



## **“Wireless” Traffic Control Solutions**

**APPLICATION:** *Mid-block Pedestrian Crossings - Type 1 & 2 Systems*  
**LOCATION:** *Flagstaff & Lake Havasu City, AZ & Pateros, WA, U.S.A.*

### **Description**

The need for mid-block pedestrian crossings for Department of Transportation agencies, from the state to the municipal level, has been met with increasing efficiencies for LED traffic safety devices, and with an ample array of choices for addressing pedestrian crossing solutions.

In general, three basic approaches cover most Ped-X applications. Type 1 is a simple crosswalk system with sensors or buttons at the crossing point and radio activated flashers in advance of the crosswalk.

A Type 2 crossing has the warning devices immediately at the crosswalk with or without advance flashers.

Type 3 systems employ In-Roadway Lighting (IRWL) to outline the crosswalk with lamp assemblies in the pavement. For more information on Type 3 systems, please see Area & In-Roadway Lighting under Specialty Systems.

These basic system types can be customized easily to adapt to specific project needs

### **Type 1 Systems**

A Type 1 system activates the warning devices at the crossing point. Typically these will be vandal-resistant push buttons yet in many cases can be pedestrian detectors such as microwave, PIR, a combination of the two or a pedestrian detection mat.

In Pateros, Washington, the need was for a pedestrian-activated beacon on a two-lane state highway where a park and a few residences were located across the highway from the main section of town. The activation device is a Polara Bulldog pedestrian button. The advance flasher units consist of a single 12-inch amber DC LED to warn oncoming traffic of pedestrian activity.

### **Type 2 Systems**

These consist of a minimum of two poles located immediately at the crosswalk, each with a button or detector to activate the system. Note: the radio communications in these systems is two-way. It is also possible to place a time switch in one of the units and operate the unit both as a time of day flasher and a pedestrian-activated flasher.



*Pedestrian-activated beacon in Pateros, WA*



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A Type 2 system on London Bridge provides pedestrian safety for tourists on the bridge.

London Bridge was built in 1831. In 1971, the bridge was dismantled, reconstructed, and rededicated in Arizona, USA and presently spans Lake Havasu in the middle of the Arizona desert. The city of Lake Havasu has installed multiple units around town for mid-block crossings.



*London Bridge - Lake Havasu, AZ*

Another example of Type 2 equipment is a split crossing with a protected pedestrian island in the middle. Flagstaff, Arizona, had a need for a mid-block crossing from a residential area along a busy street to Northern Arizona University. Since traffic volume is higher in each direction with the time of day and there was a median, a protected pedestrian crossing was created to allow pedestrians to complete the crossing as two shorter individual crossings rather than one long crossing.



*Protected pedestrian island - Flagstaff, AZ*

These examples illustrate many of the applications which can be done affordably to enhance pedestrian safety with current technology. Furthermore, they are energy efficient, can be solar powered and highlight the benefits of solar technology: no trenching, no boring, "green" and with reduced costs both initially and over the operating life of the systems.

### **Take these steps to insure the success of your solar-powered project:**

1. Location - identify the site of the application; for example, the nearest town, village or city and state.
2. Load - specify the number and size of lamps, timers or other controls (anything which draws power).
3. Duty Cycle - determine how many hours per day and which days per week the load will be drawing power.

Go to "**Send us your requirements**" at [SolarTrafficControls.com/support/requirements.php](http://SolarTrafficControls.com/support/requirements.php) for details.

### **Solar Power: a free source of energy**

STC's solar-powered systems are designed for quick and easy installation in the field. Our careful front-end engineering minimizes your installation costs and provides years of trouble-free operation. The standard solar power system includes the solar array, system enclosure with all the necessary electronics, color-coded wiring harnesses, sealed batteries and full documentation. DC LED lamp kits can also be purchased. These include the LED beacon, lamp housing and mounting hardware.

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