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## **Neighborhood Traffic Control Program**

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## CITY OF CATHEDRAL CITY

### NEIGHBORHOOD TRAFFIC CONTROL PROGRAM PROCESS

#### OVERALL OBJECTIVE

The overall objective of the Traffic Control Program is to improve the livability of neighborhoods by mitigating the impacts of vehicular traffic on residential neighborhoods. Specific impacts to be addressed by the Program include high non-local cut-through traffic volumes, high speeds, truck traffic intrusion, demonstrated accident history and other related problems.

#### PROCESS OVERVIEW

The Neighborhood Traffic Control Program process was designed to ensure that every neighborhood with demonstrated problems and overall community support (determined via petitions) has equal access to neighborhood traffic control measures. The program depends upon citizen involvement and may vary from year to year based upon funding available for neighborhood traffic control. The process includes the nine following steps:

- Step 1** - Identify Candidate Streets/Neighborhoods
- Step 2** - Preliminary Screening and Evaluation
- Step 3** - Survey/Petition Affected Persons  
or Public Hearing at Transportation Commission
- Step 4** - Engineering Analysis
  - \*Step 4a** - Neighborhood Meetings (\*optional)
- Step 5** - Prioritization and Funding Assessment
  - \*Step 5a** - Develop Demonstration Project (\*optional)
- Step 6** - Determination of Permanent Project
- Step 7** - Monitoring

The process and individual steps are explained in more detail below. See the flow chart (exhibit 1) page 9, attached to this report for a graphic summary of the process.

#### GOALS/POLICIES

Goals/Policies of the Program include the following:

- Reduce, eliminate or discourage demonstrated non-local “cut-through” traffic on local residential streets and focus such traffic on the arterial roadway system.
- Reduce traffic speeds on residential streets with a demonstrated problem to levels consistent with other non-impacted local streets in the City.
- Limit the shifting of traffic intrusion and speeding problems from one residential street or neighborhood to another.

- Ensure citizen participation throughout the Neighborhood Traffic Control Program process, obtaining the input of affected residents, business owners and non-resident property owners.
- Minimize impacts on emergency vehicle response times due to the use of neighborhood traffic control measures.
- Achieve a neighborhood/city staff consensus of opinion as to the appropriate approach to solving the problem.

Program steps are detailed below.

### **STEP 1 - IDENTIFY CANDIDATE STREETS/NEIGHBORHOODS**

Residential neighborhood traffic control improvements (for either one street or a larger neighborhood) shall be considered for local or collector residential streets, as classified in the City's General Plan Circulation Element, based on one of the following actions:

- After receipt of written requests from one or more residents, business owners or non-resident property owners of the affected neighborhood.
- Traffic problems identified by City staff
- Written requests and/or public workshop comments arising out of a Model Neighborhood Program based upon section 2 of this document.

### **STEP 2 - PRELIMINARY SCREENING AND EVALUATION**

The Engineering Division will review requests to determine whether or not they should be handled as part of the normal traffic engineering function of the City, or if they qualify for consideration under the Neighborhood Traffic Control Program. The following initial criteria will be used to assess requests:

- Is the street in question classified as a local or collector street? If not, is the neighborhood predominantly residential in character?
- Are requests related to speeding, high traffic volumes, accidents, cut-through traffic, truck traffic or other related impacts on a residential or collector street or neighborhood?

If it is determined that the requests fall under the Neighborhood Traffic Control Program, then Step 3 is initiated. If not, the request shall be followed up as appropriate by the Engineering Division as part of the Divisions normal function.

### **STEP 3 - SURVEY/PETITION OF NEIGHBORHOOD or PUBLIC HEARING at the**

## **Transportation Commission**

Following the preliminary screening and evaluation, a survey/petition will be circulated to the affected persons to ascertain whether or not others agree that there is a problem. The persons receiving the survey/petition will include all households, businesses and non-resident property owners that have frontage on the project street segment(s) or in the neighborhood and could potentially be directly impacted by the improvement(s). The purpose of the survey is to establish the level of support among affected persons prior to proceeding with a more detailed analysis and potentially a project. A study will be carried forward if the following level of support is received:

- At least 60% of responses indicate that they feel there is a problem that warrants a study and consideration for neighborhood traffic control.

A Public Hearing at the City's Transportation Commission may be held in lieu of the neighborhood petition. This decision is to be made by the City Engineer.

Step 4 begins if positive survey responses equal or exceed 60%, or upon determination by either the City Engineer or the Transportation Commission.

### **STEP 4 - ENGINEERING ANALYSIS BY THE ENGINEERING DIVISION**

The Engineering Division will undertake an engineering study of streets or neighborhoods with qualifying petitions. The study will include at a minimum the following actions:

- Review by Police and Fire Departments. This review will determine if the specific streets in question are critical police or fire response routes. If so, Engineering will work with Police and Fire to ensure that measures are not installed which significantly impact response times. Police and Fire personnel will also offer input on the problem based upon their experience and perspective.
- Traffic data collection, to include (as appropriate based on identified problem) one or more of the following:
  - Determine the area affected and then conduct field investigation to note traffic operating conditions, geometric conditions (roadway width, pavement condition, parking availability, type and location of existing traffic control devices, etc.).
  - traffic volume counts (24 hour broken down into 15-minute increments and aggregated hour-by-hour)
  - radar or machine-based speed surveys
  - truck volume counts
  - pedestrian counts

- accident investigation
- other investigation deemed appropriate by the City Engineer

Based on this investigation, the City Engineer will make a preliminary determination of the need for specific traffic control measures. The traffic control measures may include one or more of the following:

- selective police enforcement/radar trailer
- chokers (curb bulbs)
- speed humps
- traffic circles
- diverters (full or partial)
- one-way streets
- cul-de-sacs
- truck restrictions
- school crossing guards
- other measures based on specific conditions
- parking restrictions
- special speed limits

Using the criteria listed in Table 1, page 10-11 (Neighborhood Traffic Control Program Criteria, attached) and applying recognized traffic engineering standards, the City Engineer will recommend the use of one or more neighborhood traffic control measures where they are appropriate. In determining the types and location of measures, estimates of potential secondary impacts (e.g., diversion to other streets) will be made where feasible. The City Engineer may at this point make a determination that no measures are needed or are appropriate. If this determination is made, the request is denied.

#### **STEP 4a - NEIGHBORHOOD MEETING(S)** (Optional)

One or more neighborhood meetings will be conducted as required for purpose of notifying local residents, business owners and non-resident property owners of the results of the technical analysis, findings and preliminary recommendations. Based on the results of the public meetings, the preliminary recommendations will be carried forward, amended or deleted consistent with adopted guidelines.

Duly Noticed Public Hearings at the City's Transportation Commission may be held in lieu of, or in conjunction with this step.

#### **STEP 5 - PRIORITIZATION AND FUNDING ASSESSMENT**

The problems in the neighborhood will be assessed using a point-based criteria system. Points will be assigned for every problem exceeding established thresholds. The point criteria are listed in Table 2, page 12. The score will then be compared to the scores

received for problems in other areas and the neighborhood/street will be ranked for implementation based on priority order.

Projects will be implemented, as funding becomes available, with the top ranked projects receiving City match funding first. The overall list of projects will be re-evaluated every two years. Projects remaining on the list for three years without obtaining enough priority for funding will be dropped.

**It is the intention of the City that the requestant bear the cost of installation of any new devices approved through this process. The City may contribute funds as deemed appropriate by the City Engineer or City Council. City C.I.P. funds set aside for this Program may be used for contraction match or for detailed study costs.**

#### **STEP 5a - DEVELOP AND INSTALL TEST PROJECTS ON TEMPORARY BASIS**

(Optional, need determined by the City Engineer)

Once funding becomes available, temporary test projects will be designed by the Engineering Division for the neighborhood/streets at the top of the priority list. The test project(s) will be implemented with temporary materials and will remain in place for approximately six months to one year depending on the types of improvements installed. If significant citizen complaints warrant, the time period could be reduced to less than six months. The project will be evaluated during the test period to determine if it addresses the identified problems and is consistent with Neighborhood Traffic Control Program goals. The Engineering Division shall conduct follow-up studies as necessary to evaluate effectiveness of individual measures. Such analysis may include, but not necessarily be limited to; traffic counts, speed surveys or other analysis on affected and nearby streets.

#### **STEP 6 - DETERMINATION OF PERMANENT PROJECT**

If the temporary test project shows that the traffic control program has sufficiently addressed the targeted traffic problem(s) and there have not been significant citizen complaints nor excessive diversion of the problem to another residential street, the traffic control measures shall be made permanent as funding becomes available. If it is determined that the measures will be installed on a permanent basis, the list of affected residents, business owners and non-resident property owners will be notified via meeting, mailing, public notices, or a combination.

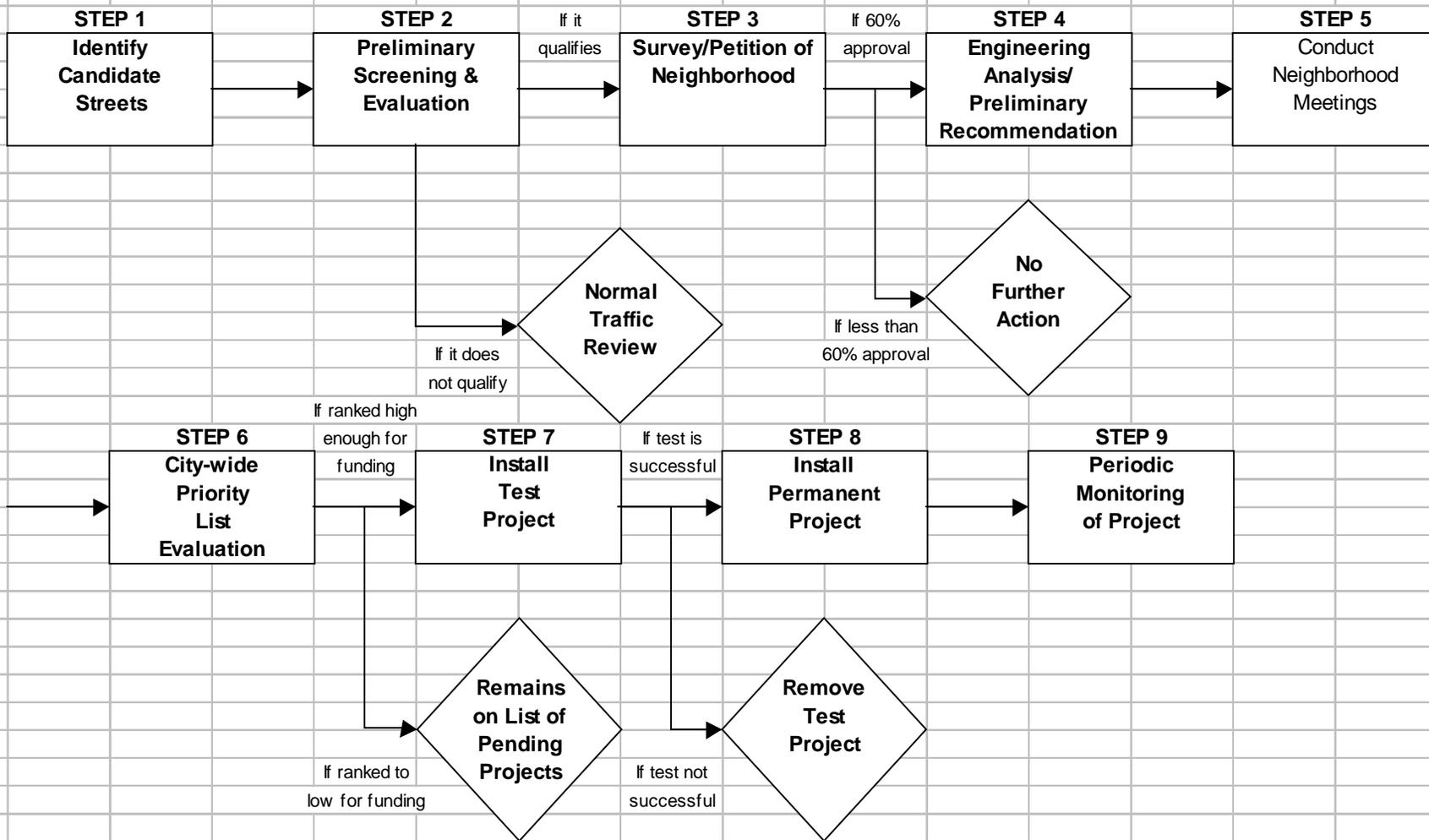
If it is found that the measures do not achieve the intended goals of reducing speeds, cut through traffic or other identified problems, the Engineering Division will review other potential measures and recommend either elimination of all measures at the location or test installation of different neighborhood control measures. If additional or different measures are recommended, the street will be re-evaluated and added back onto the city-wide priority list if appropriate.

## **STEP 7 - MONITORING**

The City will conduct periodic monitoring as necessary to determine if the project continues to meet the goals of the Neighborhood Traffic Control Program. This monitoring will be conducted at the direction of the City Engineer based on available funding, staffing levels and resident comments. If monitoring shows that the measures fail to achieve the intended goals of reducing speeds, cut through traffic or other identified problems, the measures may be removed.

**Exhibit 1**

**Neighborhood Traffic Control Program Process**



**TABLE 1  
NEIGHBORHOOD TRAFFIC CONTROL PROGRAM CRITERIA**

TRAFFIC CONTROL MEASURE	PROBLEMS TARGETED	STREET TYPE	CRITERIA			
			VOLUME (1)	SPEED	GRADE	OTHER CONSIDERATIONS
Speed Humps	High Speeds, Cut-through Traffic	Local/ Collector	1,500 to 5,000 ADT on local streets, from 3,000 to 5,000 on collector streets (2)	85 <sup>th</sup> % speed is greater than 30 MPH (2)	Less than 10%	Street must have only one lane for moving traffic in each direction, and must have curbs
Diverter	High Cut-through Traffic	Local	greater than 2,500 ADT	N/A	N/A	If full diverter, cannot be truck or transit route; emergency access to be considered
Traffic Circles	High Speeds, Accident History, Geometric Design Problems	Local/ Collector	from 1,000 to 5,000 ADT	N/A	N/A	Intersecting roadways must be of sufficient width. Loss of parking must be assessed. Cost of landscaping must be considered
Chokers	High Cut-through Traffic	Local	from 1,000 to 5,000 ADT	N/A	Less than 10%	Loss of parking must be assessed. Cost of landscaping must be considered
Cul-de-sac	High Cut-through Traffic	Local	ADT Greater than 2,000 with 20% non-local	N/A	N/A	Cannot be truck or transit route; emergency access to be considered

**TABLE 1  
NEIGHBORHOOD TRAFFIC CONTROL PROGRAM CRITERIA (continued)**

TRAFFIC CONTROL MEASURE	PROBLEMS TARGETED	STREET TYPE	CRITERIA			
			VOLUME (1)	SPEED	GRADE	OTHER CONSIDERATION
One-way Operation	Cut-through Traffic	Local/ Collector	N/A	N/A	N/A	Best if applied as one-way couplet
Radar Trailer	High Speeds	Local/ Collector	N/A	85 <sup>th</sup> % Speed is greater than 28 MPH	N/A	
Neighborhood Speed Watch Program	High Speeds	Local/ Collector	N/A	N/A	N/A	

**Notes:**

- 1) all volumes criteria based on average daily traffic. Refer to Calendar of acceptable count days prior to taking Counts
- 2) criteria is also met if 80% of both ADT and speed thresholds are met

**General Notes:**

- final determination of control application based on review by City Engineer
- subject to modification by City Council on a case-by-case basis
- N/A criteria does not apply to specific control measure

Table 2

**RANKING CRITERIA AND POINT CATEGORIES**

Criteria	Range of Points Possible	Point Assignment Criteria
Speed	0 to 30	85 <sup>th</sup> percentile speed
Volume	0 to 30	Average Daily Traffic
Density	0 to 20	Residential density along segment
Elementary School	0 to 5	Points awarded if children must cross segment to get to elementary school
Other Pedestrian Generators	0 to 5	Points awarded if there are land uses which generate significant pedestrian traffic along the segment
Other Special Characteristics	0 to 10	Points awarded at the discretion of the City Engineer based on other special characteristics which warrant neighborhood traffic control
<b>TOTAL POINTS POSSIBLE</b>	<b>0 to 100</b>	<b>RANKING: HIGHEST POINT TOTAL TO LOWEST POINT TOTAL (100 = highest)</b>

Points are assigned as follows:

- **Speed** - 2 points are assigned for every mile per hour the 85<sup>th</sup> percentile speed (average both directions) is over 30 mph, to a maximum of 30 points for 45 mph and over.
- **Volume** - 2 points per 100 Average Daily Traffic in 24 hour period (ADT) over 1,000 up to a maximum of 30 points for 2,500 ADT and over.
- **Density** - 4 points per 100 dwelling units per mile (DUPM), up to 500 DUPM.
- **Elementary School Crossing** - Awarded 5 points if street segment under investigation has a school crosswalk.
- **Other Pedestrian Generator** - Awarded 5 points if street segment under investigation has a land use which generates significant pedestrian traffic

# CITY OF CATHEDRAL CITY APPLICATION FOR NEIGHBORHOOD TRAFFIC CONTROL DEVICE INSTALLATION

## APPLICANT INFORMATION

Applicant / Responsible Party's Name:		
Applicant / Responsible Party's Address:		
Applicant / Responsible Party's Phone No.: (    )		
Type of Device:	Reasons for Request:	
Date(s) of Application:	Street(s):	Cross Street:
Describe location and list all pertinent information and details. Attach a sketch showing the location of street and devices requested for installation (required).		

## DO NOT FILL IN – OFFICE STAFF ONLY

### SERVICES REQUIRED

Traffic Control Device(s): Cost Each = \$	X Number of Devices =	\$
Public Works Crew: Number of Crew	X hourly rate = \$	\$
Engineering Design/Studies: Position	X hourly rate = \$	\$
Petition Received from Applicant:		Required / Not Required
Encroachment Permit No.:	Issued Expires:	\$
Application Accepted By:		Date: \$
<b>GRAND TOTAL FEES</b>		\$

### DEPARTMENT AUTHORIZATION

Cathedral City Police Department:	Date:
Cathedral City Fire Department:	Date:
Street Maintenance Manager:	Date:

### ADDITIONAL REQUIREMENTS

Transportation Commission Hearing/Approval Date:	
City Council Hearing/Approval Date:	
Engineer's Estimate Attached:	Yes _____ No _____ N/A _____
City Engineer's Approval:	Date:

## **SPEED HUMP IMPLEMENTATION CRITERIA AND DESIGN GUIDELINES**

The following guidelines should be utilized to determine where speed humps should be considered for installation.

- 1) Speed humps shall only be considered for installation on streets which meet the following criteria:
  - a) The street must not have more than one travel lane in each direction, and must not exceed 40 feet in width, curb to curb.
  - b) The street must be a residential street (in a “residential district”) whose primary purpose is to provide access to abutting residential properties. A residential district as defined in the California Vehicle Code is an area with contiguous property on both sides of the street consisting of 16 or more separate dwelling houses or business structures per one-quarter mile (or ratio thereof), with not less than 51 percent of the structures occupied by residences.
  - c) The street shall be designated as a residential or local collector street in the Circulation Element.
  - d) The speed limit shall be no greater than 25 mph as determined in accordance with state law.
  - e) The traffic volume on the street shall be between 250 and 750 vehicles on local residential streets, and between 3,000 and 5,000 on residential collector streets, total in both directions, in a 24-hour period, on an average weekday.
  - f) The measured 85<sup>th</sup> percentile speed of traffic shall be equal to or greater than 35 mph or 70% of the measured vehicle speeds shall be in excess of 25 miles per hour.
  - g) The street geometry must provide hump locations at least 200 feet away from intersections and sharp horizontal curves. The minimum block length on which a speed hump should be considered is 500 feet between the face of curbs on the two adjacent cross streets at either end of the block.
  - h) The street shall not have a grade of more than 10%.
  - i) The street shall not be a truck route or a transit route
  - j) The street must have raised curbs to physically prevent motorists from driving off the street to avoid the speed humps.
  - k) The street should not be an important access route for emergency vehicles. Factors to be considered are whether the street is a primary route for emergency vehicles and whether the installation of speed humps could cause a significant delay in the response to emergencies. The City Police and Fire Departments shall be consulted on candidate streets for speed hump installation.
- 2) Speed humps are still experimental roadway features. Therefore, additions, alterations or removal of any or all speed humps may occur at any time at the discretion of the City Engineer.

- 3) Guidelines to be utilized in the installations of speed humps include the following:
- a) The physical installation of speed humps and the associated traffic control devices shall conform to design standards established by the Engineering Division. In addition, the installation shall conform with the attached standard plan.
  - b) In profile view, along the centerline of the street, speed humps shall be curvilinear, 12 feet in length and with a mean height at its midpoint of 2.65 inches, with an allowable tolerance of  $\pm 0.5$  inch, as shown in the standard plan.
  - c) In plan view, across the street, the speed hump shall extend in both directions to a point near the edge of the travel way with the last 1 to 3 feet tapered, so that it is flush with the roadway at the joint with the gutter.
  - d) Speed humps must not have utility manholes, fire hydrants, or driveways within 10 feet of their location.
  - e) The following additional traffic control devices shall be installed in conjunction with each speed hump location.
    - i) Advanced pavement legends to note "Bump" in accordance with the standard plan.
    - ii) 12" reflective white vertical stripes on the speed hump (parallel to the direction of travel) to illustrate the rise in pavement.
  - f) All contractors shall conform to all the traffic control guidelines as directed by the City Engineer.
  - g) The installation of speed humps shall occur on weekdays during the hours of 8:00 a.m. to 6:00 p.m., unless otherwise directed by the City Engineer.
  - h) Street geometry shall provide at least 200 feet of clear visibility on approaches to speed humps. The humps shall be located not less than 200 feet or more than 450 feet apart.
  - i) The approach speed at the location of the first potential speed hump must be able to be effectively controlled via a physical design feature to the satisfaction of the City Engineer.