Other UDOT Traffic Information Brochures:

- Speed Limits
- School Zone Safety
- Left Turn Traffic Signals
- Pedestrian Signals
- Work Zone Safety

For More Information:

Please contact a UDOT Region Traffic Engineer located in your area of the State:

Northern Utah	(801) 620-1600
Salt Lake County	(801) 975-4900
Utah County	(801) 227-8000
Southern Utah	(435) 893-4799

Or visit the UDOT website at http://www.udot.utah.gov

Traffic Signal Safety Tips

For Drivers:

- Never accelerate toward the intersection to "make the light";
- Watch for pedestrians in crosswalks before making a turn — especially a right turn on red;
- Anticipate bikes in your lane.

For Pedestrians:

- If there is a Pedestrian Push Button be sure to use it;
- Make eye contact with drivers before stepping into the roadway and while in the crosswalk;
- Help small children cross the road whenever possible.

UDOT Traffic and Safety

Utah Department of Transportation
Division of Traffic and Safety
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Salt Lake City, Utah 84114-3200

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Traffic Signals

UDOT CONNECTING COMMUNITIES

Division of Traffic and Safety

Traffic Signals

The Utah Department of Transportation (UDOT) has prepared this Traffic Information Brochure to educate concerned citizens interested in learning more about traffic signals.

This brochure describes some of the advantages and disadvantages of traffic signals and provides answers to commonly asked questions about the process for installing a traffic signal.

Advantages of Traffic Signals

When properly used, traffic signals are valuable devices for the control of vehicular and pedestrian traffic. They assign the right-of-way to the various traffic movements and thereby facilitate traffic flow.

Traffic signals that are properly designed, located, and maintained have the following advantages:

- Provide for orderly movement of traffic;
- Increase traffic-handling capacity of the intersection;
- Reduce the frequency and severity of certain crash types, especially right-angle crashes;
- Provide for continuous movement of traffic at a definite speed along a given route;
- Interrupt heavy traffic at intervals to permit other traffic to cross.

Disadvantages of Traffic Signals

Traffic signals are often perceived to be a "cure-all" for all traffic related problems at intersections. Unfortunately this is not the case as unjustified traffic signals can adversely affect the safety and efficiency of vehicular, bicycle, and pedestrian traffic.

Improper or unjustified traffic signals can result in one or more of the following disadvantages:

- Excessive delay;
- Excessive disobedience of the signal indications;
- Diversion of traffic to other roadways (often residential streets) to avoid the traffic signals;
- Increased congestion, air pollution, and gasoline consumption;
- Significant increases in the frequency of crashes (especially rear-end crashes).

Commonly Asked Questions

How does UDOT determine where traffic signals are installed?

An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location is performed to determine whether installation of a traffic signal is justified at a specific location. Traffic signal justification is based upon minimum conditions called warrants, as described in the *Manual on Uniform Traffic Control Devices* (MUTCD).

The MUTCD is a national standard developed by the Federal Highway Administration in cooperation with the states. The purpose of this standard is to ensure uniformity in the design of traffic signals, signs, and pavement markings throughout the country. UDOT installs and maintains traffic signals in accordance with the MUTCD.

The study includes an analysis of applicable factors contained in the following signal warrants and the existing operation and safety at the study location:

- Vehicle and pedestrian volume
- School crossing
- Crash experience.

The satisfaction of one or more signal warrants alone does not justify the installation of a traffic signal. A panel of traffic engineers reviews the study and visits the location to make a decision regarding justification of the signal. If the decision is made that a signal is justified, then the project is programmed for design and construction as funds become available.

What happens once the traffic signal is justified?

The design plans are developed and reviewed at specific milestones. Environmental and right-of-way documents are prepared and public meetings are held if necessary. Once the design plans are completed, the signal project is publicly bid and awarded to an electrical construction contractor to install.

How much does a traffic signal cost?

A typical traffic signal installation costs approximately $150,000. This includes some cost for miscellaneous work items such as sidewalk repair, pedestrian access ramps, and pavement markings which are often required for a new signalized intersection.

How is a study for a new traffic signal requested?

A written request must be made to the UDOT Region Director in your part of the State. You may obtain the appropriate name and address by contacting the local UDOT region office at the numbers listed on the back of this brochure.