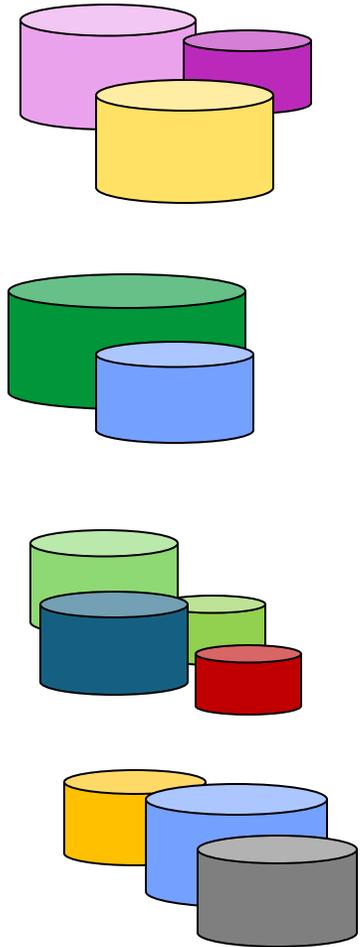


# Data & Analytics at the MTA

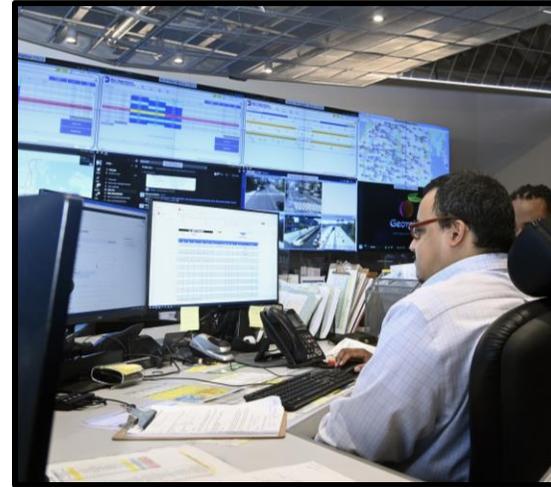
Presentation to the MTA Board  
March 25, 2026



# The MTA maintains hundreds of valuable data sources



Maintenance work orders



Vehicle locations



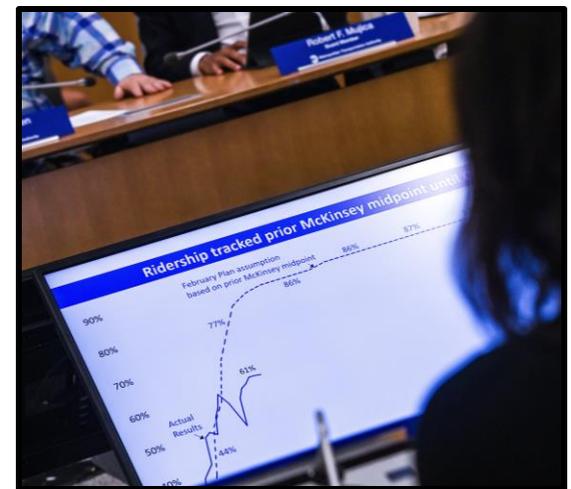
Procurement



Employee data/ Timekeeping

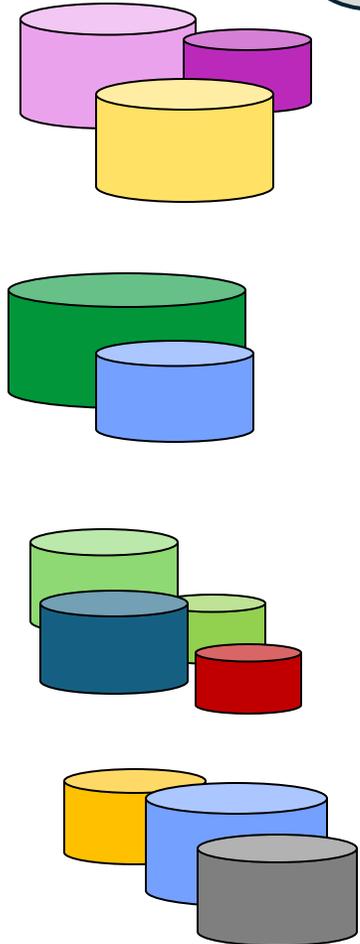


Ridership



Budget/ Finance

# But it was not always easy to use our data to inform decisions



Is there any documentation?

How can I get access?

Do we have data on this topic?

How can I combine data from different sources?

Am I working with this data in the same way as everyone else?

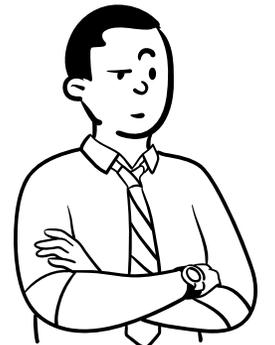
I'm getting different reports that tell different stories on the same number.

How can I get answers more quickly?

I need to dig in on this problem beyond just high-level numbers.

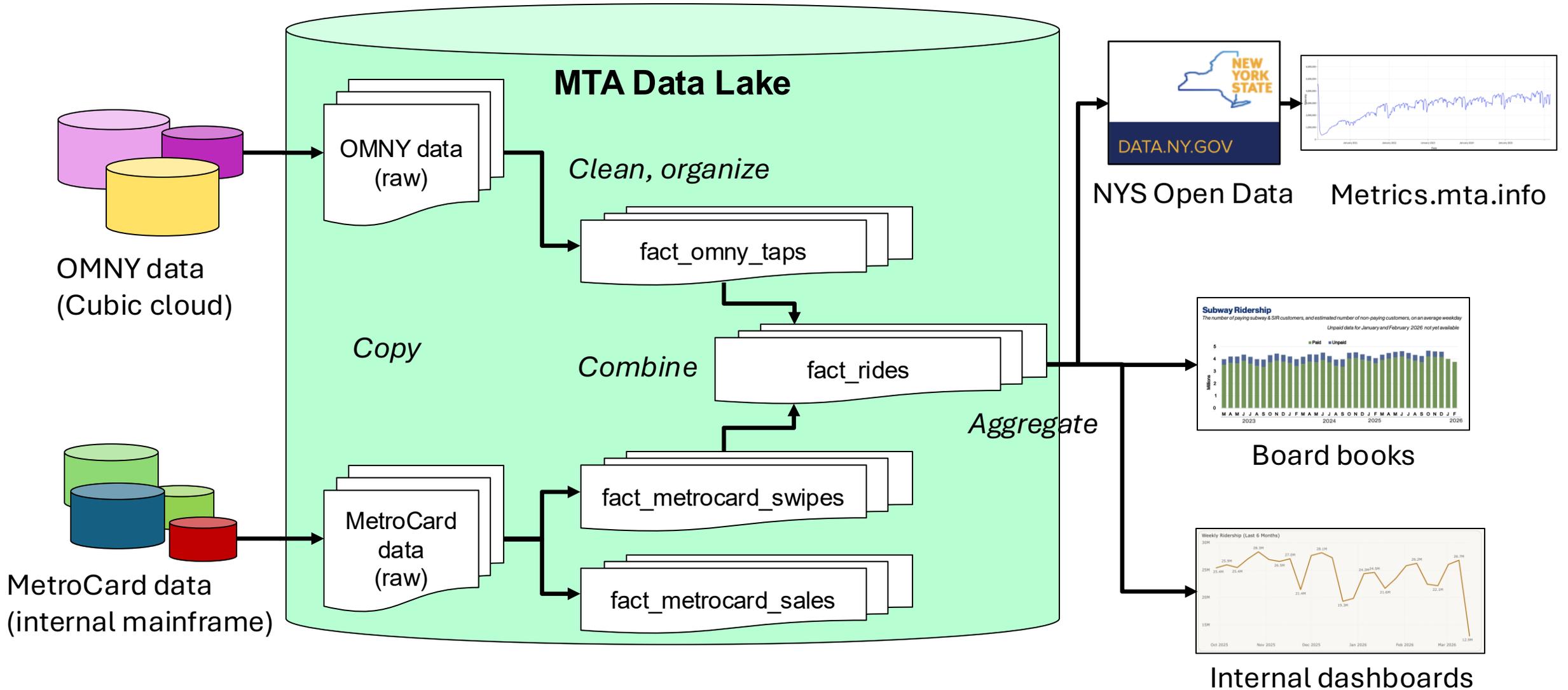


**MTA Analyst**



**MTA Manager/  
Executive**

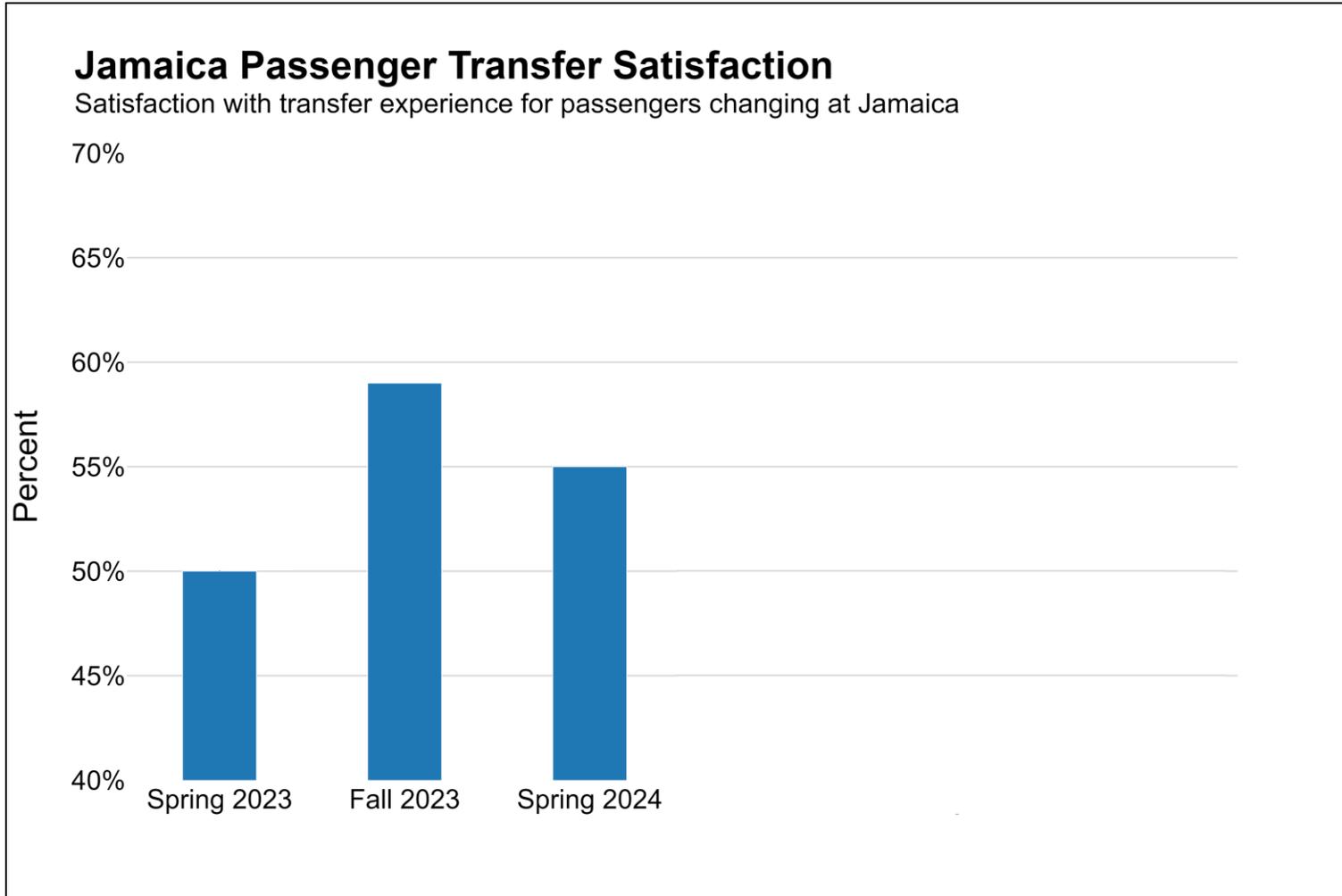
# How does MTA Data & Analytics fix this problem?



# Recent examples of sharper analytics from this new approach

- 1 Jamaica OTP
- 2 Student OMNY
- 3 NYCT vending machine uptime
- 4 Employee availability

# In early 2023, satisfaction with the transfer experience was very low



- › In early 2023, we began hearing complaints from customers about missed transfers at Jamaica
- › This was also apparent in our customer satisfaction surveys
- › Using data from the TrainTime app, we worked with LIRR to develop a “Jamaica on-time performance” metric



# Schedule deviation by branch and location

Note: Prior to 7/9/2024, schedule deviations for departures from PWS, FRY, WHD, HEM, HUN, LBH are based on manual (TIMACS) timings. On and after 7/9,

Service Date

Location considered  
 Origin  
 Jamaica Arrive

Branch  
  
 Select all  
 BY

Western Term.  
  
 Select all  
 ATL

Day of Week  
  
 Monday/Friday  
 Tuesday/Wednesday/Thursd...

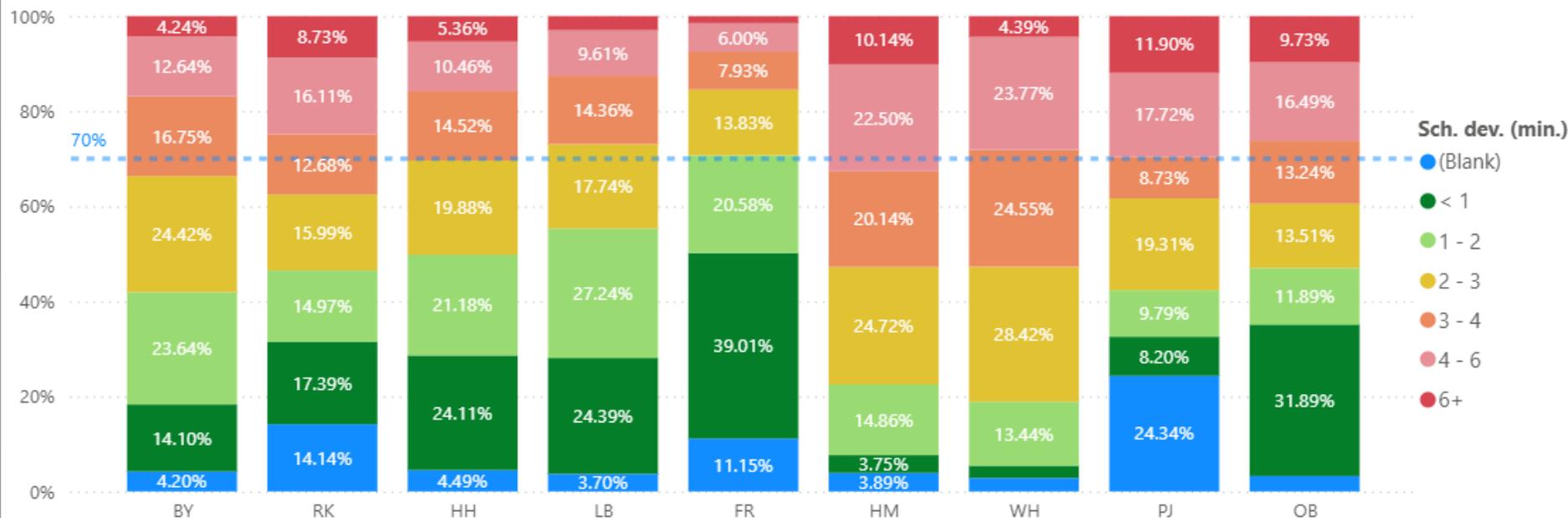
Direction  
 W

AM / PM / Off-...  
 AM  
 Off-peak

Train  
  
 1013  
 1017

Origin station  
  
 Select all  
 BTA

## Jamaica Arrive



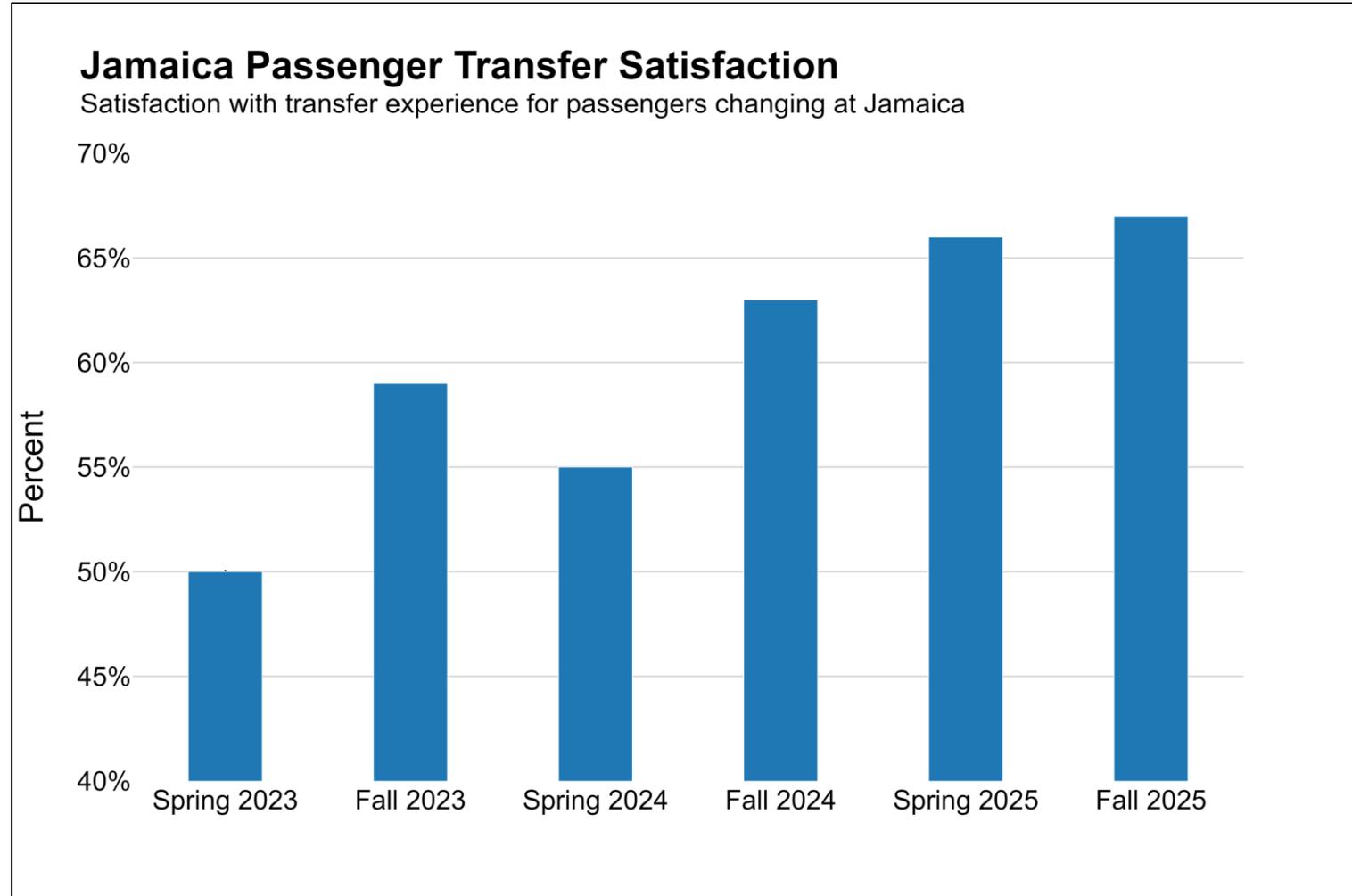
## Train level JAM OTP

Train	Branch	Number of trips	Western terminal	Western terminal scheduled	Origin	Dest.	Median Origin dept. sched. dev.	Median Jamaica arr. sched. dev.	Median Jamaica dwell	Median Jamaica dept. sched. dev.	Median Dest. arr. sched. dev.
2699	RK	79	GCT	08:07	HVL	GCT	4.67	2.6	1.2	3.0	-0.38
1127	BY	79	NYK	08:02	WGH	NYK	3.43	2.1	1.4	2.5	-0.13
1233	BY	78	GCT	08:35	FPT	GCT	3.24	2.9	1.2	2.0	0.92
1117	BY	77	NYK	06:26	WGH	NYK	2.88	2.7	1.0	2.8	2.30
2103	RK	78	NYK	08:17	FMD	NYK	2.81	4.1	1.3	4.4	3.61
133	BY	78	NYK	09:25	BTA	NYK	2.75	1.6	1.4	2.0	0.78
1123	BY	77	NYK	07:31	WGH	NYK	2.55	3.8	1.1	3.9	4.15
2503	HH	77	NYK	09:02	HVL	NYK	2.53	3.1	1.0	3.3	3.72
1225	BY	76	GCT	07:18	WGH	GCT	2.52	2.4	1.4	2.9	2.27
<b>Total</b>		<b>8993</b>					<b>0.65</b>	<b>2.4</b>	<b>1.3</b>	<b>2.7</b>	<b>2.10</b>

# Two-thirds of customers are now satisfied with their transfer experience at Jamaica

## Key LIRR actions

- › Reallocated running times to better match typical operating conditions
- › Refined stopping patterns and routings to enable parallel moves
- › Focused on getting trains out of their origins on time
- › Ensured TrainTime shows multiple transfer opportunities and platform assignments earlier



# Jamaica OTP improved from 60-65% to 70-75%

## Long Island Rail Road Jamaica On-Time Performance

Jamaica on-time performance measures the percentage of trains that arrive within three minutes of schedule at Jamaica Station. All branches, except the Port Washington Branch, converge at Jamaica Station, making it the primary LIRR transfer hub. The opening of Grand Central Madison in January 2023 elevated Jamaica's role as a critical transfer point.

Select a start and end date

Jan 23

Jan 26

Branch (selects 'Systemwide' if blank)

Systemwide x

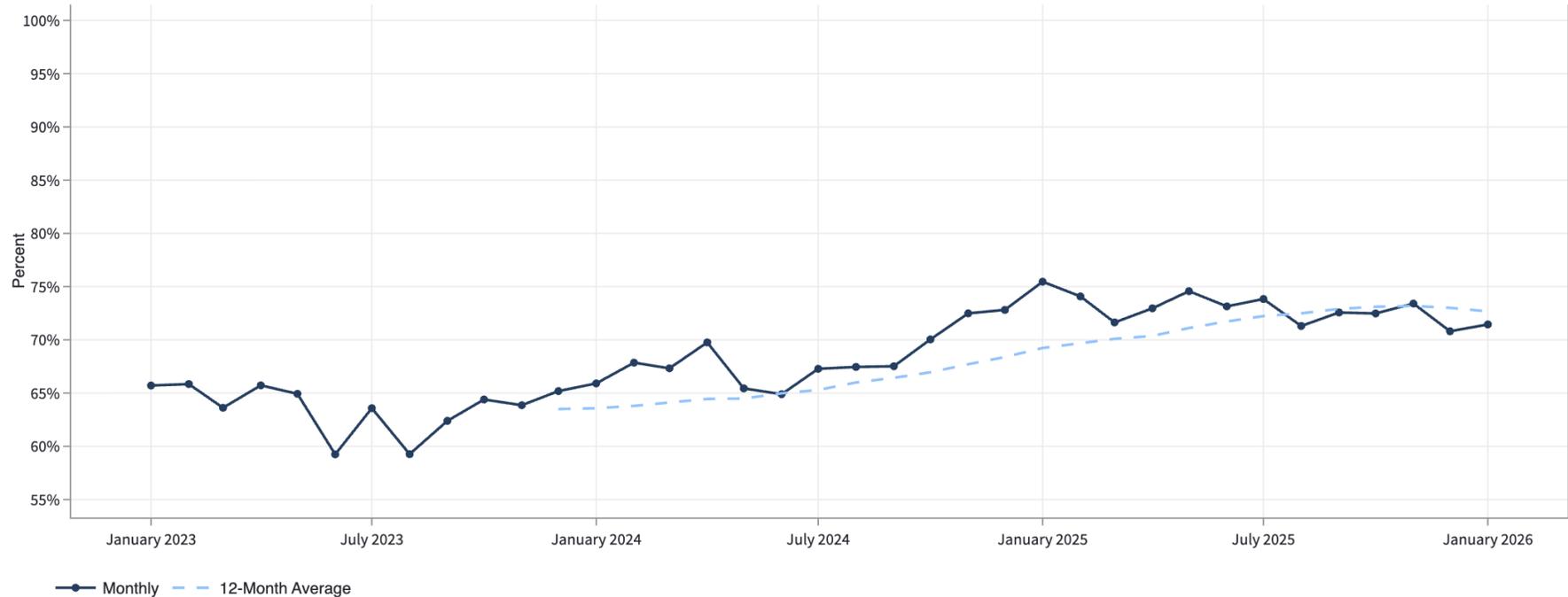
x v

Peak / Offpeak

Overall v

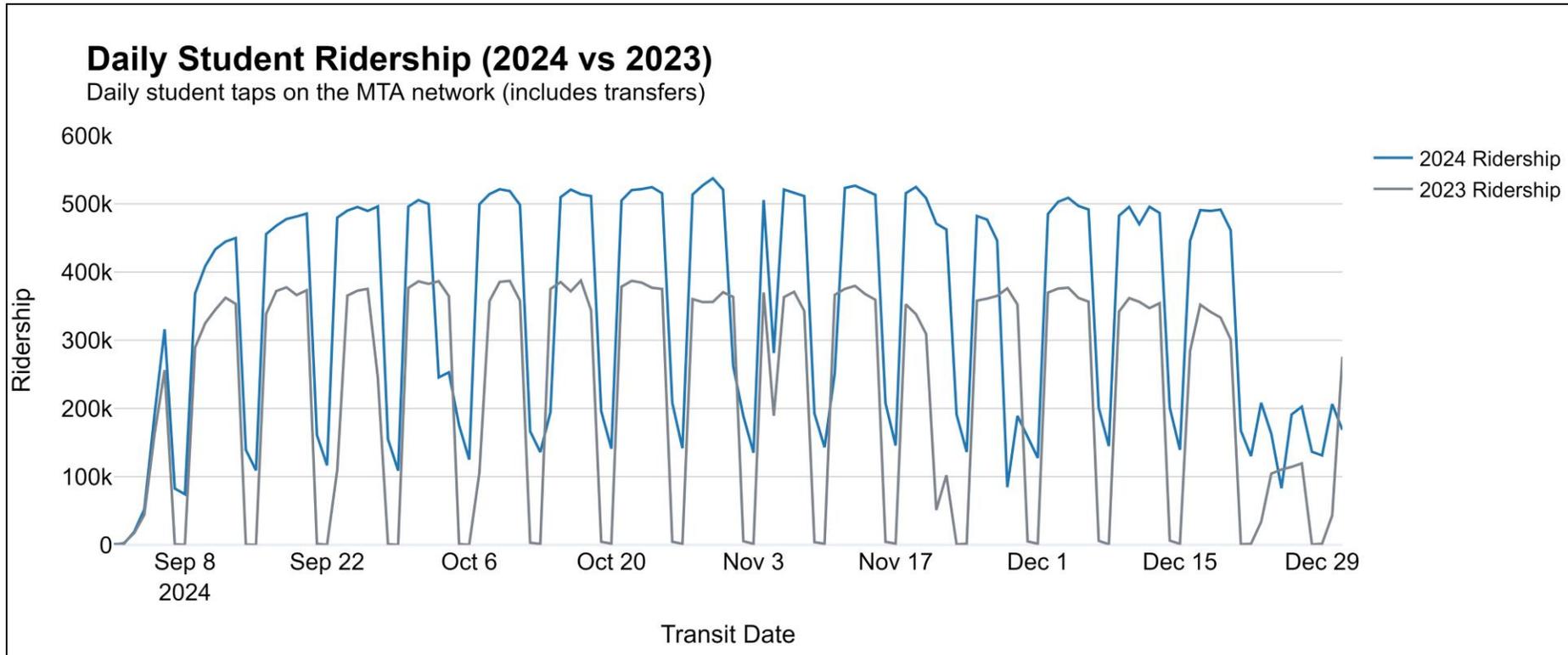
Jan 23

Jan 26



From  
*mta.metrics.info*  
and NYS Open  
Data

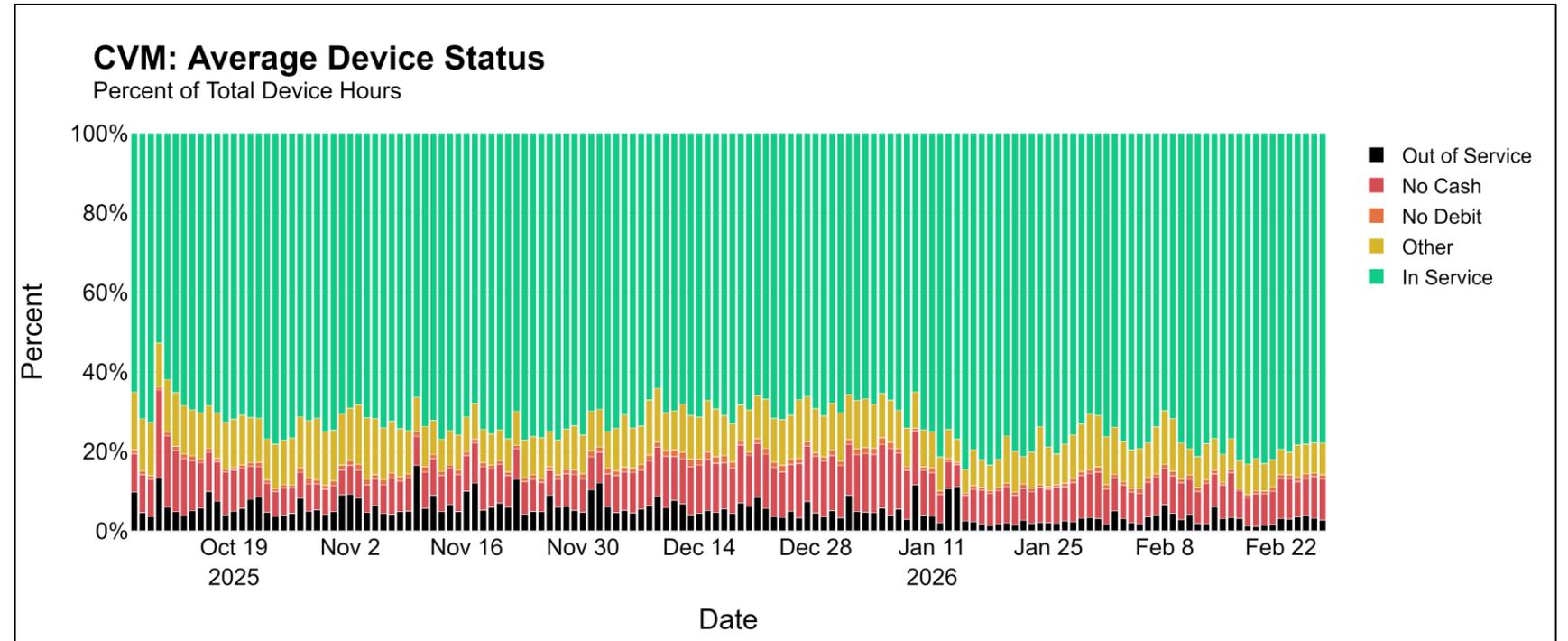
# Rolling out Student OMNY program with enhanced benefits



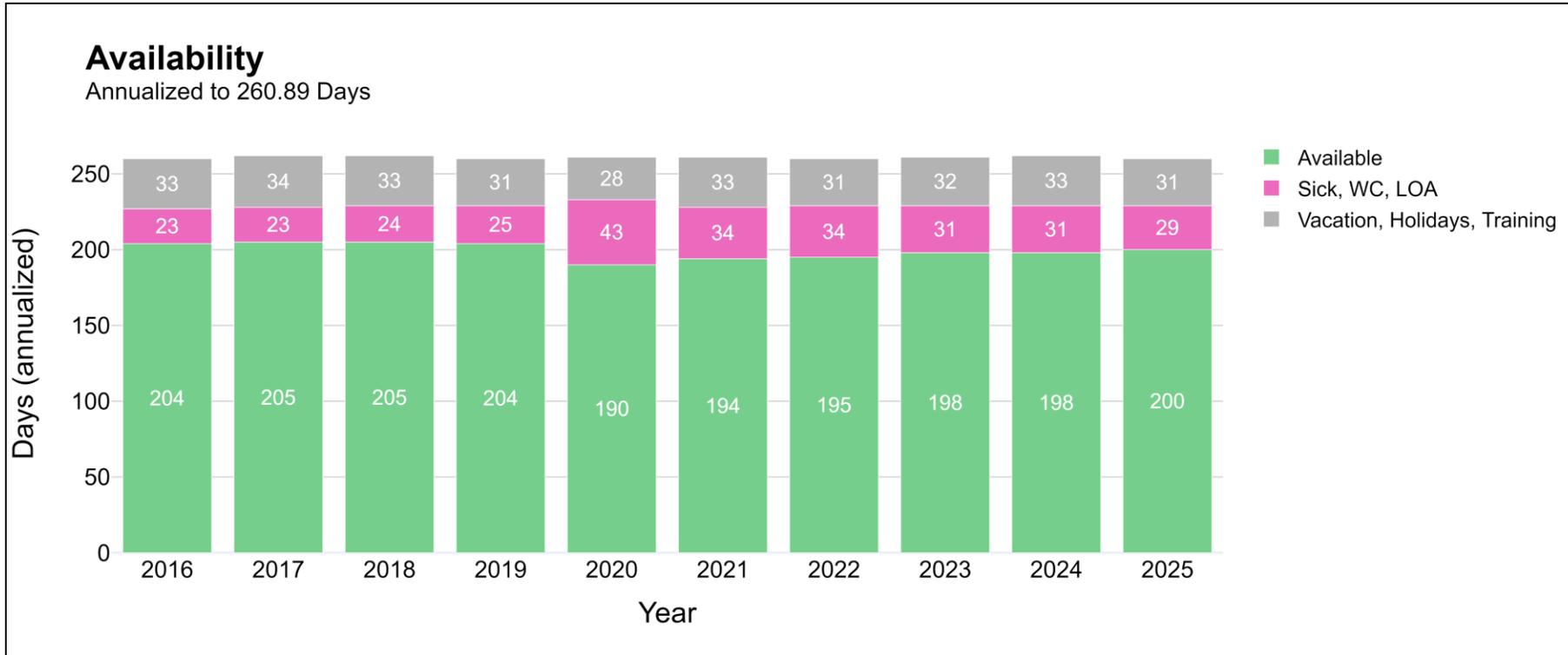
- › In 2024, MTA and NYCPS rolled out Student OMNY with 670K cards across 2600 schools
- › Usage grew by 35%
- › Fare evasion on the bus fell by 4pp
- › The MTA Data Lake tracked this program in real-time
- › Cards not being used appropriately could be identified and deactivated

# Monitoring health of vending machines and other devices

- › The MTA Data Lake ingests 2.5M rows of data per day from Cubic on the status of devices like bus validators and vending machines
- › We can track downtime and identify trends in specific error types
- › Configurable Vending Machine (CVM) downtime has decreased from 6% in December 2025 to 3% in February 2026



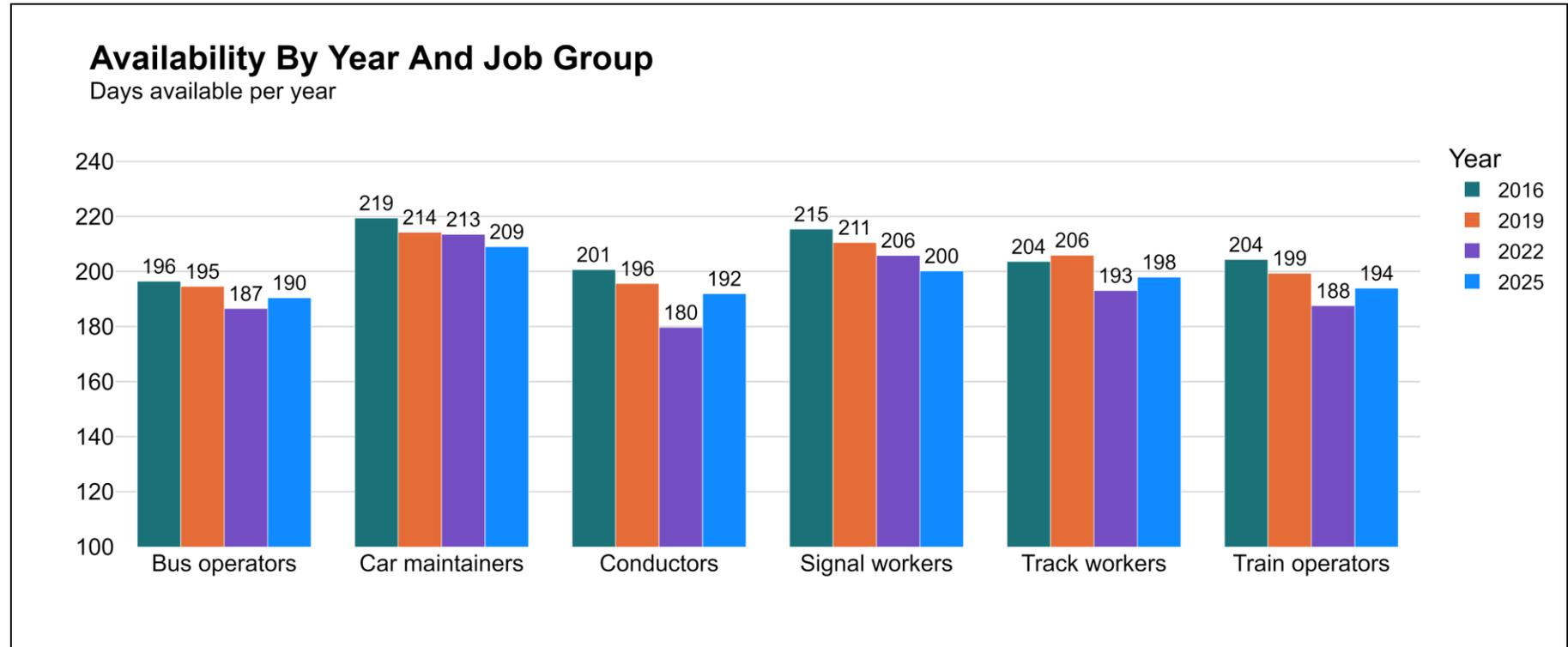
# Employee availability is a critical metric at MTA



- › When employees do not come to work as scheduled, it becomes more difficult and costly to deliver service
- › Short-notice absences often require overtime to cover
- › Long-term absences necessitate additional hiring
- › Each day of improved availability saves MTA \$17M annually

# Availability was declining, but has started to improve

- › Availability had been declining from 2016 to 2019 – but dropped 10 days after COVID, driven by increased sick leave and Workers Comp (WC)
- › Having better visibility into this metric allows us to evaluate initiatives on absenteeism, such as improvements in WC claims handling
- › Availability has recently improved, for many work groups



# The Data Lake is starting to change how the MTA works

The Data Lake and the team at Data and Analytics have been instrumental in **bringing more transparency** into the MTA's supply chain across Operating Agencies. The initiative allowed us to take **disparate systems** responsible for forecasting and inventory management and **align on key metrics systematically to help drive improvements**.

Lawrence Siegel – Senior Director, Administration

We built the OMNY go-to-market strategy on the MTA data lake. **Access to data** about payment method, rider class (student, Reduced Fare, Fair Fares, etc.), and station or bus route **helped us develop, measure, and evolve** the plan to help all customers make the switch to tap-and-ride before turning off MetroCard sales.

Jessica Lazarus – Deputy Chief, Commercial Ventures

CBTC systems produce **an immense wealth of data** — billions of data points every week. Ingesting it into the MTA Data Lake allows us to **perform large-scale data analysis to dive deep** into train performance and system operation. It also enables us to **fuse this with other sources** — like EAM and incident reporting.

Kurt Raschke – Senior Director, Subway Systems

Teams are now **aligned around the same datasets**, which has made **cross-functional collaboration faster and far more effective**.

Sunil Nair – Chief Officer, Bus Technology