

SPEED AND TRAFFIC MANAGEMENT POLICY UPDATE

This section includes proposed edits to ACHD's Residential Traffic Management Policy (Policy 5104.2) and ACHD Development Policy (Policy 7200) as it relates to traffic calming.

5104.2 Residential Traffic Management ~~(Traffic Calming)~~

ACHD shall cooperate with residents, other local agencies and neighborhood associations to manage residential traffic according to thresholds established in this policy. ~~Traffic calming~~Residential Traffic Management measures are roadway features and/or traffic controls that reduce the speed or volume of traffic on a street ~~and are not intended to address serious safety deficiencies in roadway geometry or traffic controls. The measures may include, but are not limited to, speed humps, speed tables, raised crosswalks, curb extensions, chicanes and mini-roundabouts.~~

This policy is only applicable to local residential or collector street. Speed management measures on arterials may be included through a development or ACHD capital projects as determined by ACHD's Traffic Services staff.

Notwithstanding the provisions herein, ACHD Traffic Engineering Supervisor may approve the installation of traffic calming measures to address recognized safety considerations or to encourage appropriate speeds on roadways where the land use pattern warrants.

5104.2.1 Prerequisites to Traffic Calming

Prior to implementing traffic calming:

1. A traffic safety investigation consistent with procedures outlined in Sec. 5104.1 shall be completed. This includes gathering data to determine eligibility for traffic calming, including speed and volume information as well as recent crash history or other geometric constraints present on or near the street in question.
2. Traffic calming investigations shall recur no sooner than three (3) years after the most recent traffic calming investigation completion for a specific street or street segment. The three (3) year window shall begin the day after the last day of data collection. Traffic calming investigations may recur less than three (3) years after completion of a prior investigation if street conditions have substantially changed (e.g., new development, land use changes, new street connection) or if approved by the ACHD Traffic Services Manager.
3. Input from emergency services (police, fire, EMT, etc.) shall be obtained by ACHD prior to any traffic calming installation. Should the roadway be

considered a primary response route, ACHD may decline to install traffic calming measures.

4. Where public transit service and/or school buses are routed along a street under traffic calming consideration, this shall not automatically disqualify the street from traffic calming implementation. However, ACHD shall work with Valley Regional Transit (VRT) or the relevant school district and neighborhood school to accommodate buses that may use a given route under consideration for traffic calming measures.
 - ~~1. A traffic safety investigation consistent with procedures outlined in Sec. 5104.1 shall be completed. This includes gathering data to determine eligibility for traffic calming, including speed and volume information as well as recent crash history.~~
 - ~~2. If a roadway segment meets traffic calming criteria, residents shall submit a petition showing support of 75% of the households on the impacted section of the street. For a local street, signatures representing a minimum of 10 households are required and may include other residents within the neighborhood where the number of houses on the street do not allow for satisfaction of this requirement. For a collector street, signatures representing 50% of the households of the adjacent local streets that, as defined by ACHD on a case-by-case basis, depend upon the collector for major street access, are also required.~~
 - ~~3. For continuous collector streets, additional notification and public involvement may be required. Collector streets with over 4000 vehicles per day (weekday average) are generally not appropriate facilities for speed humps or other measures that may divert traffic to other streets.~~
 - ~~4. Input from emergency services (police, fire, EMT, etc.) should be obtained by ACHD. Should the roadway be considered a primary response route, ACHD may decline to install traffic calming measures.~~
 - ~~5. Where public transit service is routed along a street that is considered for traffic calming measures, this shall not automatically disqualify the street from traffic calming implementation.~~

5104.2.2 Eligibility

~~Only residential streets with a posted speed limit of 30 mph or less and functionally classified as a local or collector street are eligible for traffic calming.~~

5104.2.3 Neighborhood Participation and Financial Contribution

~~When the cut-through traffic threshold established in Sec. 5104.2.5 or Sec. 5104.2.6 is exceeded, ACHD shall conduct a study to determine appropriate traffic calming measures, perform the design, conduct the public information process, fund the construction in accordance with available funds and priorities, administer the construction contract, and~~

~~install all supplementary traffic controls such as signs and pavement markings.~~

~~When the cut-through requirement is not met but traffic volume and/or speed thresholds are exceeded, the neighborhood is responsible for the construction costs. Payment shall be to ACHD in advance of any traffic calming construction and/or installation. ACHD shall provide the necessary supplementary traffic control devices such as appropriate signs and markings.~~

~~If traffic thresholds outlined in this policy are not met, options available to the neighborhood include the following:~~

~~Placement of a temporary speed trailer (See Sec. 5104.2.9);
Police enforcement.~~

5104.2.4 Minimum Criteria for Traffic Calming Eligibility

The following minimum criteria shall be met (applicable to both local and collector roads) for a street segment to be eligible for traffic calming:

1. Only residential streets with a posted speed limit of 30 mph or less and functionally classified according to the Master Street Map as a local or collector street shall be eligible for traffic calming under this policy. (This does not prohibit ACHD use of speed mitigation measures on other streets within the ACHD road network.) The minimum street length to be considered for traffic calming measures shall be 750'. Additional information in how this distance is measured can be found in ACHD's Traffic Standard Details (TS-1121).
- ~~2. A 200' minimum and 500' maximum distance is required between traffic calming devices (measured center to center). A minimum of 300' is required between stop or yield control, horizontal curves with 45 degree or greater deflection and any traffic calming device (except curb extensions). Minor variations in the aforementioned standards may be accepted by the ACHD Traffic Engineer.~~
2. The minimum average daily traffic (ADT), as measured by a weekday count of at least three days duration, shall be at least 400-500 vehicles.
- ~~4. The maximum average daily traffic (ADT), as measured by a weekday count of at least three days duration, shall be no more than 4000 vehicles.~~

5104.2.53 Thresholds for Local Residential Roads

One of the following thresholds shall be met in order for a local roadway to be considered eligible for traffic calming:

1. The average of the three (3) highest weekday peak traffic hours, as measured by a count of at least three (3) days duration, is equal to or greater than 100 vehicles. ~~Peak hour traffic greater than 100 vehicles.~~

2. 85th percentile speed of all vehicles, as measured by a count of at least three days duration, equal to or greater than 3029 mph. The 85th percentile speed is defined as the speed at which 15% of vehicles are traveling at or exceeding. All speeds will be rounded to the nearest mile per hour.
3. 95th percentile speed of all vehicles, as measured by a count of at least three days duration, equal to or greater than 353 mph. The 95th percentile speed is defined as the speed at which 5% of vehicles are traveling at or exceeding. All speeds will be rounded to the nearest mile per hour.

The speed requirement for both thresholds shall be reduced by one (1) mph for each of the following (maximum two [2] mph reduction); ~~1 mph for each of the following:~~

1. Lack of continuous sidewalks on at least one side of the street.
2. Vertical or horizontal alignment that limits sight distance, based on the posted speed limit, as determined by ACHD.
3. Street segment is directly adjacent to a school, or part of a school walk route, as defined by the relevant school district.
4. Street segment is directly adjacent to a neighborhood park or community center (play area, swimming pool, e.g.).

~~Provided either the speed or volume requirement is met, ACHD shall defray the costs of traffic calming measures if the cut through traffic exceeds the percentage listed in the table below. Values between those listed shall be prorated linearly from the values provided:~~

ADT (Weekday)	% Cut-Through
400	50
800	40
1200	30
1600	20
>=2000	10

5104.2.46 Thresholds for Collector or Local Roads Fully Improved to Collector Width

1. The average of the three (3) highest peak traffic hours, as measured by a count of at least three (3) days duration, is equal to or greater than 300 vehicles where no direct lot access is permitted and 150 vehicles where continuous direct lot access exists. Streets having a mixture of direct and non-direct lot access shall have a threshold volume determined by a proration based on the lineal feet of frontage of each type (for example, direct lot access on 50% of the roadway requires an average of 225 vehicles in the three (3) highest peak hours to meet this requirement).
- ~~1. Peak hour traffic greater than 300 vehicles where no direct lot access is permitted and 150 vehicles where continuous direct lot access exists. Streets having a mixture of direct and non-direct lot access shall have a threshold volume determined by a proration based on the lineal feet of frontage of each type (for example, direct lot access on 50% of the roadway requires 225 vehicles in the peak hour to meet this requirement).~~

2. 85th percentile speed of all vehicles, as measured by a count of at least three days duration, equal to or greater than 35 mph. The 85th percentile speed is defined as the speed at which 15% of vehicles are traveling at or exceeding. All speeds will be rounded to the nearest mile per hour.
3. 95th percentile speed of all vehicles, as measured by a count of at least three days duration, equal to or greater than 37 mph. The 95th percentile speed is defined as the speed at which 5% of vehicles are traveling at or exceeding. All speeds will be rounded to the nearest mile per hour.

The speed requirement for both thresholds shall be reduced one (1) mph for each of the following (maximum two [2] mph reduction:by 1 mph for each of the following:

1. Lack of continuous sidewalks on at least one side of the street.
2. Vertical or horizontal alignment limits sight distance per the posted speed limit.
3. Greater than 50% front-on housing, limited to the street segment in question.
4. Street segment is directly adjacent to a school, or part of a school walk route as defined by the relevant school district.
5. Street segment is directly adjacent to a neighborhood park or community center (play area, swimming pool, e.g.).
 3. ~~More than 50% front-on housing.~~

~~Provided either the speed or volume requirement is met, ACHD shall defray the costs of traffic calming measures if the cut through traffic exceeds the percentage listed in the table below. Values between those listed shall be prorated linearly from the values provided:~~

ADT (Weekday)*	% Cut-Through
1000	50
1500	40
2000	30
2500	20
<u>>=3000</u>	<u>10</u>

~~* Cut through requirement shall be reduced from the value shown above based on direct lot access according to the following chart:~~

Direct Lot Access	% Reduction in Cut Through
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	Requirement
0%	0%
20%	5%
40%	10%
60%	15%
80%	20%
100%	25%

5104.2.5 Collector Streets with an ADT greater than 4000

Collector streets with a weekday average of 4000 or more vehicles per day (as measured by a count of at least three [3] weekdays duration) may be considered for traffic calming, assuming they meet the requisite speed thresholds outlined in Section 5104.2.4. Such streets generally play an important role in traffic circulation and emergency response, so vertical displacement devices in the form of speed humps or speed cushions may not be desirable. In these cases, ACHD Traffic Engineering shall refer the street segment in question to Planning and Programming to incorporate into the capital project planning process.

5104.2.6 Neighborhood Petition Process

If a roadway segment meets traffic calming criteria, a petition showing support of a minimum ~~75~~60% of affected households (property owners only, one signature per household), as determined by ACHD Traffic Engineering, shall be completed and verified by ACHD Traffic Engineering. For a local street, signatures representing a minimum of ten (10) households are required. This may, at ACHD's discretion, include other residents within the neighborhood near the roadway segment where the number of houses directly on the street do not allow for satisfaction of this requirement.

For a collector or local street improved to collector standards, signatures of households on adjacent local streets that, as defined by ACHD Traffic Engineering on a case-by-case basis, depend upon the collector for major street access, shall be included in the petition process.

ACHD Traffic Engineering shall define the petition area, ~~and provide necessary instructions and petition materials to the applicant. Petitions may be circulated by the applicant in paper form or conducted in electronic form, to be administered by ACHD. ACHD will then issue mailers and initiate an online petition process to residents within the petition area. Signatures will be accepted electronically or handwritten. Applicants may enlist others within the neighborhood to assist in collecting signatures. The original applicant will be made aware when the mailers are sent out and the online petition goes live and the results when it closes. —Further, ACHD will notify the corresponding neighborhood association (or Homeowners Association where a neighborhood association does not exist) of the request and results.~~

5104.2.7 Procedure for Traffic Calming Installation

If the prerequisites and eligibility criteria for traffic calming are satisfied, ACHD shall perform the design and determine the timing of device installation based on funding eligibility and priority. ACHD may consider installation of the following traffic calming features, including but not limited to:

- Vertical Deflection (Speed Humps and Tables)
- Horizontal Shifts (Medians, Chokers, Lane Narrowing, Chicanes)
- Intersection Treatments (Roundabouts, Mini Roundabouts, Traffic Circles, Diverters, Bulbouts, Raised Intersections, and Raised Crossings)
- Vertical Elements (Street Trees or landscaping only for the purpose of traffic calming may be considered where there is an agreement for others to irrigate and maintain)
- Temporary Materials may be used as approved by ACHD Traffic Engineering to evaluate potential treatments prior to permanent installation.

A public involvement process and concept design, such as a public information meeting and/or survey of concerns, may be performed to identify and evaluate support and opposition for the proposed project. This largely applies to collector streets with an ADT greater than 4000 (see Sec. 5104.2.5). For low volume collectors or residential streets, ACHD will select the appropriate treatments for installation based on engineering judgement.

~~After clearing all preceding requirements, design shall be completed and the contract submitted to the ACHD Commission for approval.~~

5104.2.7.1 Traffic Calming Consideration for Additional Measures

Additional traffic calming measures may be considered if a street already has previously installed traffic calming devices. The minimum criteria and analysis procedure, including neighborhood support, shall remain the same as described in sections 5104.2.1 through 5104.2.6 of this policy. However, the speed ~~criteria thresholds~~ as outlined above shall govern additional mitigation.

5104.2.7.2 Traffic Calming Consideration for New Development

Traffic calming on new streets should be a part of the conditions of development for new neighborhoods (see Sec. 5104.2.8 for additional information). In the absence of any previously documented conditions or requirements for traffic calming installation, no roadway shall be eligible for traffic calming measures at District expense unless a minimum of 85~~50~~% of the front on homes are occupied.

5104.2.7.3 Traffic Calming Removal

Traffic calming device removal is an option for neighborhood residential streets. Removal of vertical deflection devices (e.g., speed humps, speed cushions) may be considered if directly affected residents submit a petition showing support at a minimum 75% rate. Like traffic calming installation, signatures representing a minimum of ten (10) households (property owners only, one signature per household) are required. If traffic calming is removed by this procedure, the street will not qualify for reevaluation or installation for 7 years from the date of removal.

Horizontal traffic calming device installation (e.g., bulb outs, chicanes) are more challenging and expensive to remove and often serve a greater purpose beyond traffic calming. Such devices shall not be removed or significantly modified without the consent of the ACHD Commission.

5104.2.8 Development Funded Traffic Calming Measures

Traffic calming measures ~~may~~ should be required as a site related impact for any development which is likely to create or add to residential traffic exceeding thresholds outlined in Sec. 5104.2.43 or 5104.2.54. The volume or cut-through criteria specified in Sec. 5104.2.43 or 5104.2.54 shall be satisfied by projected traffic volumes as identified in a traffic impact study or, where no study is required, by ACHD determination.

Traffic calming measures required with development may be approved by the ACHD Commission based on the following:

1. Evidence of neighborhood support via petition;
2. The relationship of the proposed development's impact to existing and future traffic volumes;
3. Route importance for emergency response;
4. Response from affected emergency services personnel to the proposal.

The selection of traffic calming measures shall be limited to the most appropriate devices to mitigate speeding concerns. Where the measures are for an established neighborhood area, that neighborhood may request more costly traffic control measures, but shall be responsible for the additional cost.

5104.2.9 ~~Non-Eligible~~ Options to Traffic Calming Where Threshold Is Not Met

If traffic thresholds outlined in this policy are not met, options available to the neighborhood include the following:

- Placement of a temporary speed trailer (see Sec. 5104.2.10);
- Installation of post-mounted radar speed feedback sign(s) (see Sec. 5104.2.11);
- Police enforcement.

5104.2.10 Radar Speed Feedback Trailer (Short-term Visual Traffic Speed Indicator)

Requests for trailer use may be accepted by ACHD Traffic Engineering from municipalities, neighborhood associations or groups, law enforcement personnel, school districts or individual residents on a residential street. Requests may be made in writing, by phone, or via email through the ACHD website. Location consideration shall respond to safety and sight obstruction factors.

Radar trailer availability is normally on a first come, first served basis, Monday through Friday. Display operation is all day (24 hours). Priorities for radar trailer placement may change due to special studies, weather, construction or other considerations.

5104.2.11 Radar Speed Feedback Signs (Long-term Visual Traffic Speed Indicator)

Requests for evaluation and installation of radar speed feedback signs may be accepted by ACHD Traffic Engineering from municipalities, neighborhood associations or groups, law enforcement personnel, school districts or individual residents on a residential street. Requests may be made in writing, by phone, or via email through the ACHD website.

ACHD shall maintain sole authority for funding and determining if requested locations meet the required criteria for radar speed feedback sign installation, and appropriate locations for installation. Radar speed feedback sign availability is limited and varies depending on District funds and priorities. ACHD shall determine the location and timing of device installation based on available funding and priority.~~5104.2.9 Policy for Radar Trailer (Visual Traffic Speed Indicator)~~

~~Requests for trailer use may be accepted by ACHD Traffic Engineering from municipalities, neighborhood associations or groups, law enforcement personnel, school districts or individual residents on a residential street. Requests may be made in writing, by phone, or via email. Location consideration shall respond to safety and sight obstruction factors.~~

~~Radar trailer availability is normally on a first come, first served basis, Monday through Friday. Display operation is all day (24 hours). Priorities for radar trailer placement may change due to special studies, weather, construction or other considerations.~~

7206.3.8 Speed Control and Traffic Calming

Collector streets should be designed to discourage speeds above ~~35~~30 MPH, and in ~~a~~primarily residential areas~~s~~.

collector streets should be designed to discourage speeds above ~~30~~ 25 MPH.

~~The design of collector street systems should discourage excessive speeds by using passive design elements. The traffic calming policy for existing residential streets is included in Section 5000. In the review of developments, the District will evaluate the potential need for future traffic calming. If the design or layout of a development is anticipated to necessitate future traffic calming implementation by the District, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e. stamped concrete) as a passive design element. These alternative methods may require a maintenance and/or license agreement.~~

~~Passive design elements are to be considered the preferred method to calm traffic and achieve the desired travel speed for the roadway. Speed humps, valley gutters, stop signs, and cross drains are not an acceptable tool for traffic calming new collector streets.~~

~~If the development contains roadways adjacent to schools, parks, or other land uses where higher bike or pedestrian traffic is expected or streets extend greater than 750 feet in length, the District may require street modifications and/or the addition of active and/or passive traffic calming elements.~~

~~Non-vertically deflecting design elements such as road curvature, bulb outs, curb extensions, chokers, chicanes, and mini-roundabouts are preferred traffic calming methods to achieve the desired roadway target speeds. Vertical elements, such as raised crosswalks and raised intersections designed to ACHD specifications, may be considered on a case-by-case basis. Considerations should be made to the planned on-street bicycle and parking facilities prior to proposing design elements such as bulb outs, curb extensions, chokers and chicanes to ensure their compatibility with the facilities. **Road surface texture changes (i.e. stamped concrete), speed humps, valley gutters, stop signs, and cross drains are not acceptable traffic calming tools installed on new collector streets.**~~

~~A 200' minimum and 500' maximum distance is required between traffic calming devices (measured center to center). A minimum of 300' is required between stop or yield control, horizontal curves with 45 degree or greater deflection and any traffic calming device (except curb extensions). Minor variations in the standards may be accepted by the ACHD Traffic Engineer.~~

~~The District has developed a traffic calming policy for existing residential streets **that can be found in** Section 5100. **Through the development review process,** the District will evaluate the potential need for future traffic calming.~~

7207.3.7 Speed Control and Traffic Calming

~~Design of local street systems design should discourage excessive speeds above the prima facie speed limit codified by the applicable land use agency (20 MPH or 25 MPH) by using active or passive design elements. Where no prima facie speed limit exists, 20 MPH should be the target maximum operation speed. If the development contains roadways adjacent to schools, parks, or other land uses where higher bike or pedestrian traffic is expected or streets extend greater than 750 feet in length, the District may require street modifications and/or the addition of active and/or passive traffic calming elements.~~

~~If the design or layout of a development regardless of the length of the streets is anticipated to necessitate future traffic calming implementation by the District, or streets extend greater than 750 feet in length, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e. stamped concrete) as a passive design element. Passive design elements are to be considered the preferred method to calm traffic and achieve the desired travel speed for the roadway. Speed humps, valley gutters, stop signs, and cross drains are not an acceptable tool for traffic calming on new local streets.~~

~~Non-vertically deflecting design elements such as road curvature, bulb outs, curb extensions, chokers, chicanes, and mini roundabouts are preferred traffic calming methods to achieve the desired roadway target speeds. Vertical elements, such as raised crosswalks and raised intersections designed to ACHD specifications, may be considered on a case-by-case basis. Considerations should be made to the planned on-street bicycle and parking facilities prior to proposing design elements such as bulb outs, curb extensions, chokers and chicanes to ensure their compatibility with the facilities. Road surface texture changes (i.e. stamped concrete), speed humps, valley gutters, stop signs, and cross drains are not acceptable traffic calming tools installed on new local streets.~~

The District has developed a traffic calming policy for existing residential streets in Section 51900. In the review of developments, the District will evaluate the potential need for future traffic calming.

7207.5.9 Design Speed

~~The minimum design speed for local urban and rural streets shall be match the prima facie speed limit codified by the applicable land use agency (20MPH or 25MPH) for each specific development. Where no prima facie speed limit exists, 20MPH should be the target maximum operational speed. 25 MPH.~~

7208.3.7 Speed Control and Traffic Calming

Design of local commercial street systems, where higher pedestrian activity is anticipated, should discourage speeds above the prima facie speed limit codified by the applicable land use agency (20 MPH or 25 MPH) by using active or passive design elements. Where no prima facie speed limit exists, 20 MPH should be the target maximum operation speed. If the development contains roadways adjacent to schools, parks, or other

land uses where higher bike or pedestrian traffic is expected or streets extend greater than 750 feet in length, the District may require street modifications and/or the addition of active and/or passive traffic calming elements.

Non-vertically deflecting design elements such as road curvature, bulb outs, curb extensions, chokers, chicanes, and mini roundabouts are preferred traffic calming methods to achieve the desired roadway target speeds. Vertical elements, such as raised crosswalks and raised intersections designed to ACHD specifications, may be considered on a case-by-case basis. Considerations should be made to the planned on-street bicycle and parking facilities prior to proposing design elements such as bulb outs, curb extensions, chokers, and chicanes to ensure their compatibility with the facilities. Road surface texture changes (i.e. stamped concrete), speed humps, valley gutters, stop signs, and cross drains are not acceptable traffic calming tools installed on new local streets.

In the review of developments, the District will evaluate the potential need for future traffic calming.

~~should discourage excessive speeds by using passive design elements. If the design or layout of a development regardless of the length of the streets is anticipated to necessitate future traffic calming implementation by the District, or streets extend greater than 750 feet in length, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e. stamped concrete) as a passive design element. These alternative methods may require a maintenance and/or license agreement. Passive design elements are to be considered the preferred method to calm traffic and achieve the desired travel speed for the roadway. Speed humps, valley gutters, stop signs, and cross drains are not an acceptable tool for traffic calming new local streets.~~

~~The District has developed a traffic calming policy for existing streets in Section 5000. In the review of developments, the District will evaluate the potential need for future traffic calming.~~

7208.5.8 Design Speed

The design speed for local commercial streets shall match the prima facie speed limit codified by the applicable land use agency (20MPH or 25MPH) for each specific development. Where no prima facie speed limit exists, 20MPH should be the target maximum operational speed.~~be 30 MPH.~~

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