

## CASE STUDY



# Dallas/Fort Worth International Airport—Texas

Dallas/Fort Worth (DFW) has just over 59 million passengers per year and is the seventh busiest airport in the world (Airports Council International, 2009). When they needed a proven PGS solution to direct traffic to the largest parking structure in North America, they trusted TCS to get their customers to the appropriate destination. This is accomplished using directional detectors to provide level counting information, and parking lot availability status on dynamic message signs. The implemented solution reduces congestion and increases customer satisfaction.

### Installation Highlights:

- Monitors and facilitates wayfinding to 5 major parking zones per level
- Monitors over 8,000 parking spaces in a 3 million square foot, 8 level parking facility
- Parking status (open/closed), parking count (level and zone) and variable message signs
- Fiber and cellular communication infrastructure
- Customers are guided to their destination via freeway signs displaying availability
- 120 counting points with 118 dynamic displays and 12 freeway signs connected with combined fiber and cellular based communications
- Wayfinding signs keep traffic moving in the airport to facilitate traffic flow and reduce the carbon footprint of the facility
- To safeguard against loop failures each count station contains redundant loop detectors utilized as an operating backup
- 2-way communications allow messages to be changed quickly from any workstation
- Software features real-time alarm monitoring and report filtering with complete statistical analysis
- Systems are programmed with a 5 - 10% threshold level for full spaces to help customers save time by not having to search for that last available space



Entry message boards display available parking inventory, enabling parkers to easily find an open space.



Facility count computers track space counts in real time.

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Dallas/Fort Worth 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
- fiber based network
- cellular remote signage
- high volume
- level counting
- garage open/closed status



*Parking availability is clearly displayed at the entrance of the garage to allow for intelligent parking decisions, and to keep parkers from using handicapped or reserved spaces.*

**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.

