INDECT'S VEHICLE COUNT SYSTEM, WAYFINDING SIGNAGE AND CELLULAR COMMUNICATIONS IMPROVE CUSTOMER PARKING EXPERIENCE AT MINNESOTA'S LARGEST PUBLIC PARK.

Situation

Como Park, in St. Paul, Minnesota, is a large public park sprawling over 759 acres to serve a golf course, zoo, botanical conservatory, and small amusement park. Como Park has four major lots totaling 648 individual parking spaces that are primarily used for these attractions. The park also has a few additional smaller lots that are used for other amenities.

During peak seasons, traffic to the facility is very heavy. Visitors often drive around for long periods in search of a parking spot. During peak hours parking becomes either scarce or completely full — forcing visitors to park at a remote lot and take a shuttle back over to the Park.

Project Goal

The City of St. Paul wanted to improve the experience to visitors and reduce carbon emissions by parking vehicles quicker and easier in the four lots surrounding the major attractions.

Specific Challenges to Overcome

- Ability to count the number of vehicles in each lot to determine if there is any available spaces
- Vehicle counting system from each lot must be accurate — 97%+ accuracy to provide the best experience
- Install a "Wayfinding" signage system to easily direct and guide visitors to all four lots with available parking spaces —quickly indicating whether a parking lot is "FULL" or "OPEN"
- Direct visitors to the remote shuttle lot if all the attractions parking lots are full

Solution Overview

The solution to the project integrated three technologies to achieve the intended goal and overcome visitors' parking challenges. The results were immediate. During the park's peak season, an average of 3,000 cars per day used the parking lots featuring the more efficient parking guidance system — with no recorded issues.

Vehicle Count System – Park Officials chose the INDECT's Vehicle Count System due to its high degree of accuracy and excellent durability. Software for the system required the ability to be operated remotely. City officials' offsite needed the ability to review the lot counts at any time and make adjustments to lot status based on events. This was achieved using INDECT's powerful software and a remote desktop platform. INDECT software provides a dashboard of real-time status overview of the entire facility, as well as each individual lot. The count system is used by onsite staff to increase shuttles when lots are getting full. The software also provides history reports by the day, hour, minute of capacity, lot ingress and egress, peak times, and a variety of others.

Wayfinding Signage – To provide visitors a clear indicator of the status of each parking lot, wayfinding signage was installed in strategic locations throughout the park. These signs indicate either "OPEN" or "FULL", depending on the lot's occupancy status. The signs were synced with INDECT's software to ensure the lot counts were accurate in real time.

Cellular Communications – Critical to "real-time" vehicle counts and up-to-date Wayfinding information, it was important to establish a communications network as part of the design. Como Park is a very large park rolling over small hills containing patches of dense trees. An initial study found that hardwiring and/or Wi-Fi would be costly and difficult. The design team determined that cellular communications between field devices and the central server would be the most efficient solution.

To request a copy of the full white paper detailing this project, email Stephen Evans at s.evans@indect.com.