

# Case Study

## Parking & Access Control

### California University of Pennsylvania

#### Providing RFID-enabled Hang Tag Parking Services

Founded in 1852, California University of Pennsylvania is a member of the Pennsylvania State System of Higher Education. With more than 9,400 students located in the town of California, about 35 miles south of Pittsburgh, the Department of Parking and Transportation manages a new parking deck with five levels and 660 spaces, which supplements four gated surface lots, with more than 1,000 spaces for student, staff and visitor parking.

#### Getting Control

As parking requirements continued to expand, a parking master plan was developed. The plan included constructing a much needed parking deck, and adding modern RFID-based AVI (Automated Vehicle Identification) technology, to better manage this growing area.

The system was also required to be integrated into the existing hang tag parking permit system. The system schedule was also challenging, including final selection of technology and installation partner.

A search of competent RFID installers found that CTR Systems, based outside of Pittsburgh in Warrendale, Pennsylvania, had extensive installation and service experience. CTR was selected to implement a RFID-enabled hang tag-based system which was a perfect for this parking application.



#### At A Glance

**Goal:**

Enhanced management of parking access into specific parking facilities, including surface lots and a new parking deck

**Scope:**

California University of Pennsylvania provides a hang tag-centric parking system, with more than 1,600 controlled parking spaces.

**Solution**

Implementation of TransCore's RFID-based automatic vehicle identification (AVI) parking and access control system, featuring RFID-enabled Hang Tags.

**Results:**

Parking management improved significantly. Improved enforcement. Enabled quick system-level access changes for reassignments and events.

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## Executing an Aggressive Plan

The new system was successfully implemented in a few months in August 2010, in concert with the opening of the new parking garage in time for the fall semester.

All surface lots were installed in the same late August timeframe. Integration with the hang tag management and distribution went very smoothly. Most of the new hang tags have been ordered via the existing on-line ordering system. Presently, all hang tags on campus are RFID-enabled.

## AVI System Profile

- ▶ 16 TransCore Encompass® 4 Readers are installed
- ▶ 6,100 hang tags are deployed

*The RFID-enabled hang tags are produced by Toledo Ticket, of Toledo Ohio, using technology from TransCore, the RFID parking industry leader.*

## System Results and Benefits

A significant improvement of parking management and control has resulted. From a central operations office, the access profile of a tag can be modified in almost real time. This will allow fast parking reassignments when necessary. It is also anticipated that a high degree of tag re-use will be evident. New assignments will be reflected in the data base using the same tag, without requiring the issue of a new tag, as was done in the past.

The new hang tag will be much harder to counterfeit than the old bar code-based paper tags. Overall enforcement and customer service is enhanced, and TransCore's RFID Hand Held Reader may offer an opportunity for even greater improvements.

*"We experienced a very smooth integration into our hang tag program. The system continues to work very well in both the parking garage and surface lots, providing significant operational and enforcement benefits."*

**Chris Johnston**

Executive Director, Parking and Transportation Services

## Vision for the Future

Since most on-campus vehicles will be outfitted with the new hang tags, they can be read by strategically located street-side readers to collect traffic data. This will provide valuable data to analyze traffic patterns and assess capacity as a new loop road is under construction on campus.

Traffic management will also be critical when a new 6,000 seat Convocation Center opens in 2011, the largest in the region. Increased non-university traffic for many new events will be experienced. The RFID-enabled hang tag offers a unique solution for a VIP and Seasonal parking system.

*CTR Systems specializes in sales, installation and maintenance of TransCore AVI-based Vehicle Access Control and Parking Revenue Control Systems. They designed and implemented the AVI hang tag-based parking control system referenced here.*

**For more information:  
Call 800.923.4824  
[transcore.com/rfid](http://transcore.com/rfid)**

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