Roads & transport · In Dubai, signals are run by RTA, paid parking by Parkin & tolls by Salik (no agreement with Nodal)

Corridor Equilibrium — District parking guidance & motorway exit protection

Point drivers to a space before the queue forms. Which alternative parking area should you display at the next peak, and when should the message change?



01 · UAE REGULATORY & OPERATIONAL SCALE

Roughly 40% of Parkin's public parking is Premium with peak tariffs (08:00–10:00 and 16:00–20:00 since April 2025), alongside Salik's variable peak (AED 6) and off-peak (AED 4) toll rates introduced in January 2025.

02 · ZERO-RISK START (UTILITIES & CITY INFRASTRUCTURE)

4-week corridor discovery study at AED 0 upfront on read-only historical signal logs, plate-free toll-gantry counts and parking transactions across one exit, 10–15 parallel junctions and 2–3 parking zones, with zero live login. Any pilot follows on terms agreed after the study.

03 · AUDITED STAGE, BENCHMARKS & OPERATING BOUNDARIES

Stage: Simulated, internal review (uncalibrated 10 km corridor model). Sending searching drivers to a neighbouring zone cut evening peak delay 34–37% (median, 32 runs) assuming car parks nearly full and 80% informed — falling to ~20% at 30% lower starting occupancy, 13% at 20% informed, and 5–7% when ~20% full (where off-peak delay rose ~3%; single-zone guidance moved delay 0.1%). Overloaded exit rule cut spillback minutes 98% median and delay 6–7.5% (actuated control with the same 75% ramp rule came within 0.4%), costing +61% cross-street queue, +20–24% search time and +80–93% abandoned searches. Salik tolls untouched.

COMPATIBLE SYSTEMS & STANDARDS

Historical Signal Logs · Parking Transactions · Plate-Free Gantry Counts · Dynamic Signs (Salik Tolls Untouched)

Verification Protocol · Zero Live Access

How the 4-week offline audit runs at AED 0 upfront.

Proven offline on your historical records before anything is switched on — with your own engineers, clinicians, surveyors or licensed customs staff keeping final sign-off.



Two safe ways to verify without system logins

NO VPN · NO LIVE CREDENTIALS

Option A · Read-only CSV/Excel slice under NDA
Share an agreed read-only historical export under mutual NDA. Nodal returns a quantified, line-referenced report in writing for your operational lead to verify.

Option B · Self-run by your own IT
Your IT runs Nodal's auditable offline checker locally on a standalone machine inside your UAE boundary and shares only the summary table if you choose.

What drives the simulated peak delay reduction in Corridor Equilibrium?

Steering drivers to a neighbouring parking zone rather than within a single zone: median evening peak delay fell 34–37% when car parks were assumed nearly full and 80% of drivers were informed, dropping to 13% at 20% informed and 5–7% when car parks were ~20% full.

Does Corridor Equilibrium change Salik toll prices?

Never. Toll tariffs are untouched; only parking guidance messages and overloaded exit signal splits are evaluated, with cross-street queue (+61%) and search trade-offs reported openly.

What data is used in the 4-week discovery study?

Read-only historical signal logs, plate-free gantry counts and parking transactions across one corridor and neighbouring parking zones at AED 0 upfront (noting Parkin's public portfolio is largely barrierless on-street parking).

Delegate in one forward — no introductory call required

Web dossier: nodalsystems.ae/corridor-equilibrium.html · Written checklist & mutual NDA: scollado@nodalsystems.ae

AED 0 UPFRONT