

## **FREQUENTLY ASKED TRAFFIC QUESTIONS**

### **Does the occurrence of a few traffic accidents at a particular location mean something should be changed?**

Not necessarily. Accidents occur on a regular basis in otherwise perfect conditions, and the State publishes “expected accident rates” for various types of intersections and roadway segments. The accident rate at an intersection is the number of accidents per million vehicles entering the intersection.

When we evaluate the accident history of an intersection, we compare the “actual” accident rate to the “expected” accident rate. If the actual rate is significantly and consistently higher (year after year) than the expected rate, then we look at engineering ways of reducing the actual rate. Sometimes a new traffic signal will help to reduce the actual rate, although it is not uncommon for rear-end accidents to increase once a signal is installed.

### **How do I drive in a Roundabout?**

Although roundabouts or traffic circles are relatively new to Roseville, they have been around for over 100 years. Traffic signals became predominant in the 1950’s, but now traffic circles are making a big comeback with the push to reduce right angle collisions and calm traffic. Although they cannot be used at every location, they do have many benefits such as:

- They keep traffic moving. This decreases emissions and improves fuel economy.
- They increase safety because there is no stopping in a roundabout and no left turns are made across opposing traffic lanes.
- They force vehicles to slow to a safe speed for the intersection.

Driving in a roundabout is quite simple. As you approach the intersection, slow down and prepare to Yield to any vehicles currently within the roundabout. Wait for a gap and merge right, traveling counterclockwise with moving traffic. Proceed around the circle until you reach your point of exit and signal your intent to other drivers.

#### **Roundabout Safety Tips:**

- Roundabouts are always one-way-counterclockwise.
- If you miss your turn continue around the circle again rather than swerving to make your exit.
- Obey all traffic signs and road markings.
- Always watch for pedestrians and bicycles.

### **How do I drive through a signal if it is out due to loss of electricity?**

According to the California Vehicle Code, when a signalized intersection is in “red flash” or blacked out due to a loss of power, all motorists must treat the intersection as an all-way stop.

## **How do I report an obvious malfunction with an existing traffic signal?**

If a traffic signal light bulb is out, has been knocked over, is stuck in red, or does not turn green for a particular direction, please call **(916) 746-1300** during normal business hours. Be sure to give the operator the intersecting streets, the direction of the problem, and a clear description of the problem.

## **How do I submit a traffic-related request?**

Response: All requests for traffic studies are to be submitted in writing using a ["Traffic Study Request" form](#). If, after reviewing this information, you would like a request form mailed to you, **call the Engineering Division at (916) 746-1300** and request one or print the form located on the City of Roseville website.

When we receive your written request, we will notify you that we have received it, and give you an estimate of time we think we will need to evaluate your request. Many requests require us to collect data, so it may take anywhere from a few months to a year to complete our evaluation, depending on the request. Requests are evaluated on a first come, first served basis, and we typically receive anywhere between 150 and 200 traffic study requests per year. So it may take a several months (depending on the backlog) from when we receive your request to when we begin working on it, because at the time you submit your request, we are already working on requests that were submitted months prior to your submittal.

Like nearly all cities in California, Roseville uses the California Manual on Uniform Traffic Control Devices, also known as the CaMUTCD, to evaluate the appropriateness of traffic control devices for particular situations. The CaMUTCD contains guidelines or "warrants" for each type of traffic control device. The purpose of these warrants is to ensure consistency in the implementation of traffic control devices to conform to motorists' expectations and achieve uniform driver behavior throughout the State of California. The warrants vary depending on what device is being considered. The warrants usually evaluate things like the volume of traffic, number of pedestrians, amount of travel delay, and the accident rate.

## **How do pedestrian signals work?**

A pedestrian signal allows a safer way for pedestrians to cross the street at signalized intersections. The pedestrian signal, when activated, provides time for the pedestrian to enter the street on the steady "Walk" and to finish crossing the street on the flashing "DON'T WALK" countdown signal. The pedestrian signal is normally activated by a push-button that tells the signal controller that there is a pedestrian who wishes to cross the street.

## **WALK INDICATION**

The pedestrian signal sequence begins when the "WALK" signal is illuminated. This sequence is a minimum of 5 seconds long and allows enough time to leave the curb and begin crossing the street in the direction of the "WALK" indication before the flashing DON'T WALK countdown interval begins.

In order to get the "WALK" signal, YOU MUST PRESS THE PEDESTRIAN PUSH BUTTON!! Otherwise the signal controller has no way of knowing you are there. It is only necessary to push the button once.

### **FLASHING DON'T WALK**

The pedestrian clearance interval consists of a flashing "DON'T WALK" countdown signal. During the flashing "DON'T WALK" countdown, the pedestrian should continue walking. Don't begin to cross on the flashing "DON'T WALK" countdown signal. The clearance interval is based on the street width divided by the accepted standard of 3.5-4.0 feet per second walking time.

### **STEADY DON'T WALK**

The "DON'T WALK" signal, steady illumination, means that a pedestrian should not enter or cross the street in the direction of the pedestrian signal.

**Please note** that even when crossing an intersection with the "WALK" or flashing DON'T WALK signal, pedestrians should ALWAYS watch out for potential conflicts with vehicles. Drivers may be making right or left turns across the crosswalk and may not see the pedestrian in the crosswalk. Behavioral studies on drivers shows that nearly 40 percent either do not see or do not yield to pedestrians crossing a street. Just because you have the right-of-way doesn't mean you won't get hit by a vehicle!

### **How is the length of yellow time calculated for traffic signals?**

The City of Roseville follows both Federal and State guidelines and the California Manual on Uniform Traffic Control Devices for Streets and Highways (CaMUTCD).

The length of yellow time for through traffic movements are based on approach speeds (the 85th percentile speed from radar speed surveys). Longer yellow times are appropriate for through lanes with higher approach speeds. Vehicles making left turns typically have much slower approach speeds than that of through traffic lanes. The California MUTCD Table 4D-102 suggests minimum yellow times of three seconds. A three second yellow is typically used in left turn movements throughout the State of California.

A common misconception is to assume yellow time is "clearance time" to get through an intersection. However, Section 4D.0410 of the CaMUTCD states that the exclusive function of the yellow change interval is to warn traffic of an impending change in the right-of-way assignment. In other words, the purpose of the yellow signal is to inform approaching drivers that the light is about to turn red.

As long as a motorist enters the intersection (crosses the limit line) before the signal turns red, the motorist has entered the intersection legally. If a motorist entered the intersection legally, he or she is entitled by law to continue through the intersection, even if the light subsequently turns red while that motorist is still in the intersection.

At some intersections where the traffic signals are synchronized with other signals along the

roadway, the opposing left turn movements do not terminate simultaneously, but rather they lag one another (commonly referred to as lead-lag). The lagging left turn movement will remain green with its associated through movement.

### **What can be done about speeding in my neighborhood?**

To report an in-progress, hazardous traffic situation, like a reckless driver or a suspected drunk driver, call 911 or police dispatch at 916-774-5000 extension 1. If your concern is a chronic traffic problem, call the police department's traffic hotline at 746-1023. The police department's traffic unit monitors the hotline and assigns traffic officers to investigate.

Although many residents would like to see traffic officers on their residential streets, the police department must concentrate traffic enforcement on the major arterial streets where most injury collisions occur. They also spend time around school sites, because of the higher potential of injury to children. The City also uses speed display trailers and speed awareness signs to remind drivers to slow down.

### **What can I do if the Engineering Division denies my request for a traffic control device?**

Engineering staff has the authority to install traffic control devices if the CaMUTCD (California Manual on Uniform Traffic Control Devices) warrants are met. Otherwise, engineering staff cannot recommend the installation.

If staff denies your request, you may write a letter to the City Council explaining that your request has been evaluated and denied by staff, and that you wish to have this issue brought to the City Council for consideration. If the City Council wishes to consider the issue, they will direct staff to place the item on a City Council agenda, including a staff report explaining the situation and why staff does not support the request for the traffic control device.

At the City Council meeting, the Council members will consider staff opinion along with public input in order to make a final decision.

### **What is red light running?**

A violation occurs when a motorist enters an intersection after the signal light has turned red. Motorists who are already in an intersection when the signal changes to red — while waiting to turn, for example — are not red light running, although they may be guilty of other violations, such as speeding to "beat" a red light.

### **What is the difference between a green arrow and a round green signal indication?**

A green arrow gives you the right-of-way to make a protected turn. A round green ball means you have to yield to oncoming vehicles and pedestrians before you make your turn.

## **What is Traffic Signal Coordination?**

Traffic signal coordination is a method of timing groups of traffic signals along an arterial to provide for the smooth movement of traffic with minimal stops. The goal of coordination is to get the greatest number of vehicles through the system with the fewest stops in a comfortable manner. While it would be ideal if every vehicle entering the system could proceed through the system without stopping, this is not possible even in a well-spaced, well-designed system.

Not all City streets warrant coordination. Typically, a street is selected for coordination if it carries a certain amount of traffic along the arterial during peak hours. In most cases, coordination is active from 6:00 a.m. to 7:00 p.m. during weekdays. The individual signals operate on a "first-come-first-served" or traffic activated basis outside of these hours.

## **Coordination Determination**

Corridor coordination takes into account the spacing of the signals, the prevailing speed, the traffic volume on the corridor, the amount of traffic coming in and out of driveways between traffic signals, the uniformity of intersection sizes, and the traffic signal cycle length. Evaluating a corridor for coordination requires the following steps:

1. Perform travel-time delay studies – drive the corridor several times prior to coordination to determine how long the average trip down the corridor takes.
2. Collect current traffic volume and intersection geometry information.
3. Create a simulation model of the corridor and compare to existing field conditions in order to insure the accuracy of the model.
4. Run automated and manual optimization procedures.
5. Input the new optimized timing into test controllers to verify it works.
6. Transfer the new timing to the traffic signals in the field.
7. Verify the new timing works well by performing a post-coordination travel-time delay study.

In traffic coordination, generally, "the majority rules" and the busiest traffic movements are given priority. Depending on the route, the master cycle length of an arterial could vary from 60 to 120 seconds. This means that if you were exiting a side street, and you just missed the light, it is possible to wait between 60 and 120 seconds before receiving another green light. Generally, the busier and the bigger the intersection, the longer the required cycle length. One thing to remember is that even though you may have to wait longer to enter onto a coordinated roadway, you have a better chance of not having to stop as many times along that route to your destination.

## **Results since implementing traffic signal coordination**

Since coordinating corridors, the City of Roseville has seen a reduction in travel times. Additionally, the City analyzes all of its signals for efficiency and effectiveness on a 3-year basis. Traffic signal coordination and individual signal timing are major elements in the on-going

effort to improve the performance of the street system and maximize traffic flow through-out the City of Roseville. Call (916) 746-1300 for more information on traffic signal coordination.

### **Why does it take so long sometimes for the signal to turn green?**

There could be many reasons for this. Many intersections are congested and have a lot of traffic approaching from different directions. Sometimes you just have to wait your turn. If a pedestrian pushes the pedestrian button, the WALK and flashing clearance will stay on for a certain amount of time, requiring conflicting traffic movements to have a red light. The longer the pedestrian crossing distance, the longer the flashing clearance has to stay on. Occasionally, a fire or police vehicle, train or ambulance may preempt the signal, causing the conflicting traffic movements to remain red. Sometimes it is an issue of priority, as a roadway with heavier traffic will typically have more green time than the side street with less traffic to reduce overall delay to the most number of drivers. Some of our busier roadways have the signals coordinated (see above) during peak traffic hours, and that may cause the side street approaches to wait longer than normal.

### **Why doesn't the City install a stop sign "here"?**

As with traffic signals, stop signs are installed after stop sign warrants are met for a particular intersection. Stop sign warrants are based on traffic volumes, visibility, and the accident rate. Many people believe stop signs are the answer to controlling speeding along streets. The CaMUTCD states that stop signs are **not** to be used as a speed control device, but to identify who has the right-of-way at an intersection. Studies have shown that when unwarranted stop signs are installed along a road, motorists soon realize that the stop signs are unnecessary, and begin to run the stop sign. This behavior could lead to an accident. Also, motorists tend to speed up after an unwarranted stop sign as they are frustrated having to stop or slow at what they feel is an unnecessary stop sign. In many cases, measured speeds have been higher between unwarranted stop signs than before the signs were installed.

### **Why doesn't the City install a traffic signal "here"?**

Traffic signals are recommended for installation only if the Manual on Uniform Traffic Control Devices (MUTCD) signal warrants are met. Signal warrants are based on traffic volumes, delay, pedestrian volume and the accident rate. The City also has a standard minimum spacing requirement between signals of one-quarter mile. The cost to install a traffic signal is about \$400,000-\$500,000.

### **Why doesn't the City lower the posted speed limit to slow traffic on arterial and collector roadways?**

Contrary to popular belief, lowering the speed limit on a roadway will not slow traffic. Most motorists travel at a speed which they feel is appropriate given their surroundings, regardless of posted speed limit signs. The State of California has established the 85th percentile speed as the prudent speed for a roadway. That is the speed at which 85% of the motorists are traveling at or below. For this reason, state law requires speed limits be posted at the nearest 5mph increment to

the 85th percentile speed in order for law enforcement to use RADAR. An additional 5mph reduction in the speed limit can be justified given certain conditions.

### **Will the City install speed humps on my residential street?**

No. Many years ago, the City had a speed hump installation program for residential streets. The City Council discontinued the program because of too many issues and resident complaints about the humps. Some motorists would intentionally drive over the humps at high speeds creating a neighborhood nuisance, swerve onto sidewalks and front lawns to avoid the humps, or speed up between the humps to make up lost time. Some motorists would divert to other streets to avoid the humps, transferring a speeding issue from one area to another. The City has a speed hump removal program for those interested in removing existing speed humps on your street. Contact the Engineering Division at (916) 746-1300 for additional information.

### **Will the City install speed limit signs on my neighborhood street?**

State law has set the speed limit on residential streets at 25mph whether posted or not. Unless the roadway is an entrance to a residential area from a major roadway, speed limit signs are typically not installed. This is to minimize the number of signs in neighborhoods as numerous signs can become unsightly and will have no real effect on speeds.

### **Why doesn't this City install a crosswalk here?**

Contrary to popular belief, crosswalks do not provide additional safety. In fact, the opposite can be true. Studies have shown that where traffic does not normally stop (i.e. no stop sign or traffic signal), accident rates are between three and eight times higher where the crosswalk lines were painted on the street as opposed to where the lines are left off. Many people, particularly children, view crosswalk lines as providing protection to oncoming traffic, which causes people to be less cautious when crossing the streets. This has led to the higher accident rates. The painted lines only provide a false sense of security, as if the lines are saying to the pedestrian, "come on, step on out here, its ok". For these reasons, crosswalks are typically only recommended at locations where traffic is already required to stop.

### **Why doesn't the City install "Children at Play" signs in my neighborhood?**

These signs only create a false sense of security for parents and children who believe that signs provide an added degree of protection which they do not and cannot provide. Motorists, particularly local ones, pay little attention to them. The use of these signs have long been abandoned since they are a direct and open suggestion that playing in the street is acceptable behavior. These signs have been removed from the CaMUTCD.