

# **Kaysville City**

## **Traffic Calming Procedures**

In order to further the safety of the citizens of Kaysville City by reducing the overall speed of traffic and by reducing the use of minor streets for through traffic, the following procedures will be followed for complaints regarding these matters:

Sec. 1 For complaints that appear to be an isolated occurrence:

1. The Police Department will investigate the issue and at their discretion increase enforcement in the area.
2. A record of the location and nature of the complaint will be kept.

Sec. 2 For a pattern of complaints for a certain area, the police department will at their discretion:

1. Investigate the issue and increase enforcement in the area.
2. Obtain speed data for the area.
3. Temporarily place a speed trailer or sign in the area.
4. A record of the location, nature of the complaint, and the data collected will be kept. The record may also indicate the effectiveness of the enforcement and other measures employed.

Sec. 3 Should a neighborhood desire additional measures for speed reduction the following process shall be followed:

1. An adult resident of the street to be considered must submit an application to the police department for traffic calming. The application for traffic calming includes: name and contact information of applicant, hazard or concern to be evaluated, and the signatures of 4 other neighborhood residents (see Appendix A for Resident Application). The signatures must be from residents of separate houses who live on the street to be considered.  
As part of the application process, the applicant/resident must perform a one hour traffic count on the street to be evaluated during what the residents perceive to be the busiest hour of the day (typically sometime between 7:00 AM to 9:00 AM or 4:00 PM to 6:00 PM).
2. Upon receipt of a valid application, the police department and the engineering department will review the request to assure that there are not extenuating circumstances and then conduct at least a 24-hour speed study.
3. If the speed study indicates that the 85<sup>th</sup> percentile speed is 7 mph over the posted speed or the speed indicated on the chart below (whichever is higher), then additional steps may be taken as outlined.

<u>Street Classification</u>	<u>Speed mph</u>
Local	25
Significant Local	30
Collector	35
Minor Arterial	40

4. The Police Department may increase enforcement.
5. The City will place radar speed signs at appropriate locations on the street and after one month conduct an additional speed study.
  - a. If the speed study indicates the speed has reduced below the standard, the speed signs will remain in place and speed studies will be conducted annually as needed.
  - b. If the speed study indicates the speed has not reduced below the standard, a minor traffic calming measure (see Appendix B) may be applied for. The applicant will be required to obtain approval of 60% of the affected households for the proposed measure. The City staff will determine the affected households.
  - c. The traffic calming measure may be installed on a temporary basis. After one year a speed study will be conducted and if the speed has been reduced below the standard and the applicant obtains approval of 60% of the affected households, the traffic calming device may be made permanent. The City staff will determine the affected households.
  - d. If the speed study indicates that the speed has not been reduced below the standard, then a major traffic calming measure (see Appendix C) may be considered.

Sec. 4 For complaints regarding excessive traffic volume:

1. An adult resident of the street to be considered must submit an application to the police department for traffic calming. The application for traffic calming includes: name and contact information of applicant, hazard or concern to be evaluated, and the signatures of 4 other neighborhood residents (see Appendix A for Resident Application). The signatures must be from residents of separate houses who live on the street to be considered.  
As part of the application process, the applicant/resident must perform a one hour traffic count on the street to be evaluated during what the residents perceive to be the busiest hour of the day (typically sometime between 7:00 AM to 9:00 AM or 4:00 PM to 6:00 PM). In order for the application to be accepted, the total peak hour traffic volume must be at least 80 vehicles.
2. Upon receipt of a valid application, and it can be shown that there is a reason to believe that the excess traffic is using the local street as a “short cut” (cut through traffic);

3. The City will conduct at least a 48-hour traffic count.
4. If the volume of traffic exceeds 1000 vehicles per day for a minor street or 2000 vehicles per day for a significant local street and the cut through traffic has an alternate viable route:
  - a. The condition of adjacent major streets will be reviewed for speed limit, lane width, signage and overall drivability. Adjustments to the major street will be made as feasible and a new traffic count will be conducted.
  - b. If the corrective actions to the adjacent major street(s) reduce the traffic to the standard, additional traffic counts will be taken on an annual basis as needed.
  - c. If the corrective actions to the major street(s) do not reduce the traffic to the standard, traffic calming measures may be considered.
5. A minor traffic calming measure (see Appendix B) may be applied for. The applicant will be required to obtain approval of 60% of the affected households for the proposed measure. The City staff will determine the households affected.
6. The traffic calming measure may be installed on a temporary basis. After one year a traffic count will be conducted and if the volume has been reduced below the standard and the applicant obtains approval of 60% of the affected households, the traffic calming device may be made permanent. The City staff will determine the households affected.
7. If the traffic count indicates that the volume has not been reduced below the standard, then a major traffic calming measure (see Appendix C) may be considered.

Sec. 5 It should be noted that meeting these recommended guidelines does not mean that traffic calming will or should be implemented. Other factors (e.g. pedestrian facilities, current roadway geometry and the availability of alternative routes) will also be considered by the city to verify that the conditions are appropriate for traffic calming measures.

Implementation of any measure must also be funded. Generally, the effectiveness of a traffic calming measure is somewhat proportional to the cost. Implementation of a recommended measure will be subject to budget approval from the City Council.

If the Police Department and the City Engineer determine that, as a result of the above described process, traffic calming measures are appropriate, they will present a recommendation to the City Council for approval. The City Council will have discretion to take into consideration extenuating circumstances from city residents and either approve the recommendation, deny the recommendation or present and approve an alternative measure. The City Council will have final approval on any traffic calming measures implemented as a result of a resident(s) submitting a *Request for Traffic Calming* application.

When the staff presents a recommended traffic calming measure to the City Council, they will provide a written notice to all affected households at least one week prior to the recommendation being presented at a City Council meeting.

# **Appendix A**

Resident Application

# Request for Traffic Calming

Date: \_\_\_\_\_ Resident Name (Please Print): \_\_\_\_\_

Phone Number: \_\_\_\_\_ Alternative Phone Number: \_\_\_\_\_

Address: \_\_\_\_\_

Description of Traffic Calming Location: \_\_\_\_\_

\_\_\_\_\_

Description of Problem: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Additional Signatures

#	Signature	Printed Name	House Number	Phone Number
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

## One Hour Traffic Count

Please perform count during the perceived busiest hour of the day. For your convenience please use the provided tally boxes below. Each box represents a 5 minute period.

Count period: From \_\_\_\_ : \_\_\_\_ To \_\_\_\_ : \_\_\_\_ Date \_\_\_\_\_

Start Minute	Number of Vehicles	Start Minute	Number of Vehicles
0		30	
5		35	
10		40	
15		45	
20		50	
25		55	
<b>30-Min Total</b>		<b>60-Min Total</b>	

# **Appendix B**

Minor

Traffic Calming Measures

# Speed Humps

Speed humps are rounded raised areas placed across the roadway. The profile of a speed hump can be circular, parabolic, or sinusoidal. They are often tapered as they reach the curb on each end to allow unimpeded drainage. The combination of different heights, lengths and approach ramps will vary the speed a vehicle can comfortably go over the hump. They are marked with signs and pavement markings.

## Advantages:

- Reduces vehicle speeds
- Self-enforcing

## Disadvantages:

- Can cause a “rough ride” for drivers
- May increase emergency response times
- May increase traffic noise in vicinity of hump
- May damage vehicles if not carefully designed
- Needs to be used in series or in conjunction with other traffic control devices to control speeds along a street

# Speed Tables

Speed tables are flat-topped speed humps often constructed with brick or other textured materials on the flat section. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on the flat section. Their long flat fields, plus ramps that are sometimes more gently sloped than Speed Humps, give speed tables higher design speeds than Speed Humps. The brick or other textured materials improve the appearance of speed tables, draw attention to them, and may enhance safety and speed-reduction.

## Advantages:

- Reduces vehicle speeds
- Self-enforcing
- Smoother on large vehicles than speed humps

## Disadvantages:

- Can cause a “rough ride” for drivers
- May increase emergency response times
- May increase traffic noise in vicinity of hump
- May damage vehicles if not carefully designed

# Chicanes

Chicanes are a set of two or more alternating curb bulbs or extensions that narrow and realign the roadway for short segments. Since the street is no longer straight, drivers must slow down to negotiate the roadway. Two-way traffic and full access for larger vehicles and emergency can be maintained. A chicane effect can be created using various methods, including concrete curbs, landscaped areas or alternating diagonal and parallel parking.

## Advantages:

- Reduces vehicle speeds
- Discourages cut-through traffic
- Little impact on snow removal

## Disadvantages:

- While it discourages cut-through traffic it may have little to no effect
- May require additional right-of-way
- May impact driveways
- May hinder emergency vehicles
- May be difficult for larger vehicles to navigate

## Lateral Shifts

A lateral shift is the construction of curb extensions into the roadway that creates a horizontal deflection drivers must negotiate.

### Advantages:

- Reduces vehicle speeds
- Discourages cut-through traffic

### Disadvantages:

- While it discourages cut-through traffic it may have little to no effect
- May impact driveways
- May hinder emergency vehicles
- May be difficult for larger vehicles to navigate

## Chokers

Mid-block chokers are curb extensions that narrow a street by extending the curbs towards the center of the roadway. The remaining street cross-section consists of two narrow lanes.

### Advantages:

- Reduces vehicle speeds
- Reduces pedestrian crossing width
- Can be used to control vehicle access to adjacent properties

### Disadvantages:

- May create hazard for bicyclists
- May create drainage issues
- May impact emergency vehicles
- May impact driveway access
- Can be difficult for large vehicles to navigate

# Neckdowns

Neckdowns or bulb outs narrow the roadway by extending the curb at key intersections and mid-block locations.

## Advantages:

- Reduces vehicle speeds
- Reduces vehicle turning speeds
- Reduces pedestrian crossing distance
- Discourages cut-through traffic
- Little impact on emergency response vehicles

## Disadvantages:

- Creates drainage issues where curb and gutter exist
- May create a hazard for bicyclists
- May be difficult for larger vehicles to navigate
- Complicates snow plowing



# **Appendix C**

Major

Traffic Calming Measures

# Median Barriers

Concrete or landscaped islands typically located down the center of a roadway or at a roadway entrance. Medians are located between the two directions of travel with one-way traffic on each side.

## Advantages:

- Narrows travel lanes to slow vehicles
- Often no police enforcement required
- Does not impede transit or emergency vehicles traveling along the street
- Can be used to control vehicle access to adjacent properties
- Maintains continuous routing opportunities
- Potential to reduce cut-through traffic

## Disadvantages:

- May restrict emergency vehicle access to adjacent properties
- Restricting access to adjacent properties may result in U-turns
- May increase trip lengths
- Does not restrict cut-through vehicles traveling along the street



# Traffic Circles

A variation of the modern roundabout used in residential traffic calming is the traffic circle, which is used more to slow driving speeds approaching intersections with high crash rates than to improve traffic flow (as with a modern roundabout). Motorists must reduce speed to maneuver around the circle which helps reduce the frequency and severity of crashes.

## Advantages:

- Reduces vehicle speed through the intersection
- May reduce the potential for crashes by reducing vehicle conflicts
- Maintains access to side-streets

## Disadvantages:

- Single traffic circle will not significantly calm traffic, a coordinated system of traffic circles and/or other calming measures may be required
- Raised traffic circles may interfere with snow plows
- Can increase emergency vehicle response time
- Can be difficult for larger vehicles to navigate



# Roundabouts

A modern roundabout is a raised island in the center of an intersection. Roundabouts are used on higher volume arterial streets to allocate right-of way between competing movements and provide a cost-effective alternative to traffic signals.

## Advantages:

- Reduces vehicle speed through the intersection
- May reduce the potential for crashes by reducing vehicle conflicts
- Better side-street access, may reduce queues

## Disadvantages:

- Single roundabout may not significantly calm traffic, coordinated system of traffic circles and/or other calming measures may be required
- Can be difficult for larger vehicles to navigate
- Require more right-of-way than traditional intersections
- Increases pedestrian crossing distance

# Realigned Intersections

"T" intersections are realigned/modified by constructing horizontal deflection which forces previous straight-through movements to make slower turning movements.

## Advantages:

- Reduces vehicle speeds at the intersection
- Discourages cut-through traffic
- Little impact on emergency response vehicles

## Disadvantages:

- May require additional right-of-way
- May redirect traffic to another local street

# Half Closures

Half Closures are curb extensions at intersections that restrict movements into or out of a street. They are constructed to approximately the center of the street, obstructing one direction of traffic. A one-way segment is created at the intersection, while two-way traffic is maintained for the rest of the block.

## Advantages:

- Reduces cut-through traffic from neighborhoods
- Often no police enforcement required
- Reduces pedestrian crossing distance
- Can allow access for emergency vehicles

## Disadvantages:

- May divert a significant amount of traffic to nearby parallel streets or to adjacent neighborhoods
- May increase trip lengths
- Street closures only reduce vehicle speeds in the immediate vicinity of the closed block
- Parallel roadways without closures can suffer both higher travel speeds and increased traffic volumes



## Full Closures

Full street closures, retroactively installed to previously open streets, are often reserved for locations where **all other calming attempts have failed**. They may be located adjacent to intersections, creating cul-de-sacs and dead ends, or located mid-block, creating two stub streets. These closures completely close the street to through-traffic, usually leaving only pathways open for bicyclists and pedestrians. Closure methods include landscaped islands, decorative walls, steel posts, bollards or planters, or any other means that leave an opening narrower than an automobile. The barrier can be designed to maintain emergency vehicle access. Within a grid of neighborhood streets, a series of closures are often used to make vehicular travel through neighborhoods more circuitous to discourage cut-through patterns

### Advantages:

- Closures eliminate cut-through traffic from neighborhoods
- No police enforcement required

### Disadvantages:

- Closing a few streets within a neighborhood network may divert a significant amount of traffic to nearby parallel streets or to adjacent neighborhoods
- May increase trip lengths
- Street closures only reduce vehicle speeds in the immediate vicinity of the closed block
- Parallel roadways without closures can suffer both higher travel speeds and increased traffic volumes
- All vehicles, including emergency vehicles are restricted unless specifically catered to



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