residents
- May increase trips lengths

Cost Considerations: Costs will vary depending on design and location. Typical range would be from $15,000 to $50,000 per installation

APPENDIX C: LEVEL 2 TRAFFIC MITIGATION TOOLS:

Speed Tables and Speed Humps

Speed tables and speed humps create vertical deflections in the roadway and the faster one drives over these devices, the more uncomfortable the ride. Different designs will have varying degree of impact on vehicle speeds.

Benefits:

- Very effective at slowing down traffic

Negatives:

- Traffic diversion to other streets is very likely
- Can increase emergency response times
- Noise and air pollution will increase in the vicinity of the device
- Fuel consumption may increase due to deceleration/acceleration
- Can cause maintenance problems for snow plows
- All vehicles affected to some extent - even those not speeding

Considerations: Due to the significant delay to emergency response and the potential damage to fire engines, speed tables and speed humps will not be placed on primary emergency response routes.

APPENDIX D: TRAFIC SAFETY TIPS

Traffic Safety Tip: "Always Wear Your Safety Belt and Properly Restrain Children"
The leading cause of death for individuals ages 1 – 33 is traffic-related injuries. According to the National Traffic Safety Administration, safety belts could save almost 50% of the lives lost each year. Colorado law requires infants to ride in a rear-facing child safety seat until they are at least one year old or weigh at least 20 pounds. The law also requires children ages one to four years old that weigh from 20 pounds up to 40 pounds to be restrained in a forward facing child safety seat. Children that weigh over 40 pounds or are at least four years old must be property restrained in a child booster seat or with a child safety belt-positioning device.

Traffic Safety Tip: "Don't Drink and Drive"
A large percentage of traffic fatalities are caused by drunk drivers. In Colorado you are legally intoxicated if you have a blood alcohol concentration (BAC) of .08. However, you would be considered legally impaired with a BAC of .05. If you are going to drink, do so in moderation or bring a designated driver along with you.

Traffic Safety Tip: "The Street is NOT a Playground"
The street is an inappropriate place for children to play. Children should be directed to stay out of the street at all times; to play only in their yards; to never go out into the street or cross the street without looking left, then right then left again. Streets are designed for the efficient movement of automobile traffic and in many cases bicycle traffic. They are not designed nor intended to be used as playgrounds.

Traffic Safety Tip: "Look Left, then Right, then Left Again Before Crossing the Street"
A common belief is that pedestrians have an unlimited right-of-way and that automobile drivers must stop for them if they are standing at the side of the road. This is not the case. Pedestrians are required to wait at the side of the road for a sufficient gap in traffic such that they can cross the street safely without causing a conflict with automobiles. Drivers should not stop for pedestrians that are waiting on the curb. Drivers should only stop for pedestrians if they are already in the process of crossing the street. Before crossing a street, pedestrians should look left, then right, and then left again. Only when the road is clear of traffic should a pedestrian attempt to cross. Pedestrians should continue looking in both directions until they are safely on the other side of the road.

Traffic Safety Tip: "Where there's a ball, there's a kid"
If you're driving in a neighborhood and you see a ball roll out into the street, a child is probably not far behind. Prepare to stop. You should assume that a child will run into the street to retrieve their ball.

Traffic Safety Tip: "Drive the Speed Limit"
For every mile per hour, your car is traveling 1.47 feet per second. At 25 mph your car is traveling over 36.75 feet per second. Reaction time for most people is three-quarters of a second. Thus, the reaction distance for a car traveling 25 mph is calculated as follows: (25 mph x 1.47 feet x .75) = 27 feet. This figure does not include braking distance which is affected by things like weather and other road conditions. Keep this in mind because at any time, a child could dart out behind a parked car and the faster you're going, the greater the risk that you won't be able to stop in time.

Traffic Safety Tip: "Keep Your Dog and Cat on a Leash"
The Longmont City leash law requires all dogs to be on a lead and under control of their owner if not in not in a fenced yard. While the leash law doesn't apply to cats, cat owners are also encouraged to keep their feline friends on a lead. Pets weighing only a few pounds are no match for a car weighing several thousand pounds, even if the car is traveling slowly.