Case Study

University of British Columbia

UBC boosts parking compliance for 8,000 spots with Genetec™ AutoVu™ ALPR System

Point grey campus relies on AutoVu™ license plate recognition technology for more efficient parking enforcement and scofflaw identification

Business challenge
Established in 1915, the University of British Columbia (UBC) is the oldest higher learning institution in British Columbia, Canada, and enrolls over 10,000 students every year. Its main campus is located just outside the downtown core of the city of Vancouver, and spans more than 400 hectares. While the University is a proud supporter of sustainable travel, UBC Parking Services offer approximately 8,000 parking spaces to students, faculty and staff members who commute by car. The parking spaces are spread across three main surface lots, nine small lots and six parking garages.

UBC Parking Services had been using T2’s Flex Permit Management system to issue and manage a variety of different decal permits for their campus lots. While the T2 system provided tremendous flexibility in the types of permits that could be issued, enforcement had become challenging. Visually identifying physical permits on car dashboards or finding vehicles with unpaid fines was a long and unproductive task and issuing the printed decal permits also consumed valuable staff resources.

With a focus on increasing parking compliance and simplifying the enforcement process, UBC evaluated the market for more efficient options. This search led them to STANLEY Security, a global system integrator with local offices in Vancouver, to implement a new license plate-enabled parking (LEP) system build around AutoVu™, the automatic license plate recognition (ALPR) system from Genetec™.

License plate-enabled parking simplifies registration and enforcement
AutoVu™ has allowed UBC to move away from issuing physical permits. This has significantly reduced administration time and costs and has simplified the registration process for university customers who now use their license plate numbers as their permits when registering online or in person.

Since the AutoVu™ ALPR system can dynamically synchronize data from numerous third-party parking technologies and systems, UBC was able to easily integrate their existing T2 system to create a fully-supported license plate-enabled parking system.

According to Brian Jones, Director of Parking and Access Services at UBC, “The use of Genetec™ ALPR technology dovetails nicely with our self-serve parking. We are leveraging the technology to support efficient use of the available resources, and to complement what already exists. We have streamlined the process, so there is significantly less hands-on work in terms of permit management.”

Summary

Client name: University of British Columbia
Organization size: 15,000 employees
Industry: Education
Location: Vancouver, Canada
Products: Security Center, AutoVu™
Partners: STANLEY Security Solutions, Digital Payment Technologies, Motorola, T2 Systems

Going gateless saves UBC over $4 million and 150,000 lbs of greenhouse gases annually
Parking operators leverage ALPR technology to simplify the enforcement task, minimizing the search for physical stickers, and covering more parking lots in less time. AutoVu™ Free-Flow has also been implemented to optimize enforcement routes and maximize resources. With a fixed AutoVu™ camera mounted at the entry and exit of parkade lanes, the system tracks vehicles entering and exiting the parking lot, and automatically alerts enforcement officers to vehicles in violation; these include vehicle owners who have not paid, vehicles that have not left the lot once their allotted time has expired, and vehicles with prior parking violations.

Enforcement teams can then pull violation reports and plan their routes according to the number of actual violations in each lot. AutoVu™ Free-Flow also provides real-time lot counts so that UBC can use key performance indicators to either improve overall parking services, or direct traffic to available parkades when an influx of vehicles is expected.

“By going gateless with the AutoVu™ ALPR system, we have improved our enforcement productivity by 40%, deferred $400K..."
in capital expenses on gate barriers, and reduced operational costs by $200K for each parkade. We have also been able to reduce our greenhouse gases by 150 lbs per day, since there is no more idling at entry and exit gates,” explained Jones.

**AutoVu™ pay-by-plate for transient parking improves customer service**

The expansive compatibility of AutoVu™ with other parking technologies has enabled UBC to install a number of Luke II multi-space meters from Digital Payment Technologies to manage short-term pay-by-plate parking, offering greater convenience to end users instead of pay-by-space parking. Students and guests simply enter their license plate information into the meter, select the amount of time, and pay. Mobile device payments are also supported, ensuring easier and improved service for end users. All database updates and information is wirelessly synched, so UBC operators are always enforcing current information with AutoVu™.

“For transient parking, it’s all about the vehicle now, and not the location. Customers no longer need to remember and enter location details or walk back to their vehicle to display a receipt – it’s as simple as entering their license plate and walking away. We’ve provided a huge boost in customer service,” said Jones. “That’s the beauty of ALPR and pay-by-plate technology — we have unified parking management with tremendous flexibility.”

**Short ROI ensures a solid investment for UBC**

The implementation of the AutoVu™ ALPR system has been so successful, that the University has been able to recoup its investment, mainly by encouraging better compliance. “AutoVu™ has been really helpful in terms of heightening compliance and getting people to pay for their permits, if they were not previously doing so. In turn, this had led to a quick return on investment; probably in less than 6 months,” said Jones.

While UBC primarily wanted to boost productivity with the ALPR system, Jones sums up all the benefits for Parking Services in a concluding statement: “Firstly, our partnerships with Genetec™ and STANLEY Security were invaluable in streamlining the adoption of this new technology. AutoVu™ has one of the shortest ROIs that I have seen and the investment is very solid. The system integrated very nicely with our existing T2 system, and it gives us a customer-centric, unified and simplified parking management platform. It’s just money well spent in a cash-strapped environment, and is fantastic for the user.”

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**Infrastructure at a Glance**

AutoVu™ within Security Center, the unified security platform from Genetec™, has been fully integrated by STANLEY Security with the T2 Flex Permit Management system as well as 44 Luke II meters from Digital Payment Technologies. One car is equipped with two AutoVu™ Sharp ALPR cameras and the other vehicle is outfitted with two SharpX cameras. 4 Sharp fixed cameras are installed at entries and exits of parkades to enable AutoVu™ Free-Flow. Laptops run the in-vehicle AutoVu™ software for University permit and transient parking enforcement and scofflaw identification and Motorola handhelds are used for citations. An online registration and payment platform is offered to customers, as well as a pay-by-phone application.