



City of Oregon City

NEIGHBORHOOD TRAFFIC FACT SHEET

A GUIDE OF NEIGHBORHOOD TRAFFIC MANAGEMENT INFORMATION AND SUMMARY OF TRAFFIC CALMING DEVICES

Developed by the Transportation Advisory Committee
in a volunteer effort to help outline the issues and policies regarding
traffic management in Oregon City.

City of Oregon City, 625 Center Street, Oregon City, OR 97045 503-657-0891



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Regular monthly Transportation Advisory Committee meetings are held every third Tuesday at 6:00pm in the Commission Chambers of Oregon City City Hall at 625 Center Street, Oregon City, OR 97045.

For questions or comments regarding this document, or a request for a hardcopy, please contact the Transportation Advisory Committee care of the Public Works Department at PO Box 3040, Oregon City, OR 97045, or 503-657-0891.

Abbreviations and Acronyms Used Throughout This Document:

ADT	Average Daily Trips
AASHTO	American Association of State Highway and Transportation Officials
FHWA	Federal Highway Administration
MUTCD	Manual on Uniform Traffic Control Devices
OC	Oregon City
OCCM	Oregon City Municipal Code
ODOT	Oregon Department of Transportation
ORS	Oregon Revised Statutes
PWD	Public Works Department
ROW	Right-of-Way
TSP	Transportation System Plan

Neighborhood Traffic Fact Sheet

PURPOSE

The purpose of this document is to provide an overview of the issues and policies regarding traffic management in Oregon City. It is meant to explain the various restrictions and requirements that exist regarding the larger issues of traffic flow and management. It, also, outlines procedures for citizens to become involved in traffic control measures in their neighborhood.

INTRODUCTION

There are many factors taken into consideration when reviewing traffic concerns. Any recommended solutions must consider the effect on the surrounding roadways, property access, traffic makeup, speeds and volume. Additional concerns are accident history, property usage, budget restraints, and future planned construction in the area.

The State of Oregon has authorized the various counties and cities in the state to be the local road authority for the roads within their jurisdictions. This jurisdictional authority provides the local municipality both the right and the responsibility to make traffic management decisions. Any decisions made by such an authority must be in compliance with any pertinent state and federal standards and must utilize sound engineering judgement. Despite the designation as the Local Road Authority both Clackamas County and Oregon State own and maintain roadways within the city limits. Both the State and the County maintain and manage their respective roads in coordination with the City.

In order to be eligible to receive federal funding for roadways, the federal government requires that each state adopt a national traffic signing code known as the [Manual on Uniform Traffic Control Devices \(MUTCD\)](#). This document provides guidance on various traffic control topics such as: approved traffic control devices, sign standards, road striping patterns, and temporary traffic control standards. These topics are all prescribed by the Federal Highway Administration (FHWA) in order to present a uniform standard throughout the country. The Oregon Department of Transportation has also created and adopted an Oregon Supplement to the MUTCD that defines additional standards unique to the State of Oregon. The conditions for usage of many of these standards are referred to as Warrants. That is to say there are conditions that WARRANT the use of these devices. If these conditions are not present, then the use of these devices is not warranted and the installation is not to be recommended.

MODES OF TRANSPORTATION



The various modes of transportation that municipalities must account for within their [Transportation System Plans \(TSP\)](#) include vehicular, public transportation, pedestrian, bicycle, and freight transportation. By making other methods of movement available, safer and more reliable, vehicle traffic can be lessened. The three primary components to “traffic” that we are concerned with are volume, speed and vehicle class. Volume of vehicles refers to

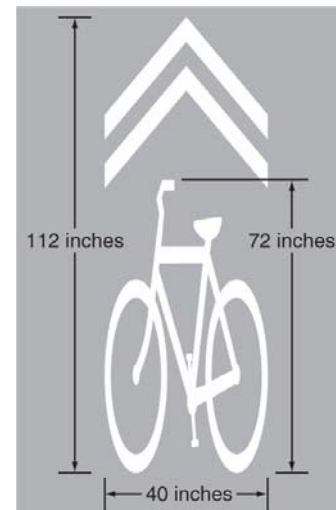
the number of vehicles present at a location(s) at a fixed period of time. Volume can fluctuate at the same location throughout the day. Speed refers to the rate at which vehicles travel along a corridor throughout the day. Vehicle class refers to the type of vehicles utilizing the transportation system. These can range from a bicycle, to a privately owned two axle cars and Trucks. Freight transportation covers commercial vehicle movement, business supply service vehicles and home delivery vehicles.

When attempting to quantify the number of vehicles utilizing a road section, transportation planners and engineers typically refer to the Average Daily Trips (ADT) associated with a road segment. The ADT is the average number of vehicles passing a specific point in both directions in a 24-hour period, normally measured throughout a year. This data can further be refined to unique locations to provide seasonal variability and even peak day/hour demand. Information on traffic counts and volumes can be found on the City’s website here:

<https://www.orcity.org/publicworks/traffic-speed-volume-and-classification-studies>

The City has over 151 miles of sidewalks to accommodate pedestrian traffic, which includes wheelchair and other handicap devices. There are portions of the city, typically the older portions, which were constructed prior to the [Oregon City Municipal Code \(OCMC\)](#) requiring the construction of adjacent sidewalks. New sidewalk installations are typically conditioned on the adjacent property owner to install as development occurs within the area. The Public Works Department (PWD) has a sidewalk infill program to attempt to connect sections of sidewalk that are needed. Some streets within the city do not readily facilitate sidewalks due to the availability of adjacent right-of-way (ROW), topography and drainage needs.

The City currently has over 42 miles of bicycle lanes and the demand for increased connectivity of bike lanes is high. Where striped bike lanes do not exist the PWD utilize shared lane markings or “sharrows” where possible.



Public transportation is generally regarded as bus service with [Tri-Met](#) providing this primary service within the city. However, taxi service, mini-bus service provided by the Pioneer Center also fall into this category. More information about the Pioneer Center transportation service can be found here:

<https://www.orcity.org/pioneercenter/transportation>

STREET CLASSIFICATIONS

Major and Minor Arterial

These streets are meant to carry large traffic volumes and provide service between and into commercial and industrial areas. They may also serve as residential through streets. Typically, this type of road would carry State Highways, major County Roads, and large volumes of commercial and freight traffic. Bus lines would use these streets. These streets generally have centerlines, marked bicycle lanes and both marked and unmarked crosswalks. Molalla Avenue and portions of Beaver Creek Road are representative examples of major arterials. South End Road and Linn Avenue are representative examples of minor arterials.

Collector

These streets are meant to carry lesser traffic volumes than arterial streets but more than residential streets. They are meant to carry moderate to large traffic volumes and provide service between and into commercial and industrial areas. They may also serve as residential through streets. Bus lines would use these streets. These streets generally have centerlines, marked bicycle lanes and both marked and unmarked crosswalks. Center Street and Central Point Road are both examples of collector roads.

Residential

Residential streets are meant to provide vehicular access to residential properties. They are meant to carry low volumes of light weight vehicles. Bus lines would generally NOT use these streets, but may be used for access to public places such as parks or other public use facilities. Some commercial and industrial use may utilize these streets. Typically these streets do not have painted center lines, striped marked crosswalks, signage other than street signs, stop or yield signs, and possible restricted parking signage.

SPEED ZONES

All the roads and streets in the city, and, indeed the State of Oregon, are covered with various Speed Zones. Because there is a posted speed sign, it does not mean that the posted speed is a safe speed everywhere in the zone. The Basic Rule (ORS 811.100) still applies to individual locations within the zone, which may require lower speeds to safely pass through.

Basic Rule (ORS 811.100, Violation of Basic Speed Rule; Penalty)

The Basic Rule is a long established principle that states that a vehicle must not travel FASTER than safety allows. This means that the driver is responsible for the safe operation of the vehicle and must be aware of road and weather conditions, the condition of his vehicle, and all roadside conditions. The safe speed is never faster than the posted speed.

Statutory Speed Zones

Statutory Speed zones are zones that the State allows the City to establish without having a speed study done. The adjacent topography and road conditions must match the requirements in ORS. These speeds are 20 MPH in school zones, 25 mph on residential streets and 55 mph in rural areas. All other speed zones require a speed study to be done to [ODOT](#) standards and approved by the State Speed Zone Board. ODOT's website can be found here:

<http://www.oregon.gov/odot/Pages/index.aspx>

Non-Statutory Speed Zones

These speed zones require that a speed study be done and accepted by the State Speed Zone Board to establish or change maximum allowable speeds. No new speed limit signage can be placed prior to receiving this approval. An example of a non-statutory speed zone is Central Point Road where speed limits range from 35-45mph.

The state approved speed is generally the 85th percentile observed when traffic is allowed to flow freely through the studied stretch of roadway. To encourage compliance and effectively manage risk, many agencies set speed limits to reflect the "reasonable and prudent" behavior of the majority of motorists acting in an appropriate manner. This encourages drivers to obey the posted speed limit and travel at a reasonable speed. It also targets limited enforcement resources at the occasional violator who disproportionately contributes to crash risk. The concept of a rational speed limit involves a formal engineering review, during which drivers' speeds are observed. The assumption is that by reflecting actual driver speeds, most people will consider the speed limit appropriate. Such speed limits are desirable because they encourage public compliance, reduce speed differences among drivers, and offer a defensible enforcement tool.

Resetting Speed Limits upon annexation

Generally speaking [Clackamas County](#) established speed zones are accepted by the City upon annexation. These are then maintained until conditions indicate that a change is desirable.

Speed Zone Evaluation

Periodically, the City receives requests to evaluate and reset speed zones. The process for evaluating and resetting a speed zone requires ODOT to conduct an engineering analysis of the requested zone and determining what the observed 85th Percentile for the road segment is as well as determine what other contributing variables are present to warrant a speed zone change. ODOT then issues a Speed Zone Report in which the local road authority can accept or appeal with justification. The report can recommend to either increase, decrease or maintain the current posted limit.

SIGNAGE AND SIGNALS

Signage and Signals within Oregon City are placed and maintained by Oregon City Public Works. Signs that have been defaced, marred, stolen, hidden by foliage, or otherwise made unusable should be reported to the Public Works Department. Problems with signal installations in Oregon City should be reported to Public Works.

Passive

Passive signage is considered common roadside signs that show speed limits, street names and similar items. Generally, they are pole mounted alongside the road, but can be barricade mounted or overhead mounted for certain situations. Periodically, the City receives request for additional signage along roadways beyond what is currently in place. The addition of new signs within a travel corridor are carefully reviewed based upon existing standards. The addition of a sign in a location to address one issue can result in unwanted consequences that must be evaluated prior to deployment.

Oregon City has a [STOP SIGN policy](#) brochure available in the Public Works Street Division section of the official OC web site and is included as Appendix A of this document. This brochure discusses and explains the City's position on using and

placing Stop Signs. Information can be found on the City's website here:
<https://www.orcity.org/publicworks/stop-sign-brochure>

The City often receives requests from residents for stop signs in order to control speeding. Stop signs may seem like a good solution to neighborhood speeding, but traffic studies and experience have shown that using stop signs to control speeding is not an effective means of calming traffic.

Active

Automated Speed Signs

Oregon City has several stationary automated speed limit signs and two trailer mounted mobile automated speed limit signs. These signs show the posted limit and the speed of approaching cars as measured by a radar gun. A resident can request a radar trailer be placed in their neighborhood through the [Radar Trailer Program](#) managed jointly by the Public Works Operations Department and the Police Department. A call to either department will place them on the wait list for the next available radar trailer to be mounted on their street, in a reasonable location. The Radar Trailer webpage can be found here: <https://www.orcity.org/police/radar-trailer>

Street Markings

Street Markings refer to the striping patterns and advisory markings associated with a road segment. The most common forms of striping used to control motorist and pedestrian behavior patterns are center line markings. Based on the road conditions present within an area, the local road authority can choose a striping pattern to restrict passing from any one or both of the lanes. Other street markings can convey the location of crosswalks, the presence of a dedicated bike lane, or the lack thereof, and the need to share the road with cyclist. School Zones and speed humps are also typically denoted with the use of street markings in conjunction with other advisory signage. These markings and their suitable usage are covered in detail in the MUTCD.

Crosswalks

It is important to note that under ORS 801.220, all intersection corners are crosswalks, whether marked or not. In certain instances the City receives request for mid-block crosswalks from residents. These are locations that are not associated with two roads intersecting and there is no subsequent cross street. In most cases the City discourages the installation of mid-block crosswalks for safety reasons. Instances in which mid-block crosswalks have been approved and installed were preceded by engineering analysis. The City has installed two Rectangular Rapid Flashing Beacons (RRFBs) which enhances safety and visibility at a crosswalk. The cost of an RRFB can vary greatly with \$6,300 in materials alone and installation costing two to three times that depending on location of the crossing and nearest power source.

TRAFFIC CALMING

Traffic Calming refers to techniques to affect heavier traffic flows and/or higher speeds in areas where the heavier flow or speed is not safe or desirable. There are many different techniques available but all have positive and negative aspects to their construction and use. Most require a reasonable level of forethought before installation and some require complete engineering studies and construction plans. The following information will outline several of these traffic calming measures:

- Applicability
- Complexity
- Cost
- Goal – to target speed and/or volume

Complexity and cost will be scored on a relative scale of 1-4 with 4 being the most complex and costly measures.

Items that require more than a minor expenditure must be included in the Street Division's current operating budget. As the City is on a 2-year budget cycle, it could be a matter of several years before funds become available to implement major changes.

Drive Safe Oregon City Campaign

Applicability: All Oregon City Streets	Complexity: 
Cost: 	Goal: Target speed and volume

[Drive Safe Oregon City](#) is a means of addressing citizen concerns regarding vehicular speeding and unsafe driving practices that can lead to serious, irreversible consequences. In coordination with the City's Transportation Advisory Committee (TAC), The Public Works Department, and Police Department, are working together to create this program by providing outreach, sharing resources, and producing educational materials.

Positive aspects are:

1. A low cost support tool to inspire communication among residents about traffic safety and awareness.
2. Can narrow focus to address specific traffic safety concerns such as distracted driving, speeding, and seat belt use, for example.



Negative aspects are:

1. This grassroots effort requires resident participation to grow and disseminate materials.
2. There is no enforcement, only distribution of materials to educate individuals on safe driving practices.

Radar Speed Trailers

Applicability: Residential, Collector, and Minor Arterial	Complexity: 
Cost: 	Goal: Target speed

Mobile radar speed trailers visually display a driver's real-time speed. Radar trailers can be effective reminders of the posted speed limit in that neighborhood especially the mounted electronic sign flashes that a driver is moving too fast. Again, more information can be found on the City's website here: <https://www.orcity.org/police/radar-trailer>

Positive aspects are:

1. Immediate feedback on how fast a driver is moving to help swiftly reduce the vehicle's speed.



Can be moved to varying locations.

2. Easily transported to an area where speeding is prominent to quickly address concern.

Negative aspects are:

1. This is not a substitute for permanent action.
2. There is no traffic enforcement for preventing the driver to continue speeding.

Traffic Circles

Applicability: Collector, and Arterials	Complexity: 
Cost: 	Goal: Target speed

Traffic circles tend to be smaller than roundabouts and are meant to function at low speeds. As such they are generally placed in locations that will NOT require acquiring additional right-of-way.

Positive aspects are:



1. Vehicles are forced to move out of a straight line, and thus, reduce speed to make the maneuver.

Negative aspects are:

1. Maintenance of the center section can be difficult and careful consideration should be taken in the design process as to what will occupy the center of the circle.

2. In an intersection setting, the traffic circle replaces an all-way, 4-way stop, or a signal installation, and allows faster transition through the intersection than what is possible with either a multiple way stop or a signal. This improves traffic flow and results in a quicker passage through the intersection.

Roundabouts

Applicability: Collector, and Arterials	Complexity: 
Cost: 	Goal: Target speed and volume

Roundabouts tend to be larger than traffic circles and are meant to function with higher volumes of traffic and possibly at higher speeds. They almost always require the purchase of additional right-of-way to accommodate their size.

Oregon City has two existing roundabouts within the city with more possible in the future. One roundabout that functions as an intersection is at Highway 213 and Clackamas River Drive. The other is along the Main Street Extension Interstate 205. A useful website for additional information on

roundabouts is [American Association of State Highway and Transportation Officials \(AASHTO\)](https://www.transportation.org/) which can be found here: <https://www.transportation.org/>

Positive aspects are:

1. Vehicles are forced to move out of a straight line, and thus, reduce speed to make the maneuver.
2. Decreased overall long term maintenance cost.

Negative aspects are:

1. More right-of-way is required to construct a correctly sized roundabout.
2. Larger and longer vehicles, such as buses, moving vans, fire engines and the like can have a certain amount of difficulty moving through the circle.
3. Pedestrian and bicycle modes of travel can have difficulty moving through the circle.
4. Maintenance of the center section can be difficult and careful consideration should be taken in the design process as to what will occupy the center of the circle.

Sidewalk Extensions or Bumpouts

Applicability: Residential, and Collector	Complexity: 
Cost: 	Goal: Target speed

Sidewalk extensions are used to narrow the width of the pavement at intersections. In essence, the curb is moved to the outside edge of the vehicle travel lane with the sidewalk extended to the new curb location.

Positive aspects are:

1. The intersection is visually narrowed which tends to slow vehicle speeds through the intersection and areas near the intersection.
2. Pedestrians crossing the street are more visible to vehicle drivers prior to crossing streets and can cross streets quicker due to the shorter distance to be traveled.
3. Fire hydrants located on corners are easier to access due to vehicles forced to park away from the hydrant.

Negative aspects:

1. The curb line is a critical part of the storm drainage system. Due to the street crown, the extension blocks the drainage channel along the curb and additional work is required to provide for the passage of storm water collected along the curb.
2. Street cleaning is made more difficult as street sweeping equipment may not be able to clean through the turns the curb makes to form the extension.

Diverters

Applicability: Residential, and Collector	Complexity: 
Cost: 	Goal: Target speed and volume

Diverters are usually diagonal vehicle barriers across intersections, which force vehicles to move to a different street in order to continue moving forward. Provision for non-vehicular traffic movement through the diversion is generally made.

Positive aspects are:

1. Traffic volumes and speeds are reduced as vehicles use alternative routes.
2. Existing street drainage patterns can generally be maintained.

Negative aspects are:

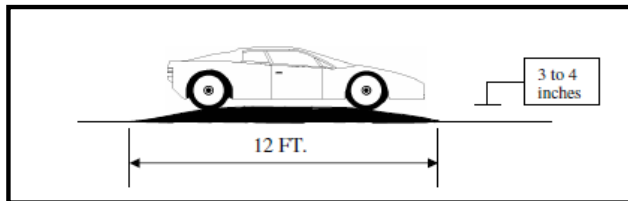
1. Traffic volumes and speeds may be increased on neighboring streets as the traffic establish new routes.
2. Access for emergency vehicles and home service vehicles can be hindered.

Speed Humps

Applicability: Residential	Complexity: 
Cost: 	Goal: Target speed

A speed hump is a raised pavement feature constructed across the width of the street. It is usually 3 inches high and at least 12 feet in length from the leading edge to the trailing edge. This feature discourages motorists from speeding and encourages them to obey the posted speed limit. When speed humps are constructed, advisory signs are also installed to notify motorists of the speed hump and an appropriate advisory travel speed. Oregon City has a [SPEED HUMP policy brochure](#) available on the Public Works website and is, also, attached to the document as Appendix B. This

brochure discusses and explains the City's position on using and placing Speed Humps. In addition, speed humps must be funded by the neighborhood making the request of this type of traffic calming device.



Raised sidewalk street crossings are a variation of the more usual form of speed hump.

The installation of speed humps may or may not have a slowing effect on traffic for several reasons:

1. The humps affect different vehicles differently. Some vehicles, (notably Sport Utility Vehicle types) are designed to absorb and soften road shocks at speed to provide a smoother ride to the occupants.
2. The installation requires maintenance to remain visible.
3. Increased speed in most vehicles can negate the effect of the hump.

Positive aspects:



1. Vehicle speeds may be reduced to a level more compatible for a residential environment.
2. The installation does show vehicle drivers that there is or has been a speeding problem in the area and that residents do not feel safe with the vehicles moving at higher speeds through the area.

Negative aspects:

1. Vehicle speeds may not be reduced. In some locations where multiple humps are installed, drivers have adopted the strategy of slowing leading up to cross the bumps and speeding up between humps.

2. Storm drainage may be adversely affected.
3. Street maintenance operations such as street sweeping is affected by the humps.
4. Vehicles other than the target vehicles may be more severely affected. Some studies have shown that emergency vehicles response times can be affected.

Chicanes

Applicability: Collector	Complexity: 
Cost: 	Goal: Target speed

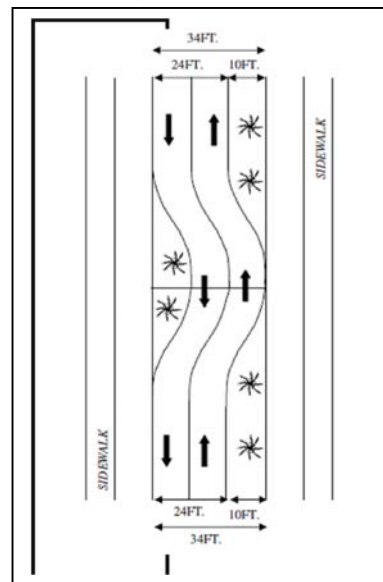
A chicane is a traffic calming measure that reduces the speed of vehicles by altering the vehicle travel path for a section of roadway. This feature changes the physical characteristics of a roadway section from an existing straight alignment to a series of horizontal curves.

Positive aspects are:

1. Vehicle speeds may be reduced to a level more compatible for a residential environment.
2. Increased landscaping along the route

Negative aspects are:

1. Typically requires the elimination of the parking strip or center turn lane in order to accommodate the chicane.
2. Storm drainage may be adversely affected.
3. Difficult to implement in areas of high relief or grade variations.
4. Negative affect to cyclists.



SAFE ROUTES TO SCHOOL

Oregon Safe Routes to School helps create safe, convenient, and fun opportunities for children to walk, bike and roll to and from school. More information can be found at their website here: <https://www.oregonsaferoutes.org/>.

TRAFFIC CALMING FUNDING SOURCES

Many of the aforementioned traffic calming devices are costly to implement. There are various options of financing these types of measures beyond finding funds within the Public Works transportation budget.

For example, a neighborhood association funded the purchase of a permanent radar speed sign in their neighborhood. Speed humps, also, require a neighborhood funded installation.

Residents can petition to form a [Local Improvement District \(LID\)](#) which is a special improvement area created under State of Oregon statutes. This allows for public financing for public improvement projects that benefit private property. This type of special improvement area requires a petition to the City for the desired improvement. If the project is accepted by the City, the cost is tabulated and a hearing is set to conform the final assessments to each property owner since the property owners within the LID benefit area are responsible for repaying the costs of the project.

The City can, also, take action and initiate an LID if they feel it is necessary to fund specific types of improvement, but prefer to work with the residents to make it a collaborative effort that benefits all.

USEFUL WEBSITE LINKS:

AASHTO - <https://www.transportation.org/>

Clackamas County's Drive to Zero - <http://www.clackamas.us/drivetozero/>

Drive Safe Oregon City Campaign - <https://www.orcity.org/publicworks/drive-safe-oregon-city>

Oregon Impact - <http://oregonimpact.org/>

Oregon Safe Routes to School - <https://www.oregonsaferoutes.org/>

TriMet - <https://trimet.org/>

Right-of-Way Rule

U Yield the right of way at an uncontrolled intersection.

The right-of-way rule states that when approaching an uncontrolled intersection (an intersection without any traffic signs or signals) the driver of a vehicle must yield to any driver on their right that is also approaching the intersection, regardless of which vehicle reaches the intersection first. (ref. ORS 811.275)

APPENDIX A



City of Oregon City

PO Box 3040

625 Center Street

Oregon City, Oregon

97045-0304

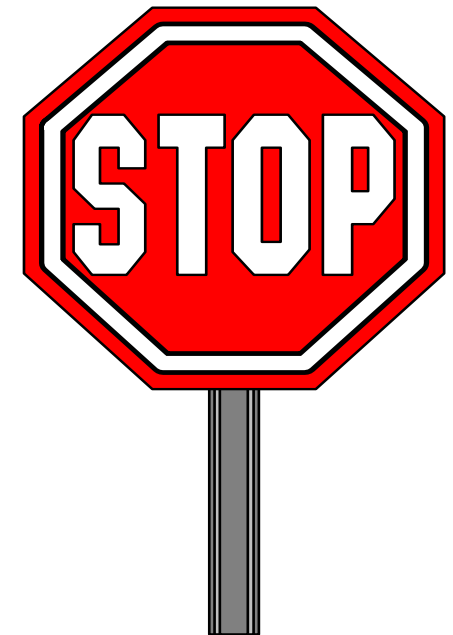
Phone: 503-657-0891

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Web: www.orcity.org

City of
Oregon City

**STOP
SIGNS**



What to know about stop signs:

Oregon City encourages safe and calm travel on Oregon City streets. So when we are called about a traffic or safety problem, an investigation is conducted to determine the best solution – such as a sign or signal.

In order to prevent collisions, the City installs stop signs where it may be unclear as to who should have the right-of-way. However, stop signs placed at intersections where they're not needed can tempt drivers to disobey stop signs or cut through other neighborhood streets.

The City often receives requests from residents for stop signs in order to control speeding. Stop signs may seem like a good solution to neighborhood speeding, but traffic studies and experience have shown that using stop signs to control speeding doesn't necessarily work. When stop signs are installed to slow down speeders, drivers may actually increase their speed between signs or intersections to compensate for the time lost by stopping. Some drivers tend to accelerate rapidly after a stop, possibly creating an even more dangerous situation. In fact, in residential and business districts, most drivers reach their top speed within 100 feet of a stop sign.

So why not have a stop sign at every intersection?

Too many stop signs can cause motorists to ignore the right-of-way rule or some drivers may simply choose

to ignore the stop sign. More stop signs in a neighborhood can result in higher levels of pollution and more noise.

The City Engineer determines where to place stop signs so they provide the best benefit for the neighborhood. Stop signs in one location could affect traffic on nearby streets. Drivers may seek new routes to avoid stop signs, which can lead to new traffic problems in adjacent neighborhoods. Also, putting a stop sign on one street could foster higher speeds on the intersecting streets.

The final decision to install a stop sign is made after City traffic engineers consider the flow and volume of traffic, the configuration of the intersection, and traffic crash reports. If you believe your street might benefit from a stop sign, please review the following criteria before you contact the City Engineer with your concerns.

The primary reason for stop signs in the City of Oregon City

Stop signs are installed at intersections where drivers cannot safely apply the right-of-way rule, resulting in an increase in motor vehicle accidents.

Criteria for Two-Way Stop Signs

Two-way stop signs are used:

Where a street enters a through street; or

Where a safe approach speed is less than 10 mph due to permanent visibility obstructions such as buildings, trees or shrubs; or

Where accident history indicates three or more reported crashes over the last three years, and the crashes could have been avoided by the use of a stop sign; or

Where circumstances and crash history indicate that observing the normal right-of-way rule could still be hazardous, resulting in crashes.

Criteria for Four-Way or All-Way Stops

In most cases, a two-way stop sign is sufficient to define who has the right-of-way. A four-way or all-way stop is considered only when an intersection with a two-way stop is the site of numerous crashes or traffic congestion problems.

Four-way stop signs are used:

Where traffic signals are needed; four-way or all-way stops may be used as an interim measure; or
On local streets, where there has been five or more reported crashes in a 12-month period. These crashes would likely have been prevented by an all-way stop; or

On through streets, where within a two-year period the intersection had at least 1.5 crashes per million vehicles entering the intersection, and the crashes would likely have been prevented by all-way stops; or
Where the number of vehicles entering an intersection averages at least 300 vehicles per hour for any eight hours of a typical day and the combined vehicular and pedestrian volumes from the minor street averages at least 200 per hour for the same eight hours.

APPENDIX B

SPEED HUMP ELIGIBILITY CHECKLIST

Fill out the following checklist; if the answer to all questions/statements is "yes", review the policies and procedures and fill out the Speed Hump Application. If you answer "no" to any of these questions/statements or are unsure about any of these questions/statements, please contact City staff at 503.657.0891.

Yes	No	
_____	_____	Is the street classified as a residential street or lesser classification in the Oregon City Transportation System Plan https://www.orcity.org/publicworks/2013-transportation-system-plan
_____	_____	This street does not provide a transportation service to the community beyond that of simply providing access to the immediate abutting residences.
_____	_____	Does the street carry fewer than 2,500 vehicles per day?
_____	_____	Does the street have a designated speed limit of 25 mph?
_____	_____	Does the street have no more than one traffic lane in each direction?
_____	_____	Are 85th percentile speeds less than 30 mph?
_____	_____	This street is not designated as a truck route or a transit route.
_____	_____	Are the grades on the street less than eight percent (8%)?
_____	_____	Does the street have adequate vertical and horizontal alignment and sight distances to allow for safe installation of speed humps?
_____	_____	The street is not a primary access route for emergency vehicles.

SPEED HUMP INSTALLATION POLICY

BACKGROUND

Speed humps are an accepted traffic calming device suitable for installation on residential streets in Oregon City. The installation of speed humps has been shown in some circumstances to slow traffic, but is not a guarantee that the street is a safe place for children to play. Streets exist primarily for the passage of motor vehicles; hence residents, both adults and children, should exercise due care when in the roadway.

Installation of speed humps on streets other than local residential streets could have potentially severe traffic safety consequences, almost certainly affect emergency services and other service delivery activities, and likely create the diversion of large amounts of through traffic onto adjacent local residential streets, which were not intended for that purpose. Therefore, speed humps will not be considered for streets that are classified as collector streets or higher in the Transportation System Plan (TSP), or which are determined to provide a transportation service to the community beyond that of simply providing access to the immediate abutting residences.

The purpose of this policy is to establish the circumstances and criteria under which speed humps will be considered for installation on a residential street.

MINIMUM CRITERIA

The following minimum criteria shall govern installation of speed humps in the City:

- Speed humps will be considered only after other less intrusive traffic calming measures have been rejected as infeasible or ineffective.
- Speed humps will be available only on residential streets carrying fewer than 2,500 vehicles per day.
- Speed humps will be available only on streets that have a designated speed limit of 25 mph as determined in accordance with State Law, and no more than one traffic lane in each direction.
- Speed humps will not be installed on any street where 85th percentile speeds are greater than 30 mph.
- Speed humps will not be installed on any street designated as a truck route or a transit route.
- Speed humps will not be installed on a portion of any street with a grade in excess of eight percent (8%).
- Speed humps will not be installed on any street as to which there is, in the judgment of the City Engineer, inadequate vertical and horizontal alignment and sight distances to allow for safe installation.
- Speed humps will not be installed on any street that is a primary access route for emergency vehicles and would cause, in the judgment of the City Engineer, unacceptable delay in response time to emergencies.

As described in the accompanying Speed Hump Installation Procedures, speed humps will only be installed if 100% of the owners of residences immediately adjacent to the proposed speed humps (one vote per ownership) and 67% of the occupants of residences in the neighborhood signing a petition (one vote per dwelling unit) request the speed humps.

For this policy the following definitions shall apply:

Immediately Adjacent - Any part of a property being located within 50 feet of the location of the proposed speed hump.

Neighborhood - All dwelling units which take access from the street with the proposed speed hump, extending in each direction from the speed hump to the first cross street.

CONSTRUCTION STANDARDS

The installation of speed humps and associated traffic control devices shall conform to City design standards.

Speed humps should be installed on logical segments of local residential streets, separated from each other by approximately 300 feet. Logical segments are considered to be segments between arterial streets or between natural discontinuities, such as jogs in the street. Speed humps will not be installed in isolated blocks along a continuous street, or on relatively short (less than 800 feet) cul-de-sac-streets.

NEIGHBORHOOD - FUNDED INSTALLATION

The Transportation Advisory Committee (TAC) will process requests for speed hump installation in the order received from petitioners that can privately finance the speed hump installation. Once a location has been approved, and only after the petitioners have committed in writing to privately fund the installation, the City will prepare a drawing indicating the number and locations of humps and warning signs. The petitioners may then retain a City approved contractor and install the speed hump, pursuant to City requirements and specifications. Speed Hump projects will be approved in the order received unless the TAC determine that conditions on a particular street, as demonstrated by speed or accident statistics, require that the street be given greater priority.

SPEED HUMP INSTALLATION PROCEDURES

APPLICATION

The TAC's adopted policies and procedures for the installation of speed humps will be made available to all interested parties.

A representative of a local residential street, who believes the residents on his or her street will support the installation of speed humps, shall complete a Speed Hump Application (Attachment 1) and obtain signatures from 10 resident/business owners in the vicinity of the problem street. The City Engineer will consult with the Police, Fire, and Planning Departments, as well as the City Manager, in making a determination as to whether the street in question is eligible for further consideration for the installation of speed humps based on the criteria contained in the above speed hump policy. The City Engineer will present his or her findings to the TAC who will make recommendations to the City Engineer, who will then make the final eligibility determination.

DETERMINATION OF ELIGIBILITY

Upon determination by the TAC that a street is not eligible for speed humps, the representative(s) of the street will be notified in writing of the reason why the street is not eligible. The representative(s) of the street will have fifteen (15) days to appeal the decision to the TAC. Appeals must be timely delivered in writing to the TAC (care of the City of Oregon City, 122 S Center Street, Oregon City, Oregon 97045) and set forth the basis for the appeal. The TAC will consider the appellants' appeal in light of the speed hump policy, and either affirm, reverse or modify their decision. A further appeal may be taken from the TAC to the City Commission, in accordance with the same time and procedural requirements as set forth above. The decision of the City Commission shall be final.

Upon determination that a street is eligible for further consideration, the representative of the street will be advised to submit statements of understanding from owners of 100% of the residences immediately adjacent to the proposed speed humps (See Attachment 2) and a petition documenting support of at least a 2/3 majority of the occupants of the residences in the neighborhood requesting the speed humps (See Attachment 3). Only one vote will be counted per ownership and per dwelling unit.

SUBMISSION OF PETITION

The sponsor of the petition shall contact every resident of the abutting properties on the subject street. If a resident is against the speed humps, the word "opposed" will be noted on the petition signature space. If the sponsor is unable to contact a resident, "no contact" will be noted on the petition signature space with the days and times that contact was attempted. The sponsor must make at least two (2) attempts on separate days and separate times to contact a resident.

VERIFICATION AND PROCESSING OF PETITION

Upon receipt of a complete petition containing the requisite number of signatures, the proposal will be scheduled for a hearing before the TAC, which will make a recommendation to approve or deny the installation of speed humps. The TAC's recommendation will be forwarded to the City Engineer. The decision of the City Engineer shall be final.

PRIORITY RANKING

Speed hump requests will be prioritized in the order received and approved, unless the TAC or the City Engineer determine that conditions on a particular street, as demonstrated by speed or accident statistics, require greater priority. Approved projects may be privately funded.

The City reserves the right to install speed humps without a resident petition, as circumstances require.

REMOVAL OF SPEED HUMPS

Speed humps installed upon resident petition pursuant to this policy may be removed either by the City upon a determination that the removal is required for public safety reasons, or by petition of a substantial majority (67% or more) of occupants of residences within the same geographic area as petitioned for the humps, requesting the removal. If removal is by petition, the residents shall pay the cost of removal, which sum shall be deposited with the City prior to the removal.