EVENT MOBILITY PLANNING CHECKLIST

A practical coordination checklist for major stadium events

PTV GROUP part of Umovity

PAGE 1 - CORE PLANNING AGENDA

Visitor Demand

Planner's note: *Use expected attendance not tickets sold. Create 15-minute profiles. Consider modal split sensibly and note that a 10% shift toward car travel can create thousands of extra vehicles.*

- Confirm expected attendance
- Estimate arrival/departure peaks
- Define expected modal split
- Identify visitor origins
- Separate operational traffic (e.g. deliveries/logistics)

Road Network & Traffic Flow

Planner's note: *Plan ingress and egress separately. Departure flows are usually sharper and may need different routes, signal timing and closures.*

- Define arrival routes
- Define departure routes
- Plan closures/diversions
- Adapt signal timing
- Protect emergency corridors

Parking & Curbside

Planner's note: *Use realistically usable, not nominal capacity. Entry processing rate often creates queues before total lot capacity is reached.*

- Confirm usable parking capacity
- Assign parking by route
- Check entry capacity
- Plan overflow parking
- Separate drop-off/pick-up

Public Transport & Shuttles

Planner's note: *Test peak 15-minute passenger surges. Hourly averages hide platform, transfer-point and shuttle-loading risks.*

- Confirm added service capacity
- Check station capacity
- Plan shuttle operations
- Prepare for passenger surges
- Coordinate passenger information

Pedestrian Movement & Venue Flow

Planner's note: *Security queues, crossings and station exits are common bottlenecks. Check pedestrian flow outside and inside the venue.*

- Map all walking routes
- Check pedestrian crossings
- Size queueing areas
- Assign gates by arrival mode
- Identify bottlenecks
- Verify accessible routes

Safety, Security & Approvals

Planner's note: *Align crowd safety, traffic control, emergency access, approvals and hostile vehicle mitigation in one operating concept.*

- Confirm required approvals with local authorities
- Complete the risk assessment
- Define safety/security concept
- Plan evacuation/shelter options
- Protect rescue routes/refuge areas

Sustainable Access & Demand Management

Planner's note: *Sustainability works only when alternatives are operationally credible: reliable transit, shuttles, routing and early communication.*

- Prioritize transit-accessible locations
- Reduce avoidable car demand
- Integrate mobility with ticketing
- Use practical incentives
- Communicate travel options early

Open Questions

Use this space for assumptions that need clarification or confirmation.

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Scenario Test Matrix

Planner's note: *Validate the plan under plausible failure conditions.*

Scenario	Roads & Parking	Transit & Shuttle	Pedestrian Flow	Emergency Access
Model peak arrivals	☐	☐	☐	☐
Model peak departures	☐	☐	☐	☐
Test higher car share	☐	☐	☐	☐
Test heavy rain	☐	☐	☐	☐
Test road incident	☐	☐	☐	☐
Test transit disruption	☐	☐	☐	☐
Test simultaneous events	☐	☐	☐	☐
Test security disruption	☐	☐	☐	☐

Day-of-Event Control

Planner's note: *Define who can change routes, open overflow, modify signals or hold/release crowds.*

- Confirm who can change routes, closures and signal plans
- Define when overflow parking opens
- Define when visitors are redirected to other stations or stops
- Define when gates are held, opened or reassigned
- Define when police control replaces signal control
- Prepare pre-approved traveler messages
- Monitor traffic, transit, parking and pedestrian conditions in real time

Decision Triggers

- Queue reaches freeway ramp or arterial intersection
- Parking lot reaches agreed occupancy threshold
- Parking entry queue blocks public road
- Gate queue exceeds available holding space
- Station/platform reaches crowding threshold
- Pedestrian crossing cannot clear within signal cycle
- Emergency route is blocked or partially blocked
- Transit delay requires shuttle or diversion plan
- Weather changes walking, cycling or drop-off assumptions

Evidence to Validate Before Sign-Off

- Network travel times under event demand
- Queue lengths at ramps, signals and parking entries
- Parking occupancy and clearance time
- Public transport passenger loads and station crowding
- Pedestrian densities at crossings, gates and bottlenecks
- Emergency route availability during peak flows
- Scenario comparison: base plan vs. contingency plan
- Visual outputs for council, police, operators and venue teams

Questions a Model Should Answer

- Where do queues spill back first?
- Which route becomes the critical constraint?
- Which parking area fills or clears too slowly?
- Which station, stop or transfer point becomes overloaded?
- Where do pedestrian densities become operationally risky?
- Can emergency vehicles still pass during peak arrival and departure?
- Which mitigation has the strongest effect?

How Technology Supports Every Stage of Event Mobility

- **Before the event – Forecast:** Forecast visitor demand and travel behavior and understand multimodal mobility impacts across the network.
- **Before approval – Validate:** Test mobility concepts and compare alternative scenarios. Identify traffic, pedestrian and public transport bottlenecks before implementation.
- **During the event – Operate:** Monitor network conditions in real time. Predict congestion and support proactive traffic management decisions.
- **After the event – Improve:** Measure mobility performance and analyze KPIs. Capture lessons learned to improve future events.

Open Decisions / Notes

Planner's note: *Capture unresolved assumptions, owners and decisions that need confirmation before sign-off.*

More information on **ptv.to/event-mobility**