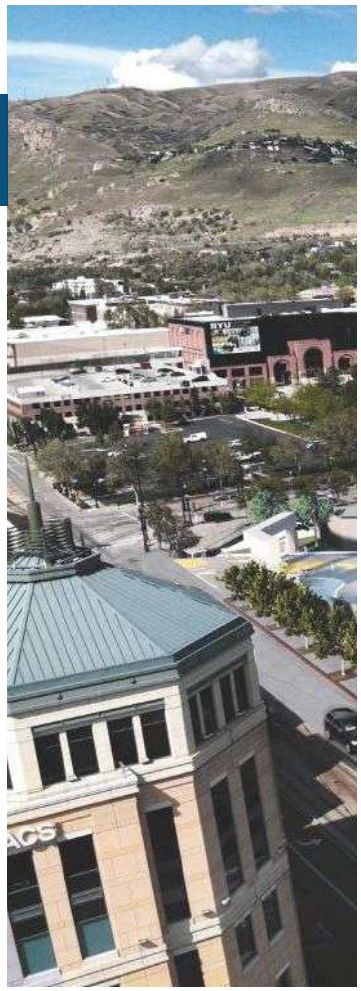


PARKING SAFETY

Two Case Studies, One Common Goal

Vastly different event facilities incorporate different strategies to ensure safety of vehicles and patrons.

» BRIAN LOZANO, PE, PMP

Venues, arenas, and stadiums face complex security risks within the structural boundaries of the facility itself. Outside the facilities, security plays an increasingly important role. Parking garages and surface lots have become a critical part of the facility management safety plan. The security measures protect vehicles and patrons, safely control ingress and egress, and manage the movement of patrons before and after events.

In Salt Lake City, the Delta Center's new adjunct parking garage illustrates how venue parking is being reimagined as part of a broader security and fan experience strategy. The garage was designed to guide vehicles and patrons safely from the street into the arena, reduce conflicts between pedestrians and vehicles, and support smoother event day operations.

Additionally, Reliant Stadium in Houston demonstrates a similar shift toward treating parking as an extension of venue security. Thousands of vehicles converge on the parking lots outside the stadium for Texans games and major events. The safety strategy includes traffic control, pedestrian movement, rideshare activity, signage, staffing, and real-time communication so fans can arrive and leave safely with fewer points of conflict.

DELTA CENTER'S PARKING SECURITY STRATEGY

A new seven-level parking garage at the southwest corner of the Delta Center was completed before the 2026-27 NBA basketball season. The garage is part of a multiphase redesign launched in 2025 to transform the arena into a modern, multi-sport venue for the NBA's Utah Jazz and NHL's Utah Mammoth. With 435 spaces primarily serving premium ticket holders, the structure is intended to provide direct, safe, and convenient access to the arena.

Originally constructed in 1991 as the home of the Utah Jazz, the arena underwent significant renovations in 2017 and was modified again in 2024 to accommodate the Utah Mammoth hockey team. The current transformation is the facility's most extensive renovation to date, with improvements aimed at optimizing sightlines and enhancing the overall fan experience — beginning with how patrons approach and enter the venue.

The steel-framed, long-span garage was built over an active loading dock, while its exterior façade was shaped to blend with the mountain landscape surrounding Salt Lake City.

Safety and security measures are integrated throughout the garage design. Inside the structure, primary vehicular circulation areas are separated from pedestrian paths to reduce potential conflicts between vehicles and patrons. Enhanced, even lighting throughout the garage and main pedestrian areas also supports visibility and a safer experience for both drivers and pedestrians.

Elevator and stair cores are positioned on flat portions of the parking decks to improve access and visibility. Each



^ *The new garage at Delta Center was built over an active loading dock and was shaped to blend with the surrounding landscape. Photo by Walter P Moore.*

elevator cab entrance faces inward toward the garage, giving pedestrians clearer sightlines, while concrete-filled steel bollards at the cores add another layer of protection. Clear wayfinding further supports safe movement through the facility. Vehicular and pedestrian signs use distinct colors to separate the two circulation systems, helping patrons quickly identify the correct route and reducing confusion during peak arrival and departure periods.

During large events, the garage ingress plan allows parking credentials to be quickly identified from the street, helping to prevent vehicles from queuing onto the surrounding streets. For egress, an effective traffic management plan has been implemented to help spillage into the structure after the event to keep traffic movement more predictable.



^ *Parking signage guides guests on game day at Reliant Stadium. Photo by Walter P Moore.*

The garage design also accounts for Salt Lake City's winter weather. A snow-melting system and protective canopies along the access ramps improve driver safety during entry and exit, while a separate canopy over the top deck helps prevent snow and ice accumulation on ramp parking areas.

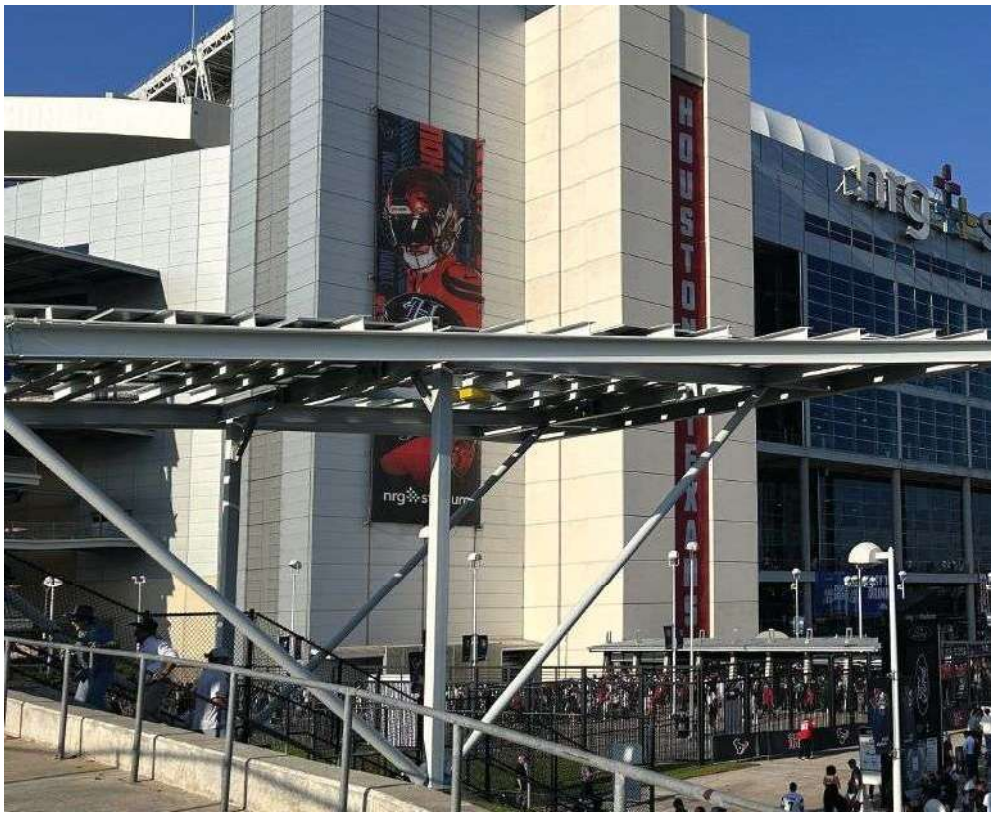
ENSURING SAFETY OUTSIDE AN NFL STADIUM

Reliant Park, formerly NRG Park, is a 350-acre campus in Houston that hosts more than 750 events annually and offers 26,000 onsite parking spaces. As Texans' attendance grew for NFL games, the stadium wanted to improve game-day mobility during the 2023-25 seasons. For the first time, key stakeholders, which included METRO, TxDOT, City of Houston Transtar, and security teams, came together in weekly meetings to align traffic control, parking, safety, and communication strategies.

Solutions included contraflow traffic plans, dynamic double-sided message boards, redesigned wayfinding, and strategic lot-loading procedures. Traffic was monitored from the control room inside the stadium, where real-time decisions were made regarding signal timing, routing, and lot operations. A permanent rideshare zone, supported by geofencing, scalable capacity, and QR-code walking directions, handled more than 3,000 rides during its first deployment, improving safety and consistency for thousands of rideshare users.

Future enhancements, including dynamic signage, were proposed and eventually installed. The Texans also have access to the City of Houston's traffic camera system to monitor traffic in and around the stadium on game day. The project set up a coordinated model for major event mobility management focused on safer, more effective movement around the stadium.

The success of the parking strategies implemented for Texans games was



^ *Reliant Park improved game-day mobility by implementing multiple solutions, such as a permanent rideshare zone. Photo by Walter P Moore.*



^ *The new seven-level parking garage at the southwest corner of the Delta Center is scheduled for completion before the 2026-27 NBA season. Photo by Walter P Moore.*



^ *The garage will have 435 parking spaces, providing direct, safe, and convenient access to the Delta Center. Photo by Walter P Moore.*



tracked through arrival and departure data, observed traffic patterns, stakeholder debriefings, and NFL surveys. Pre-sale parking passes increased from 5% to 20% after website enhancements and targeted outreach, reducing transaction times and congestion at entry points.

By combining technology, design, and collaborative planning, the program created a scalable mobility system that improved safety, efficiency, and fan experience.

INCREASING ROLE OF PARKING SAFETY

The examples in Salt Lake City and Houston show that parking is no longer a peripheral concern for venues; it is a central part of the security, operations, and guest-experience strategy.

Venues, arenas, and stadiums increasingly depend on innovative parking and mobility design to move vehicles and patrons predictably and reduce safety vulnerabilities before and after an event. ◆

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What Venue Managers Should Consider:

DESIGN CIRCULATION

before you design signage. Separating vehicle and pedestrian paths at the layout stage reduces conflict more effectively than signage added after construction.

VERIFY CREDENTIALS

before vehicles reach the structure. Identifying parking credentials from the street, rather than at the garage entrance, keeps queuing off public roads.

COLOR-CODED WAYFINDING

is a low-cost fix. Distinct colors for vehicle and pedestrian routes cut confusion during peak arrival and departure periods.

COORDINATION

can matter more than construction. Weekly meetings among all stakeholders can produce measurable gains before any new infrastructure is built.

RIDESHARE DEMAND

needs dedicated space. A permanent zone with geofencing, scalable capacity, and QR-code directions can handle thousands of rides.

CLIMATE-SPECIFIC DESIGN

decisions pay off. Design should account for regional weather patterns affecting driver safety, not just traffic volume.