



TRAFFIC SIGNALS ON STATE HIGHWAYS

General Information:

Traffic Signals are a vital tool used by the Washington State Department of Transportation to safely and efficiently manage vehicle, bicycle and pedestrian traffic on state highways.

To achieve optimum efficiency, traffic signals must be monitored and adjusted to serve changing traffic patterns. Traffic engineers collect detailed information about traffic patterns, volumes and speeds. Once this data is analyzed, new timing plans are developed and field adjustments are implemented as required.

To maximize traffic flow on arterials and along corridors, closely spaced signals are interconnected, creating coordinated signal systems. Using traffic signals in coordinated systems may benefit society by reducing time delay, and providing improved safety, efficient use of fossil fuels, and reduced air pollution.

Frequently Asked Questions:

What does it take to get a new traffic signal installed?

Traffic counts and accident statistics are the primary considerations for installing traffic signals. When they are installed, traffic signals provide a solution to specific operational challenges, such as stopping heavy flow of traffic on a major roadway to permit crossing movements from intersecting minor streets. When programmed for optimum timing efficiency, signals can increase the traffic handling capacity of an intersection, and can reduce the occurrence of angle, or 'broadside' collisions. However, they are not the solution to all traffic woes. Most people don't realize that accidents can increase when a traffic signal is installed.

Traffic signals cause accidents?

Rear-end collisions usually increase when a signal is installed. Normally, traffic engineers are willing to trade off an increase in rear-end collisions for a decrease in the more severe angle-type accidents. However, when there is no angle-type accident problem at an intersection, a traffic signal may actually raise the number of accidents in a given area.

Is it true that traffic signals always make traffic flow smoother and safer?

No. They only make traffic flow smoother and safer when used in proper situations. Traffic signals cause traffic to stop where it may not have had to stop before. When used at an intersection where not justified, signals can cause frustration in drivers, who then seek alternate routes. These routes usually are not built to handle increased traffic flow. In addition, drivers frustrated by unnecessarily long waits at signals may begin to disobey the law. Traffic control devices are most effective when perceived as reasonable by the motorist, bicyclists, and pedestrians that use them.

When do traffic engineers decide signals are justified?

Usually after lesser forms of control, such as stop signs or yield signs have proven to be ineffective. Then traffic engineers follow specific, uniform guidelines to determine whether a traffic signal is necessary.

What about intersections that don't meet this engineering criteria?

Problems can occur. Signals almost always create overall delay to drivers. In fact, minor side street traffic may experience excessive delay, particularly during off-peak hours. Because of this, drivers may actually avoid the signalized intersection and switch to alternate routes or, to residential streets not designed to handle through traffic. People also seldom consider the cost of signals, both in public funds and out of their own pockets.

Out of pocket costs to me?

It costs the taxpayer \$100,000 to \$150,000 to purchase and install a traffic signal. Electric bills and routine maintenance amount to about \$3,000 a year. Drivers also have increased costs for fuel, time delay, and accidents. This adds to the reasons for installing signals only where clearly justified.

If I think a signal may be needed at an intersection, what should I do?

Contact the appropriate public agency: The Washington State Department of Transportation for state highways, or your city or county public works department for local roadways. Ask the traffic engineers to review available data on the intersection, and to consider initiating a more detailed study to see if a serious problem indeed exists. Talk to them about the possibility of trying lesser forms of traffic control, such as improved signing and pavement markings, or minor intersection improvements to see if that alleviates the problem. Working together on the safest, most appropriate solutions is the best approach to keeping traffic flowing safely and smoothly in our communities.

Who can I contact for more information about traffic signals on SR 169?

You can contact:

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