

AI Expert Statement to Government — Ganpati Bandobast 2025 (Police & Admin Brief)

From: Lead AI Advisor, Bandobast AI Unit

To: Commissioner of Police (Nashik), Divisional Commissioner (Nashik), DCPs/ACPs, NMC (Disaster & Traffic), SRPF Command

Date/Time (IST): 2025-08-27 11:40

Use: Internal government brief (police-first). Not for public release.

0) Executive Statement

After conducting end-to-end AI-assisted planning for Ganpati Bandobast 2025, I am submitting this concise brief for approval and adoption. We now possess a city-wide, station-wise, **live visual picture** of immersion flows and risks; an **AI prediction engine** that forecasts hourly crowd loads and route congestion; and a **police-only visual ops system** (map + wallboard + field PWA + WhatsApp copilot) that turns those predictions into decisions, tasks, and proof of action.

Bottom line: We can detect hotspots earlier, allocate manpower smarter, enforce corridor discipline with QR guidance, and communicate diversions clearly—while keeping humans in control and audit on every critical step.

1) What we built & why it matters

- **10-year data brain** (Notebook-style corpus) to answer precedence, patterns, and policy questions on demand.
- **GIS city layers**: police stations, mandals (tiers), routes, ghats, chokepoints, congestion nodes, and sensitive zones (incl. festival overlap).
- **Station one-pagers** that standardize counts, routes→ghats, manpower, and checklists, with slots for **QR deep-links**.
- **Prediction engine (v1)** to forecast **Load Index (0-100)**, **GAR status** (Green/Amber/Red) on segments, and **incident risk** at PS/ghats, hourly.
- **Visual Ops stack**: Control-Room Live Map, PS wallboard, Field PWA (QR navigator + incident log), and WhatsApp internal copilot.
- **Governance & guardrails**: human-in-the-loop on Reds, audit trails, reversible diversions, privacy-by-design.

Impact: Faster hotspot recognition (minutes→seconds), tighter rosters on peak windows, safer riverfront queues, and consistent SITREPs for leadership.

2) Key findings from planning & mapping

- **Hotspot clusters** concentrate around immersion corridors and feeder alleys; small geometry fixes (barricade nodes, U-turn pockets) reduce gridlock.

- **Peak windows** are predictable at mid-festival and the final visarjan days; surge rosters must be pre-approved per station and time band.
 - **Triggers matter:** rainfall and dam discharge thresholds are strong predictors for riverbank crowding and queue slowdowns; they must auto-raise Amber/Red for human confirm.
 - **Route discipline** improves dramatically when start points carry **QR route posters** and beat teams use the Field PWA navigator.
 - **Citizen clarity** (diversion microsite + push messages) lowers last-mile confusion and complaint calls during peak hours.
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3) Recommendations for immediate approval

1) 72-Hour Sprint (deploy v0)

- Publish Control-Room Live Map (static layers + manual GAR toggles).
- Duplicate 14 **PS one-pagers**; insert station names; leave PI/SPI contacts for field fill.
- Generate and paste **QR deep-links** for all `derived_route_*` paths.
- Stand up **WhatsApp copilot** (`/sitrep`, `/alert`, `/ack`).
- Print **A3 route posters** (QR) and **A6 SOP trigger cards** (Mar/Eng).

2) Week-2 Enhancements

- Wire rainfall & dam feeds into trigger rules (auto Amber/Red + SOP snippet).
- Enable **manpower optimizer** (surge recommendations per station/shift).
- Pilot **CCTV headcount** at 3 chokepoints (device-only processing).

3) Citizen Channel (controlled)

- Launch a minimalist **diversion microsite** (Marathi/English) with ghat wait bands and parking guidance; coordinate media at 19:30 daily.
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4) Expected benefits & KPIs

Function	Benefit	Target KPI
Control Room	Faster hotspot detection & tasking	Alert→ack < 2 min
Police Stations	Rosters aligned to peaks	Missed-post incidents ↓ 40%
Traffic Branch	Smoother diversions on Red nodes	Corridor travel time ↓ 25%
SRPF/QRT	Faster surge to critical nodes	Dispatch→on-scene < 8 min
Medical Access	Unblocked ambulance lanes	Reach time < 6 min
Leadership	Clear, hourly SITREPs	Accuracy > 95%

5) How the AI prediction works (plain language)

- **Sees:** festival day/time, station/ghat geometry, chokepoints around routes, sensitive zones, rain (24h), dam discharge, historical incidents.

- **Thinks:** learns typical hour-by-hour loads and assigns GAR to route segments; adds rule-based bumps when triggers cross thresholds.
 - **Says:** "This corridor likely Amber 18:00–20:00; reason: chokepoint density + rain trend; advise detour B and +1 SRPF team."
 - **Shows:** why the alert fired and asks for human confirm before anything goes live.
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6) Day-of-ops workflow (who does what)

- 1) **06:30** Control opens Live Map; verify feeds & radios.
 - 2) **07:00** PI/SPI prints wallboard roster and **QR posters** at start points.
 - 3) **All day** Beat teams use Field PWA (QR nav + one-tap incident log).
 - 4) **Hourly (peak bands)** Control posts SITREP with map snapshot & notes.
 - 5) **On Red** Assign SRPF/QRT, enforce diversion, log **Cleared**; audit trail auto-updates.
 - 6) **23:00** AAR draft auto-compiled; station notes added; file by 23:30.
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7) Resource ask (lean, time-bound)

- **People (10 days):** 1 GIS, 1 full-stack dev, 1 ops PM, 1 analyst.
 - **Print kit:** A3 posters (routes), A6 SOP cards, QR sticker sheets.
 - **Devices (pilot):** 3 CCTV counters (edge), 1 mini-server for dashboard if needed.
 - **Costs:** Leverage free/low-cost stack (Next.js, MapLibre/Maps, Supabase, n8n); credits for messaging (Gupshup/Twilio) during peaks.
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8) Risks & controls

- **False Reds** → human confirm gate + reason codes + throttle.
 - **Data gaps** → conservative defaults + field confirmations.
 - **Connectivity loss** → offline PWA + printed posters/SOPs + radio fallback.
 - **Privacy** → minimum data, on-device blur for pilots, timed retention.
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9) Implementation timeline

D-3 to D-1: 72-hour sprint items (Map v0, one-pagers, QR, WhatsApp v0, posters, SOP cards).
Festival Week: trigger wiring, optimizer, 3-site CCTV pilot, daily SITREPs & AARs.
Post-Festival (Week +1): full AAR, model retrain, SOP updates, permanent re-use plan.

10) Approvals requested

- 1) Proceed with **72-hour sprint** and assign owners (PS Cell, GIS, IT, Ops).
 - 2) Permit controlled **WhatsApp internal flows** and the **citizen microsite**.
 - 3) Approve **pilot CCTV counting** (edge only) at 3 chokepoints.
 - 4) Sanction print budget for posters, SOP cards, and QR stickers.
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Annex — Evidence & References (police-only)

- NotebookLM (10-yr corpus): <https://notebooklm.google.com/notebook/a4c612ec-d732-4b12-8db8-ebbc05d3d90f>
- Google Earth — City Map (PS, mandals, checkpoints, congestion): <https://earth.google.com/earth/d/1bn0HzlPOAdUo7Ua5S9nxWeEA2RTGAtOy?usp=sharing>
- Google Earth — Sensitive Areas (Eid + peak visarjan): https://earth.google.com/earth/d/1IKWvUr_K7XdeafnZKadEf-ZFUglPVjFs?usp=sharing
- BandobastGPT (ops copilot): <https://chatgpt.com/g/g-68ac299e7c588191b2edecda5a018df3-bandobastgpt>

Signed:

Lead AI Advisor, Bandobast AI Unit
(For Commissioner of Police approval)