

CASE STUDY



Phoenix Sky Harbor Airport—Arizona

TCS International has received acclaim as one of the “greenest” parking guidance solution providers in the world, and the installation at Phoenix Sky Harbor is a perfect example of how we continually push the industry boundaries. The project consists of wireless 802.11 communication, and solar powered roadway signs. These signs communicate directly with terminal data controllers connected to ultrasonic directional sensors which count cars on each level of the facility. Centralized workstations are connected to the airport’s fiber-optic network and monitor the status of the signs and detectors.

Installation Highlights:

- Solar powered roadway signage reduces energy requirements
- Low cost retrofit solution minimizing hard-wiring and eliminating the need for cutting loops in concrete using TCS’ innovative directional sensors
- Simplified implementation reduced the operational impact of the installation
- Monitors and facilitates wayfinding to 4 terminal parking structures, and 4 large surface parking lots
- Monitors approximately 15,000 parking spaces daily
- Wireless communications
- Parking status (open/closed), parking count (level and zone) and dynamic message signs
- Wayfinding signs keep traffic moving in the airport to facilitate traffic flow, and reduce the carbon footprint of the facility
- 19th busiest airport in the world (ACI, 2009)
- Use of existing customer communication network



Dynamic message panels display open parking spaces by level.



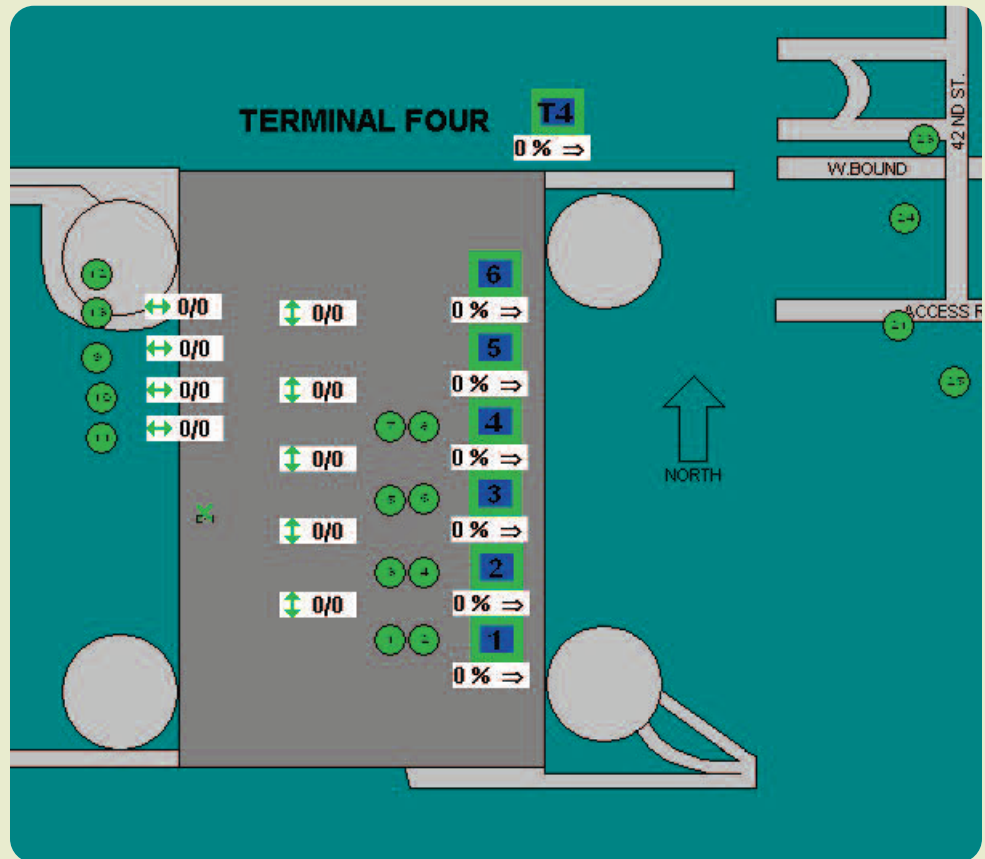
Solar powered roadway signs

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Phoenix Sky Harbor Airport uses TCS International's powerful counting software which includes preset statistical analysis and the ability to perform ad hoc queries. Reports are accessible via browser based access for immediate real-time system updates. Alarms and messages are updated real-time and can be delivered to a cell phone or PDA. All LED signs meet the highest standards including light intensity sensors based upon ambient light, and MBFT of 100,000 hours/10 yrs.

Technologies:

- complex parking guidance
- wayfinding
- space counting
- wireless communications
- solar powered roadway signs
- space monitoring
- level counting
- use of existing customer communication network



Schematic diagram showing a parking guidance system overview for Phoenix Sky Harbor Terminal Four.

About TCS

TCS International manufactures and designs intelligent parking guidance solutions. Real-time monitoring allows our customers to promote open spaces, and improve vehicle flow by reducing “cruising” which increases operator and customer satisfaction. Getting customers to their destination more quickly has the added benefit of reducing your facility’s carbon footprint. TCS conceptualizes, manufactures, and continually improves all of its products by harnessing over 100 years of direct industry knowledge found in its product development team. From wireless intelligent parking guidance systems, to automated parking management solutions, TCS provides end-to-end solutions to monitor and facilitate car egress for any facility.

