CASE STUDY

Improving the Campus Parking Experience at a College Campus

MPS Intelligent Infrastructure

Background

College campuses are the center of activity for hundreds or thousands of undergraduate and graduate students, faculty, staff and community members.

With a constant stream of visitors, contractors and sporting, cultural and community events taking place on campuses, administrators view parking as an issue that strongly impacts the quality of campus life. It also has a major influence on visitors' perceptions of a college. For many college campuses, their existing parking systems are found to be cumbersome for parkers and become increasingly more difficult to manage due to the expansive, outdated systems.

Administrators wanted to:

- Improve the quality of the parking experience on campus.
- Eliminate waiting time to enter and exit garages and lots on campus.
- Grow parking revenues by segmenting numerous user groups: students, weekend users, evening users, contractors, and other VIP groups.

Lastly, it was very important for the university to reduce the administrative burden on staff and eliminate many of the tasks associated with parking administration that were time-consuming, but not adding value.

KEY CHALLENGES

An extremely busy college campus with an outdated, cumbersome system, was looking for solutions to improve their parking experience, eliminate wait times at garages and lots, and grow parking revenue.

KEY BENEFIT

The MPS Sentry Total System Solution provided the college campus with a better parking experience and increased parking revenues - all with lower administrative costs.

The Challenge

Administrators identified **five key factors** affecting the quality of the parking experience at the college campus. The new parking solution would need to address all five factors.

1. **Upgrading an outdated payment system**. The token-based parking system at the college campus was slow and inconvenient for parkers who had to walk to and from payment stations. Faculty and staff could not perform self-serve actions to receive and assign parking permits and had to manually enter and release permits.

2. **Automating enforcement, communication and improving access to data**. The campus parking enforcement team struggled with resource challenges and the manual methods used to enforce campus parking 24 hours, 7 days a week. Administrators were also frustrated because the current system didn't produce reliable data on parking usage, payment information and financial reconciliation.

   They were unable to recover parking fees from event sponsors, provide targeted customer communication (such as potential student guest pass for parking) or implement fair or variable pricing strategies.

3. **Elimination of entry and exit wait times**. With new "gateless" designs becoming more popular at other colleges and universities Administrators wanted to eliminate gates to improve the parking experience. The surface lots and garages were mostly single entrance/exit, with egress onto busy roads. Parkers at these facilities experienced congestion and safety issues at exits, especially during peak usage times and large events. Quicker, more efficient entry and exit actions were necessary to improve parker convenience and safety. Gate hardware was often unreliable and subsequently vandalized by frustrated parkers, resulting in loss of parking revenues, data and statistical information such as occupancy or dwell times.

4. **Meeting the needs of a mixed parking audience.** The campus serves a mixed parking audience including permit holders, day and event parking customers, as well as contractors. Administrators wanted to provide each category of parker with an easy, convenient parking experience that generated a more positive experience and view of the college.

5. **Reducing or switching to a more cost-effective permitting system.** The college was licensing an industry standard database for administering permits that was costly. MPS offered to provide most of the same functionality at no additional cost.

The Solution

In early 2021, the college implemented the MPS Sentry Total Gateless System Solution at their campus. The Sentry system incorporates:

- Highly efficient License Plate Recognition (LPR) technology.
- Physical components with a small footprint.
- Easily installed digital kiosks and cameras.
- A web-based management system with tools and mobile applications that provide advanced reporting and data analytics which enables administrators to monitor, customize and control every aspect of the campus parking experience. Initial deployments at the campus included a 500 space garage and 250 space surface lot. Upon initial success of these implementations, the engagement expanded to include 13 additional lots and garages within the campus system. These mixed-use parking facilities totaled nearly 2,000 spaces. The MPS Sentry Total System is built in a way so that it can be specifically tailored to meet each college's unique needs and requirements.

MPS Sentry Total System Solution

- ✓ Better Parking Experience
- ✓ Increased Parking Revenues
- ✓ Lower Administrative Costs

FINANCIAL BENEFITS

4X
INCREASE IN GROSS REVENUE

+20%
PAYMENT COMPLIANCE IMPROVEMENT

+3000%
SUPERIOR ENFORCEMENT EFFICIENCY (IN DEC 20)

4:1
VENDOR CONSOLIDATION

99%+
REDUCTION IN MAINTENANCE BREAK-FIX EXPENSE

99.99%
SYSTEM UPTIME

MPS
Intelligent Infrastructure

The Outcome

Administrators report that parking on the campus is now easier, safer and more hassle-free than ever before. A few highlights of how the Sentry Total System Solution is benefiting campus parkers and administrators include:

Lower operating costs.
Total costs were returned by thousands of dollars.

Ease of use.
Parking at the college is now paperless and payment on entry or exit is easy.

The new system enhances the university's image.
The quality of the new technology-based and easy-to-use parking experience supports parkers' perception of the college as a forward-thinking, progressive institution.

The parking experience is easier with LPR.
LPR and License Plate-based permitting produces easier payment options and greatly reduces queuing and congestion at entry and exits. The parker experience is now quicker, easier, and safer - even for large events.

The parking experience is tailored to each parking audience.
Administrators can easily customize parking privileges, pricing strategies and automate communication to individuals or special groups of parkers.

Parking revenues increased significantly.
Automated LPR enforcement and easy payment technologies streamline collections resulting in automated creation and processing of citations. The system's different operating modes (normal, small events, large events) provides accurate revenue recovery from event sponsors, something that was previously very labor intensive and almost impossible to track.

Parking administrative costs are reduced.
The college reports that the system has enabled significant reductions in dedicated parking administrative hours. LPR technology yields useful, easily manipulated data that supports efficient customer service and facilitates management of the campus parking system.

THE MPS SOLUTION FEATURES:

- Hard-wired, Internet connected parking system yields near 100% uptime
- Advanced automated license plate recognition capability throughout the parking system
- Vision Technology and AI are combined with a sophisticated back-end software management platform to automatically photograph and register every parking session and document violations
- Flexible, easy-to-read large LED screen customer interface, enabling additional notification services to city such as safety messages and business advertising
- Multiple language customer interface capability
- Touchless auto-pay option for parkers
- Real-time, open space identification for customers; system can also provide parkers with turn-by-turn directions from Sentry smart phone app
- MPS personnel review every violation for quality assurance prior to presenting the violation to city parking enforcement officers for verification and ticket issuance
- Manages ticket mailing and violation collection services
- Increases community safety with cameras located on every parking meter and SafetyStick™