



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

**APPLICATION:** *School Zone Beacons with TrafficCalm DFB Signs*

**LOCATION:** Surprise, AZ, U.S.A.

### **Description**

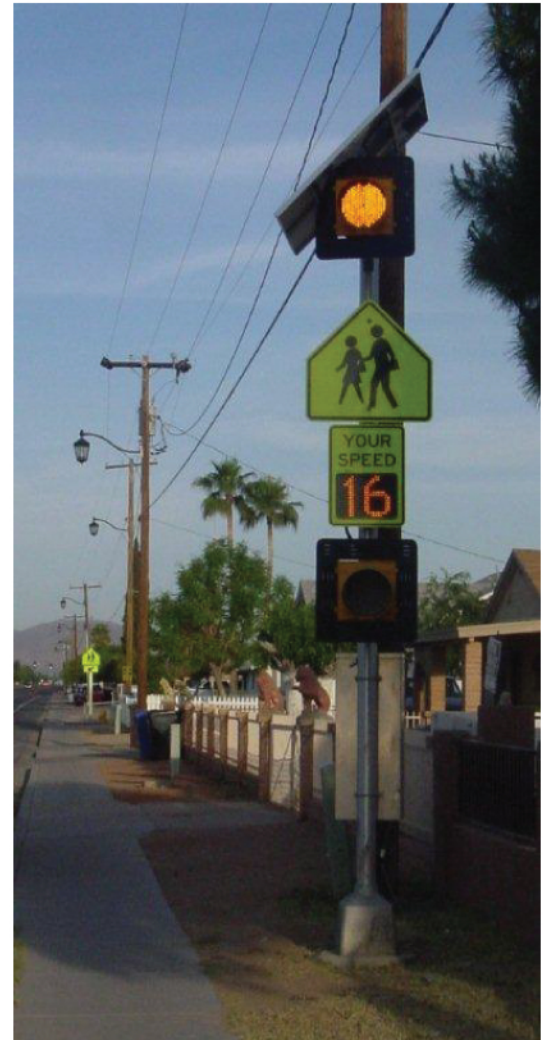
Surprise, AZ has long been a user of STC flashing beacon products for school zone and pedestrian safety projects, as well as emergency vehicle exit signals. In an effort to enhance school zone safety in a particularly busy school zone, the city called on STC to upgrade an existing solar flashing beacon system with Driver Feedback (DFB) signs.

Since the design of any successful solar-powered system is dependent on three things — location, load and duty cycle — Surprise personnel knew in order to increase the load, an adjustment to either the solar-powered system or duty cycle would have to be made.

Surprise selected the 9-inch DFB from TrafficCalm for the feedback device. This defined the revised load for the system. STC had furnished the solar flashing beacon system several years ago which had been designed for a higher duty cycle than the school was currently using or intended to use in the future. As a result of the small increase in the load and the available duty cycle, no changes to the power system were necessary.

STC Applications Engineer Jimmie Dixon assisted Surprise personnel with the installation of the sign and the supporting equipment. As the sign is equipped with an internal scheduling function, the city opted to continue using the original STC-01 time clocks to run the systems and keep their control configuration consistent with the rest of the equipment throughout the city.

Studies by local engineering companies performed on completed STC projects have shown that by combining school flashers with radar signs tends to have a greater impact on driver compliance with posted speed limits in school zones. STC can work with agencies to look at options for upgrading existing beacon systems to incorporate DFB packages or to furnish new systems with either 9-, 14- or 15-inch DFB signs from TrafficCalm (<http://www.trafficcalmsystems.com>).



For more information on STC systems combining both flashers and DFB signs, go to:  
[http://www.solar-traffic-controls.com/pdf\\_datasheets/School\\_Radar\\_Flasher.pdf](http://www.solar-traffic-controls.com/pdf_datasheets/School_Radar_Flasher.pdf)

**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 [www.SolarTrafficControls.com/support/requirements.php](http://www.SolarTrafficControls.com/support/requirements.php) for more 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.

**STC Systems are Cost Effective**

Our solar flasher systems allow you to stretch your budget to obtain the traffic safety devices you need at affordable prices. Most systems are equivalent to the cost of obtaining an AC power drop. Battery life is typically three to six years; less expensive than grid electricity for the same period of time.

Solar Traffic Controls (STC) provides solar-powered traffic control systems for city, state and federal DOTs; police, firefighting and public works departments; facility maintenance and plant safety industries. Our primary products are solar-powered flashing beacon systems used for school zones and 24-hour applications. We also supply specialized flasher systems using environmental sensors and custom communications packages to control the flashing beacon systems. Our product spectrum also includes wireless power systems for ITS, EMS and HAR. STC's products and services are sold through a network of regional distributors who offer technical support for your project.

**For more information:** Solar Traffic Controls, LLC • 1930 East Third Street, Suite 21 • Tempe, AZ 85281-2929 USA  
Tel: 480.449.0222 • Fax: 480.449.9367 • [info@solar-traffic-controls.com](mailto:info@solar-traffic-controls.com) • [www.solar-traffic-controls.com](http://www.solar-traffic-controls.com)