Case Study

City of Perth Parking

Introduces ticketless car parks with Genetec AutoVu Automatic License Plate Recognition (ALPR)



Major Australian city leverages AutoVu ALPR cameras to streamline parking, reduce environmental output and cut costs

Business challenge

City of Perth is a local government area and body, within the Perth metropolitan area, which is the capital of Western Australia. While the City's population has reached just over 21,000 people, its central location and growing business district draw in a workforce of 124,000 people who commute into the city daily from surrounding areas. For these reasons, the City's parking unit, City of Perth Parking (CPP), offers 34 car parks which accommodate over 11,000 parking bays. A limited number of monthly permits are allocated to each car park, and the remaining parking spaces are reserved for transient customers.

Over the years, City of Perth Parking has become known as 'The Greener Place to Park', implementing many initiatives to reduce its environmental impact. So when the opportunity for a ticketless gated parking application was made apparent by using Automatic License Plate Recognition (ALPR) technology, Patrick Abernethy, Manager for City of Perth Parking was eager to start a trial.

"For a ticket-operated car park, a customer needs to stop at the boom gate, press a button, retrieve a ticket and then the boom gate will open and they can proceed," he said. "This process takes about 15 seconds, and on the way out, it can take even longer as people do not always have their ticket ready. We wanted to speed up the entries and exits, reduce Co2 emissions from vehicles that are idling at the gates and reduce the costs and waste associated with tickets."

In search of the most effective ALPR solution for its parking application, CPP relied on the expertise of OPS Australia Pty, a local Genetec distributor and its integrator partners, and chose Genetec AutoVu ALPR system. According to Abernethy, the unified offering from Genetec was a vital factor in the selection: "Many organizations in Australia were already using Genetec solutions. We also wanted to upgrade our video surveillance and access control systems within the car parks. Genetec Security Center was an easy-to-use solution that offered all three systems within one unified platform."

Ticketless Parking Saves \$25,000 Annually per Car Park

After the first trial, CPP was confident in its selection of Genetec Security Center with AutoVu ALPR. Today, the City has two car

Summary

Client name: City of Perth Parking

Organization size: 98 employees

Industry: Municipal Parking

Location: Perth, Australia

Products: Security Center, AutoVu, Omnicast & Synergis

Partners: Hills OPS Australia Pty, Axis Communications, HID Global,

Hub Parking Technology

parks that are fully functional, and another three on the verge of being operational.

"There is no more stopping at the boom gates. The AutoVu ALPR cameras read the license plates of incoming vehicles and the gate opens— it's all so seamless," explained Abernethy. "There are also no more lost or wet tickets, since all license plate information is digitally stored. Our customer service has definitely been enhanced."

The City of Perth Parking has also experienced a tremendous savings in the management and operation of car parks—not just on the tickets themselves, but also concerning all the associated costs such as printer heads, ink ribbons, jams and maintenance. According to Abernethy, "We are saving about \$25,000-\$35,000 AUD per car park annually."

When vehicles enter a car park, the AutoVu Sharp ALPR camera automatically captures the license plate, along with a time and date stamp, as well as a full colour image of the vehicle and prompts the boom gate to open. AutoVu then sends that information back to the Genetec Security Center platform which is managed by operators from a central monitoring station. Thanks to its open architecture, Genetec Security Center is openly integrated with a DATAPARK parking management system, allowing both systems to sync databases of transient customers and monthly permit holders in real-time.

"When a customer is ready to leave the car park, they simply enter their license plate number at the DATAPARK pay station or the



approximate time they entered the car park," elaborated Abernethy. "For the latter, the pay station will display a colour image of all vehicles around that entry time so they can select their vehicle and pay whatever is owed."

Upon leaving, another AutoVu Sharp ALPR camera captures license plates of outgoing vehicles, raising the gate to vehicles that are associated with a paid transaction or a monthly permit. If a vehicle has not paid, a digital signage triggers the following message: "Please pay at the pay station". In the event that there is a mishap, drivers can prompt an intercom button, which sends an alarm within Security Center. Operators can then engage in a two-way conversation to resolve the issue at hand.

ALPR information and unified security offers more tangible benefits

Apart from enhancing customer service and becoming even more 'green', the AutoVu ALPR system has provided CPP with valuable tools to improve operations and help local law enforcement with occasional investigations.

"We do a lot of reporting to see how many vehicles are entering our facilities and how long they are staying, which helps us identify opportunities for parking improvements around the city," said Abernethy. "Also, when law enforcement needs assistance in an investigation, we are able to conduct searches using the license plate number to identify what time the vehicle entered and left, and provide a colour image of the vehicle and sometimes even the driver."

Since the City of Perth Parking also undertook a full video surveillance and access control upgrade by implementing the unified security platform, Security Center, other benefits have ensued. One example has been the ability to schedule automated access control lockdown of car parks at closing hours, eliminating the need to have someone physically secure all doors. If there is a potential break-in or access-denied event, an alarm is prompted in Security Center with the associated video so that operators can respond accordingly.



Moving ahead with more ticketless car parks and better service

Since the CPP has seen significant savings by moving to a ticketless parking application, eventual expansion across all other car parks is in the plans. Shortly, CPP will also be offering a mobile app service whereby transient parking customers will be able to pre-book a bay within specific car parks. Information will be automatically sent to both the DATAPARK and AutoVu systems, and added to a permitted database which will allow them to come and leave without hassle.

"Moving to a ticketless gated parking application with AutoVu and DATAPARK has helped us save money and live up to our green-friendly reputation, all while offering our customers a more seamless parking experience. Choosing Genetec Security Center also gave us the ability to work from one platform for all three solutions, which has been so much easier and efficient for our operators than what we had before," concluded Abernethy.

Infrastructure at a Glance

Two AutoVu Sharp ALPR cameras are installed at the entry and exit of each car park to capture the license plates of vehicles entering and departing. All information is sent over a city-owned fiber optics network back to Genetec Security Center, which is synched to the DATAPARK parking management system, from HUB Parking Technology. DATAPARK pay stations are also integrated with Security Center, ensuring real-time accuracy when vehicles approach boom gates. HID Global iCLASS SE® access control readers and VertX EVO V1000 networked controllers were chosen for the approximately 30 doors per car park, and about 300 network cameras from Axis Communications (AXIS P3363-VE, AXIS Q6032-E, AXIS P5534 and AXIS P3354) were selected for video surveillance coverage.