

# SPEED STUDY RESULTS ON RHODODENDRON DRIVE

In September 2024, the City submitted a request to the Oregon Department of Transportation (ODOT) for a speed zone study to be completed along Rhododendron Drive from 0.47 miles north of the entrance to Greentrees Village to Heceta Beach Road.

With the completion of the Rhododendron Drive Realignment and Improvements Project we informed the community that we would request a speed study to determine if the roadway improvements would validate a need to lower the speed limit along the 40 mph corridor of Rhododendron Drive.

ODOT sets speed limits in Oregon to ensure safety by balancing traffic flow with the conditions of the road and surrounding environment. They use both statutory (set by state law) and designated (based on engineering studies) speed limits. ODOT also considers factors like traffic volume, crash history, and roadside development when determining appropriate speed limits.







#### Statutory Speed Limits:

These are the default speed limits established by Oregon state law for certain types of roads and areas. For example, 25 mph in residential areas and 65 mph on most interstate highways.

## Designated Speed Limits:

These are speed limits that differ from the statutory limits and are established through an engineering investigation. ODOT conducts these investigations, which analyze factors like traffic volume, crash data, and roadway characteristics to determine a safe and reasonable speed for a specific location.

The last speed zone investigation that was completed in November 2018 successfully reduced the posted speed from 45 mph to 40 mph. Rhododendron Drive is classified as an urban minor arterial with average daily trips (ADT) of 3,100 and has a designated speed zone of 40 mph. The ODOT speed investigation report found:

- Area context: Moderate residential in density and culture with a suburban fringe context.
- Average Daily Trips (ADT): 3,100 vehicles.
- Speeds recorded:
  - 85th percentile speed: 44 mph
  - 50th percentile speed: 39 mph
  - 79% of vehicles within 35-44 mph pace
  - 38% of vehicles are exceeding the posted 40 mph speed
- Crash history (2020–2022): 8 reported crashes

Based on the results of the speed study, ODOT found that traffic flow, roadway conditions, and crash history all supported keeping the posted speed at 40 mph.

### City Radar Speed Sign Data

The City has two permanently mounted radar speed feedback signs that record traffic volumes and speeds on Rhododendron Drive. One is located on the south bound lane of Rhododendron Drive at Shelter Cove Way. The other sign is located on the north bound lane of Rhododendron Drive at 12<sup>th</sup> Street.

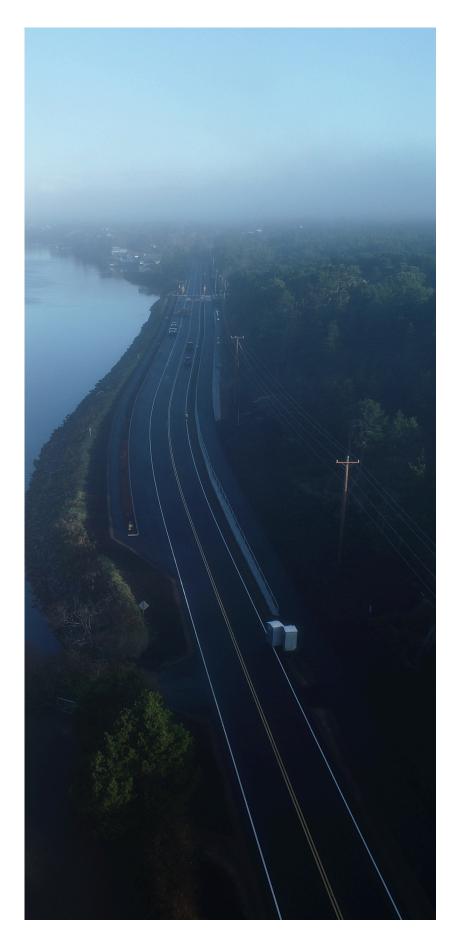
Southbound at Shelter Cove Way:

- Average speed: 37 mph
- 85th percentile: 43 mph
- 68% of vehicles travel within the posted speed limit of 40 mph

Northbound at 12th Street (30 mph zone):

- Average speed: 30 mph
- 85th percentile: 35 mph
- 48% of vehicles travel within posted speed limit of 30 mph

One of the major factors in establishing speed zones is the consideration of the 85<sup>th</sup>-percentile speed. Why is this factor so important? The 85<sup>th</sup>-percentile is an indication of the speed most drivers feel is reasonable and safe. We need to remember that speed limits are set for ideal conditions. Drivers need to respond to adverse conditions and Oregon vehicle law requires that motorists drive at a reasonable and prudent speed and with a regard for danger. Motorists must adjust their speed according to the existing vehicle and pedestrian traffic, road surface, lighting, and weather conditions. No matter the posted speed, you should always maintain a safe speed while traveling on the roadway.



Below is information about speed zones in Oregon and how they can be changed.

## How are speed zones established and can they be changed?

As stated above, local road jurisdictions, do have some ability to lower the speed on statutory roads (alleys, residential districts and business districts), however for designated speed zones, the setting of the speed is still highly controlled and regulated.

Setting speed zones on Oregon's highways and streets is often a controversial and emotional issue. Many citizens believe that lowering the speed will improve traffic safety on their street or in their community. On the other hand, speed zones that are unrealistic are often disregarded by a majority of motorists who are normally careful and law-abiding drivers.

## The logic of speed zones

Extensive studies from around the U.S. show that traffic moving at a speed that is reasonable for the road and weather conditions results in fewer accidents. Drivers are more patient because a reasonably uniform speed allows progress with less passing, less delay and fewer rearend collisions. Lowering the speed does not necessarily result in fewer crashes.

## **Speed zone standards**

In the absence of posted speed limits, Oregon state law gives motorists the following designated speeds:

15 mph – Alleys, narrow residential streets

20 mph - Business districts, school zones

25 mph - Residential districts, public parks, ocean shores

55 mph - Open and rural highways, trucks on interstate highways

65 mph - Autos on interstate highways

#### The Basic Rule

Designated and posted speeds are not the final word in Oregon, for all travel on public streets and highways is subject to the Basic Rule. The Basic Rule is both a safety valve and an acknowledgment that drivers are able to act independently, reasonably and with good judgment.

The Rule states that a motorist must drive at a speed that is reasonable and prudent at all times by considering other traffic, road and weather conditions, dangers at intersections and any other conditions that affect safety and speed.

The Basic Rule does not allow motorists to drive faster than the posted speed or designated speed. Instead, the Rule expects drivers to be responsible for their own actions.

### What happens when a speed zone change is requested?

The Oregon Department of Transportation has the responsibility to investigate most public roads at the request of the road authority (in this case the City of Florence).

When a city or county asks ODOT to review a speed zone, an engineering study is started. The road is surveyed for the following:

- Lane and shoulder widths
- Signals and stop signs
- Number of intersections and other accesses
- Roadside development
- Parking and bicycle lanes

Other analysis includes:

- Number and type of vehicles
- Number of pedestrians and cyclists
- Crash history
- Speed checks

Radar and laser are used in speed checks, recording free flow traffic. Recognizing that most motorists are generally safe, the speed at or below which 85 percent of the drivers travel is one nationally recognized factor proven by repeated studies as a fair and objective indication of safe and reasonable speeds.

When the investigation is completed, a report is prepared. All of the above considerations are evaluated in deciding whether to propose a change, or retain the existing posted speed. The report is then sent to the agency with road authority for review.

#### Who decides?

If the road authority (City) agrees with the recommendation, the speed zone is established. If not, ODOT reviews the road authority's objection and any additional information, and then, if possible, comes to a mutual agreement. If mutual agreement can't be reached, the case is referred to the Speed Zone Review Panel.

## Speed zone review panel

The Speed Zone Review Panel hears contested speed zone cases. The panel reviews the speed zone recommendation and receives testimony from the local agency and interested parties.

The panel consists of representatives from the League of Oregon Cities, Association of Oregon Counties, Oregon Transportation Safety Committee, Oregon State Police and ODOT.

### **Speeding**

Unlike other driver behaviors that can have a negative impact on safety, such as distracted driving, speed is also associated with positive benefits, including reduced travel times, greater mobility, and increased economic productivity due to lower transport and inventory costs and larger market areas. Thus, speed management involves balancing safety and efficiency in travel.

Specific advisory speeds are used in conjunction with warning signs like this one to indicate appropriate travel speeds at curves and intersections.

## The effect posted speed limits have on actual traffic speeds

Posted speed has very little effect on actual traffic speeds. There is a common belief among citizens, and even by some officials, that the mere posting of speed limit signs will cause drivers to react accordingly. This is not true and is why posted speed limits must be realistic to receive compliance.

Unrealistically low speed limits will invite violation by responsible drivers. Enforcement of unreasonably low limits sets up the so-called "speed trap," which results in poor public relations. The posting of proper speed limits has the beneficial effects of smoothing traffic flow and aiding effective law enforcement.

# The effect of installing lower speed limit signs

It is a common myth that posting slower speed signs forces drivers to slow down and will result in fewer traffic accidents. National research has shown that the prevailing traffic conditions and the type of street, not the posted speed limit, influence drivers. Generally, speed signs are typically installed at quarter-mile intervals on the major arterial streets and are posted at half-mile intervals on collector streets. Twenty-five mph speed signs are installed at the entrances to subdivisions where the speed zone changes from a higher posting (35 or 45 mph) to the residential speed (25-mph). It is not practical to install speed signs at the end of every residential street.

If an unreasonably low speed is posted, many drivers tend to ignore the signs. There are some drivers who, on the other hand, always try to stay within the posted speed. This can cause conflict between faster and slower drivers, resulting in more accidents. Traffic engineering studies help to determine the prevailing speed of most drivers using a certain street. Additionally, the studies take into account accident records and road conditions. An appropriate speed is then set based upon this data.

#### Installing stop signs to slow drivers down

Under the right conditions, STOP signs can play an important role in traffic safety. However, STOP signs installed in the wrong place usually create more problems than they solve. Many requests are received for STOP signs to interrupt traffic or slow traffic down. However, studies across the nation show that there are a high number of intentional violations when STOP signs are installed as nuisances or speed breakers.

STOP signs are installed at an intersection only after a careful engineering evaluation of the existing conditions indicates that their installation is appropriate. Four-way Stops are only helpful when traffic volumes are high and close to equal on all approaches to an intersection. Slowing traffic down in neighborhoods Speeding is typical of a large and diverse family of problems that has a complex set of human responses and reactions at its foundation. People tend to drive at the speed that they feel is safe and appropriate. They are also affected by the speeds that others are driving.

In many cases, the speeders are your neighbors (and possibly, you). Discussions among the neighbors can help to reduce the problem. The City has an educational program available, where citizens can call and request that the radar reader board be deployed to a specific area. The purpose of the program is to advise drivers of their speeds, call attention to inappropriate habits and involve the neighborhood in the process. The radar reader board deployment can be arranged for by contacting Florence Public Works at 541-997-4106.

Verification of a speeding problem will be forwarded to the Police Department so that they can schedule selective enforcement in the area as their resources allow. Under those circumstances, it is helpful to be able to advise the Police Department as to days and times of day when problem is most noticeable.

Last, and possibly most important, is our responsibility to drive safely and within the speed limit ourselves. Often, the most important part of the equation is YOU. When we drive safely and appropriately, it has a positive affect on the driving habits of others. The more of us that take that challenge seriously, the greater will be the positive impact on safety within our neighborhoods, and within our community, in general.