Western Systems
Innovative Transportation Solutions

CASE STUDY

IMPROVING SAFETY IN SCHOOL ZONES

Western Systems partnered with Washington County to bring 150 school zone flashers under one smart system

SCHOOL ZONE FLASHERS ACROSS WASHINGTON COUNTY

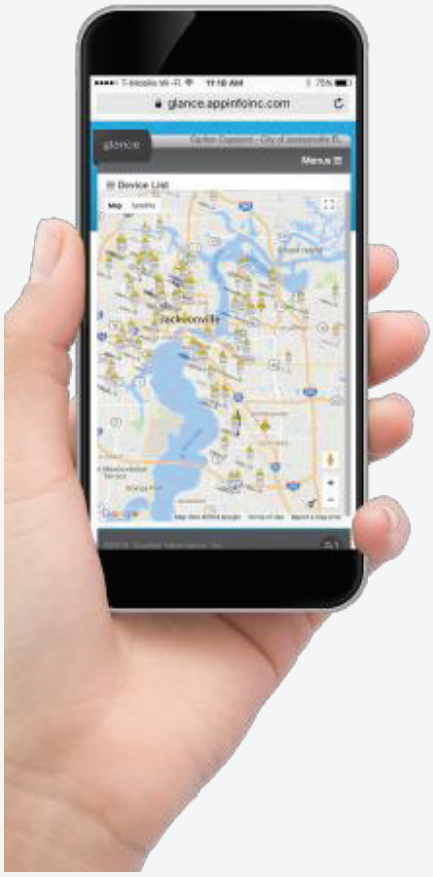
School zone beacons seem like a minor amenity to the public but managing them is no small task. Flashers need to be scheduled by the district—or by the individual school. Power and backup power need to be constantly monitored, and the bulbs themselves need routine replacement.

And when the goal is keeping children safe—the stakes are high. Managing a few dozen school flashers requires streamlined processes and reliable hardware. Washington County, Oregon, manages about 150 school zone beacons across the county.

IMPROVE EFFICIENCIES AND ENABLE PROACTIVE MAINTENANCE

With 150 school zone beacons to monitor and maintain across the entire county, County staff knew that their team needed an efficient system. Until recently, the flashers were working on a pager-based system, which required a lot of time to maintain. The agency struggled to keep up with battery backup maintenance and programming each new school year took a full month to complete. Additionally, without any kind of remote monitoring, it made maintenance very reactive: chasing battery issues based on calls from the public.

Washington County needed a smarter solution for monitoring, maintaining, and programming their school zone flashers.



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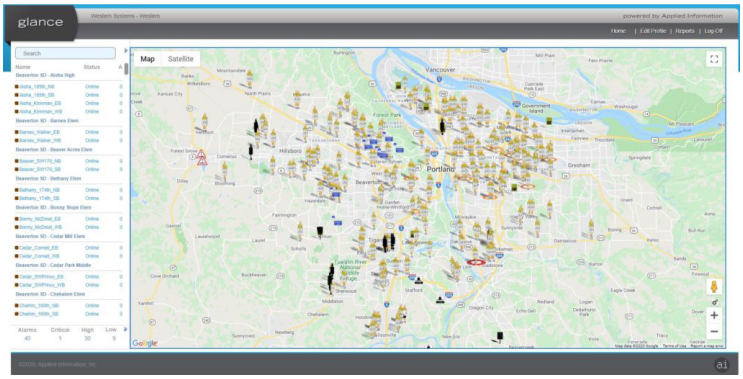
A CLOUD-BASED PLATFORM THAT PLUGS INTO EXISTING HARDWARE

Western Systems worked with Washington County to design a solution that would upgrade existing hardware to work on a remote monitoring system. Applied Information's Glance system was the perfect platform for the job.



Glance is a cloud-based solution designed for school zone beacons. It enables remote scheduling, smart alerts for user-defined criteria, power monitoring, and lamp failure warnings. Glance works with existing hardware, with the addition of a small device that fits into the cabinet, so installation is simple.

Western Systems helped facilitate planning and procurement for the system upgrade, so everything was ready to launch at the beginning of summer. One hundred and fifty beacons were upgraded and ready to perform in time for school that autumn.

IMMEDIATE EFFICIENCIES AND INCREASED FLEXIBILITY

The benefit of the new system was felt almost immediately as programming 150 flashers for the new school year took only two days.

Remote monitoring and alerts at every beacon has also dramatically reduced the amount of staff time required for maintenance because teams don't need to be dispatched for unnecessary checks. Remote monitoring has also finally enabled Washington County to be proactive in maintaining flashers—reducing the number of incoming calls from about 50 each year, to less than 10.

All of those new efficiencies, of course, translate to cost savings for the county and the local agencies they work with. The remote monitoring capabilities has helped to improve the reliability of the system and the traveling public and County staff trusts that these flashers are on and operating at the correct time. The types of improvements are helping the County build goodwill towards their ITS program and helping them gain support from the traveling public.

The new system is also helping the agency be more responsive to emergencies and changes. When COVID-19 shut down schools in Washington County, they were able to turn off 150 flashers, county-wide, in one day. As schools reopen, Glance will make it easy to re-engage the beacons and alter the schedules as needed.

School zone safety is just one of several custom projects that Western Systems has facilitated for Washington County. Learn how our solutions experts and engineers helped The Washington County team improve safety and increase efficiencies in flood zones and snow zones across northwest Oregon as well.