



BUSWORLD SOUTHEAST ASIA CONFERENCE 2026

From Chaos to Control

How Transjakarta Rebuilt Its
Bus Brain with AI

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The Scale We Operate At

Transjakarta is the backbone of mobility for Greater Jakarta — and the world's largest BRT system by route length.

1.4M

DAILY PASSENGERS

All-time high • 2025 average

413M

ANNUAL PASSENGERS

2025 • 2.2× growth since 2022



4,869

BUSES

Nearly 5,000 fleet

251.2

KM BRT

World's longest

14

CORRIDORS

+ 233 routes

269

HALTES

Across Jabodetabek

92.5%

AREA COVERAGE

of Jakarta served

80%+

GEN Z + MILLENNIAL

of riders



Orchestrating 5,000 Buses with Paper, Radio, and Hope

Before 2022, our operational nervous system couldn't keep up with the network we'd built.



● Siloed Data

GPS, fare gates, CCTV, customer feedback — each in its own system. Reconciling them was a manual job that ran on spreadsheets.

● Reactive Monitoring

Incidents reached the control room through WhatsApp, radio chatter, and customer complaints — minutes after they mattered.

● Manual Decisions at Scale

Dispatchers tracked headway by eye. Drivers got assigned via printed sheets. Mileage was reconciled with pen and paper.



Meet SYNTRA

Our Digital Mobility Brain

100% IN-HOUSE BUILT

Modular

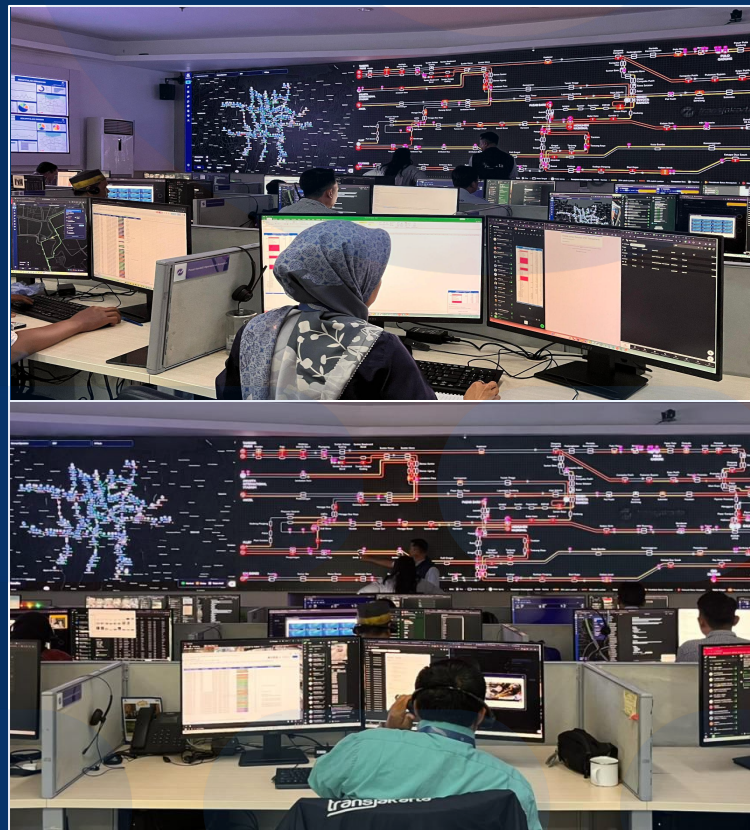
Six operational domains, one platform.

Predictive

From reactive monitoring to anticipating problems before they reach the passenger.

Real-Time

Live data flowing from every bus, every halte, every transaction into a single command view.





04 · HOW IT WORKS

Six Modules. One Brain.

SYNTRA orchestrates the full operational lifecycle — from planning through real-time dispatch to post-trip analysis.

01

Asset Monitoring

Live status of every bus, halte device, and trip on a single map.

02

Headway Management

Real-time spacing between buses to keep service rhythmic.

03

Mileage Verification

Automated reconciliation — no more paper logs.

04

Scheduling

AI-assisted assignment of buses and drivers to demand.

05

Driver Performance

Six-axis scoring to develop our pramudi as professionals.

06

Dispatching

Decision support for control-room operators.



→ Each module reads from and writes to a unified data layer. No more reconciliation. No more 'which dashboard do I trust?'



Perencanaan Operasi



- Ringkasan
- Jadwal Operasi
- Jadwal Pramudi
- Rostering
- Realisasi

Tanggal

08 Aug 2025

Jenis Layanan

BRT

Depo

Semua Depo

Kode Kontrak

Semua Kode Kontrak

Titik Awal		4:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30
G00060 Kali Besar	1	BMP-240334	1-R07	BMP-240334		1-R07	BMP-240334		
	10D		-						
	10H	BMP-240340	1-R07	BMP-240340		1-R07	BMP-240340		
	11		-						
	12	BMP-240323	1-R07	BMP-240323		1-R07	BMP-240323		
	13		-						
	13B	BMP-240339	1-R07	BMP-240339		1-R07	BMP-240339		
	14		-						
	13E	1-R08	BMP-240326	1-R07	BMP-240326		1-R07	BMP-240326	
	2			YUSUP				YUSUP	
	2A	1-R08	BMP-240337	1-R07	BMP-240337		1-R07	BMP-240337	
	2C			HERI PRASETYO				HERI PRASETYO	
	3	1-R08	BMP-240325	1-R07	BMP-240325		1-R07	BMP-240325	
	3H								
	4	0331	1-R08	BMP-240331	1-R07	BMP-240331		1-R07	BMP-240331
	4D			MADHOPAR				MADHOPAR	
	5								
	5C								

Kuota Rencana Operasi

19

Total Bus

19

Terpenuhi

19 (100.00%)

Tidak Terpenuhi

0 (0%)

Ketersediaan Bus

*Berdasarkan bus Terpenuhi

Tersedia

19 (100.00%)



+ Tambah



Rute 8 Lebak Bulus – Pasar Baru

Pilih Status Halte



Pilih Status Kendaraan



Pasar Baru



Pondok Indah



Total Aktivitas Kendaraan

20 unit

Rerata Waktu Tunggu

7.5 menit

Max Waktu Tunggu 30.1 menit

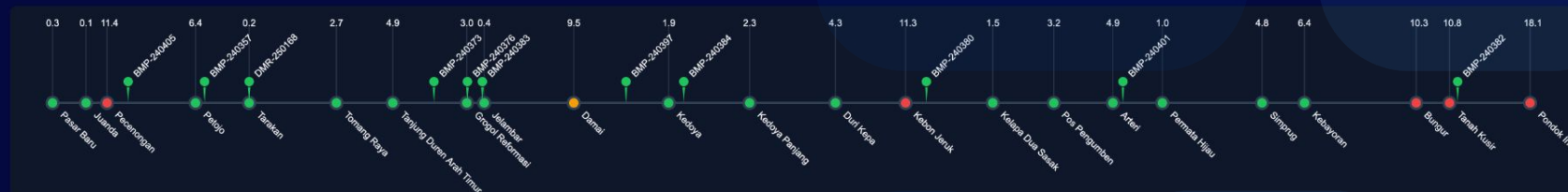
Pasar Baru



Pasar Baru



Pondok Indah



Total Aktivitas Kendaraan

12 unit

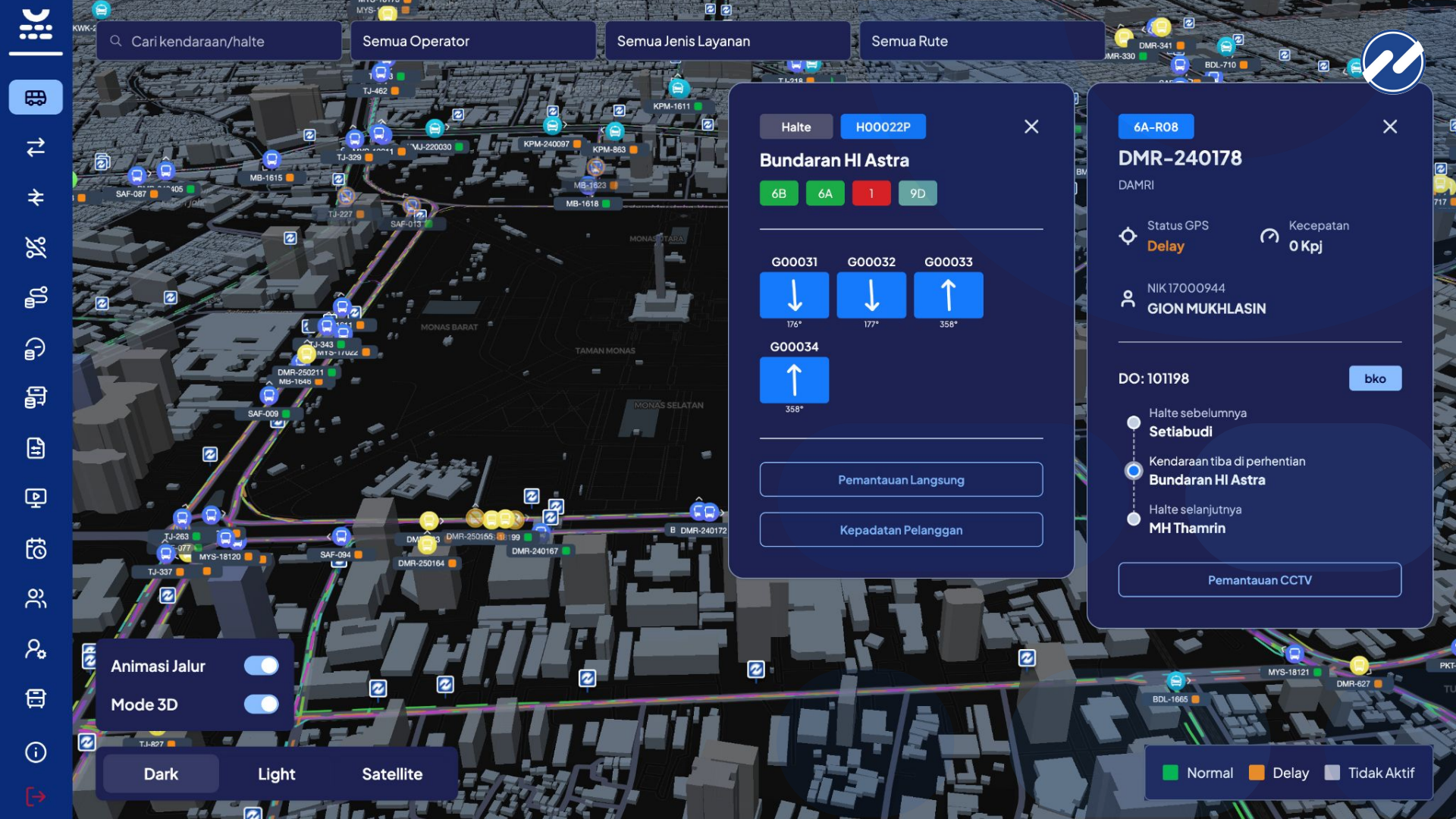
Rerata Waktu Tunggu

4.8 menit

Max Waktu Tunggu 18.1 menit

Pondok Indah

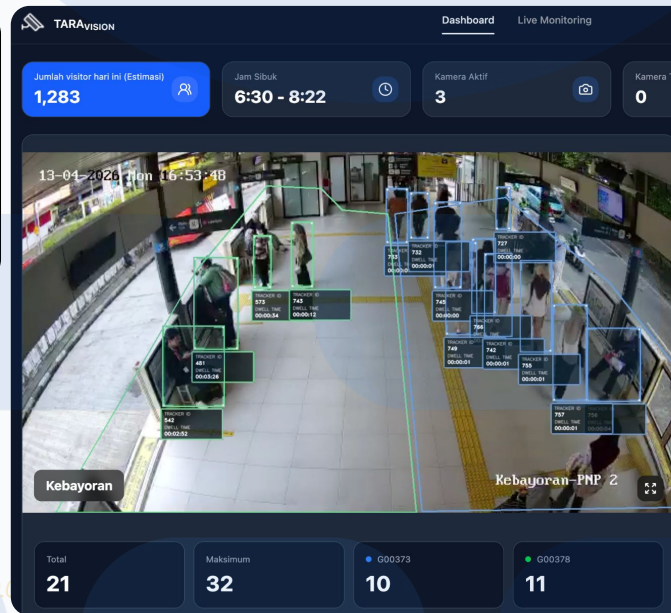
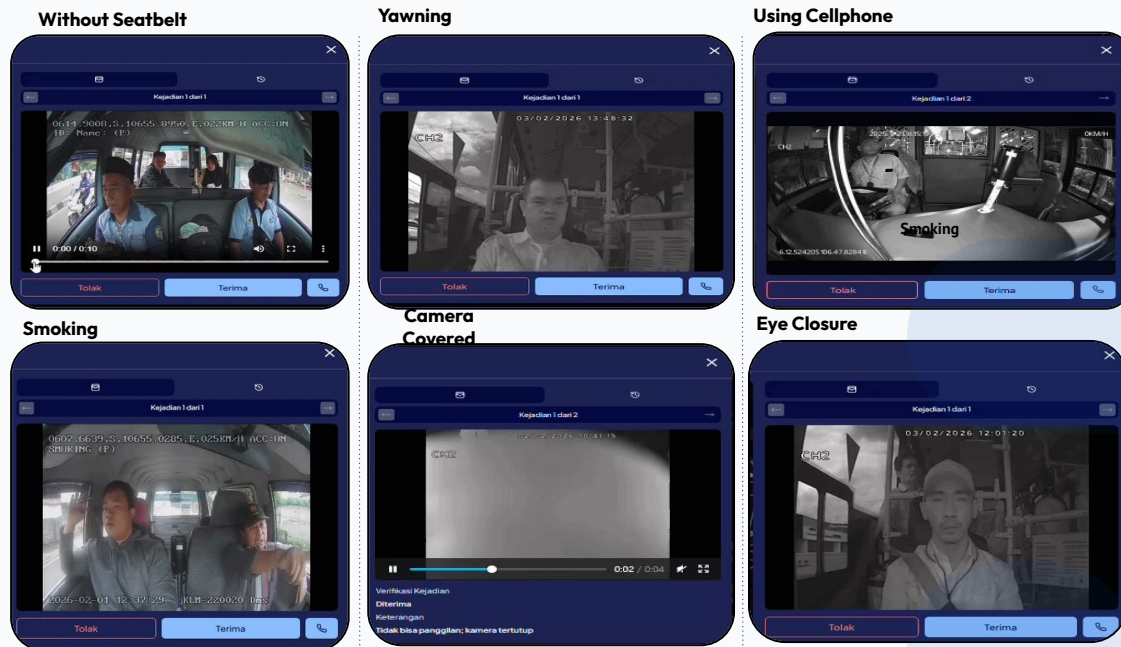






Guardian AI in Every Cabin and Bus Station

ADAS + DMS continuously watch the road and the driver — alerting both the pramudi and our NOC in real time.

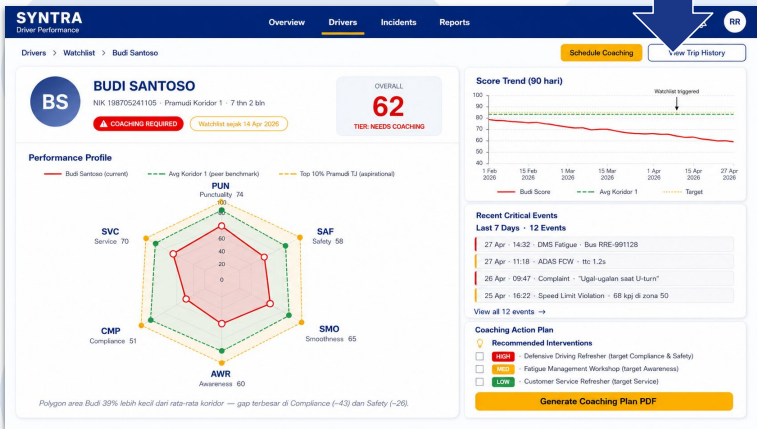
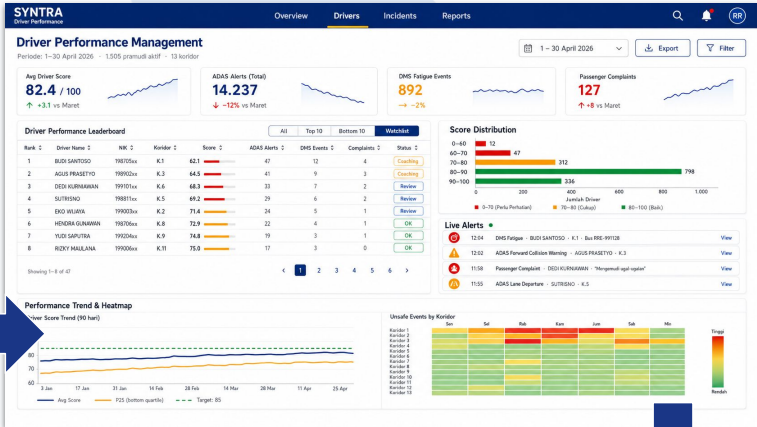
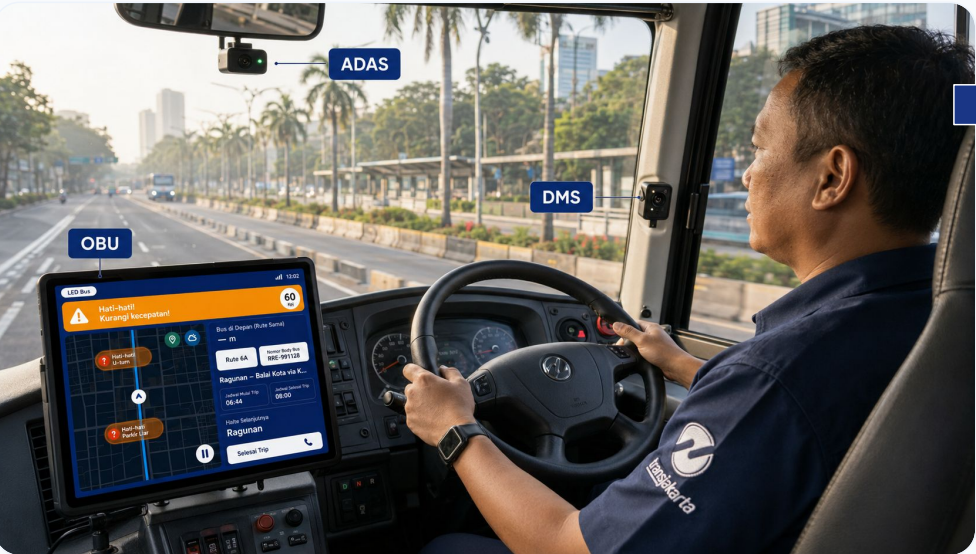


Deployed on ~2,000 buses and 200 CCTV in bus stations accelerating to full fleet through 2026 · piloting pre-shift fitness-for-duty next.



VISUAL • BEHAVIORAL SAFETY

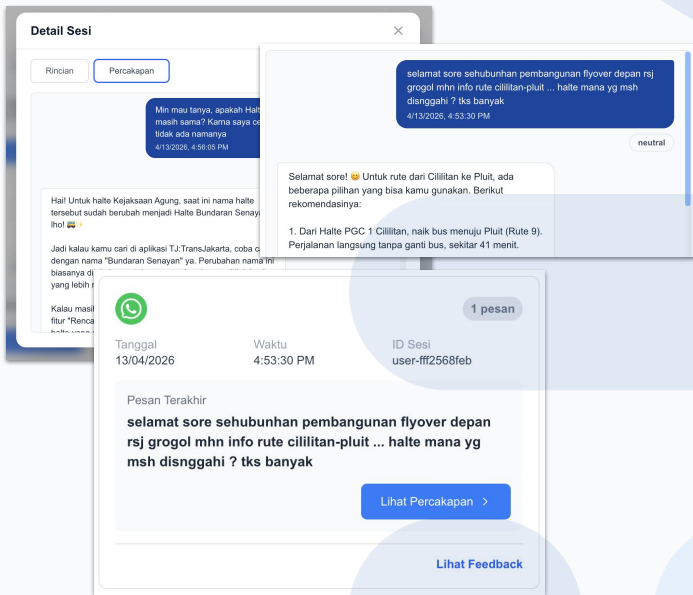
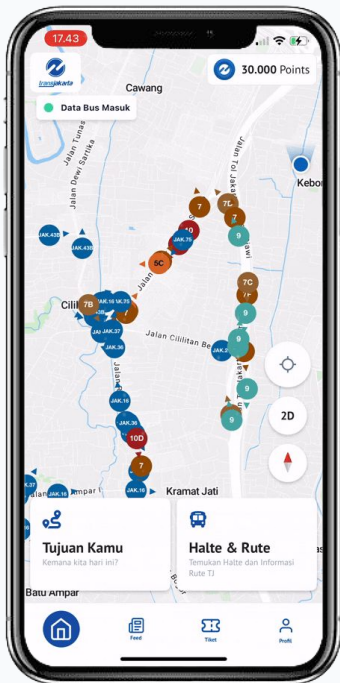
Cockpit Pramudi & Control Room





From Operational Brain to Passenger Companion

The same intelligence that runs the network reaches the passenger through the TJ:Transjakarta super-app.



2.7M+

APP DOWNLOADS

Since launch · 4 Sep 2024

- Real-time bus tracking
- Trip planner with live ETA
- Digital ticketing · QR · multi-wallet
- TARA AI assistant
- Companion Mode · TJ Radio
- In-app reporting · feedback loop



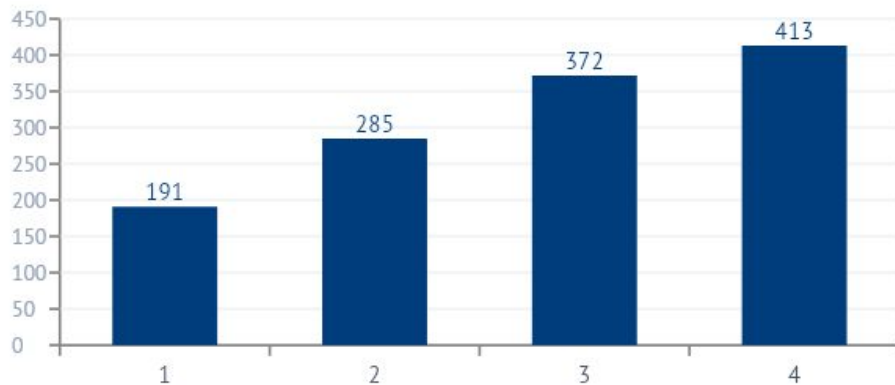
07 · THE OUTCOMES

Growth and Safety, Together

The clearest signal: ridership doubled while incidents fell — and subsidy per passenger dropped.

ANNUAL PASSENGERS (MILLIONS)

2.2× growth in 3 years



ACCIDENT RATE

-40% since 2022



-14%

SUBSIDY / PAX
vs 2022

4.4/5

CSAT · NPS 73%
Customer satisfaction

Rp 281B

NON-FAREBOX
4× in 3 yrs

40

AWARDS 2025
Incl. Bloomberg

10K

E-BUSES BY 2029
100% electric · 2030



Three Lessons for ASEAN

01 Build the brain, not just the buses

Hardware is commoditizing. Integration is the moat. Own the data layer.

02 Safety is the killer app for AI

ADAS-DMS isn't a feature — it's the most defensible reason to bring AI into operations.

03 Drivers are AI's first customer

If the pramudi trusts the system, the passenger feels it. Build with them, not at them.

Clean. Smart. Connected.

transjakarta.co.id · Let's build the next ASEAN mobility brain — together.

