



## City of St. George Public Works Department

### Frequently Asked Questions

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If you need more information on these topics, or would like to submit a traffic service request, click here [Traffic Service Request Form](#).

To comment on this document, send an email to [to trafficinfo@sgcity.org](mailto:trafficinfo@sgcity.org)

Topics are listed below. Click on the link to move to that section.

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#### ***HOW DO I GET A "CHILDREN AT PLAY" SIGN INSTALLED IN MY NEIGHBORHOOD?***

##### ***Safety Factors Relating to Children At Play***

The City of St. George often receives requests to install signs warning drivers of the possible presence of children at play. Concerned citizens fail to realize that these signs are deceiving and ineffective.

Drivers already expect the presence of children in residential areas, especially at certain times, and studies show that devices attempting to warn motorists of normal conditions or conditions that are not always present fail to achieve the desired safety benefits.



##### ***City Policy on "Children At Play" Signs***

"Children at Play" and similar signs are not recognized by the Federal Highway Administration as official traffic control devices and, therefore, are not installed by the City of St. George.

"Children at Play" signs, although they have been seen in various communities in Utah, create a false sense of security for parents and children who believe the signs provide an added degree of protection when motorists, particularly local ones, actually pay little attention to them. The use of "Children at Play" and similar signs such as "Slow" or "Slow - Entering Residential Area" has long been discouraged since these signs are a direct and open suggestion to small children that playing in or beside the roadway is acceptable.

Parents also seem to believe such signs may reduce speeds. There is no evidence that these signs prevent accidents or reduce the speed of vehicles. If problems with speeding exist, stricter enforcement should be sought from the appropriate law enforcement authorities.

### *HOW DO I LOWER THE SPEED LIMIT ON MY STREET?*

Citizens frequently request 10 mph speed limit signs on residential streets where children are playing. The unposted speed limit on a residential street is automatically 25 mph and can be enforced. The City cannot post 10 mph speed limits because the posting of such signs by a local government agency is considered a speed trap and therefore makes enforcement of such limits illegal.

It is a common myth that posting slower speed limit 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. 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 limit is then set based upon this data.

Speed studies are conducted to help set the speed limits. If an unreasonably low speed limit is posted, many drivers tend to ignore and violate the signs. There are some drivers who, on the other hand, always try to stay within the posted speed limit. This can cause conflict between faster and slower drivers, resulting in more accidents.



### *HOW CAN WE GET SPEED HUMPS FOR OUR NEIGHBORHOOD?*

Although speed humps are gaining national attention as a means of traffic calming there are numerous cases across the country where speed humps have been installed and later removed, as the desired effect was not obtained.

A speed hump for a public street is significantly different than what you see in a private parking lot. The small four inch wide and two inch high bump that grabs your attention in the parking lot is not allowed on a public street for safety and liability reasons. While speed humps may slow down most drivers, a percentage of drivers will still travel at a high rate of speed in between the humps or occasionally do not slow down at all for the hump itself. For these reasons the City promotes other traffic calming measures.

### *HOW DO I GET A "NO TRUCKS" SIGN PLACED IN MY NEIGHBORHOOD?*

#### Prohibiting Trucks In Residential Areas

To help make residential streets safer for children to play on, citizens also frequently request signs that say: NO TRUCKS

Whenever such signs are installed, not all vehicles over 3000 lbs. are prohibited from using these posted streets. Exemptions to posted weight restrictions include: emergency vehicles; vehicles used in transporting passengers such as buses; vehicles used in conjunction with building construction or delivery; vehicles used for local pick-up or delivery; vehicles used by local businesses to gain access to and from the business. It requires a City Council resolution to establish weight restrictions on a street and high visibility enforcement to make such signs effective. Therefore, the City posts such signs only on streets where there where there is a documented large volume of heavy traffic that does not have a legitimate reason to use such streets.

### *HOW DO I GET A "REDUCED SPEED SCHOOL ZONE" IN MY NEIGHBORHOOD?*



In 1992, the Utah Legislature passed the "School Zone Safety Act." This act included a number of measures to improve the safety of pedestrians in the vicinity of Utah's schools. Under this law, UDOT has developed specific standards for the location, design, operation, and operation of

school zones. The City of St. George has adopted the State of Utah's school zone guidelines to be implemented within school zones in the City. a brief summary of the state law and the standards pertaining to school zones is outlined below.

### What is a "School Zone"

A "school zone" is a section of highway in advance of a designated school crosswalk that has a reduced speed limit. The school zone speed limit of 20 MPH applies from the point indicated by a special speed limit sign to the point marked by the "End School Zone" sign.

The reduced speed limit is in effect only when indicated by the flashing lights on the school speed limit sign. The school zone may abut the school property or it may be located at a crosswalk which is remote from the school grounds.

### What are the laws pertaining to school zones?

The "School Zone Safety Act" had the following important provisions:

- Required UDOT and local highway authorities to establish reduced speed school zones at all elementary schools.
- Required school zones on state highways at secondary schools when requested by local authorities
- Required local authorities to provide trained crossing guards.
- Required flashing lights on school speed limit signs during the hours of operation.
- Increased the fines for speeding in a school zone. Fines range up to \$250 for a first offense and up to \$500 for subsequent offences
- Require UDOT to develop a manual of specifications for a uniform system for the location and operation of school zones, school crossing guards, and school access plans.

### How is reduced speed school zone established?

UDOT has developed specific standards for school zones, as required by the Utah Code. These standards have been adopted as a supplement to the "Manual on Uniform Traffic Control Devices," which, by law, guides the placement and use of all traffic signals, signs, and pavement markings on public streets and highways.

An important objective in providing for safe highways and pedestrian crosswalks is the concept of uniformity. Thus, identical standards are applied to all school zones throughout the state so that drivers become familiar with the standard location, signs, and operation of a school zone.

"Warrants" have been established for reduced speed zones to determine when it is appropriate to create a 20 MPH speed limit. The reduced speed limit cannot be used indiscriminately, as its use at an improper location would result in disrespect for the law. The following criteria must be met for the establishment of a reduced speed school zone:



- A marked school crosswalk is present. Marked crosswalks may be installed only if there are at least 10 school-aged pedestrians in the morning or afternoon, and there is a minimum traffic volume of 500 vehicles per day
- There is a need for school zone protection, as determined by an engineering study. The study considers the number of pedestrians, the speed of vehicles, and the number of gaps in traffic.

*What is the meaning of signs used at a school zone?*

- The "School Advance" sign is used several hundred feet before the crosswalk to give warning to the driver.
- The "School Crossing" sign is placed at the cross walk.
- The "School Speed Limit" sign is placed in advance of the crosswalk. The speed limit of 20 MPH is in effect only when the attached lights are flashing.
- The "End School Zone" sign is placed 50 feet after the school crosswalk. A driver may resume speed only at a point even with this sign.

### ***HOW CAN WE MAKE CROSSINGS SAFER AND HAVE MORE OF THEM INSTALLED?***

#### *What is a crosswalk?*

Crosswalks are either "marked" or "unmarked". The MUTCD defines a "crosswalk" as the portion of a roadway at an intersection, which is an extension of the curb and property lines of the intersecting street or is any other portion of a roadway which is marked as a pedestrian crossing location by painted lines. A "marked crosswalk" is any crosswalk which is delineated by white or yellow painted markings placed on the pavement. All other crosswalk locations are, therefore, "unmarked".

#### *How are crosswalks used?*

At any crosswalk (marked or unmarked) drivers must yield the right-of-way to pedestrians. Crosswalks are marked mainly to encourage pedestrians to use a particular crossing. Studies conducted on the relative safety of crosswalks support minimal installation of marked crosswalks.

The City of San Diego, California, studied intersections at which there were both marked and unmarked crosswalks. The results were surprising. Although 2 ½ times as many people used the marked crosswalks, 6 times as many accidents occurred in the marked crosswalks. A pedestrian safety study in Long Beach, California, reported 8 times as many accidents in marked cross walks compared to unmarked crosswalks. Similar studies in other cities have confirmed these results.

#### *What causes accidents at marked crosswalks?*

Research suggests that marked crosswalks give pedestrians a false sense of security. Pedestrians often step off the curb into the crosswalk expecting drivers of approaching vehicles to stop. However, drivers frequently fail to stop and cause an accident. At all crosswalks, both marked and unmarked, it is the pedestrian's responsibility to be cautious and alert when crossing the street.

At mid-block crosswalks on multi-lane roadways, another frequent factor in causing accidents involves the driver of a vehicle in the lane nearest to the curb stopping for a pedestrian that is waiting to cross or who is already in the crosswalk. The driver of a second vehicle traveling in the lane next to the stopped vehicle tried to pass the stopped vehicles and hits the pedestrian, even though it is illegal for drivers to pass a stopped vehicle at a crosswalk. Pedestrians should be very cautious when walking in a crosswalk, especially when their visibility is limited by vehicles already stopped at the crosswalk.

### Where are crosswalks normally marked?

Crosswalks are marked at intersections where there is substantial conflict between vehicle and pedestrian movements, where significant pedestrian concentrations occur, where pedestrians could not otherwise recognize the proper place to cross, and where traffic movements are controlled. Examples of such locations are:

- Approved school crossings
- Signalized and four way stop intersections where there is significant pedestrian traffic and one or more crossing locations have been prohibited.

These examples follow the philosophy of marking crosswalks as a form of encouragement. In the first case, we are encouraging school children to use a crossing which is normally being monitored. In the second case, we are encouraging all pedestrians to avoid a prohibited crossing. It is the City's policy not to paint crosswalks at midblock locations where traffic is not controlled by stop signs or traffic signals. Painted crosswalks should only be used where necessary to direct pedestrians along the safest route.

### What are special school crosswalks?

Crosswalks should be marked at all intersections on the "suggested route to school", available from your local school. They should also be marked where there is high conflict between vehicles and students (while crossing), where students are permitted to cross between intersections, or where students could not otherwise cross. The best safety measure for school age children is to educate them on how and where to safely cross the street.

### How do I get a mid-block crossing installed?

#### Pedestrian Signals

Many years ago in St. George when traffic volumes were much lower than they are today, pedestrians could take their cues from the same traffic lights as motorists. Things are more complicated today, so it shouldn't be surprising that questions are frequently asked about pedestrian signals which were introduced to improve pedestrian safety. Here is what the symbols mean:



- "Walk" or the walking pedestrian symbol means you may begin crossing.
- A flashing or steady "Don't Walk" or an upraised hand symbol means it's too late to begin crossing. Don't enter the street but finish crossing if you have already started.

#### Why does it always say "don't walk" before I've completed crossing the street?

The flashing "don't walk" or upraised hand is a warning to people who have not yet entered the intersection that late to safely cross the street before the traffic signal changes allowing cars to proceed. Signals are timed to allow plenty of time for people who have already started walking, to safely cross the street.

### Is it really necessary for me to push a button to activate the pedestrian signal? Can't I just wait for the light to change?

Where buttons are available to pedestrians, it is because the traffic signal is timed for cars, not for people on foot. If you don't activate the pedestrian signals by pushing the button, the traffic light won't give you enough time to safely cross the street. You only need to push the button once for it to be activated.

### Can I count on a safe crossing if I carefully follow the pedestrian signals?

The signals assign your legal rights in the intersection; however, it is important to be cautious when crossing a busy intersection. The following suggestions are offered in the interest of safety:

- Cross intersections defensively.
- When crossing the street, regardless of the availability of signals, cross as quickly as possible. Minimize your time in the roadway.

- Always watch for turning vehicles. You have the legal right to be there, but that doesn't protect you from the carelessness of some motorists.

#### What are the official guidelines for marking crosswalks?

The City of St. George follows State policies with regard to traffic control. The Utah Code requires us to follow the national guidelines outlined in the Manual on Uniform Traffic Control Devices, or "MUTCD".

Traffic control devices include signal lights, traffic signs, and paint markings. The MUTCD covers all aspects of the placement, construction and maintenance of every form of approved traffic control. The guidelines prescribe five basic requirements for all devices. They must:

- Fulfill a need
- Command attention
- Convey a clear, simple meaning
- Command respect of road users
- Give adequate time for proper response

The MUTCD emphasizes "uniformity" of traffic control devices. A uniform device conforms to the regulations for dimensions, color, wording and graphics. The standard device should convey the same meaning at all times. Consistent use of traffic control devices protects the clarity of their messages. As stated in the MUTCD "uniformity" must also mean treating similar situations in the same way.

#### *HOW DO TRAFFIC SIGNALS WORK?*

Have you ever wondered why sometimes you seem to wait forever for that green light or how a traffic signal knows your car is there? In reality, no permanent traffic signal in the City of St. George has more than a two-minute cycle length when working properly. Each traffic signal location runs a unique timing program that includes maximum and minimum green times for each direction. Typically, when no car is present at an intersection, a traffic signal rests in green for the major street. When vehicles are present in multiple directions, the signal controller distributes green time based on its timing program. The key to vehicle detection is the traffic loops placed in the travel lane for each direction. These loops are a coil of wire that induces a current that is detected by the signal controller when a metal object passes over them.

Each direction of travel is assigned a minimum and a maximum amount of green time. Minimum times are long enough for one or two cars to clear the intersection and for a pedestrian to cross the street. If there is no vehicle on the traffic loop and the minimum time has expired the next phase of the cycle will begin. The City of St. George also uses camera detection at many of its intersections. These cameras use motion detection instead of loops in the pavement. This type of detection is beneficial because if a road needs to be repaired there is no risk of damaging the detection system.

Maximum times are also assigned to assure that all lanes of traffic get a green signal. For example without a maximum time limit one direction would be green all day long if vehicles continued to pass over its traffic loops. When the maximum time is reached, that phase will go to yellow even if cars are still coming. The next phase can then begin. If you observe maintenance problem or traffic signal operational problems contact the City Engineering Division.

#### Why Is My Traffic Light Not Turning Green?

Frequently drivers call the city because a certain signal is not turning green. There are a couple of causes for this. The most common is that the car is no longer in the detection zone. For most approaches, the detection zone extends from the stop line to between 40 and 60 feet behind the line. If the vehicle crosses the stop line sufficiently, there may be insufficient metal over the detector to register or the vehicle has pulled out of the camera detection zone.

This condition can be resolved by backing up and stopping with the vehicles front tires on or slightly behind the stop line. The other cause is that the loop is “out of tune”. Detector units rely on a wire loop wound into the roadway. Sometimes the loop becomes disturbed by the environment (rain, extreme cold or heat) and fails to function properly. If backing up and stopping behind the line does not get the green there may be a fault with the camera or loops. For more information on how signals work go to <http://www.sgcity.org/traffic/upload/RedSignal.pdf>

*How does the City of St. George decide where to install traffic signals?*

Traffic signals do not prevent crashes. Engineering studies have shown that in many instances, total intersection crashes increase after a traffic signal is installed. Certain types of crashes are susceptible to correction by installation of traffic signals, however, overall the number of crashes increase.

When determining whether or not a traffic signal is necessary at a specific location, an evaluation of the candidate location (called a signal warrant study) is conducted to determine the answers to the following questions:

- How much traffic is on the intersecting streets?
- Are high levels of traffic consistent throughout the day or just during a few hours?
- Is there a lot of pedestrian traffic?
- Is the street a wide, high speed, and busy thoroughfare?
- Are school children crossing the street?
- Will a signal improve the flow of traffic or cause gridlock with other nearby signals?

The signal warrant study collects all of the relevant data at a location that is being considered for a traffic signal. Once data is collected, it is compared to national standards in the Manual on Uniform traffic Control Devices (M.U.T.C.D.). These standards have been established by extensive research and experience and are used by traffic engineers throughout the United States to help determine appropriate signal locations.

A properly placed signal can improve the safety and efficiency of flow through an intersection. An unnecessary signal can be the source of danger and annoyance to all who use the intersection including pedestrians, bicyclists, and motorists. It can also increase air pollution and cause driver frustration if there is not much traffic on the major street.

Satisfaction of the signal warrants does not necessarily justify installation of a traffic signal. Other, more appropriate solutions should be considered prior to considering installation of a traffic signal. Spacing between signals is always a major concern beyond the basic warranting analysis and should be carefully reviewed before deciding to install a new signal.

*How did traffic signal indications become red, yellow, and green?*

In 1868 the first known gas powered traffic signal was installed in England for pedestrian and horse carriage traffic. In the 1880s red and green lanterns with candles controlled railroad traffic. The railroads decided that red should mean stop and green, go. As motor vehicles became popular, railroad signals were adapted for use on the roads. Garrett Morgan invented an electric traffic signal using the railroad colors of red and green. The first electric traffic light is believed to have been installed in Cleveland, Ohio, in 1914. After the early signals were in use it was determined that a clearance time was needed in order to tell the drivers to slow down. Engineers first decided to turn on both the red and green lights at the same time for a period of three seconds. Drivers thought the red and green looked orange/yellow so the new yellow caution signal was added in the late 1920's.