

SUMMARY OF ROAD UNDULATIONS

Types of Road Undulations:

- There are two types of road undulations in use in Santa Rosa: speed humps and speed tables.
 - Speed humps are areas of pavement raised 2.5 inches over a distance of 12 feet in a circular shape. They are marked with signs and pavement markings.
 - The preferred road undulation in Santa Rosa is a speed table. A speed table is a flat-top speed hump. Speed tables provide a rise in the pavement elevation of 3.5 inches in a distance of 6 feet, remain parallel with the street elevation for a distance of 10 feet, and descend to the original pavement elevation over a distance of 6 feet. Speed tables are marked with warning signs and pavement markings.

Applications:

- Used on local streets where speed control is desired.
- Used on local residential streets where cut through traffic is to be discouraged.

Advantages:

- Road undulations have been documented to effectively lower speeds when properly installed.
- Lower speeds may improve pedestrian and bicycle safety.
- Road undulations are self-enforcing and reduce the need for police enforcement of speeds.
- Residents typically support them and are willing to put up with the negative impacts discussed under “Disadvantages.”
- Road undulations can effectively reduce traffic volumes by encouraging drivers to use other routes. Those living on the alternative routes may see this as a negative impact.
- Road undulations can give the public a sense of involvement and an ability to affect the speeding in their neighborhood.

Disadvantages:

- Road undulations have a documented negative impact on the response time of emergency vehicles.
- They can cause loose objects to be thrown around in an ambulance, fire truck or other vehicle if crossed at too high of a speed.
- They can be controversial. While many support them, there are residents who dislike them. A few agencies have reported having to remove them after a large amount of complaints.
- Road undulations cause an increase in noise due to slowing and accelerating vehicles. Noise increases are most noticeable at the undulation. In some cases, dissatisfied drivers will “peel out” on the undulation late at night.
- They cause a slight increase in gasoline consumption and emissions.
- They can cause discomfort for people with certain ailments such as back problems.
- They can divert traffic onto neighboring streets, thus transferring a traffic problem to someone else.
- Some of the public will typically find the undulations and the associated signs and pavement markings aesthetically unpleasing. Some owners have reported a decrease in property values because of the presence of road undulations.