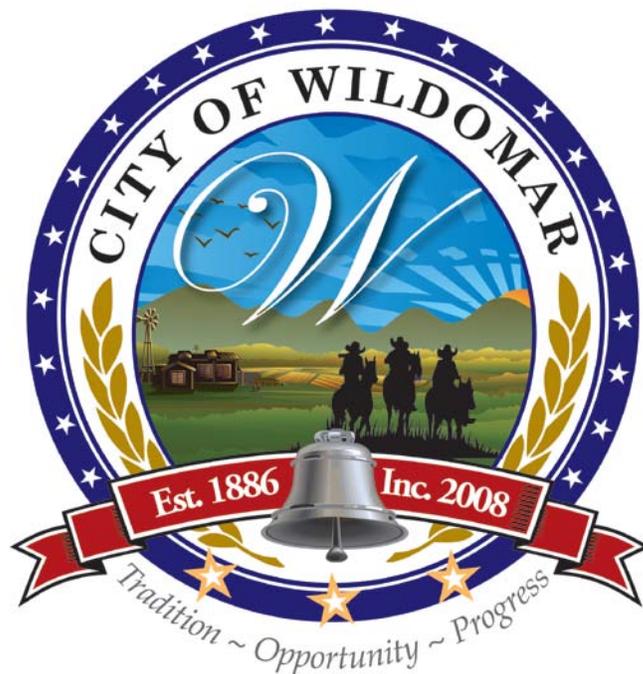


# City of Wildomar



## Traffic Management Policy

**April 2013**

## **Purpose**

The purpose of this document is to provide a logical framework for the City on how to effectively address neighborhood traffic concerns raised by residents of Wildomar. This particular version of the traffic management policy is the City's first and is therefore, by design, simple and general in its approach. As the City continues to assume local control and develop its own unique standards and policies - standards and policies that differ from the County of Riverside - it is expected that this traffic management policy will be updated and revised to reflect local preferences to an even greater degree than what is represented in the following pages.

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## What is Neighborhood Traffic Management?

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Traffic management calming is the balancing of the “3 E’s”

- Education
- Enforcement
- Engineering

These are the commonly accepted elements needed for the successful implementation of a neighborhood traffic management program. Experience has shown that the use of only one of the “E’s” without the other two generally brings about less than satisfactory results.

- **EDUCATION:** Residents will be provided with information, through a variety of outlets to make informed decisions about neighborhood traffic concerns and influence driver behavior. These include such means as brochures on neighborhood traffic issues and the speed display trailer. Residents need to become involved and obtain neighborhood consensus before any program can evolve.
- **ENFORCEMENT:** Some strategies can be put into place through targeted police enforcement to increase community awareness of speed problems. Studies have shown that a large portion of speeding violators in residential neighborhoods are residents.
- **ENGINEERING:** Traffic management strategies involving physical features can be developed using a combination of engineering principles, community input and established traffic management practices.



## Implementation Process

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The City of Wildomar’s Neighborhood Traffic Management Program involves a three-phase strategy or implementation process. The first phase is a series of preliminary actions, designed to determine the extent and severity of the traffic concern. The second phase of the implementation process involves neighborhood input and the identification of the appropriate traffic management tools to address neighborhood concerns. The third phase of the process involves the implementation and funding of the identified traffic management strategy.

### **Phase One- Initial Actions**

This part of the process involves understanding the specific neighborhood concerns, making field observations, data collection, and determining what actions are appropriate to address these concerns.

Initial contact from resident: Most concerns are generally related to either safety of maintenance (sight distance problems related to tree trimming or the replacement of a sign, etc.). If it is motorist speeding through a neighborhood street, then enforcement, the speed display trailer or additional signs, such as speed limit signs, might be needed. These concerns can usually be addressed relatively quickly. If the resident feels that the issues still exist then the resident initiates the next stage of the process.

### **Phase Two- Neighborhood Involvement and Implementation**

This phase step of the process requires that residents of the neighborhood to be involved in the process.

Data collection and analysis: upon receipt of the completed and signed application (see attachment A), it will be validated as to the traffic issue and area or streets involved. Data will be collected from the neighborhood (volume, speed and accident information) to determine the traffic conditions. The traffic issue will also have to be clearly identified and confirmed that it is a real issues.

Identifying the traffic problem: This involves accurately identifying the cause of the neighborhood’s concerns. It is important to determine whether the concern is

vehicle safety, pedestrian and bicycle safety, noise, speeding or shortcutting traffic through the neighborhood. The concern and issue needs to be correctly identified to allow the Public Works Department to help select the appropriate traffic management measures.

Setting goals: It is important that the neighborhood has reached consensus on the desired outcome of the traffic management strategy. A goal must be identified to measure against for success. The goals must be realistic during this development phase. It may not be practical to reduce or eliminate peak hour congestion adjacent to schools, or reduce the volume on a neighborhood street. However, peak hour school congestion could be better managed.

Selecting the traffic management tools: There are a number of appropriate traffic management tools available for use. The following tools are listed in order of preference to address concerns:

## Speed Display Trailers



A device that consists of a changeable speed display, a radar speed detector and a regulatory speed limit sign. The speed control device encourages speed limit compliance.

Advantages	Disadvantages
Reduces the speed of the vehicles traveling through a work zone	Not intended as an enforcement tool
Increases safety in construction and maintenance work zones	Effectiveness decreases over time
Easy to read and attract driver's attention	Speed reductions attained are usually less than desired
Cost-Effective	Temporary calming measure
Mobile	May require temporary lane closure

# Police Enforcement



The presence of police enforcement to monitor speeds and issue formal or courtesy citations. Used as an initial attempt to reduce speeds on street with documented speeding problems.

Advantages	Disadvantages
Available on shore notice	Effective Temporarily
Targets motorist violators without affecting traffic	Enforcement may be limited by police availability
Encourages compliance for speed regulations	Demand for enforcement is greater than available resources/budget

# Signing and Striping:



Signing and striping are used to help reduce speeds in residential areas. Striping creates narrow lanes that give the illusion of a narrow street. Signing enforces speed reduction with the use of speed limit signs and/or neighborhood signs.

Advantages	Disadvantages
Require little to no maintenance	May not be self enforcing
Alert drivers of environment	Pedestrian safety compromised if motorists do not comply



If these traffic management tools – speed display trailers, police enforcement, signing and striping - are not effective as determined by the City in reducing speed, speed humps will be considered - if requested by the residents.

## What are Speed Humps?



Speed humps are rounded raised areas placed across the road. They are generally 12 feet long (in the direction of travel), 3 to 3 ½ inches high, parabolic in shape, and have a crossing speed of 15-20 mph. speed humps on roadways with multiple lanes should have a sinusoidal profile. When placed on a street with rolled curbs or no curbs, bollards are placed at the ends of the

speed hump to discourage vehicles from veering outside of the travel lane to avoid the device.

The magnitude of reduction in speed is dependent on the spacing of speed humps between points that require drivers to slow. Streets with higher 85<sup>th</sup> percentile speeds (e.g., 35mph) prior to application tend to experience the greatest speed reduction. In other words, it is unreasonable to expect significant speed reduction on streets with an initial 85<sup>th</sup> percentile speed less than 30mph.

Advantages	Disadvantages
Very effective at reducing speeds	Can create a “rough-ride” for drivers with certain physical disabilities
Relatively inexpensive	Slows emergency vehicles and buses
Relatively easy for bicycles to cross	Signs and bollards may be unwelcome by adjacent residents
	Increased noise for nearby residents



## Speed Hump Process

**STEP 1. Speed Hump Feasibility:** if speed humps are requested after the initial actions above, a Speed Hump Warrant is performed to determine if the location is feasible for speed hump installation (Attachment B.)

**STEP 2. Residents to circulate petition for speed hump:** if the location satisfies the warrant, the City will mail an information letter and a sample petition to all affected residents describing the nature of the petition to be circulated.

The petition, by residents of the proposed speed hump street segment, must be submitted to the city (Attachment C)

To demonstrate there is a widely held perception of a problem and adequate community support for further action, the petition should be returned with supporting signatures from a minimum of 10 of the households of the proposed speed hump segment (one signature per address). Also, if the segment in question is in an HOA area, a letter of support from the HOA is required.

The initial qualifying criteria are shown in Table 1. (Below)

**TABLE 1: SPEED CONTROL PROGRAM INITIAL QUALIFYING CRITERIA**

Criteria	Requirement
Street Classification	2-lane Local or Collector Street
Minimum Street Length	750 feet between traffic controls
Average Daily Traffic Volume <sup>1</sup>	500 – 4,000 Vehicles per day
Posted Speed Limit	30 mph or less
85 <sup>th</sup> Percentile Speed	≥ 5 mph over the posted speed limit
Adjacent Land Use	≥ 75% Residential, Park or School
Fire Department Review	Review primary emergency response route map to determine device eligibility; Eligible streets will be forwarded to the Fire Department for review, emergency response time impact analysis and comment.

**Notes:**

Alternative traffic calming measures may be available for streets which exceed the average daily traffic threshold of 4,000 but serve less than 7,500 vehicles per day and meet all other criteria.

Public Works staff will evaluate each request based on the initial qualifying criteria shown in Table 1. If a street satisfies the minimum requirements and is a candidate for the program, Public Works staff will notify the individual who submitted the request in writing. Staff will also notify applicants of non-qualifying streets and provide an explanation in writing as to why. If the street fails to meet the necessary requirements, the street may not be considered for the program. Qualifying criteria and the priority ranking system are subjected to change at any time. Streets, which may have qualified for the program previously, shall be reevaluated in accordance with the most current set of qualifying criteria and ranking system established in subsequent revisions to this document.

### **Define Study Area**

During the investigation, Public Works staff will define the limits of the study area. The study area may be limited to the segment(s) identified in the petition or enlarged to encompass the full length of the street. Public works staff may find it reasonable to extend the study area on roadways that serve a higher number of vehicles or to combine two or more separate requests for the same street. Logical study areas are commonly defined by physical features such as an arterial roadway, creek, traffic control device (e.g., stop sign) or transition in land use. By defining an appropriate study area, the program will employ a more comprehensive approach than addressing requests on a limited segment by segment basis. It is important to look at the cumulative impact of installing a series of vertical deflection measures and the unintended consequence they may have on trip diversion and emergency response time.

### **Qualifying Criteria**

Following the review of the petition, staff will initiate a traffic investigation to determine whether the street in question satisfies a series of requirements. These qualifying criteria are necessary to rule out more appropriate traffic engineering and maintenance solutions (e.g., signage changes or trimming vegetation to improve sight distance). In addition, vertical traffic calming measures are not appropriate on every street even when basic qualifying criteria are met. Staff reserves the right to approve or reject speed control requests on a case by case basis.

The initial qualifying criteria listed in Table 1 are described in greater detail below.

1. **Street Classification**: The Speed Control Program is applicable only on two-lane residential streets designated as local or collector streets. The terms local and

collector refer to the functional classification that denotes a specific level in the transportation network hierarch and specifies the design of the facility according to City of Wildomar standards. While the streets may have been designed for a particular purpose, they may in reality function differently than intended. Therefore, it may be difficult to differentiate between the two. Local streets provide direct access to residential properties and facilitate short neighborhood trips. Collector streets are secondary roads that connect motorists from surrounding local streets in arterial roadways and freeways and facilitate intermediate trip lengths. Each roadway has its own unique set of characteristics; therefore, eligibility of a specific roadway is determined by Public Works staff in coordination with other departments.

2. Minimum Street Length: the street segment in question must be at least 750 feet long between traffic controls. This requirement typically ensures that streets have at least two speed humps to slow traffic. The distance requirement also prevents over use of speed control measures in a relatively short distance.
3. Average Daily Traffic Volume: The street segment in question must serve at least 500 vehicles per day. This requirement ensures that speed humps are used discriminately on residential streets with a moderate level of traffic. Average daily traffic volume must be less than 4,000 vehicles per day. Higher volumes typically suggest roadway functionality greater than that of a local residential or collector.
4. Posted Speed Limit: The posted or prima-facie speed limit on the street segment in question must be 30mph or less. Streets with posted speed limits higher than 30mph are not eligible for this program due to the difference in prevailing vehicles speeds and the design speed of the traffic calming devices.
5. 85<sup>th</sup> Percentile Speed: The 85<sup>th</sup> percentile speed must be at least 5mph higher than the posted speed limit. The 85<sup>th</sup> percentile speed is the speed at which 85 percent of vehicles are traveling at or below. The 85<sup>th</sup> percentile speed shall be determined from a 24-hour speed survey. If the bi-directional 85<sup>th</sup> percentile speed is equal to or more than 5mph over the posted speed limit, this criteria is satisfied.
6. Adjacent Land Use: the street segment frontage must consist of a minimum of 75 percent residential, parks or school uses. If the adjacent properties are not built out and functioning as intended, these streets will be evaluated on a case-by-case basis.
7. Fire Department Review: the presence of a primary fire response route presents another factor in selecting the most appropriate, if any, traffic calming device. Fire apparatus are more sensitive to vertical and horizontal shifts than

passenger vehicles. A reduction in travel speed equates to a slower response time.

The Fire Department has a response goal of \_\_\_ minutes or less, \_\_\_% of the time, as measured by the first arriving unit to the scene of the emergency. The longer it takes the Fire Department to respond to an incident, the higher the probability of the severity of a situation. Depending on design, vertical deflection measures may slow vehicles, including fire trucks.

The following measures will be taken before installing traffic calming measures on a street as part of this program:

- Public Works staff will review primary emergency response routes identified by the fire department.
  - If the street is a primary response route but meet qualifying criteria 1, 2, 4, and 6, Public Works staff will flag the location and initiate discussion with the Fire Department on a case-by-case basis prior to collecting speed and volume data to satisfy qualifying criteria 3 and 5.
  - If the street is not primary response route and meets qualifying criteria 1 through 6, Public Works will qualify the street for the program. Public Works will prepare a list of streets for Fire Department to review quarterly. Speed humps, lumps, tables will be considered on non-primary response routes.
- Public Works will supply the Fire Department with an initial map that identifies proposed placement and frequency of the devices under consideration.
  - At the Fire Department's discretion, they may chose to conduct analysis and document response time impacts in relation to response time goals.
  - In the event where response time goals are anticipated to be exceeded as direct result of device placement, Public Works will disclose the Fire Department's findings in the annual staff report resented to City Council for construction project approval.

### **Phase Three – City Council Approval**

**City Council Approves Funding and Installation of Speed Humps:** City Council may approve or disapprove funding and installation.

**Speed Hump Installation:** City implements speed hump installation at locations approved by the city council. Design is in accordance with current speed hump standard.

ATTACHMENT A

**Neighborhood Traffic Management Program Application**

Neighborhood Information

Name of Neighborhood or Area: \_\_\_\_\_

Applicable Street(s): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Contact Information

Applicant Name: \_\_\_\_\_

Applicant's Address: \_\_\_\_\_

\_\_\_\_\_

Contact Phone Number: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

\_\_\_\_\_

Reason for Request (Check all that apply)

Cut through Traffic

Speeding

Parking Issues

Pedestrian safety

School related

Other \_\_\_\_\_

To Initiate the Neighborhood Traffic Management Program –

Is there a Homeowners Association (HOA) in this neighborhood?  Yes  No

If **YES**, then a letter of support is required from the HOA board to be submitted with this application.

If **NO**, then a letter of support is required to initiation the Neighborhood Traffic Management Program. A minimum of 25% of the affected neighborhood is required to sign the letter. The letter shall address the street(s) involved and identify the specific traffic or parking issue.

Applicant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## ATTACHMENT B

### CITY OF WILDOMAR PUBLIC WORKS AGENCY SPEED HUMP WARRANT

Street:			
From:		To:	
<b>ALL OF THE FOLLOWING CRITERIA MUST BE MET FOR CONSIDERATION OF SPEED HUMP INSTALLATION.</b>			
CRITERIA	SATISFIED	NOT SATISFIED	REMARKS
Street is a residential street with no more than one lane in each direction. <b>Lanes per direction:</b> _____			
Street is neither a primary fire access route nor a transit route.			
The street is a through street, at least 500 feet long and uninterrupted by stop sign or traffic signal. <b>Length:</b> _____			
The posted prima facie speed limit is 25mph.			
The 85 <sup>th</sup> percentile speed is $\geq$ 35mph <b>85<sup>th</sup> Percentile:</b> _____			
Adequate visibility can be provided at all speed hump locations.			
Daily traffic on the street segment is less than or equal to 3,500 vehicles per day. <b>ADT:</b> _____			
Speed Hump Warrant Met	<input type="checkbox"/> YES		<input type="checkbox"/> No
Performed by:	Date:		

# ATTACHMENT C

## SPEED CONTROL PROGRAM PETITION FORM

CITY OF WILDOMAR

### Resident Support

Signatures from 10 different households in support of the Speed Control Program are required.

We, the undersigned residents of \_\_\_\_\_ (street) between \_\_\_\_\_ (street) and \_\_\_\_\_ (street), do hereby request the City of Wildomar, to install speed humps on our street to attempt to slow speeding drivers. By signing below, we understand that a speed hump with related signing and pavement markings may be installed in front of our property. We also understand that installing speed humps may produce some noise and increase emergence vehicle response time to our home.

Signature	Printed Name	Address	Phone Number
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			