

ATTACHMENT B
County of San Mateo
Department of Public Works Residential Speed Control Device Program,
Regulatory Sign and Parking Policy

Residential Speed Control Device Program

PURPOSE

The purpose of the Residential Speed Control Devices¹ Program is to provide a consistent, fair and cost-effective process to evaluate requests for speed control devices from citizens in the unincorporated areas of San Mateo County. The purpose of a speed control device is to encourage a reduction in traffic speeds on residential streets, commensurate with the prima facie speed limit as provided in the California Vehicle Code, while preserving the intended efficiency of the road network for emergency response and routine travel.

The California Highway Patrol (CHP) has primary responsibility for enforcing the provisions of the California Vehicle Code on streets in the unincorporated areas of the County. The Department of Public Works considers speed control devices as traffic law enforcement tools. Speed control device installations require the approval of the CHP.

The Department of Public Works (DPW) will not recommend that speed control devices be installed on roads where the posted speed limit is 30 miles per hour (mph) or more.

Speed humps and speed dips are the most common types of speed control devices constructed or permitted within public rights of way in San Mateo County. Speed humps are typically 12 to 18 feet in length and encourage speeds within the prima facie speed limit (i.e. 25 mph maximum) to traverse them comfortably. Speed humps are recommended where the 85th percentile² speed on a street is at least 32 mph. Speed dips are typically surface drainage “valley gutters,” which primarily serve to channel stormwater runoff. Speed dips can also slow the speed of vehicles traversing them. Speed dips may be installed in lieu of speed humps where the 85th percentile speed on a street is at least 36 mph.

¹ Throughout this document, the term “speed control device” is used to signify “speed hump,” “speed dip,” “speed lump” and “speed table.” Speed lumps, also called speed cushions, are modified speed humps intended to allow wide wheel-based emergency vehicles (e.g. fire engines) to pass without substantially reducing their speed. Speed tables are typically longer, flat-topped speed humps often used to increase pedestrian crosswalk visibility.

² The 85th percentile speed is the speed at and below which 85 percent of all vehicles traveled during the survey. 85th percentile speeds are considered the standard for traffic engineering practice.

RESOURCES

The Department of Public Works will make available on its website traffic survey reports from surveys conducted commencing July 2004. Speed data and/or reports more than two (2) years old shall not be used to determine whether a street qualifies for speed control devices (see Procedures below).

PROCEDURES

1. Request (Notice of Interest)

Any citizen who owns property or resides on a residential street in the unincorporated area may initiate a request for a Residential Speed Control Device by completing a Residential Speed Control Devices Interest Form. The form will indicate the street, applicable cross streets, description of the problem and contact information.

The Redwood City or San Francisco Area Commanders of the California Highway Patrol, or the San Mateo County Sheriff may also initiate requests for Residential Speed Control Devices. Requests received directly from the CHP or Sheriff will not be subject to the Petition Process in Part 2 below.

2. Petition Process

The Department of Public Works will provide a standard form of petition to the citizen initiating the request. The petition will include:

- a) A map of the proposed Project Area as defined by the Department of Public Works;
- b) The names of the owners of the property adjacent to the road within the proposed Project Area as listed on the Assessor's roll;
- c) Situs addresses of parcels adjacent to the road;
- d) A statement that the petitioners understand that the County makes no guarantee that the installation of said speed control devices will reduce the speed of all traffic on the road to within the prima facie speed limit or to a speed that is satisfactory to the property owners;
- e) A statement that the petitioners have voluntarily contributed any administrative fees or other costs associated with the installation of the speed control devices;
and

f) A statement that the petitioners acknowledge the potential impact of speed control devices on emergency services response times.

A Neighborhood Project Coordinator and one alternate shall be identified on the petition form.

The Department of Public Works will notify all property owners and residents in the Project area that a request was received and that a form of petition has been provided to the requestor. The notification will include contact information for the Neighborhood Project Coordinator and a copy of these Procedures.

The petition must be signed by Property owners or residents that represent at least 51% of the property on the street. Any resident of a parcel listed on the petition shall be deemed authorized to sign the petition on behalf of that residential parcel (one signature per parcel). The Neighborhood Project Coordinator will certify the petition and deliver it to the Department of Public Works, and the Department of Public Works will verify the number and percent of signatures obtained.

3. Initial Review

The petition will qualify for prioritization as a Project if the road grade, alignment, sight distances and storm drainage features are suitable, as determined by the Department of Public Works; minimum Qualifying Criteria 1 and 2 are met, and at least one of the Supplemental Qualifying Criteria 3, 4 or 5 are satisfied:

Minimum Qualifying Criteria

1. Minimum 85th percentile speed of 32 mph
2. Approval by California Highway Patrol

Supplemental Qualifying Criteria

3. Minimum volume of 500 vehicles per day
4. Location within 1,000 feet walking distance of a school, senior citizen facility, facility for the disabled, park, community center or other site with significant pedestrian activity;
5. Unusual accident history (as defined by six or more vehicle property damage incidents or one vehicle related fatality within the prior three consecutive years. Property damage incidents due to parking, vehicle equipment, drug/alcohol and certain other causes clearly not solvable by traffic calming will not be counted).

Petitions that meet the Minimum Qualifying Criteria (1 and 2), but none of these Supplemental Qualifying Criteria 3 through 5, and where the road grade, alignment, sight distance and storm drainage features are suitable for the

installation of speed control devices, may be included in the Neighborhood Funded Speed Control Device option (below) if requested by the petitioners.

4. Neighborhood Meeting

The Department of Public Works will schedule a community meeting to discuss the proposed Project. Notification of the meeting date, time and location will be mailed to all property owners and residents within the Project area.

5. Board of Supervisors Approval

Proposed Projects must be approved by the Board of Supervisors prior to commencing design and construction.

6. Notifications

The Department of Public Works will notify all property owners and residents within the Project area and within three hundred feet (300') of the Project area of the date, time and location of the Board of Supervisors meeting where the installation of the speed control devices is scheduled for consideration. Fire and law enforcement agencies, public works agencies in adjoining cities/towns, and community councils and homeowners associations, where applicable, will also be notified.

The Department of Public Works will also notify the same group of property owners and residents of the schedule for construction of speed control devices approved by the Board of Supervisors.

7. Fees

The Board of Supervisors has established an administrative fee to be paid for speed control devices requested by petition. Payment must be submitted in the form of cash or a single check, payable to the County of San Mateo, prior to construction of the speed control devices.

The administrative fee is currently \$400 per device (established October 2003 by Resolution No. 66308).

8. Design

The Department of Public Works will prepare a map showing locations and types of speed control devices. Speed control devices will be designed in conformance with the San Mateo County Department of Public Works Standard Drawings and Guidelines for the Design and Installation of Speed Control Devices (March 2005).

The design will consider the impacts to drainage, utilities, driveways, pedestrian and bicycle routes, and road maintenance considerations. The final design including locations and types of speed control devices shall be at the sole discretion of the Director of Public Works.

9. Construction

The Department of Public Works will select and manage the work of a contractor, or may employ its own forces to construct speed control devices.

10. Maintenance

The Department of Public Works will maintain speed control devices including signs and legends.

11. Removal

Speed control devices will not be removed unless the Board of Supervisors approves a Resolution directing their removal.

12. Monitoring

The Department of Public Works will conduct follow-up traffic monitoring (i.e. speed and volume surveys) a minimum of six (6) months after construction of speed control devices.

NEIGHBORHOOD FUNDED SPEED CONTROL DEVICES

Proposals that qualify under the procedures, but for which there will not be sufficient funds in the Department of Public Works budget to complete construction within the neighborhood's desired timeframe, or that meet the Minimum Qualifying Criteria but do not meet at least one of the Supplemental Qualifying Criteria, may qualify for Neighborhood Funded Speed Control Devices option. Neighborhoods must finance 100% of the estimated cost of constructing speed control devices and must pay the administrative fee per device as stated in Section 7 above. The neighborhood must deposit funds sufficient to cover the estimated cost of construction and the administrative fees in the form of a single check made payable to the County of San Mateo before design work commences.

Proposals for Neighborhood Funded Speed Control Devices are subject to all of the procedures listed above, including approval by the San Mateo County Board of Supervisors. Projects that are not first approved by the Board of Supervisors will not be constructed or permitted.

This option is available to expedite the construction of speed control devices that would otherwise be delayed due to program funding limitations. Proposals for Neighborhood Funded Speed Control Devices will not be prioritized over projects planned for completion using public funds.

Neighborhood Funded Speed Control Devices are subject to removal by the Department of Public Works in accordance with Section 11 above.

Program Budget

The Department of Public Works will, each year, recommend to the Board of Supervisors funding for Residential Speed Control Devices.

Should the anticipated cost of completing all requested Projects exceed the funding available, the Department of Public Works shall take into consideration the 85th percentile speeds, accident histories and the recommendations of the CHP in order to prioritize the outstanding requests.

Stop Sign Policy

New stop signs may be installed at qualified intersections on County maintained roads.

To qualify for 1-way or 2-way stop control, one or more of the following warrants from the California Manual on Uniform Traffic Control Devices³ (MUTCD) Sections 2B.05-07 shall be met:

- A. Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;
- B. Street entering a through highway or street;
- C. Unsignalized intersection in a signalized area; and/or
- D. High speeds, restricted view, or crash records indicate a need for control by the stop sign.

Multiway stop (3-way or more) installations are regulated with additional criteria because research has proven⁴ that drivers disobey unwarranted stop signs. To qualify for a multiway stop, one or more of the following warrants shall be met:

- A. Where traffic signals are justified, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangement are being made for the installation of the traffic control signal;
- B. A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multiway stop

³ FHWA's MUTCD 2003 Revision 1, as amended for use in California

⁴ <http://www.ite.org/traffic/documents/AHA99B49.pdf>

installation. Such crashes include right- and left-turn collisions as well as right-angle collisions.

- C. Minimum volumes:
 - 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and
 - 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but
 - 3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values.
- D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

In addition, the Department may also consider the following for a multiway stop:

- A. The need to control left-turn conflicts;
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop; and
- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve operational characteristics of the intersection.

Yield Sign Policy

The Department may choose to install a Yield sign on a County maintained road if engineering judgment indicates that one or more of the MUTCD Section 2B.08-10 conditions are met:

- A. Where the ability to see all potentially conflicting traffic is sufficient to allow a road user traveling at the 85th-percentile speed to pass through the intersection or to stop in a reasonably safe manner.
- B. If controlling a merge-type movement on the entering roadway where acceleration geometry and/or sight distance is not adequate for merging traffic operation.
- C. The second crossroad of a divided highway, where the median width at the intersection is 30 feet or greater. In this case, a STOP sign may be installed at the entrance to the first roadway of a divided highway, and a YIELD sign may be installed at the entrance to the second roadway.
- D. An intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.

Regulatory Speed Limit Sign Policy

The Department follows the California Vehicle Code (CVC) to assign speed limits. CVC Section 22352 states that the prima facie speed limits on highways that are not State highways shall be as follows:

- A. 25 miles per hour
 - 1. Residential Districts
 - 2. Business Districts
 - 3. Next to a Senior Citizen facility with posted "Senior" sign
 - 4. School Zones (when children are present) with posted "School" sign
- B. 15 miles per hour
 - 1. Railroad grade crossing with obstructed view
 - 2. Uncontrolled highway intersection with obstructed view
 - 3. Alleys

The prima facie speed limits listed above and in the CVC do not require posting of a speed limit sign to be enforced therefore it is unnecessary to pass a resolution to add speed limit signs to an established prima facie speed zone.

However, if any portion of a County maintained road is determined by an "Engineering and Traffic Survey" to require an increase or decrease in the prima facie speed, an ordinance will be required.

Other Regulatory Signs Policy

All other Regulatory Signs such as those relating to turning restrictions, weight limits, and other enforced rules of the road shall be studied on a case-by-case basis, using the MUTCD for guidance. An appropriate traffic study may be performed for each request.

No Parking Zone Policy

A No Parking Zone (NPZ) may be established on a County Maintained Road.

New potential NPZs are evaluated by the following criteria:

- A. Sight Distance- The motorist's line of sight will be evaluated for an increase in decision-making time attributed to the proposed No Parking Zone. Available sight distances will be compared to the requirements set by the American Association of State Highway and Transportation Officials "A Policy on Geometric Design of Highways and Streets," 2004. The California Manual on Uniform Traffic Control Devices states a minimum one parking stall length (suggested as 24') shall have parking prohibited at unsignalized intersections and two stall lengths at signalized intersections per page 3B-16 (September 2006), unless determined otherwise by the engineer.
- B. Available Parking-The County will determine whether there is enough space to accommodate the volume of vehicles (minus the NPZ) that may

access this area. Also, the County will take into consideration if any motorists could park on other streets nearby.

- C. Traffic Flow- Observations of traffic flow adjacent to the requested NPZ will be evaluated for delay contributed by parked vehicles and safety to pedestrians and bicyclists (if on a known bicycle facility).
- D. Accident Records-Previous accident records showing broadside collisions attributed to limited sight distance at intersections and/or sideswipe collisions may also be considered.

No Parking Zones are not required to be installed at curb returns, bus stops, fire hydrants, curb ramps, or edge of driveways, as they are prohibited by the California Vehicle Code Section 22500-22526 et seq.

If an existing NPZ is no longer valid, the parking zone in the original Resolution may be abolished.

Loading Zone Policy

A Loading Zone (LZ) may be established on a County Maintained Road.

Loading Zones are shown with yellow curb markings. A LZ zone may be established in front of the business that requested it. If a sign accompanies the yellow markings, it may show specific times and/or days that apply to that LZ. If there is not a sign posted with the yellow painted curb, the LZ is applicable at all times.

New potential LZs are evaluated by the following criteria:

- A. The type of business, which relates to the business's active freight loading and unloading requirements
- B. How the proposed parking zone will impact neighborhood parking

If an existing LZ is not longer needed by the business that requested it, the original parking zone Board Resolution may be abolished.

Time Limited Parking Policy

A Time Limited Parking (TLP) zone may be established on a County Maintained Road.

Time Limited Parking zones are shown with green curb markings. A TLP zone may be established in front of the business that requested it. The County will assign all TLP zones to be a 20-minute, 1-hour, or 2-hour by Board Resolution, and the time limit will be printed directly on the curb or posted on a sign.

New potential TLP zones are evaluated by the following criteria:

- A. The type of business, which relates to the length of time customers require parking
- B. The off-street parking available

C. How the proposed parking zone will impact neighborhood parking

If an existing TLP is no longer needed by the business that requested it, the original parking zone Board Resolution may be abolished.

Disabled Parking Policy

A Disabled Parking (DP) zone may be established on a County Maintained Road.

Disabled Parking (DP) zones are shown with blue curb markings and designate parking spaces for people with a disability. A DP space may be established in front of private property (home or business, etc.)

New potential DP zones are evaluated by the following criteria:

- A. Access route for the disabled person
- B. Existing off-street parking such as driveway, garage, parking lot

How the proposed parking zone will impact neighborhood parking DP is only valid for 2 years and must be renewed by Resolution. A copy of the resident or patron's current Department of Motor Vehicles Disabled Placard Receipt must be kept on file at Traffic Services in Road Operations. Proof of residence or patronship to the business making the request also must be provided with the application.

If the resident who requested an existing DP no longer requires it, the original parking zone Resolution may be abolished.

Drop-Off Zone Policy

A Drop-Off Zone (DOZ) may be established on a County Maintained Road.

Drop-Off Zones are shown with white curb markings. A DOZ zone may be established in front of the business or organization that requested it. If a sign accompanies the white markings, it may show specific times and/or days that apply to that DOZ. If there is not a sign posted with the white painted curb, the DOZ is applicable at all times.

New potential DOZs are evaluated by the following criteria:

- C. The type of business or organization, which relates to the active passenger or mail loading and unloading requirements
- D. How the proposed parking zone will impact neighborhood parking

If an existing DOZ is not longer needed by the business that requested it, the original parking zone Board Resolution may be abolished.

Updating Master Lists

The locations of signs, parking zones, and crosswalks on County maintained streets are currently documented on GIS Maps in the Department of Public Works, and will be made available in list form on the Department's web site. The master lists will be updated to reflect the recommended changes if your Board approves the proposed resolutions.

F:\users\admin\Board of Supervisors\2009\April 28, 2009\Traffic Board Memo - Attachment B Final.doc
F:\users\COMMON\Operations\A new Operations\Board reports\April28,2009\Traffic\TrafficBoardMemo-
AttachB_033109.doc