



Case Study

Data Connectivity for Traffic Management System

A county highway department in Wisconsin rolled out an initiative to begin using a new traffic management system. This new system required the use of cameras to monitor vehicle traffic, rather than traffic sensors installed underneath the pavement to trigger light changes. Using just one bird's eye camera at each intersection, the camera monitors the traffic in all directions. The system can then adjust the signal latency depending on the flow of the traffic.

By using this new system, the county no longer had to replace any pavement to maintain the existing inductive-loop pavement sensors. It also provided a less expensive alternative and allowed the county to add new traffic signals when they needed to.

This new traffic system required the use of a reliable data connection so the county can access data remotely. By having a data connection present at each system terminal, highway department staff can see traffic in real time and manage traffic data such as detection zones and monitor complaints and traffic counts. It also allows them to receive email-generated reports on traffic information and activity.

Cellcom was able to provide the county with a device from Cradlepoint that can be specially configured for remote access to the traffic terminals. The Cradlepoint IBR1 100 provided a reliable 4G LTE high-speed cellular data connection, which allowed for the intersections to be connected no matter their location.

By using a reliable data connection from Cellcom, highway department staff can now remotely manage multiple terminals from a central location. This new system also helps the county save on costly truck rolls. If someone reports issues with traffic flow or traffic lights not working properly, by simply logging into the system, staff can verify real-time traffic activity and see if lights are working normally. This allows them to check first before sending someone out to resolve an issue.

Equipment & Service Used:

- Cradlepoint IBR1 100LPE
- weBoost Mini Cellular Antenna
- Static IP Address
- AC Power Supply
- 5GB Government Mobile Broadband Plan