# Traffic Calming On Local/Collector (Residential) Streets



This information package is adopted by resolution of City Council (#2913-Oct. 1998, and #3042-Apr. 1999).

#### I. PROCESS FOR INITIATING AND EVALUATING NEIGHBORHOOD TRAFFIC CALMING MEASURES

- A resident calls or writes to the City to report a problem involving excessive traffic volume and/or traffic speed along a local or collector street through a residential area. The report is forwarded to the Traffic Engineering section if received by another office.
- A Traffic Calming Request packet is mailed to the resident
- The resident completes a Traffic Calming Request form provided by the City, showing the names of at least four other residents from separate households in the neighborhood who are willing to assist City staff with identification and evaluation of traffic calming measures. This form needs to be mailed back to the City traffic engineering office.
- Once the request form is received traffic engineering staff will survey the conditions (street type, street design, land uses, and traffic volume and/or speeds).
- Based on the survey of conditions, measures with minor impacts are suggested to the resident, as appropriate for conditions.
- If minor impact measures have already been implemented in the neighborhood, but these measures are not acceptable to the resident(s) Traffic Engineering staff will suggest an appropriate traffic-calming project.
- If a Traffic Calming project is required, then traffic engineering staff requests the neighborhood group to organize and distribute notice of a neighborhood meeting on traffic calming.
- A neighborhood meeting is held to identify traffic-related concerns, to establish the precise area of concern, and to form a Committee of residents willing to work on identification and evaluation of traffic calming measures.
- City staff assists the Committee in evaluating the effectiveness and potential adverse impacts of neighborhood traffic calming measures desired by the Committee.
- If the measures proposed by the Committee are generally acceptable, petitions provided by the City are circulated by the Committee to demonstrate the required level of area-wide support. Generally, 75 percent of the residents in the affected area must be in favor of the traffic calming measure, including 100 percent of those property owners who would be located within 100 feet of speed humps, diverters, traffic circles, chicanes, chokers or similar traffic calming devices. [Refer to *Petition Requirements* (section III) for more information]
- City staff estimates implementation costs for measures if found to be warranted, [Refer to *Warrants* (section IV) for more information] and the project is ranked by traffic engineering staff in relation to other traffic calming projects under consideration. Highest priority projects will be funded to the extent of funds available for traffic calming in the current fiscal year

# II. CRITERIA FOR EVALUTING NEIGHBORHOOD TRAFFIC CALMING MEASURES

Traffic Engineering shall maintain a listing of warrants justifying the implementation of each type of traffic calming measure. "Warrants" are conditions that must be met before a particular traffic control measure can be implemented. In general, traffic calming measures will not be approved unless warrants are met, even though residents may be willing to bear the full costs of implementation. However, if the petition meets the required level of area-wide support for a traffic calming measure and the residents are willing to bear the full costs of implementation, the traffic calming measure may be approved if City Fire, Police and Traffic Engineering staff determine that there are no significant adverse impacts associated with implementation.

All traffic calming measures involving reconstruction in the roadway (e.g., barriers, speed humps, traffic circles, street closures) may affect storm water run-off. City staff will evaluate the drainage impacts of measures involving reconstruction in the roadway to identify potential flooding problems. Where the reconstruction cannot be designed to eliminate the storm water runoff problem, residents potentially affected must consent to implementation of the traffic calming measure, acknowledging through a

document recorded with the Maricopa County Recorder's Office and on the property title that they are willing to accept the risk of flooding. That consent must be provided when petitions demonstrating areawide support is submitted. All traffic calming measures involving either reconstruction in the roadway or installation of regulatory signs restricting traffic flows may adversely affect emergency vehicle response times. Traffic engineering staff will prepare schematic plans for requested traffic calming devices, for review and approval by the Fire and Police Department. Either Fire or Police may veto implementation of traffic calming devices found to have unacceptably adverse impacts on emergency vehicle response times.

#### **III. PETITION REQUIREMENTS**

Any traffic calming measure which has potentially major impacts (e.g., turn prohibitions, construction of barriers, speed humps, traffic circles) must receive area-wide support, as demonstrated by submittal of petitions showing that at least 75 percent of the residents and/or businesses affected favor implementation. In addition, 100 percent of the property owners located within 100 feet of speed humps, diverters, traffic circles, chicanes, chokers or similar devices to be constructed in a street must be in favor of the traffic calming measure. Only one signature per household or business will be counted to determine the 75 percent approval.

Traffic Engineering staff will provide standard petition wording and exhibits to be attached to the petition, and will provide the boundary of the area for which the petition is to be circulated by the Committee. The petition area boundary must include streets to which traffic may be diverted due to implementation of a traffic calming measure on another street. The petition form should clearly state that persons signing in favor of the traffic calming measure might need to participate in financing the implementation. City staff will provide information about estimated implementation costs and the level of public financial support potentially available.

Persons circulating petitions must attempt to contact all affected residents or business owners. Completed petitions must show signatures from at least 90 percent of the households or businesses in the petition area (including both persons in favor of and persons opposed to the proposed traffic calming measure).

# V. FINANCING

For streets with an average weekday traffic count of 900 or more vehicles, costs for construction of speed humps, diverters, traffic circles, chicanes, chokers or similar devices involving street reconstruction shall be fully paid for by the City. For streets with an average weekday traffic count of 450 to 900 vehicles, 50 percent of the costs for construction of speed humps, diverters, traffic circles, chicanes, chokers or similar devices involving street reconstruction shall be paid for by the residents. The residents' share of project costs must be paid in full to the City prior to construction. The City will not assume responsibility for collection of payments due from individual residents. City staff will determine project priorities based on the order in which requests were received, the relative severity of problems as determined by surveys, and the level of neighborhood support demonstrated by petitions submitted.

The City will pay the full costs for any signs or markings associated with implementation of traffic calming measures. The City will also pay for ongoing maintenance of all traffic control devices including speed humps, diverters, traffic circles, chicanes, chokers, signs and markings. For projects within a Redevelopment Area, Traffic Engineering staff will initiate a request for Community Development Block Grant funds to cover the residents' share of project costs.

# IV. WARRANTS FOR IMPLEMENTATION OF TRAFFIC CALMING MEASURES

#### All-way stop warrants

- There is a minimum of 500 vehicles per hour entering the intersection during each of 8 hours per day and vehicular plus pedestrian volume crossing major street is at least 200 per hour for the same 8 hours; OR
- There are 5 or more accidents in the past year that can be corrected by a 4-way stop; OR
- It is an intersection of two collector streets with at least 1,000 vehicles per day on the lower volume street (Stop signs should be at quarter-mile or greater spacing); OR
- It is an intersection of two collector streets with approximately equal volumes (no more than 60/40 split) and at least 800 vehicles per day on the lower volume street; OR
- The Intersection sight distance does not meet requirements of City of Chandler Standard Details C296 or C247.

# **Choker warrants**

- There is a minimum of 500 vehicles per day along the local/collector (residential) street; AND
- All households within 100 feet of the choker must agree to the installation; AND
- Restricted sight distance does not allow the pedestrian to cross at 3.5 feet per second; OR
- Surveyed speeds show that at least 15 percent of motorists traveling in the area exceed 32 miles per hour; OR
- Crosswalk is along a route to school, park or any other place with considerable pedestrian movements.

# Increased enforcement or speed trailer warrants

- There are at least 6 homes facing the street every 660 feet.
- Street section must be at least 600 feet long without stop sign control or right-angle turns.

# Diverter or street closure warrants

- There is a minimum of 500 vehicles per day along local/collector (residential) street with at least 6 homes facing the street every 660 feet; AND
- At least 20 percent of traffic on street during a peak travel period is not destined to anyplace in the neighborhood and are simply using the local/collector (residential) street in order to connect to another street situated beyond that area; AND
- 75 percent of households affected must agree the installation; AND
- All households within 100 feet of the diverter or barrier must agree the installation.

# Median barrier, one-way street or turn restriction warrants

- There are at least 500 vehicles per day along the local/collector (residential) street with at least 6 homes facing the street every 660 feet; AND
- At least 20 percent of traffic on street during a peak travel period is not destined to anyplace in the neighborhood and are simply using the local/collector (residential) street in order to connect to another street situated beyond that area; AND
- If a turn movement study indicates that barrier or restriction will discourage pass-through, by motorist that do not live within the neighborhood. AND
- 75 percent of households affected must agree the installation.

#### Speed hump or traffic circle warrants

- A minimum of 450 vehicles per day along the local/collector (residential) street with at least 6 homes facing the street every 660 feet; AND
- Surveyed speeds show that at least 15 percent of motorists traveling in the area exceed 32 miles per hour; AND
- 75 percent of households affected must agree the installation; AND
- All households within 100 feet of the speed hump or traffic circle must agree the installation.

#### **Truck restriction warrants**

- If trucks over 9,600 pounds gross vehicle weight are observed to use the local/collector (residential) street with residential frontage for pass-through traffic; AND
- An alternative route is available for the truck traffic; OR
- Street is not designed for heavy truck traffic.