PROCHAIN ARRÊT

THE FORESIGHT SERIES BY KEOLIS



Mobility Report

Women's safety and predictive mobility: cameras that keep safe are cameras that keep watch (Hyderabad)

The thinking camera

For half a century, a CCTV camera could do only one thing: record. It took a human eye, after the event, to find anything in the footage. The break that came in the 2020s was not the (already colossal) number of cameras but the fact that they began to *understand* what they see. The "smart camera" fuses optics with algorithms: computer vision, facial recognition, numberplate reading, detection of "abnormal" behaviour, crowd analysis, all in real time and, increasingly, processed inside the camera itself.

Market figures show the scale and speed of the shift, bearing in mind that research firms all have different figures that should be read as orders of magnitude rather than to the nearest dollar. The global market for AI-powered video surveillance is estimated at between $4 billion and $6.5 billion in 2024, and projected at between $12 billion and $29 billion by 2030, depending on the source (MarketsandMarkets: ~$3.9bn → $12.5bn, i.e. +21% a year; Grand View Research: ~$6.5bn → $28.8bn, i.e. +31% a year). The market for smart cameras alone is expected to grow from around $14 billion in 2024 to $47 billion in 2030 (Grand View Research, ~+22% a year). The facial recognition market should similarly grow from around $5 billion in 2022 to $16 billion in 2030 according to some (Grand View), or, more conservatively, to $8 billion according to others (Statista). Whatever the range, two constants stand out: Asia-Pacific is the most dynamic region, led by China and India, with up to 45-50% of the market as early as 2026 according to one estimate; and the use cases driving public procurement are the same everywhere: security, crime prevention, the "safe city". The big equipment makers (Hikvision, Dahua, NEC, SenseTime, Axis) now sell brains rather than cameras.

So what is changing is not that more is being filmed, but that the machine is being asked to *judge* what it films: recognise a face in a crowd, spot a gathering, flag a behavioural "anomaly" and, in the next step, the subject of this chapter, *anticipate*. We are moving from the camera that remembers to the camera that predicts.

Hyderabad, a life-size laboratory

No city embodies this shift better than Hyderabad. After a series of bomb attacks in 2013, the Telangana police launched a video surveillance programme which, ten years later, placed the city among the most surveilled in the world: several hundred thousand cameras across the state (approximately 600,000 according to the most widely cited estimates, though figures vary greatly depending on the source and scope). In August 2022, a Command and Control Centre was inaugurated in Banjara Hills: a glass tower designed to aggregate these feeds in real time and, according to its promoters, able to process images from hundreds of thousands of cameras. There, facial recognition is linked to a database of known offenders.

This infrastructure is not without consequence. Amnesty International, the Internet Freedom Foundation and Article 19, in the *Ban the Scan* campaign, concluded that Hyderabad was "on the brink of becoming a total surveillance city", with more than half of public space under CCTV coverage in some neighbourhoods. The same organisations document a use that has a disproportionate impact on minorities: Muslims, Dalits, transgender people, the working poor. The case of S Q Masood, a Muslim activist photographed by force in the street and the first person to bring a legal challenge against facial recognition in India, has become its symbol. India does now have a data protection law in force (the DPDP Act, 2023), but its exemptions for state security agencies are so broad that in practice it offers almost no safeguards. In the Hyderabad area, the automated metro has since 2017 been operated by Keolis, a central player to which we will return.

What makes surveillance acceptable: fear

A technology this intrusive is not rolled out without social consent. That consent has a fuel, measured by the international survey *Keoscopie Planet* (Keoscopie × Toluna, 2026;

8,000 residents, 20 cities, 11 countries, including Hyderabad and Pune): this fuel is the feeling of insecurity. It is widespread, and it is mainly experienced by women. Mainly, but not exclusively.

Worldwide, eight public transport users in ten say they have adopted at least one strategy over the past twelve months to cope with feeling unsafe: letting someone close know that they are travelling somewhere, pretending to be busy to avoid travelling, avoiding a time of day or a route, or even giving up on the trip altogether. This is not the behaviour of an anxious minority: it is an ordinary part of getting around. Use of this strategy varies by gender (85% of women as against 81% of men), but the gap is smaller than expected; the generation gap, by contrast, is huge: 94% of 18- to 24-year-olds employ these ruses for their own safety, compared with 67% of over-65s. The youngest members of society, who are the main users of public transport, are also the most anxious about taking it.

The decisive point for understanding why surveillance is accepted can be summed up in one sentence from the survey: this feeling of insecurity does not describe objective insecurity (public transport remains one of the safest modes in the world); it describes a *perception*, and that perception drives behaviour as powerfully as reality does. This is exactly what makes the camera an appealing solution: fear that is exaggerated relative to the actual danger calls for a visible response, and women's safety is the most consensual justification there is. Nobody objects in principle to protecting women, which explains why their protection is the best argument for installing cameras and facial recognition.

Hyderabad illustrates this to a dizzying degree. It is there, along with Pune, that the use of avoidance strategies is highest in the entire Keoscopie Planet survey: 93% of people used avoidance strategies at least once in the past twelve months, 84% over the past thirty days. It is in Hyderabad too that the share of users who have let someone close know about a trip reaches 88% over twelve months, the highest figure in the sample. In other words, in the most surveilled city in the panel, nine users in ten take self-protection measures, and nearly nine in ten have already told someone close about a journey. The cultural ground for "journeys tracked for my safety" is not only ready; it is already the norm. In India, uniquely among the eleven countries, safety even ranks ahead of lower fares among mobility policy priorities. And the mechanism is self-perpetuating: the city that has invested most in surveillance remains where the feeling of insecurity is highest. The survey does not allow a cause-and-effect relationship to be drawn, but the juxtaposition is enough to throw cold water on the idea that more cameras automatically relieve apprehension.

The gender basis, meanwhile, has long been documented. According to the European Union Agency for Fundamental Rights, 55% of women in the EU have experienced some form of sexual harassment since the age of 15, in any setting. Women fear sexual assault and harassment where men fear theft; in France, according to Keoscopie, 45% of female users aged 15 to 29 refrain from going out or choose a different transport mode after a certain time of night, which is twice the rate for men of the same age. These reflexes are learned in adolescence, sometimes as early as ten. It is on this basis that India has built a dedicated safety apparatus: the SHE Teams (plain-clothes police units set up in Hyderabad in 2014), the Hawk Eye app and its "Woman Travel Made Safe" feature (where a woman registers her journey and is geolocated until a patrol arrives), and QR codes for reporting incidents on the metro and buses. The apparatus for protecting women and the apparatus of surveillance quite literally share the same equipment.

One final nuance, which honesty demands, all the more so since it comes from the survey itself: *Keoscopie Planet* concludes that the most effective lever is not technology but human presence, "a reassurance factor that surveillance technologies cannot replicate", alongside the quality of infrastructure and transparency about actual crime figures. The report argues for simple, well-known reporting tools, not for facial recognition. The whole foresight question of this chapter lies in this gap: between what the data recommends (people, well-lit facilities, transparency) and what technology makes possible (prediction, biometrics, pre-crime).

From reporting to pre-crime: the "Mobility Report"

Until now, the system has been *reactive*: a woman reports, a team responds. The step change now emerging is the shift to the *predictive*. As early as 2021, the Lucknow police announced the installation of AI-equipped cameras at some two hundred hotspots, which were supposed to alert the nearest police station "as soon as the expressions of a woman in distress change". The plans were immediately criticised by digital rights advocates: an unproven technology, based on the pseudo-science of emotion recognition, and carrying a massive risk of over-policing, including against women whose misread expression would trigger an unwanted intervention. The fundamental objection, put forward by the researcher Anja Kovacs, goes deeper: the system assumes that "women in distress necessarily look at the police as desirable, or even possible, 'saviours'", an assumption that is far from universal.

Extended to 2044, this logic produces what this chapter calls, with a nod to Philip K. Dick and his *Minority Report*, the Mobility Report: no longer detecting an assault in progress, but anticipating it before it happens. By cross-referencing mobility data in real time (who is where, at what time, in which train, at which stop) with video surveillance, facial recognition and

the records of people "known to the police", a system can identify a *risk convergence*: a woman travelling alone, late at night, and the gathering around her of a group of men, some of whom are on police files. It calculates the probability of an offence and, before the encounter takes place, dispatches a unit. The assault does not happen, because action was taken on something that had not yet happened.

It is an appealing prospect, and that is exactly where the trap lies. *Minority Report* is not a utopia: it is a warning. Pre-crime punishes a probability, not an act. It assumes that police files are accurate and reliable, yet Hyderabad's police databases overrepresent people who are already being tracked: the poor, migrants, minorities. "Known to the police" is not neutral data about an individual's dangerousness; it is often data about their class, their religion and their neighbourhood. A predictive system applied to these files does not predict crime: it perpetuates suspicion. The promise of letting women circulate freely at night is an unquestionable one. Its flip side, a class of men who can be intercepted for life, and women who are fully traceable "for their own good", is sadly just as unquestionable.

Looking to 2044: the most protected and most surveilled woman passenger in the world

Extend the trends (an unrivalled density of cameras, widespread smart cameras and facial recognition, a surveillance market multiplying five- or six-fold in under a decade, a proactive women's safety policy, a fully automated metro and named-user ticketing) and you get, in 2044, a city where women's mobility is the most protected *and* the most administered object in public space.

This in turn will lead to three system effects. First, algorithmic guardianship: a reinforced protection status, opt-in in theory but often signed up to by the family in practice, with a father, brother or husband who "enrols" his daughter, sister or wife and receives the alerts. When nearly nine users in ten have already, by 2026, told someone close about a journey, the line between reassuring oneself and being tracked imperceptibly evaporates. Second, the end of women's anonymity: protected women means women that are easy to locate; they can no longer melt into the city, disappear for an evening, exist without being seen: a privilege that men retain. Third, the shift of suspicion: as the use of prediction continues to spread, it is no longer assaults that are judged but convergences; and the same groups of people, already on police file, are intercepted again and again.

The transport operator is at the heart of this tension. In Hyderabad, the automated metro has been operated since 2017 by Keolis: 69.2 km, three lines (red, blue and green), 57 stations, between around 450,000 and more than 500,000 passengers a day, CBTC train control, and around 80% of tickets sold as QR codes. In our 2044 scenario, part of the data feeding into the *Mobility Report* flows through its systems: onboard cameras, passenger counting, named-user ticketing, train geolocation. The operator, whose doctrine aims to be "rooted in the community" and whose own studies (Keoscopie) argue in favour of people rather than machines, finds itself the technical hub of a surveillance apparatus it did not choose and whose purpose it does not control. Protecting without controlling, serving without profiling: it is a fine line to walk indeed.

THE STORY

The Scarlet Passenger

Hyderabad, November 2044

At 11.14 pm, Kavya descended the steps leading into Raidurg station, and the city recognised her. She knew it now intuitively, just as one knows that day is turning to night. The camera on the gate blinked, her face was read, and her status appeared somewhere on a screen she would never see: one dot among millions, and that dot was red.

Red meant protection. On the interfaces of the *Women Safety Wing*, women registered in the reinforced scheme appeared in scarlet; people called them "the scarlets", sometimes "the wards", and the last carriage of every train, reserved for women after 9 p.m., was known across the city as the *scarlet carriage*. Kavya got on. She was twenty-four, an engineer at a company in Gachibowli, and she was heading home, as she did three evenings out of five, long after the hour at which her mother, at the same age, would never have dared go out alone.

Because one thing was true, and this was worth stating first: Kavya was less afraid than her mother. Infinitely less. Her mother, in Warangal in the 2010s, had planned every journey as if defusing a bomb: don't finish late, don't stand around on your own, don't meet anyone's gaze, change carriages, hold your keys between your fingers. Kavya got on a clean, air-conditioned, camera-monitored train, where a soft voice announced the stations in Telugu, Hindi and English, and where, if anything were to happen, she had only to brush her wrist

for the city to come running. The night had been given back to the women of Hyderabad. That was not insignificant. It really was no small thing.

At Ameerpet, the big interchange where the blue line crosses the red, the train stopped for longer than usual.

Two kilometres away, in the Keolis Hyderabad control centre, Sirisha Rao saw the pattern take shape on the video wall before she understood what she was looking at. Twenty-two years in the job, the last twelve in this windowless room where the feeds from all 57 stations converged. She had started out as a station manager, back when stragglers were still pushed clear of the doors by hand. Now she ran trains that had no driver and data that never slept.

The alert had not come from a woman. That was the novelty of recent years, one that Sirisha had never quite got used to: the alert came from the system. *Convergence: orange level.* On the platform at Ameerpet, the analytics engine (the city called it Drishti, "the gaze") had isolated a configuration: a scarlet passenger, travelling on her own, who had stepped out of the women's carriage to change trains; and around her, within a radius the machine considered significant, a group of seven men that had formed in under ninety seconds, two of whom were "known to the police". Probability of an incident: high enough for Drishti not to ask for Sirisha's opinion. The system had already formed its own. A SHE unit, stationed permanently at Ameerpet since the station had been classified as a hotspot, was ordered down to the platform. Pre-emptively. Always pre-emptively.

On the screen, Sirisha watched events unfold in the order the machine had predicted and, at the same time, in the disorder the machine never predicted. The SHE team (four plain-clothes women officers, whom female passengers called the *didis* among themselves, and one uniformed officer) cut across the platform. The group of men scattered instantly, like a flock of sparrows: most had nothing to do with one another, simply seven people brought together under the same camera by coincidence and a train they had to catch. Five walked away. Two were retained. And that was when Sirisha felt the familiar knot inside, which appeared in none of her indicators.

The first of the two was indeed on file for past offences of groping; the machine, that evening, might not have been entirely wrong. The second was called Imran. He was nineteen, delivered meals on an electric bike, and was waiting on that platform for an order to collect from the shopping centre above. He was "known to the police" because a year earlier a camera had mistaken him for a gold-chain snatcher on the strength of a vague resemblance, and even though he had been cleared, his record had never been entirely erased. The system, which does not forget, had pulled him up from the depths of the database the way a name is pulled from a blacklist that no one keeps a register of anymore. They pinned him against the tiled wall in view of two hundred passengers and demanded to see his face, his fingerprints, his phone. He had done nothing. He would do nothing. And now he could never have done nothing: the assault had been averted, so it had not happened, so no one would ever know whether it would have happened. It was the whole mechanism of *Minority Report*, transposed to a platform in Hyderabad: punishing a future that the machine asserted and that nothing, ever again, would contradict.

Kavya saw almost nothing. She saw figures converge, sensed that people were taking care of her without her input, and understood that she had unwittingly been at the centre of something. A *didi* came up to her, gentle and firm. "Everything's fine, *amma*. You were flagged. We'll take you to the blue line platform." Kavya nodded. She felt, in equal measure, protected and dispossessed, as if she had been saved from a danger she had not seen and would never know had been real. She boarded another scarlet carriage. The red dot resumed its course southwards.

Her phone vibrated before the train had even pulled out. It was her father, in Warangal. Drishti had alerted him: as Kavya's registered guardian on the scheme, he received the alerts concerning her. His voice was tender, and it closed around Kavya like a hand. "You see? You see what happens when you come home at that time? Next time take a driverless cab, I'll pay for it. I don't want you on those platforms at night anymore." He was not shouting. He was afraid, and fear born out of the evidence that the city had just supplied. Kavya wanted to retort that indeed nothing had happened; that the system had just shown she was safe; but as she opened her mouth she realised the argument turned against her: if nothing had happened, it was because someone had had to act; so the danger was there; so he was right. Protection proved the threat, and the threat justified control. Her mother had spent her youth hiding from men. Kavya would spend hers never being hidden from anyone.

She looked out of the window at the city sliding past, scarlet with lights and cameras. Tonight she was the best-protected passenger in India. She wondered at exactly what point that had stopped being a good thing.

Back in the control centre, Sirisha closed the Ameerpet event in the log. *Incident anticipated – resolved – no injuries.* By every indicator in the contract, it had been an excellent evening. Safety KPI: met. Punctuality KPI: barely dented. Somewhere in the *Wing* building, a dashboard would tomorrow report one more assault prevented. And Imran, released around midnight without the slightest charge, would cycle home to a neighbourhood the cameras knew better than he did, wondering for the second time in his short life how you can prove you did not do something you did not do. Sirisha switched off the station screen. The silence of the cameras,

she thought, did not exist. They never stopped. That was the whole point.

Three foresight scenarios

White scenario – A shield without detention

In the optimistic scenario, the 2030s turned women's safety into a matter of rights as much as of technology. The predictive system exists, but within a strict framework, inspired by the very objections that digital rights advocates had raised as early as 2021, and by the findings of the Keoscopie survey putting people before machines. Guardianship is genuinely opt-in and controlled by the woman herself, never by a family member; no father or husband receives an alert without her explicit and revocable consent. Emotion recognition, a pseudo-science, has been abandoned in favour of objective, verifiable signals. The file of people "known to the police" is automatically purged and audited every year for bias, and no interception based on prediction alone leads to detention: the unit simply provides a deterrent presence and de-escalation, with no biometric capture and no custody for men who have not committed an offence. Mobility data held by the operator (Keolis) and the authorities is minimised, ringfenced and disclosed in a public transparency report. The result: assaults on public transport genuinely fall; women reclaim the night without becoming, in return, red dots tracked to their front door; and the Hyderabad metro becomes the safest public space in India without ceasing to be a free one. The model is exported, just as the SHE Teams brand was exported ten years earlier.

Grey scenario – Protection that profiles

In the intermediate trajectory, the most likely one, the system half works and nobody decides. Harassment is falling, really and measurably; but tracking has become the norm, accepted as the price of peace of mind, all the more easily since, as early as 2026, nearly nine in ten users in Hyderabad had already let a friend or relative know about one of their journeys. Guardianship, while officially voluntary, is massively taken up by families and, increasingly, by employers who 'ensure' their women night-shift staff's security while knowing where they are. False positives are tolerated as acceptable collateral damage; poor men and men from minorities continue to be over-profiled, intercepted, released and profiled again, in a loop that the Imran pattern has institutionalised. Women are safer but no longer benefit from anonymity; they can no longer disappear, and many have stopped wanting to be able to. The line between protection and control has not disappeared: it has simply become invisible, because no one stands far enough back to see it anymore. The operator runs a network of exemplary safety and zero transparency, and reports excellent indicators every quarter.

Black scenario – Sovereign pre-crime

In the pessimistic scenario, the security justification swallows everything. Women's safety becomes the argument that makes everything acceptable: women's visibility is total, guardianship is compulsory in all but name, and a woman who refuses scarlet status is treated as a suspect in her own right: "why hide, if you have nothing to fear?" Patriarchal family control and state surveillance have merged into a single apparatus, in which a daughter is protected by the state on her father's behalf. At the other end of the chain, pre-crime has created a permanent class of 'interceptables': the poor, migrants and minorities, arrested *en masse* on the strength of calculated convergences, but without any subsequent prosecutions. The *Women Safety Wing*, created to free women from fear, has become the instrument of the control it claimed to fight: Atwood's gendered order served by Dick's pre-crime. The metro is spotless, perfectly safe, and perfectly unfree. The city has kept its promise: no woman is afraid on its platforms anymore. It has simply forgotten to keep the other promise that it never put into words: that safety would not become a euphemism for surveillance.



Keoscopie illustration — Hyderabad, 2044

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