

# Goings with the flow

## Parking Design Can Make Campus Event Parking A Breeze

**T**he championship game is about to begin, but the stadium's stands are half empty. Where are the fans? A look outside might confirm a campus planners worst fears: lines of cars waiting to enter the stadium's parking facilities. This is a sight that's all too familiar on Canadian campuses—and easily preventable.

Event parking can be particularly challenging for college campus planners. Typical day-to-day campus parking requirements revolve around providing numerous long-term spaces spread throughout campus. These spaces turn over infrequently, and campus parking facilities generally don't experience large numbers of vehicles entering or exiting at the same time.

Event parking, particularly parking for large sporting events, introduces an entirely different parking dynamic on a college campus. Sporting events, particularly large events, can lead to huge numbers of drivers descending onto a campus at the same time, and after the event these multitudes must be able to exit parking areas quickly and safely. It's easy to see why event parking can be a nightmare for campus planners. Fortunately, there are a number of approaches that can be implemented to help campus parking

structures overcome the challenges presented by large events.

Even though Canadian universities often enjoy more of a surplus of useable land than their American counterparts, the development of parking structures may still be more advisable than relying on parking lots. Sporting events that attract tens of thousands of fans require parking facilities that can accommodate thousands of vehicles. Parking lots, while relatively inexpensive to develop require a lot more land, and a university that can spare hundreds of acres for parking is rare.

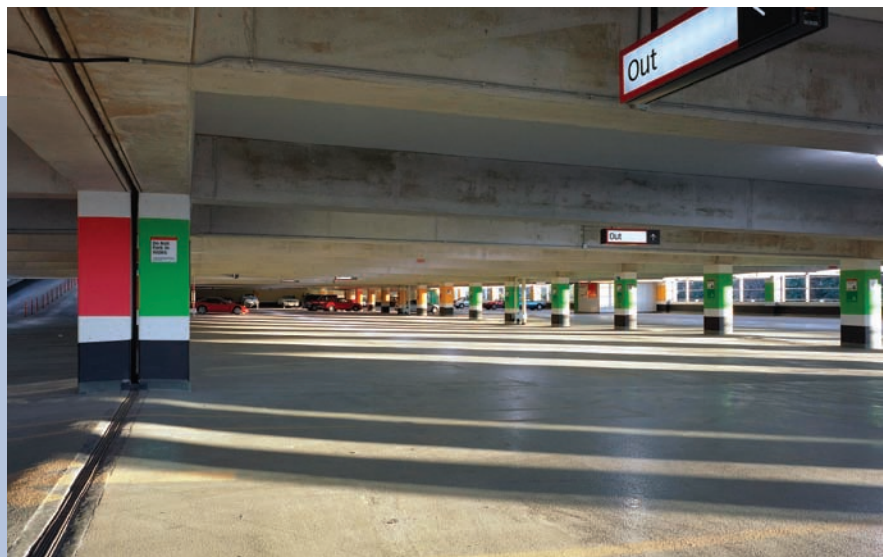
Parking structures, on the other hand, can accommodate many more vehicles on a much smaller footprint. Of course, getting so many cars in and out of a single structure in short order can be extremely challenging. That's why careful planning and design is required.

The first consideration in developing a parking structure to serve a university stadium is how it will impact local traffic patterns. This is a more important issue for an urban campus than a self-contained rural university. It's essential that the design does not result in excessive queuing at entrances, which will cause traffic to back up onto city or campus streets.

The key is to create entrances that won't lead to excessive queuing, and internal traffic patterns that will minimize back-ups in the facility. There are a number of ways to do this. For instance, by moving access controls or transaction points further within the parking facility, and combining this with an operating plan that minimizes transaction time for inbound traffic, excessive backups on the streets can be mitigated.

Exiting traffic is also important since large numbers of vehicles will also be leaving the structure when the event is over. Minimizing the amount of time it takes to exit is a function of traffic flow design, location of exits, and operational strategies, as well as the capacity of adjacent streets to accommodate the exiting traffic volume. Operational decisions, such as whether to have patrons pay as they enter the facility to allow a free exit flow can facilitate fast exiting, but poses other operational issues, particularly in downtown urban settings where parking is sometimes shared with the general public. Traditional or conventional access and revenue control systems that are appropriate for everyday parking activities, such as key card access, ticket/cashier systems or even pay-on-foot systems are not

**Safety is a vital design goal for any university stadium parking facility. One key to safety is visibility, which can be enhanced by eliminating visual obstructions and blind movements within the facility. Clear and concise signage can also promote safety by directing drivers away from pedestrian areas.**



Structured parking is often a better choice than parking lots because structures can accommodate many more vehicles on less land.



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conductive to large “shock” arriving or departing traffic volumes. The key is to take all of the factors into consideration and develop a plan that best addresses the unique issues, maximizes levels of service, and promotes safety.

Safety is another key element that comes into play. With the large volume of entering and exiting traffic comes an even larger volume of pedestrian traffic within a parking facility and at street level. This factor should be considered when determining the placement or location of vehicular entrance and exit locations, and pedestrian circulation. Every attempt should be made to minimize as much as possible, vehicular / pedestrian interaction. This will result in a safer environment and smoother traffic flow.

Campus parking planners should also be security-conscious with parking facilities that serve sporting events because alcohol is often sold at these events, and emotions often run high among event patrons. As such, there are a number of active and passive security measures that can be used to make the parking facility safer and more secure.

One key to safety and security is visibility. From a safety standpoint, designers should seek ways to eliminate any visually obstructed or blind movements within a facility. For instance, if the facility requires shear walls, these walls should not be placed at the end of drive aisles where turning movements will occur. Also at vertical cores, pedestrians should be afforded maximum visibility of the parking floor prior to entering the parking

level. Conversely drivers should be afforded maximum visibility of pedestrians entering a parking floor from a stair or elevator tower. These areas should also be enhanced by higher lighting levels and even painted interiors.

Another important consideration is maximizing flexibility. Since most special event parking on a campus will also serve everyday parking needs, it is essential that the design take this into consideration. It is more likely that a parking facility on a university campus will be designed for daily use, with systems in place for daily access and revenue control. But during a special event, the university should have the capability to change the method of operation—even traffic patterns—to maximize traffic flow and pedestrian / driver safety.

While event parking—particularly sporting event parking—presents unique and sometimes tough challenges to university planners and administrators, these challenges can often be overcome through strategic parking planning and design. When it comes to parking design, universities and their parking designers can go a long way towards overcoming these challenges by focusing on design features that enhance traffic flow, safety, and security. ■

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## UNIVERSITY OF MANITOBA FACES EVENT PARKING CHALLENGES

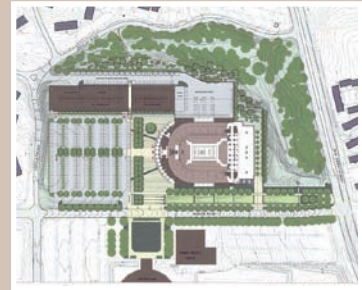
The University of Manitoba faces many of the typical parking issues when it comes to parking: there often isn't sufficient on-campus parking for both university parkers and event attendees. Meeting the needs of everyone often requires compromise and sacrifice.

“We face two common challenges,” says Norma Carswell, the university's manager of parking and shuttle services. “First, people want to have events on campus when there just isn't enough parking available. Also, event sponsors don't always coordinate their events with university administrators during the planning process, so we often have multiple

events scheduled at times when we would be hard-pressed to provide parking for a single event.

“Here in Winnipeg, we have two seasons: winter and construction season,” jokes Carswell. “In the winter, our lots are used every day by students, teachers, and staff, and there isn't a lot of extra room for event parkers. In the summer, the university undertakes its construction and renovation projects, and we typically have a lot of heavy construction equipment stored on campus lots.”

Careful and creative planning is required to assure that a university's event parking resources meet the needs of both the campus as a whole and those who attend campus events.



These challenges can lead to tough choices. Often, Carswell finds herself forced to relocate parking permit holders to satellite lots and lots on the outskirts of the campus to provide spaces for event parking. The university provides shuttle buses to help university parkers get to and from their vehicles, and a comprehensive signage program helps parkers find the most convenient available spaces.

"We hate asking paid parkers to move from their regular spaces, but we have no choice," said Carswell. "We do our best, though, to help make the parking experience as convenient as possible."

Enforcement poses another quandary. Parkers sometimes bristle at being asked to park in more remote lots and ignore event parking rules. University parking managers are faced with the choice of ticketing illegal parkers and risking a public relations backlash, or not ticketing and foregoing an important potential revenue source. According to Carswell, in these cases the university often takes a lenient approach to enforcement.

"Ultimately, the answer to all of these challenges revolves around communication," said Carswell. "If event planners include us in the planning process, we can generally accommodate their parking needs. And when we communicate effectively with parkers, we can avoid the parking shortages and conflicts that can arise."

The university will soon be faced with its biggest challenge yet when the local Canadian Football League team, the Winnipeg Blue Bombers, begins play on the U of M campus. The university currently has a total of 6,000 on-campus parking spaces, but the Blue Bombers will be playing in a stadium that will accommodate up to 45,000 fans.

"Obviously, we can't fit 45,000 people into 6,000 parking spaces," said Carswell. "We're going to have to do some creative planning and develop a lot of new resources to meet our parking needs. But ultimately, I think this process will have a positive impact on our parking planning and administration campus-wide." ■