
Promised Riders, Socialized Debts

A Political Economy of Ridership Inflation in India's
Metro Rail Build-Out, 1995–2026

UngalSoththu Transit Research Desk

Contents

1	Abstract	2
2	1. Introduction	2
3	2. Framework and literature	3
3.1	2.1 The empirical literature on megaproject error	3
3.2	2.2 Marxian concepts for a metro age	3
3.3	2.3 Swartz: the DPR as information enclosure	4
4	3. Data and methods	5
4.1	3.1 Corpus	5
4.2	3.2 Indicators	5
4.3	3.3 Known limitations	6
5	5. Findings B — The revision treadmill	9
6	6. Findings C — Counting as ideology	10
7	7. Findings D — The fiscal dump	11
7.1	7.1 Revenue realization: the audited collapse	11
7.2	7.2 The transfer ledger	12
7.3	7.3 The PPP variant: privatized claims on a public shortfall	12
7.4	7.4 Fare hikes: the commuter as residual claimant	12
7.5	7.5 Opportunity cost: what the same money does on a bus	13
7.6	8.1 Property income as the phantom savior	13
7.7	8.2 Who rides, who pays	13
7.8	8.3 The integration deficit as class boundary	14
8	9. The information enclosure — and what openness would cost its owners	14
9	10. Contradiction and transformation	15
10	11. Conclusion	15
11	References	15
12	Appendix A — Data tables	16
12.1	A.1 Latest reported actuals vs original DPR forecasts (as of 18 Oct 2026)	16
12.2	A.2 Lucknow: audited year-wise shortfall (CAG No. 12 of 2025, Table 5.1)	16
12.3	A.3 Lucknow: audited revenue realization (CAG Tables 5.2–5.3)	17
12.4	A.4 Delhi: fixed-horizon (2021) projection revisions	17
12.5	A.5 MoHUA central releases to metro SPVs, FY2020-21 → 30-03-2026 (USQ 6274, Annexure II; ₹ crore)	17
12.6	A.6 MoHUA budget outgo on metro schemes, ₹ crore (USQ 1943)	17
13	Appendix B — Method notes	18

1 Abstract

Every Indian metro rail system was sold to its approval authority on a ridership number that never arrived. We assemble the most complete public evidence base to date on projected versus realized daily ridership for India's metro build-out — thirteen systems from the IIT Delhi TRIP Centre / Infravision Foundation corpus, four official Comptroller and Auditor General (CAG) performance audits (Delhi 2021, Lucknow 2025, Bengaluru 2026, Nagpur figures via ORF), two Parliament annexures laid in 2026, successive DPR projections from 1995 to 2020, and operator disclosures to March 2026. At the white paper's measurement dates, the median system realized **9.7 per cent** of its DPR forecast; the multi-year official series show shortfalls of 87–99 per cent persisting for seven consecutive years; successive revisions cut Delhi's 2021 projection by 74 per cent while Lucknow's DPR *raised* its forecast mid-project; revenue realization ran between 4 and 23 per cent of DPR projections; and redefinitions of "ridership" inflated reported figures by roughly half. We interpret this record through Marxian political economy — fixed capital financed by sovereign credit, land-rent capture through transit-oriented development, the statistical fetishism of the "journey count" — and through Aaron Swartz's information ethics: the DPR demand model is an enclosure, kept private precisely because its falsifiability is its danger. The farebox shortfall is not an accident of forecasting; it is the transfer mechanism by which risk moves from project developers and lenders to general budgets and fare-paying commuters, while construction surpluses and station-area land rents are privatized. We document the counter-tendency — Tamil Nadu's zero-fare bus program, carrying 84.32 lakh riders a day at roughly a tenth of one metro phase's capital cost — and close with transparency-first demands: open demand models, standardized station-entry counting, universal CAG audit, and mode-neutral funding tests.

Keywords: metro rail; megaprojects; strategic misrepresentation; ridership forecasting; fixed capital; political economy; farebox; CAG; information justice; India

2 1. Introduction

Between 2014 and 2025, India's operational metro network grew from 248 km across five cities to over 1,000 km across 23, at a stated investment of ₹2.5 lakh crore; by June 2026 the Ministry of Housing and Urban Affairs (MoHUA) reported roughly 1,159 km operational in 26 cities with national daily ridership crossing 1.15 crore passenger journeys.^{1 2} This is, by any physical measure, one of the largest fixed-capital expansions in the country's urban history. The government narrates it as triumph. The Press Information Bureau's own retrospective is titled *India's Metro Revolution: From Miles to Milestones*.³

This paper is about what the revolution cost and who is paying, measured against what it promised. The puzzle is well known in fragments: metro after metro has opened at a small fraction of the ridership claimed in its Detailed Project Report (DPR) — the document on which both the mode choice and the financial model rest. What is missing is a unified, multi-year, source-traceable account of the shortfall and of its fiscal consequences. We assemble one.

The paper makes three contributions. First, it consolidates the empirical record: a thirteen-system snapshot of forecast versus realization; four official CAG audits read closely; the Ministry's own ridership and loss disclosures extracted from 2026 Parliament annexures; and year-wise projection revisions for Delhi from the original 1995 feasibility study to the 2018 social impact assessment. Every figure is cited to a primary or archival source, and the full dataset with build script is published openly.⁴ Second, it constructs comparable indicators — Realization Ratio, Revision Delta, Revenue Realization, and a Fiscal Transfer ledger — with explicit attention to the measurement trap that has corrupted most public debate: the 2019 change in Delhi Metro's counting definition, which converts a shortfall narrative into a success narrative by redefining what a "rider" is. Third, it offers a political-economic interpretation and a politics. Following the method associated with Aaron Swartz — "information is power. But like all

¹Press Information Bureau, Government of India. *India's Metro Revolution: From Miles to Milestones* (August 2025). <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2025/aug/doc2025812102401.pdf>

²Lok Sabha, Unstarred Question 1943, answered 30 July 2026 (Metro rail projects progress; central assistance FY2024-25–FY2026-27). https://sansad.in/getFile/lsapps/loksabhaquestions/annex/188/AU1943_vmUqd2.pdf?source=lsapps

³Press Information Bureau, Government of India. *India's Metro Revolution: From Miles to Milestones* (August 2025). <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2025/aug/doc2025812102401.pdf>

⁴UngalSoththu Transit Research Desk. *Metro Projections vs Reality* dataset (CSV, DuckDB, charts, source PDFs). <https://zo.pub/cashlessconsumer/metro-projections-vs-reality>

power, there are those who want to keep it for themselves”⁵ — we treat the DPR demand model not as an honest guess that failed but as an *enclosure*: a privately held number whose publicity would defeat its purpose. And following Marx, we treat the recurring fiscal rescue of metro SPVs not as waste or “leakage” but as the ordinary circulation of risk in a credit-financed fixed-capital system: gains are capitalized privately (construction contracts, land rents, arbitral awards), losses are socialized (budget infusions, fare hikes, forgone buses).

A note on standpoint. This desk is a riders’ research operation — an AI-native accountability initiative in Chennai — and the paper’s politics are explicit rather than pretended. We are interested not in optimizing the DPR lie but in abolishing the conditions that require it.

3 2. Framework and literature

3.1 2.1 The empirical literature on megaproject error

The canonical finding belongs to Flyvbjerg and collaborators: in a reference-class sample of 258 transport infrastructure projects across 20 nations, nine out of ten rail projects overestimated traffic, by an average of 106 per cent for rail specifically, while costs were underestimated in nine of ten cases.⁶ Flyvbjerg named the mechanism *strategic misrepresentation*: forecasts are deliberately and systematically slanted to get projects approved, because the actors who benefit from approval do not bear the cost of the error.⁷ The Indian record we present below is a textbook confirmation — with the addition of an official paper trail (CAG audits and parliamentary annexures) that most countries lack.

The Indian technical literature has made the same point for two decades. Mohan’s *Mythologies, Metros and Future Urban Transport* (2008) showed that Delhi Metro’s Phase I actual ridership was at most a quarter of projections, and argued that appraisal benefits were thereby fictitious.⁸ Tiwari and Jain’s 2023 white paper for the Infravision Foundation — the source of the @reclaimchennai chart that prompted this study — tabulated forecast versus actual daily ridership for thirteen systems and concluded that most operate below 20 per cent of forecast, and that Indian cities are selecting heavy rail *before* establishing demand, then back-filling the numbers.⁹ A 2021 UITP knowledge brief found Delhi at 38–79 per cent of projections (depending on year and counting definition), Mumbai Line 1 at 57–74 per cent, Bengaluru at 24–27 per cent, and Chennai at 3–13 per cent.¹⁰ The parliamentary Standing Committee on Housing and Urban Affairs (2022) concluded that most metro projects other than Delhi and Mumbai Line 1 carry less ridership than needed even to break even — Bengaluru required 18.64 lakh riders a day to break even in 2020-21 and carried 0.96 lakh; Hyderabad required 19 lakh and carried 0.65 lakh — and blamed “faulty DPRs” and missing first/last-mile integration.¹¹

What this literature lacks — and what this paper adds — is (a) the *multi-year* dimension inside official audits, showing that shortfalls persist rather than close; (b) the *fiscal* dimension, tracking where the shortfall lands; and (c) a class analysis of the transfer.

3.2 2.2 Marxian concepts for a metro age

Four concepts from the critique of political economy organize the interpretation.

Fixed capital and credit. A metro is fixed capital of the most extreme kind: immovable, single-purpose, 30-to-100-year lived, with near-zero salvage value. In Marx’s schema, such capital only circulates through credit: someone

⁵Swartz, A. (2008). *Guerrilla Open Access Manifesto*. “Information is power. But like all power, there are those who want to keep it for themselves.”

⁶Flyvbjerg, B., Bruzelius, N., & Rothengatter, W. (2003). *Megaprojects and Risk: An Anatomy of Ambition*. Cambridge University Press.

⁷Flyvbjerg, B. (2014). “What You Should Know About Megaprojects and Why: An Overview.” *Project Management Journal*, 45(2), 6–19.

⁸Mohan, D. (2008). *Mythologies, Metros and Future Urban Transport*. TRIPP, IIT Delhi.

⁹Tiwari, G., & Jain, D. (2023). *Urban Public: A Framework for Selecting an Appropriate Urban Public Transport System in Indian Cities*. TRIP Centre, IIT Delhi × The Infravision Foundation, Table 2A.5. <https://tripc.iitd.ac.in/assets/publication/Urban-Transport-Project-White-Paper.pdf>

¹⁰UITP India (2021). *Performance of Indian Metro Rail Systems — Knowledge Brief*, November 2021; and *Methodology* annex. <https://www.uitp.org/wp-content/uploads/sites/7/2025/04/Knowledge-Brief-November-2021.pdf>

¹¹Parliamentary Standing Committee on Housing and Urban Affairs (2022). *Implementation of Metro Rail Projects — An Appraisal*; summary: <https://prsindia.org/policy/vital-stats/overview-metro-rail-projects-india>

advances present money against future revenue streams that exist, at signing, only as projections.¹² In India's metro political economy, that credit is dominated by sovereign and quasi-sovereign lenders — JICA loans constituted 60 per cent of Delhi Phase I, 58.5 per cent of Chennai Phase I, and 48.6 per cent of Delhi Phase III costs¹³ — with the Union and state budgets standing behind repayment. The DPR forecast is therefore not merely an estimate; it is the *collateral*. Inflate the forecast and you have manufactured the security for the loan. This is why ridership inflation is structural rather than accidental: the projection must clear the threshold at which heavy rail beats bus rapid transit in appraisal — peak-hour peak-direction traffic above roughly 15,000–20,000 — and cities whose actual demand fits a bus corridor must still produce a metro-sized number, or lose the argument.¹⁴

The spatial fix and land rent. Harvey's "spatial fix" describes capital's drive to overcome its own crises by switching into the built environment.¹⁵ Urban rail is the paradigmatic fix: it is a machine for re-pricing land. A station re-zones its surroundings; transit-oriented development (TOD) rules multiply floor-space along corridors; landowners and developers capture the capitalized ground rent that the public's investment created. Indian metro DPRs explicitly book this as future revenue — property development income is a named line in every financial model — and the CAG audits we cite show the gap between booked and realized property income is even larger than the farebox gap.¹⁶ The metro, in this reading, is a land-value machine that occasionally carries passengers.

Commodity fetishism and statistical fetishism. Marx's fetishism describes how relations between people appear as properties of things. Its statistical analogue is everywhere in this file: the "rider" counted by DMRC after 2019 is not a person making a journey but a line-boarding event; a commuter who changes lines twice is three "passenger journeys." By this redefinition DMRC's daily count rose by roughly half without a single additional passenger.¹⁷ The fetish obscures the social relation (a person trying to get across a city) behind the commodity metric (journeys sold), and thereby obscures the shortfall the metric was designed to hide.

Socialized risk, privatized gain. The recurrent fiscal event in this file — budget infusion after farebox collapse — is the metro-sector form of what Marx analysed as the credit system's tendency to socialize losses while capital retains its claims. The 2025–26 arbitral awards against MMRDA in favour of Mumbai Metro One (MMOPL, 74 per cent owned by Reliance Infrastructure) — an award of over ₹1,100 crore partly upheld by the Bombay High Court, plus ₹157.64 crore over subordinated debt — are the purest specimen: the private operator's revenue shortfall against an inflated forecast was converted into a claim on the public development authority's budget.¹⁸

3.3 2.3 Swartz: the DPR as information enclosure

Swartz's guerrilla open-access ethic holds that information kept from the public is power kept from the public.¹⁹ Applied to transport appraisal: the DPR demand model — trip tables, mode-choice elasticities, the logit coefficients that conjure 15 lakh daily riders out of a bus city — is held as private intellectual property by consultants and SPVs. The public pays for the project but may not inspect the model that justified it. Chennai's Phase II DPR runs to hundreds of pages and is posted online, but its demand model's workings cannot be reproduced from the public record; sensitivity bands around the central forecast are nowhere disclosed; and no Indian metro publishes its model code or input trip matrices. The enclosure has a function: a falsifiable model is a defeatable project. Falsifiability is precisely what the enclosure prevents — until the CAG arrives, years later, to count the shortfall after the money is spent. openness here is not a politeness; it is the difference between appraisal and alchemy.

¹²Marx, K. (1885). *Capital*, Vol. II (Part I: fixed capital and credit); Marx, K. (1894). *Capital*, Vol. III (Part VI: ground rent).

¹³UITP India (2021). *Performance of Indian Metro Rail Systems — Knowledge Brief*, November 2021; and *Methodology* annexe. <https://www.uitp.org/wp-content/uploads/sites/7/2025/04/Knowledge-Brief-November-2021.pdf>

¹⁴Tiwari, G., & Jain, D. (2023). *Urban Public: A Framework for Selecting an Appropriate Urban Public Transport System in Indian Cities*. TRIP Centre, IIT Delhi × The Infravision Foundation, Table 2A.5. <https://tripc.iitd.ac.in/assets/publication/Urban-Transport-Project-White-Paper.pdf>

¹⁵Harvey, D. (1982). *The Limits to Capital* (Ch. 12, "The Spatial Fix"); Harvey, D. (1985). *The Urbanization of Capital*. Blackwell.

¹⁶Comptroller and Auditor General of India. *Performance Audit No. 7 of 2026 — BMRC Phase I & II*; coverage: The Hindu (15 January 2026), <https://www.thehindu.com/news/national/karnataka/bengaluru-metro-phase-1-realised-just-23-per-cent-of-projected-farebox-revenue-cag/article69942195.ece>

¹⁷UITP India (2021). *Performance of Indian Metro Rail Systems — Knowledge Brief*, November 2021; and *Methodology* annexe. <https://www.uitp.org/wp-content/uploads/sites/7/2025/04/Knowledge-Brief-November-2021.pdf>

¹⁸Economic Times Infrastructure (29 July 2025), "MMRDA deposits ₹560 crore as part of arbitration award to MMOPL"; Moneylife (2025), "Bombay High Court Partly Upholds Arbitral Award in Favour of MMOPL"; Hindustan Times, "Reliance Infra wins ₹157.64 cr award in Metro 1 dispute." <https://infra.economictimes.indiatimes.com/news/urban-transportation/mmrda-deposits-560-crore-as-part-of-arbitration-award-to-mmopl/122976407>

¹⁹Swartz, A. (2008). *Guerrilla Open Access Manifesto*. "Information is power. But like all power, there are those who want to keep it for themselves."

4 3. Data and methods

4.1 3.1 Corpus

The study corpus, assembled 17–18 October 2026 and archived openly,²⁰ comprises:

#	Source class	Documents	Coverage
1	Academic white paper	Tiwari & Jain (2023), TRIP Centre IIT Delhi × Infravision Foundation, Table 2A.5	13 systems: forecast, actual, %
2	CAG performance audits	No. 12 of 2025 (Lucknow); No. 7 of 2026 (Bengaluru); No. 9 of 2021 (Delhi); Nagpur tables reproduced in ORF (2025)	Year-wise projected vs actual riders and revenue
3	Parliament annexures	Lok Sabha USQ 6274 (02-04-2026): commissioning, MoHUA releases, loss-makers; USQ 1943 (30-07-2026): progress, central assistance; Rajya Sabha USQ 863 (27-07-2026): Chennai DPR vs actual	FY2020-21–FY2026-27
4	Successive DPR projections	Delhi 1995–2018 revision series (RITES, Mohan, DMRC EIAs/SIAs); Chennai Ph II DPR (2020); Nagpur DPR (2013)	Projection evolution
5	Operator/industry data	UITP Knowledge Brief (2021); UNFCCC/UNEPCCC Delhi case study; CMRL monthly disclosures; DMRC annual statements; LT Metro; BMRCL via press	Actual daily ridership 2006–2026

4.2 3.2 Indicators

- **Realization Ratio** $R = A_t/F$ — actual average daily ridership A_t at date t over the original planning-stage forecast F . Reported with t explicit, since horizons differ across systems.
- **Revision Delta** — the change in a *fixed-horizon* forecast across successive estimation dates (Delhi’s projections “for 2021”, estimated 1995–2018).
- **Revenue Realization** — actual farebox (or operating) revenue over the DPR’s projected revenue for the same period, as audited.
- **Fiscal Transfer ledger** — central releases to metro SPVs (MoHUA Annexure II, USQ 6274) and statutory/parliamentary loss designations (Annexure III), read as the public balance sheet of the shortfall.

²⁰UngalSoththu Transit Research Desk. *Metro Projections vs Reality* dataset (CSV, DuckDB, charts, source PDFs). <https://zo.pub/cashlessconsumer/metro-projections-vs-reality>

4.3 3.3 Known limitations

Three honesty notes. (1) *Horizon mismatch*: Table 4.1's actuals were measured at different dates than each DPR's target year; this is inherent to the source and we report it rather than adjust it — the analytically relevant fact is precisely that systems remain below original forecasts *years after* their horizons pass. (2) *Counting*: “actuals” across cities mix station entries and line-boarding journeys; Section 6 treats this as a finding, not mere noise, and we use entries-based figures wherever an audited series exists (Delhi). (3) *Selection*: the 13 systems over-represent metros old enough to have measured actuals; the newest systems (Meerut, Agra, Patna, Noida extensions) have no comparable record yet — the direction of the industry's error is unlikely to have reversed, but we flag the inference. # 4. Findings A — The projection machine

Table 4.1 reproduces the consolidated forecast-versus-reality record for the thirteen systems in the IIT Delhi / Infravision corpus — the table underlying the @reclaimchennai chart — and adds our computed statistics.²¹

Metro (phase)	DPR forecast (lakh/day)	Forecast yr	Actual (lakh/day)	Actual yr	Realization
Delhi (Ph 1+2+3)	53.47	2016	25.37	2017-18	47.5%
Kolkata	15.0	–	5.84	2019-20	38.9%
Mumbai Line 1	10.06	2016	3.33	2017-18	33.1%
Lucknow	0.94	–	0.26	2020-21	27.4%
Kochi (Ph 1)	3.80	2015	0.49	2019-20	12.9%
Chennai (Ph 1)	7.57	2016	0.92	2019-20	12.2%
Jaipur (Ph 1)	2.10	2014	0.20	2019-20	9.7%
Nagpur	1.90	–	0.13	2021-22	7.0%
Bengaluru (Ph 1)	16.10	2021	0.96	2021-22	6.0%
Pune	6.00	2018	0.35	2017-18	5.8%
Ahmedabad	6.75	2010	0.30	2022-23	4.4%
Hyderabad	19.00	2017	0.67	2017-18	3.5%
Kanpur (Ph 1)	6.61	2024	0.10	2022-23	1.5%

Median realization: 9.7 per cent. Mean: 16.2 per cent. Only three systems — Delhi, Kolkata, Mumbai Line 1 — exceed one-third of promise. Kanpur's DPR projected 6.61 lakh daily riders for 2024; the system measured one *tenth* of one lakh — a 98.5 per cent shortfall — on a corridor justified, at ₹23.76 crore per km of the day, by that same number.

The distribution is not noise around an honest mean; it is the signature of a selection rule. Indian cities do not measure demand and then choose a mode; under the MoHUA appraisal hierarchy, a corridor forecast above the heavy-rail threshold *qualifies* for metro capital, and the forecast is manufactured to qualify.²² The forecast is therefore endogenous to the financing: it is the number the capital requires. In Flyvbjerg's vocabulary this is strategic misrepresentation; in ours, it is the approval technology of the spatial fix.

Updating the snapshot with the latest reported actuals (2019–2026, sources in Appendix A) softens the picture without changing its structure: Delhi 52 per cent (entries, CAG-audited), Bengaluru 50, Kolkata 41, Chennai 41 against

²¹Tiwari, G., & Jain, D. (2023). *Urban Public: A Framework for Selecting an Appropriate Urban Public Transport System in Indian Cities*. TRIP Centre, IIT Delhi × The Infravision Foundation, Table 2A.5. <https://tripc.iitd.ac.in/assets/publication/Urban-Transport-Project-White-Paper.pdf>

²²Tiwari, G., & Jain, D. (2023). *Urban Public: A Framework for Selecting an Appropriate Urban Public Transport System in Indian Cities*. TRIP Centre, IIT Delhi × The Infravision Foundation, Table 2A.5. <https://tripc.iitd.ac.in/assets/publication/Urban-Transport-Project-White-Paper.pdf>

its 2016-horizon target; **20 per cent** against the Ministry's own 2026 target of 15.69 lakh — see §7), Mumbai Line 1 35, Pune 36, Jaipur 29, Kochi 26, Hyderabad 25, Ahmedabad 21, Nagpur 18, Lucknow 17, Kanpur 1.5. Aggregated across the thirteen systems, latest actuals sum to 60.1 lakh/day against 154.9 lakh originally promised — **38.8 per cent**, a figure dominated by Delhi's post-counting-change numerator and best read as an upper bound.

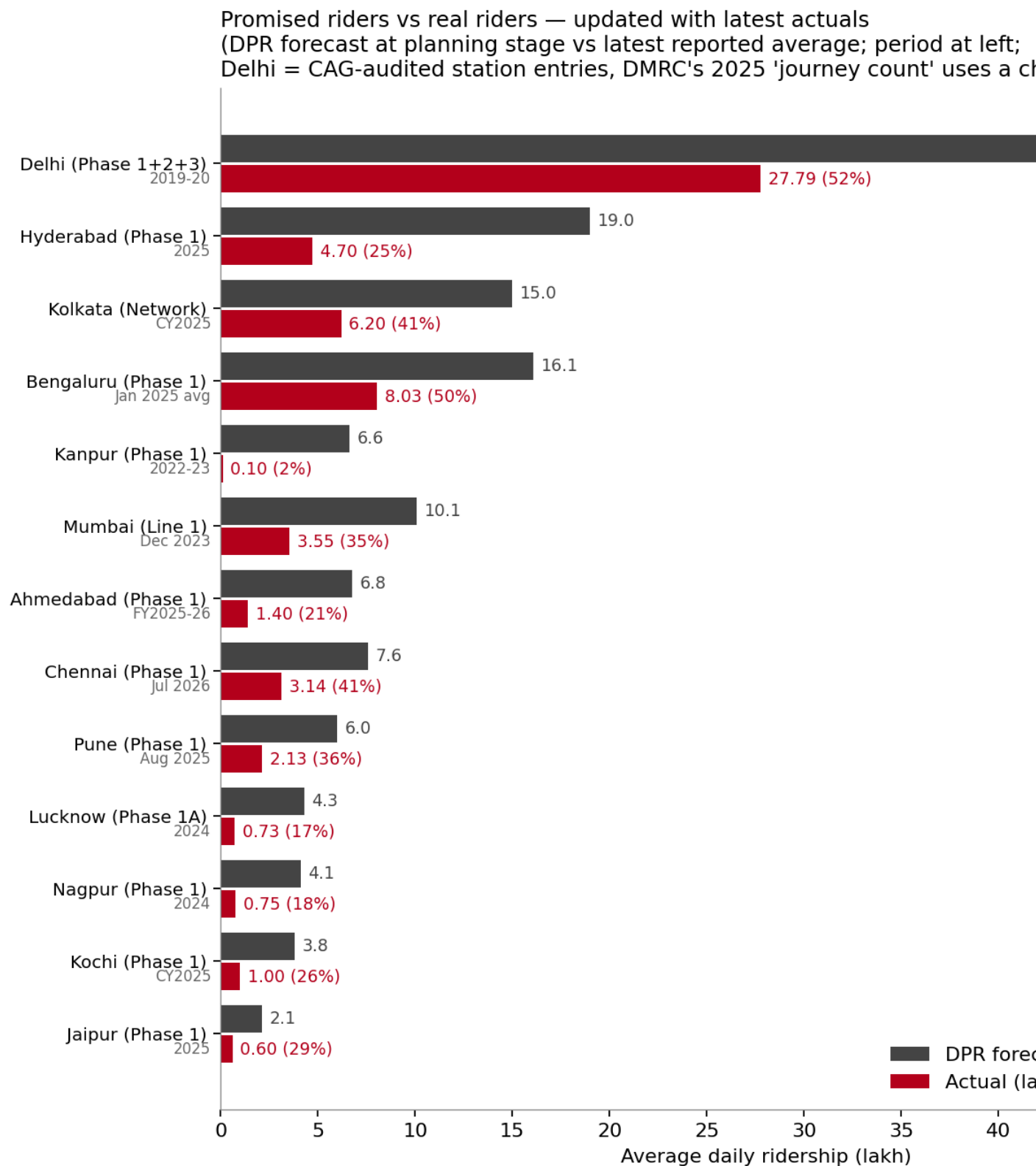


Figure 1: Figure 1. Forecast versus latest reality, thirteen systems. Forecast bars are the original DPR projection (horizon noted); reality bars are the latest officially reported actuals, with the counting definition in parentheses. Sources: TRIP Centre / Infravision Foundation (2023), CAG audits, operator and press disclosures; see Appendix A.1.

5 5. Findings B — The revision treadmill

An inflated forecast cannot survive contact with operations, so the institution has evolved a second mechanism: systematic revision. Table 5.1 tracks Delhi Metro’s forecast *for a fixed horizon year, 2021*, across five estimation rounds.

Estimation round	Source document	Projected daily riders for 2021
1995 (& 2004)	Original feasibility / RITES	15.7 million
2006	Social cost-benefit analysis	5.4 million
2006 & 2011	Phase II DPR / Phase III EIA	7.2 million
2011	EIA for Phase III corridors	9.5 million
2018	SIA for Phase IV corridors	4.05 million

Between 1995 and 2018 the number Delhi Metro claimed it would carry by 2021 was cut by **74 per cent**. Each successive DPR’s cost-benefit case was built not on the original promise but on the *revised* one — the treadmill launders the previous lie by re-anchoring the appraisal. The practice generalizes. UNFCCC data for Delhi Phase I show opening-year realization of 20 per cent (2006), crawling to 26 per cent by 2009 — the country’s *best* metro opened at one-fifth of its DPR.²³ Lucknow’s CAG audit (Table 5.1 of the report) shows the reverse manoeuvre: after operations began, the DPR’s projected daily ridership for the *same years* was **raised** from 4.29 lakh to 6.45 lakh, so that measured shortfalls — 87.5 to 96 per cent, every single year from 2017-18 to 2023-24 — would be benchmarked against a more defensible number.²⁴ Independent reporting on LMRC’s own disclosures found the same 2024 shortfall.²⁵ Nagpur’s DPR (2013) projected 4.10 lakh for 2026; its FY2024 actual of 69,863 is 16–17 per cent of that, and its monthly realization in the first two operating years ran between 2 and 7 per cent.²⁶ Bengaluru’s CAG reports that Phase I ridership *as audited through 2022-23* had still not reached the projection made for the year **2007**.²⁷

The treadmill has a precise political function. A static lie is falsifiable; a revisable lie is not. By the time an audit arrives, the official benchmark has moved — and the “shortfall” is measured against the doctored baseline, shrinking the visible error by construction. The revision series is thus the audit-proofing of the original inflation, and should be read as its institutional confession.

²³UNFCCC/UNEP CCC. *Case Study of Metro Rail (Delhi)*, Table 7: Phase I projected vs actual ridership 2006–2009. <https://unepccc.org/wp-content/uploads/2014/08/case-study-of-metro-final.pdf>

²⁴Comptroller and Auditor General of India. *Performance Audit No. 12 of 2025 — Lucknow Metro Rail Project* (30 January 2026), Tables 5.1–5.3. <https://cag.gov.in/en/audit-report/details/123696>

²⁵Hindustan Times (10 October 2024), “Lucknow Metro falls short of DPR targets, new data shows.” <https://www.hindustantimes.com/cities/lucknow-news/lucknow-metro-falls-short-of-dpr-targets-new-data-shows-101728573730206.html>

²⁶ORF (Khan, U.) (June 2025). *Should Metro Rail Projects Continue Unchecked? Evaluation of Nagpur Metro and Way Forward*, Special Report. <https://www.orfonline.org/research/should-metro-rail-projects-continue-unchecked-evaluation-of-nagpur-metro-and-way-forward>

²⁷Comptroller and Auditor General of India. *Performance Audit No. 7 of 2026 — BMRL Phase I & II*; coverage: The Hindu (15 January 2026), <https://www.thehindu.com/news/national/karnataka/bengaluru-metro-phase-1-realised-just-23-per-cent-of-projected-farebox-revenue-cag/article69942195.ece>

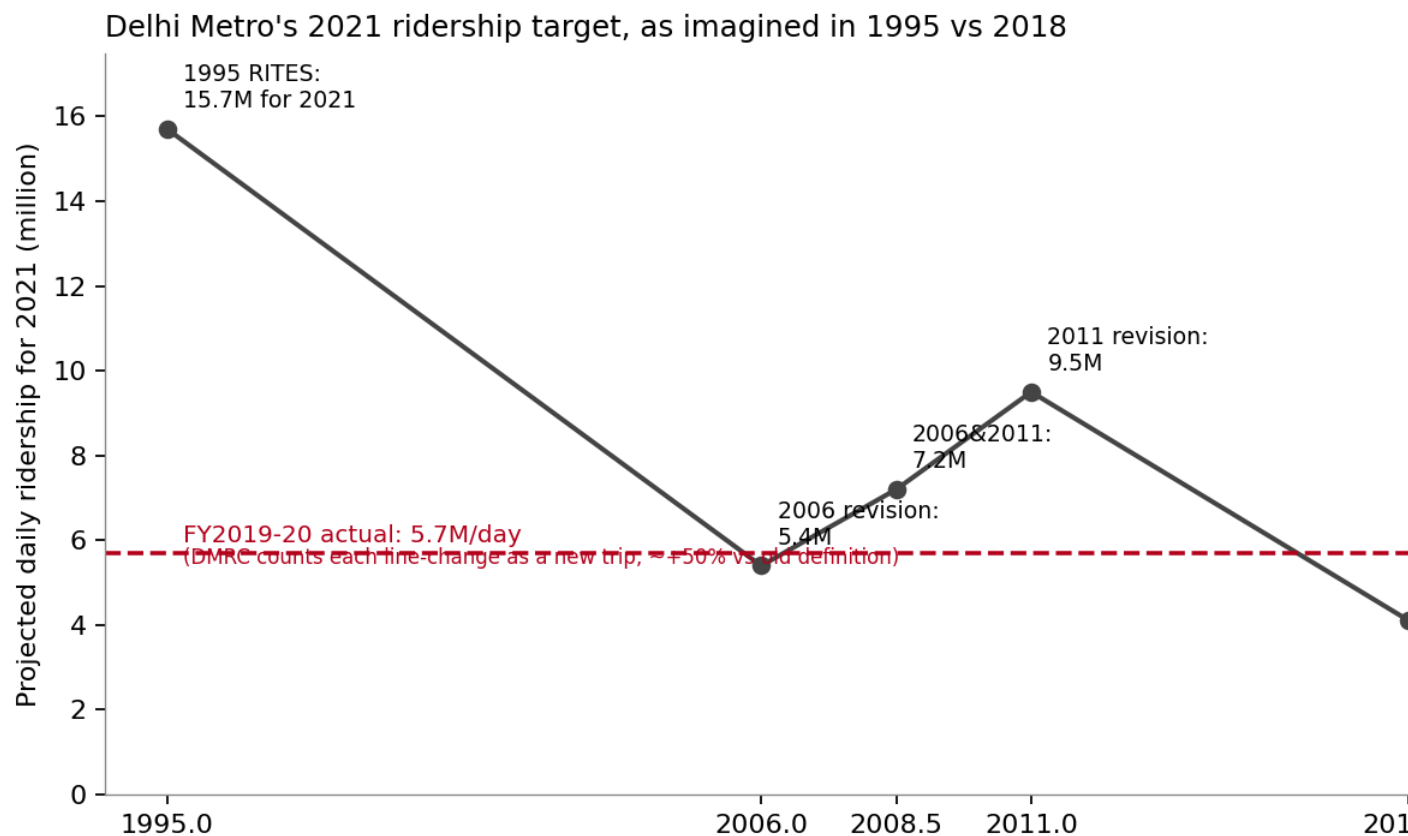


Figure 2: Figure 2. The Delhi revision treadmill: successive projections for the same fixed horizon (2021), 1995–2018. The 2019 counting redefinition then raised the reported count by roughly half without an additional passenger. Sources: UNFCCC/DMRC via UITP annexe; DMRC disclosures.

6 6. Findings C — Counting as ideology

In 2019 DMRC changed its definition of a passenger: each boarding of each line became a separate “passenger journey,” where previously an origin-destination trip counted once. UITP estimates the change inflated reported ridership by about half; its knowledge brief shows Delhi’s realization ratio against projections jumping from 38 per cent (FY18) to 79 per cent (FY20) — *not because one additional passenger was carried, but because the unit was redefined*.²⁸ The CAG, auditing on the older entries basis, found FY2019-20 actual ridership of 27.79 lakh against the DPR’s 53.47 lakh — a 52 per cent realization on the very year the industry narrative declared a triumph.²⁹

The sequence matters politically. When *The Economist* in late 2023 used ITDP data to report Indian metro ridership far below targets, the government’s rebuttal leaned on journey-counts (Delhi “exceeding 7 million daily”) that no comparable international system uses, while the same DMRC statement conceded the pre-COVID figure of 57 lakh “passenger journeys” — a number that, converted to entries, is roughly 28 lakh, i.e. the CAG’s shortfall.³⁰ The Ministry’s own white paper on the sector continues to cite journey-counts without disclosing the definitional break.

This is statistical fetishism in the strict sense: the social relation — a person moving across a city — is replaced by a commodity unit (a journeys-sold event), and the replacement is chosen *after* observing which unit flatters the balance sheet. It is also an information enclosure in Swartz’s sense: the definitional break is disclosed in footnotes

²⁸UITP India (2021). *Performance of Indian Metro Rail Systems — Knowledge Brief*, November 2021; and *Methodology* annexe. <https://www.uitp.org/wp-content/uploads/sites/7/2025/04/Knowledge-Brief-November-2021.pdf>

²⁹Comptroller and Auditor General of India. *Report No. 9 of 2021 — Delhi Metro Rail Corporation*; coverage: Hindustan Times (14 August 2021), <https://www.hindustantimes.com/cities/delhi-news/cag-finds-serious-lapses-in-delhi-metro-phase-3-projects-101629001313201.html>

³⁰The Economist (2023), “India has splurged billions on metro trains”; government rebuttal via ETGovernment (6 December 2023). <https://government.economictimes.indiatimes.com/news/urban-transportation/india-has-splurged-billions-on-metro-trains-economist/105833399>

and audit annexes, never in the headline. Our dataset therefore reports entries-based figures wherever an audited series exists and flags the break everywhere else. Comparative metro practice — and every system London, Hong Kong or Singapore benchmarks itself against — counts the journey, not the boarding.

Projections vs reality, year by year — the gap never closed

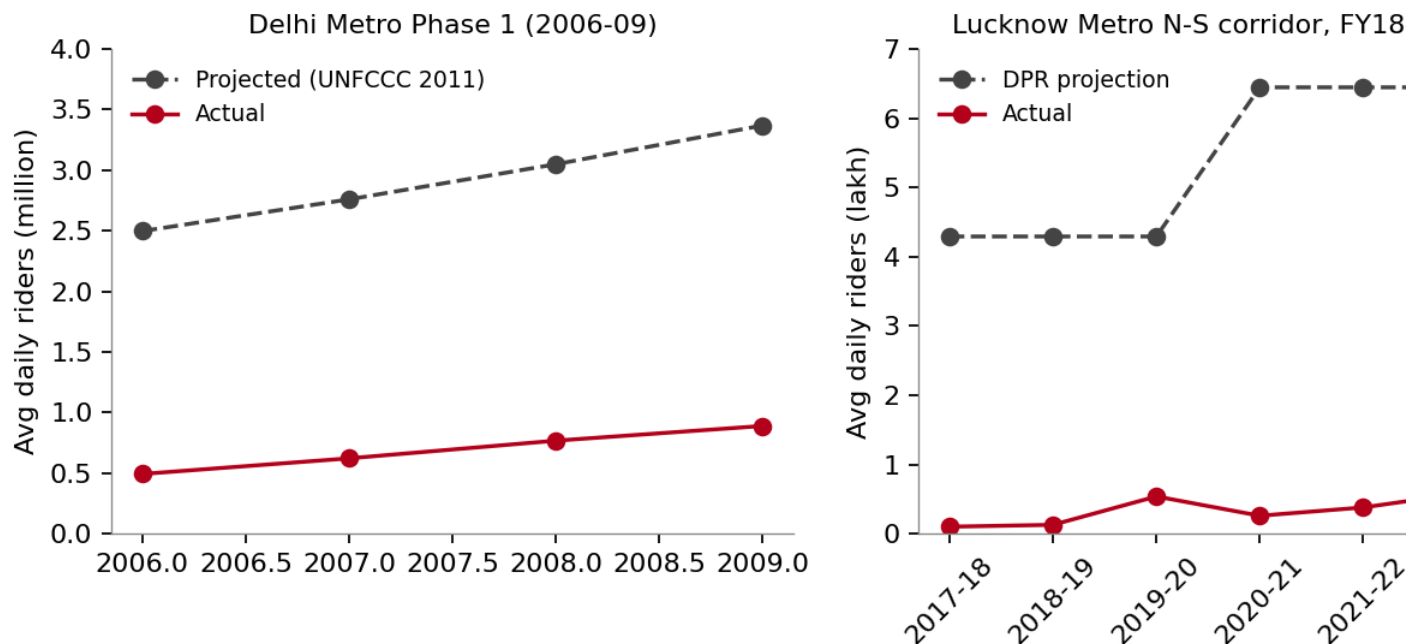


Figure 3: Projected versus actual daily ridership over the first years of operations, four systems. The gap does not close with maturity; it becomes permanent. Sources: CAG (Lucknow), ORF (Nagpur), TRIP Centre snapshot.

7 Findings D — The fiscal dump

7.1 Revenue realization: the audited collapse

The ridership shortfall converts into a revenue shortfall at full pass-through, as the CAG audits quantify:

- **Lucknow** (CAG No. 12 of 2025): DPR farebox for FY2018-19 to FY2023-24 totalled ₹2,867 crore; actual operating revenue over the seven audited years rose from ₹5.55 crore to ₹99.35 crore, but in *no year* exceeded 17.5 per cent of projection (range: 4.1–17.5 per cent). Operating ratios ran 291 per cent (2017-18), 187, 100, 226, 146 — five years of operating cash burn before two years of relief.³¹
- **Bengaluru** (CAG No. 7 of 2026): farebox 2016-17 to 2022-23 was ₹1,758.13 crore against ₹7,736.70 crore projected — **22.7 per cent**. Property development income of ₹21,282 crore was projected from 55 hectares that had not even been acquired by March 2023.³²
- **Nagpur** (CAG via ORF): revenue realizations of roughly 4 per cent of DPR across 2018-19 to 2020-21.³³

³¹Comptroller and Auditor General of India. *Performance Audit No. 12 of 2025 — Lucknow Metro Rail Project* (30 January 2026), Tables 5.1–5.3. <https://cag.gov.in/en/audit-report/details/123696>

³²Comptroller and Auditor General of India. *Performance Audit No. 7 of 2026 — BMRL Phase I & II*; coverage: The Hindu (15 January 2026), <https://www.thehindu.com/news/national/karnataka/bengaluru-metro-phase-1-realised-just-23-per-cent-of-projected-farebox-revenue-cag/article69942195.ece>

³³ORF (Khan, U.) (June 2025). *Should Metro Rail Projects Continue Unchecked? Evaluation of Nagpur Metro and Way Forward*, Special Report. <https://www.orfonline.org/research/should-metro-rail-projects-continue-unchecked-evaluation-of-nagpur-metro-and-way-forward>

The Ministry's own annexure concedes the operating-loss list for FY2024-25: **Chennai, Noida, Mumbai (MMRCL), Ahmedabad, and Jaipur** metro corporations — with the losses of initial-phase systems described as the normal condition of the sector.³⁴

7.2 7.2 The transfer ledger

Where does the gap go? Into the budget line. MoHUA's central assistance to metro projects rose from ₹23,102 crore (FY2023-24 actual) to ₹28,544, ₹29,451 and ₹30,942 crore across FY2024-25 to FY2026-27 (BE) — **₹1,12,039 crore in four years** for one urban mode.³⁵ The corporation-wise release ledger from the same ministry (USQ 6274 Annexure II) totals **₹1,37,119 crore to nineteen SPVs in six years** (FY2020-21 to 30-03-2026), led by NCRTC (₹20,967 cr), BM-RCL (₹19,647 cr), DMRC (₹18,812 cr), CMRL (₹16,465 cr — of which ₹8,688 cr in FY2025-26 alone, the Phase II ramp) and MMRCL (₹14,050 cr). These are central releases only; they sit atop state equity, JICA debt serviced through state budgets, and fare revenue.

The debt layer deserves naming, because it is the collateralization of the inflated forecast. JICA loans constituted 60 per cent of Delhi Phase I, 58.5 per cent of Chennai Phase I and 48.6 per cent of Delhi Phase III.³⁶ Chennai Phase II carries a JICA commitment of ₹20,196 crore against a project cost the Union Cabinet fixed at ₹63,246 crore — a cost that had already grown from the ₹40,941 crore completion figure in the 2020 state order.³⁷ Every rupee of that loan was sized against the DPR's 15.5 lakh daily riders for 2026. MoHUA's own annexure, quoted in §7.1, records Chennai Metro operating at 3.14 lakh — **20 per cent of the number the loan was underwritten on**.³⁸

7.3 7.3 The PPP variant: privatized claims on a public shortfall

Mumbai Line 1 (Versova–Andheri–Ghatkopar) was India's first metro PPP: MMOPL, 74 per cent Reliance Infrastructure, 26 per cent MMRDA, ₹2,000 crore of syndicated bank debt against a DPR forecasting 4.3 lakh daily riders in 2011 and 6.7 lakh in 2021. It carried 3.3–3.5 lakh at maturity. The shortfall then travelled *upstream* through the contract: an arbitral tribunal in August 2023 awarded MMOPL roughly ₹992 crore for cost escalation and the state's fare freeze; the Bombay High Court in 2025 partly upheld an award of over ₹1,100 crore, directing MMRDA to deposit ₹1,169 crore (₹560 crore deposited by July 2025); a further ₹157.64 crore award for “subordinated debt” followed.³⁹ The DPR's fiction became the private operator's enforceable claim on the public authority. This is the risk-transfer in its purest form: the forecast was the operator's sales pitch, the shortfall became the state's invoice.

7.4 7.4 Fare hikes: the commuter as residual claimant

When budgets and arbitration fail to close the gap, the farebox is squeezed from the other side. Parliament's answer records fare revisions at DMRC and BMRL within five years.⁴⁰ Bengaluru's February 2025 hike — 51.6 per cent on average before discounts — cut average daily ridership by roughly 80,000 within weeks (8.04 lakh in January to 7.24 lakh in March 2025).⁴¹ Delhi's 2025 revision followed the same logic. Each hike is the debt service converted into a

³⁴Lok Sabha, Unstarred Question 6274, answered 2 April 2026 (commissioning; central releases FY2020-21–2025-26; fare revisions; operating-loss corporations, Annexure III). https://sansad.in/getFile/loksabhaquestions/annex/187/AU6274_TyKwGk.pdf?source=pqals

³⁵Lok Sabha, Unstarred Question 1943, answered 30 July 2026 (Metro rail projects progress; central assistance FY2024-25–FY2026-27). https://sansad.in/getFile/lsapps/loksabhaquestions/annex/188/AU1943_vmUqd2.pdf?source=lsapps

³⁶UITP India (2021). *Performance of Indian Metro Rail Systems — Knowledge Brief*, November 2021; and *Methodology* annex. <https://www.uitp.org/wp-content/uploads/sites/7/2025/04/Knowledge-Brief-November-2021.pdf>

³⁷JICA (21 June 2022), “ODA Loan of INR 4710 Cr for Chennai Metro Rail Project Phase 2”; Times of India (November 2020), “Chennai: Metro phase-2 gets back on track” (JICA ₹20,196 cr); GO Ms No. 43, Planning Development & Special Initiatives Dept, TN (2020). <https://timesofindia.indiatimes.com/city/chennai/metro-phase-2-gets-back-on-track/articleshow/79137801.cms>

³⁸Rajya Sabha, Unstarred Question 863, answered 27 July 2026 (Chennai Metro: DPR projections vs actual ridership; Phase II DPR projection of 15.50 lakh for 2026). https://sansad.in/getFile/annex/271/AU863_vLXf8k.pdf?source=pqars

³⁹Economic Times Infrastructure (29 July 2025), “MMRDA deposits ₹560 crore as part of arbitration award to MMOPL”; Moneylife (2025), “Bombay High Court Partly Upholds Arbitral Award in Favour of MMOPL”; Hindustan Times, “Reliance Infra wins ₹157.64 cr award in Metro 1 dispute.” <https://infra.economictimes.indiatimes.com/news/urban-transportation/mmrda-deposits-560-crore-as-part-of-arbitration-award-to-mmopl/122976407>

⁴⁰Lok Sabha, Unstarred Question 6274, answered 2 April 2026 (commissioning; central releases FY2020-21–2025-26; fare revisions; operating-loss corporations, Annexure III). https://sansad.in/getFile/loksabhaquestions/annex/187/AU6274_TyKwGk.pdf?source=pqals

⁴¹Deccan Herald (June 2025), “Bengaluru metro fare hike hits ridership hard.” <https://www.deccanherald.com/india/karnataka/bengaluru/bengaluru-metro-fare-hike-hits-ridership-hard-3559754>

commuter price; each subsequent ridership dip then becomes the next argument for further subsidy and expansion support. The circularity is complete: inflate to approve; underperform; transfer; hike; repeat.

7.5 7.5 Opportunity cost: what the same money does on a bus

The counterfactual is not hypothetical; one Indian state is running it. Tamil Nadu's zero-fare travel program (Vetri Payanam) moved **~84.32 lakh women and trans persons a day** across 12,692 buses as of October 2026, at an annual cost of roughly ₹6,000 crore — two-thirds of which is fare reimbursement to corporations, the rest fleet expansion.⁴² Chennai Metro, by the Ministry's own figures, carries 3.14 lakh a day — 3.7 per cent of the bus program's ridership — on a Phase I+Extension capital account of ₹22,150 crore, with Phase II adding ₹63,246 crore: **the entire decade of the zero-fare program's cost, for a corridor promising 15.5 lakh riders against an identical promise that delivered 3.14 lakh.**⁴³

Crude capital-per-daily-served arithmetic (one-time capital over average daily ridership at latest count, with all the caveats such ratios deserve) gives Delhi ≈ ₹25,000 per station entry and Chennai ≈ ₹70,500 per daily rider, against roughly ₹25,000 per daily bus trip for a ₹1 crore standard bus at 400 trips/day — i.e., a metro is *not* an order-of-magnitude more capital-efficient at realized ridership; it is an order of magnitude more capital-intensive at *promised* ridership. The difference between promise and realization is precisely the transfer documented in §7.2. # 8. Findings E — Land rent, class composition, and the city the metro builds

7.6 8.1 Property income as the phantom savior

Every DPR books property development and transit-oriented development (TOD) income as the margin that closes the financial model — and every audit finds the same gap repeated on the land side of the ledger. Bengaluru's projected ₹21,282 crore property income rests on 55 hectares unacquired after a decade;⁴⁴ Mumbai's CAG-sourced tables show property income at a fraction of projection across 2018–2024;⁴⁵ Lucknow's audit flags the same in smaller sums.⁴⁶ The pattern is explicable in the terms of §2.2: the “property development” line is the ground rent that the public's fixed capital capitalizes into land — and that rent accrues, in the first instance, to whoever holds the land when the alignment is announced. In practice this is a subsidy stream flowing upward: land values along Indian metro corridors reprice years before opening, station-area zoning relaxations concentrate floor-space value in developer hands, and the SPV — capital-starved precisely *because* the farebox collapsed — ends up selling or leasing into a market whose appreciation it created. The metro is a machine for making land claims legible and valuable; whether the public that funded it captures the rent is a policy choice that India has, so far, declined to make (no functioning land-value-capture statute exists).

7.7 8.2 Who rides, who pays

The class composition is stark. Metro users are disproportionately salaried service-sector commuters; construction of the corridors displaced informal settlements and street vendors in every major city; and the *fiscal* burden documented in §7 is borne by general taxpayers — including the bus riders, informal workers, and non-motorized majority whose mobility the investment crowded out. Amita Baviskar's analysis of Delhi's “bourgeois environmentalism” — the middle-class capture of urban environmental discourse against the urban poor's uses of the city — describes the cultural side of this transfer: the metro entered Indian civic imagination as the emblem of a clean,

⁴²UngalSoththu — Vetri Payanam monitoring desk (October 2026): 12,692 zero-fare services; 84.32 lakh women/trans riders per day; ~₹6,000 crore annual cost. Internal dataset and daily briefs, <https://ungalsoththu.github.io>

⁴³Rajya Sabha, Unstarred Question 863, answered 27 July 2026 (Chennai Metro: DPR projections vs actual ridership; Phase II DPR projection of 15.50 lakh for 2026). https://sansad.in/getFile/annex/271/AU863_vLXf8k.pdf?source=pqars

⁴⁴Comptroller and Auditor General of India. *Performance Audit No. 7 of 2026 — BMRCL Phase I & II*; coverage: The Hindu (15 January 2026), <https://www.thehindu.com/news/national/karnataka/bengaluru-metro-phase-1-realised-just-23-per-cent-of-projected-farebox-revenue-cag/article69942195.ece>

⁴⁵ORF (Khan, U.) (June 2025). *Should Metro Rail Projects Continue Unchecked? Evaluation of Nagpur Metro and Way Forward*, Special Report. <https://www.orfonline.org/research/should-metro-rail-projects-continue-unchecked-evaluation-of-nagpur-metro-and-way-forward>

⁴⁶Comptroller and Auditor General of India. *Performance Audit No. 12 of 2025 — Lucknow Metro Rail Project* (30 January 2026), Tables 5.1–5.3. <https://cag.gov.in/en/audit-report/details/123696>

orderly, “world-class” city defined against the bus, the cycle-rickshaw, the vendor cart.⁴⁷ Mohan’s 2008 warning — that metro capital is celebrated as modernity while bus fleets decay for want of operating budgets — remains the sector’s most precise one-line political economy.⁴⁸

The gender dimension sharpens the contrast. The stated rationale for Chennai’s Phase II includes women’s mobility and safety; yet the program that actually transformed women’s mobility in Tamil Nadu is the zero-fare bus program of \$7.5 — 84 lakh women and trans persons a day — funded at one-tenth of Phase II’s capital account and serving precisely the trips (short, multi-stop, informal-work-linked) that rail trunk systems structurally cannot serve.

7.8 8.3 The integration deficit as class boundary

The Standing Committee found the same first/last-mile deficit everywhere: no feeder rationalization, no fare integration, stations sited for land acquisition convenience rather than origin-demand.⁴⁹ This is not an engineering oversight. A fare-integrated, feeder-dense, street-connected metro would be a *public transport system* — accessible to the working class it currently excludes. A gated, premium-fare, park-and-ride trunk line is a *club good*. The choice between them has been made, repeatedly, in favour of the club good, and the ridership shortfall is the quantitative register of that choice.

8 9. The information enclosure — and what openness would cost its owners

Return to Swartz. The sequence documented in §§4–7 — inflate, approve, underperform, revise, redefine the count, socialize — is an *accountability pipeline* in which each stage is only possible because the previous stage’s claim was never independently testable in public. The demand model is proprietary; the sensitivity bands are undisclosed; the counting definitions change in footnotes; the DPRs of many corridors (several joint-venture and regional projects) are simply not published at all. The remedy set writes itself, and costs nothing but the owners’ power:

1. **Open the models.** Publish every DPR demand model — code, input trip matrices, elasticities, sensitivity ranges — under an open licence at approval time. Refuse approval where the model cannot be publicly reproduced.
2. **Standardize the count.** Adopt station-entries (origin-destination journeys) as the sole official ridership unit, with an audited national series; sunset “passenger journeys” as a headline metric.
3. **Audit before approval, not after.** Give the CAG — or an independent reference-class forecasting office — statutory pre-certification of demand forecasts, using ex-post distributions from completed Indian projects (we have, by now, a rich national reference class to draw on: Table 4.1).
4. **Phase gates.** Release capital in tranches tied to realized ridership against *original* forecasts, with automatic mode-rebalancing toward buses when gates are missed — making the budget internalize the error the DPR created.
5. **Mode-neutral funding tests.** Fund per passenger-capacity-hour delivered, not per km of rail built, so that a bus corridor competes for the same rupee on equal terms.
6. **Land-value capture as statute.** If the metro is to capitalize land rents, the capitalized rent must be booked as project revenue — by law, not by tender.

Our own practice models the smallest version of the demand: this study’s dataset — every table, script, and source PDF, hashed and archived — is public at zo.pub/cashlessconsumer/metro-projections-vs-reality.⁵⁰ The state publishes ridership; the collective publishes the difference.

⁴⁷ Baviskar, A. (2003). “Between Violence and Desire: Space, Power, and Identity in the Making of Metropolitan Delhi.” *International Social Science Journal*, 55(175), 89–98.

⁴⁸ Mohan, D. (2008). *Mythologies, Metros and Future Urban Transport*. TRIPP, IIT Delhi.

⁴⁹ Parliamentary Standing Committee on Housing and Urban Affairs (2022). *Implementation of Metro Rail Projects — An Appraisal*; summary: <https://prsindia.org/policy/vital-stats/overview-metro-rail-projects-india>

⁵⁰ UngalSoththu Transit Research Desk. *Metro Projections vs Reality* dataset (CSV, DuckDB, charts, source PDFs). <https://zo.pub/cashlessconsumer/metro-projections-vs-reality>

9 10. Contradiction and transformation

The metro system's deepest feature is that its failure is *productive*. The farebox collapse documented in §7 does not discredit the program; it generates the next program. The Standing Committee's remedy for shortfalls is "more network to reach breakeven" — the claim that 3,300 km of new lines will fix what 1,159 km did not.⁵¹ Delhi carried 79 per cent of its *original* projection only after quintupling the network and redefining the count; Chennai's answer to a 20 per cent realization is to double the network at triple the cost on the same forecast form. The shortfall does not close the model; it re-enters the model as the case for scale. In Marxist terms, the contradiction — between the capital intensity of the fixed asset and the fare-box revenues a stratified, bus-based city can actually yield — cannot be resolved within the mode; it can only be displaced into larger phases, longer loan tenors, and bigger annexures.

But the same displacement creates the conditions of its own critique. Every rupee of the ₹1,37,119 crore release ledger is a comparison the public can now run: against bus fleet renewal, against the zero-fare program's 84 lakh riders a day, against street safety and last-mile access that actually generate ridership. Tamil Nadu's counter-tendency — universal fare-free bus access funded as social policy — is the first institutionally significant demonstration in India that *volume comes from affordability and frequency, not from rail gauge*, and it did more for women's mobility in three years than every metro PPP since 2006. The transit commons is not a utopia; it is an operating program with audited ridership numbers that the metro sector cannot match on any per-rupee measure.

10 11. Conclusion

We began with a chart on social media: thirteen metros, one bar each, a red gap between the promise and the riders. The chart was accurate but static. The full record is worse in structure than in any single number: a median realization of 9.7 per cent at horizons; an 87–99 per cent seven-year audited shortfall in Lucknow; a 74 per cent revision treadmill in Delhi; a counting redefinition worth ~50 per cent of the national headline; farebox realization between 4 and 23 per cent of plan; ₹1.12 lakh crore of central assistance in four years to a mode that returns single-digit percentages of its promised revenue; an arbitral machinery converting private forecasts into public invoices; and a 63,246-crore repetition of the identical bet now under construction in Chennai.

The political economy is not mysterious. Fixed capital of this scale can only be advanced against future revenue; the future revenue exists only as a forecast; the forecast is produced by the same parties who are paid from the approval; and its falsification is legally enforceable only after the capital is sunk — by which time the claim has been transferred to the public balance sheet. Swartz's rule tells us where the intervention lies: make the model public *before* the approval, count the rider honestly *after* it, and let the numbers — not the renderings — allocate the rupees between rail, bus, and street. The philosophers have only interpreted the ridership gap. The point is to close the rupee gap it hides.

11 References

⁵¹Parliamentary Standing Committee on Housing and Urban Affairs (2022). *Implementation of Metro Rail Projects — An Appraisal*; summary: <https://prsindia.org/policy/vital-stats/overview-metro-rail-projects-india>

12 Appendix A — Data tables

12.1 A.1 Latest reported actuals vs original DPR forecasts (as of 18 Oct 2026)

City (system scope)	Original DPR forecast (lakh/day)	Latest actual (lakh/day)	Period	Source basis	Realization
Delhi (network)	53.47	27.79	FY2019-20	CAG entries basis	52.0%
Bengaluru (Ph 1+2)	16.10	8.04	Jan 2025	BMRCCL monthly	49.9%
Kolkata (metro)	15.00	6.20	FY2024-25	KMRCL/press	41.3%
Chennai (Ph 1+Ext)	7.57 (2016 tgt)	3.14	FY2024-25	MoHUA annexure	41.5%
Mumbai (Line 1)	10.06	3.55	2019 (pre-COVID)	MMOPL/press	35.3%
Pune (Ph 1+2 partial)	6.00	2.13	2025	Maha Metro/press	35.5%
Jaipur (Ph 1)	2.10	0.60	2024-25	JMRC	28.6%
Kochi (Ph 1)	3.80	1.00	2025	KMRL	26.3%
Hyderabad (L1-3)	19.00	4.70	2025	L&T Metro	24.7%
Ahmedabad (Ph 1)	6.75	1.40	2024-25	GMRC	20.7%
Nagpur (Ph 1)	4.10 (2026 tgt)	0.75	FY2023-24	CAG via ORF	18.3%
Lucknow (Ph 1A/1B)	4.29	0.73	FY2023-24	CAG Table 5.1	17.0%
Kanpur (Ph 1)	6.61 (2024 tgt)	0.10	FY2022-23	CAG/TRIP	1.5%

Note: horizons differ (see §3.3). Chennai's realization against the Ministry's own 2026 target of 15.69 lakh is **20 per cent**.⁵²

12.2 A.2 Lucknow: audited year-wise shortfall (CAG No. 12 of 2025, Table 5.1)

FY	Projected/day	Actual/day	Shortfall
2017-18	429,250	10,054	97.7%
2018-19	4,74,250	33,565	92.9%
2019-20	5,19,250	63,820	87.7%
2020-21	5,64,250	24,759	95.6%
2021-22	5,70,750	42,169	92.6%
2022-23	5,77,250	53,729	90.7%
2023-24	5,83,750	72,733	87.5%

⁵²Rajya Sabha, Unstarred Question 863, answered 27 July 2026 (Chennai Metro: DPR projections vs actual ridership; Phase II DPR projection of 15.50 lakh for 2026). https://sansad.in/getFile/annex/271/AU863_vLXf8k.pdf?source=pqars

12.3 A.3 Lucknow: audited revenue realization (CAG Tables 5.2–5.3)

FY	DPR operating revenue (₹ cr)	Actual (₹ cr)	Realization
2018-19	135.10	5.55	4.1%
2019-20	463.25	81.23	17.5%
2020-21	88.96	4.32	4.9%
2021-22	132.90	10.91	8.2%
2022-23	802.87	113.53	14.1%
2023-24	933.21	136.90	14.7%

Operating ratio: 291% (2017-18), 187% (2018-19), 100% (2019-20), 226% (2020-21), 146% (2021-22).

12.4 A.4 Delhi: fixed-horizon (2021) projection revisions

Estimation year	Document	Forecast for 2021
1995 / 2004	Feasibility / RITES	15.7 M/day
2006	SIA	5.4 M/day
2006 / 2011	Ph II DPR / Ph III EIA	7.2 M/day
2011	Ph III EIA	9.5 M/day
2018	Ph IV SIA	4.05 M/day

FY2019-20 actual (CAG, entries): 27.79 lakh vs DPR 53.47 lakh = 52.0%. Post-redefinition “journeys”: ~57 lakh (FY20) and 7.1 M (CY2025).

12.5 A.5 MoHUA central releases to metro SPVs, FY2020-21 → 30-03-2026 (USQ 6274, Annexure II; ₹ crore)

NCRTC 20,967 · BMRCL 19,647 · DMRC 18,812 · CMRL 16,465 · MMRL 14,050 · Surat 7,229 · Pune 7,226 · Ahmedabad 6,656 · Kanpur 6,468 · Agra 4,120 · Patna 3,069 · KMRCL 3,035 · Indore 2,967 · Bhopal 2,734 · Nagpur 2,291 · Pune L3 821 · Gurugram 250 · Kochi 213 · Thane 100 — **Total ₹1,37,119 crore (19 SPVs, six years, central assistance only).**

12.6 A.6 MoHUA budget outgo on metro schemes, ₹ crore (USQ 1943)

FY2023-24 (A)	FY2024-25 (A)	FY2025-26 (RE)	FY2026-27 (BE)
23,102.20	28,543.86	29,451.00	30,942.05

13 Appendix B — Method notes

1. *Counting definitions.* “Entries” = net station entries per day (origin-destination equivalent). “Journeys” = line boardings; a two-line interchange = 3 journeys. UITP estimates ~55% inflation from journeys-counting. Our realization figures use entries wherever an audited series exists (Delhi), and city-reported series otherwise — flagged in A.1.
2. *Chennai 7.57 vs 15.69.* The 2016-horizon DPR target (7.57 lakh) and the Ministry’s 2026 target (15.69 lakh) are both primary-sourced; we report both. The 20 per cent figure uses the Ministry’s own target-year data.
3. *Aggregation.* The 38.8% aggregate is sums of latest actuals over sums of original forecasts; it is Delhi-dominated (44% of the promised total) and an upper bound. The median (9.7%) is the robust headline.
4. *Reproducibility.* `build_dataset.py` regenerates every CSV, chart, and DuckDB table from the archived sources; SHA-256 hashes of source PDFs ship with the dataset.