Maximo User Group UK & Ireland 2022

IBM Innovation Studio, York Road, London
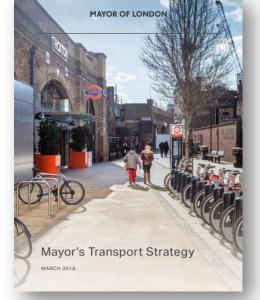
Transport for London

Alan Scott
Head of Asset Systems & Reliability
alanscott@tfl.gov.uk

Richard Thomas
Senior Product Manager
Asset Management
richardthomas1@tfl.gov.uk

Transport for London

Formed in 2000, TfL is the integrated transport authority responsible for meeting the Mayor's strategy and commitments on transport in London.
We run the day-to-day operation of the Capital's public transport network and manage some of London's busiest roads

We manage a bus fleet of around 9,300 vehicles operating across 675 routes.

London Underground has 11 lines covering 402km and serving 270 stations. Handles up to five million passenger journeys a day and at peak times, there are more than 540 trains in service
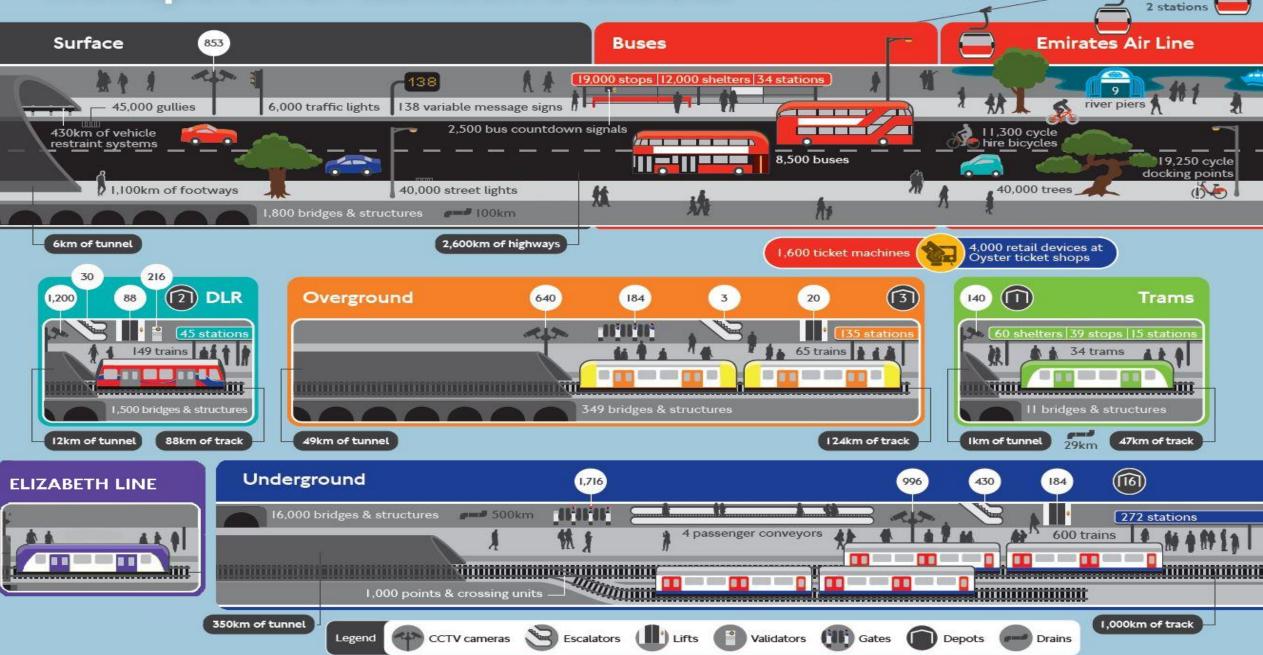
The DLR has 45 stations and 149 vehicles

The London Overground network covers 112 stations across six routes

There are 14,790 kilometres of road in London. The Transport for London Road Network (or "red route" network) accounts for 590 kilometres (around 5% of the total road network in London, but carrying about 30% of the city's traffic!)
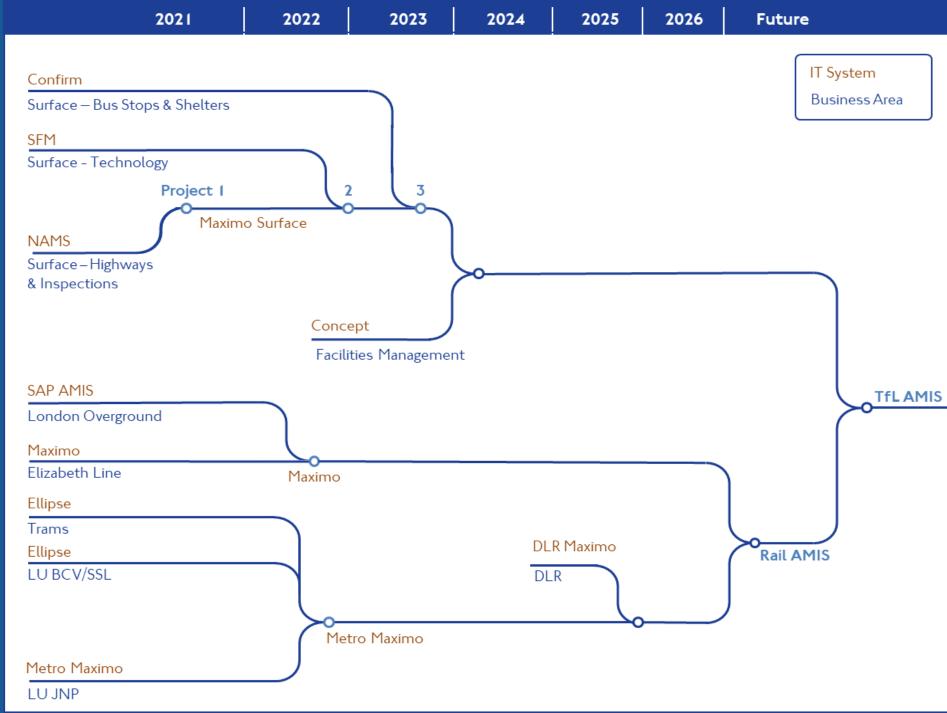
MAYOR OF LONDON

Mayor's Transport Strategy

MARCH 2018

DLR

AIR·LINE
BUSES
OVERGROUND
RIVER
COACHES
CROSSRAIL
TAXI·PRIVATE HIRE
TFL·RAIL
CYCLES
DIAL·A·RIDE
TRAMS
UNDERGROUND

Transport for London's assets

Keeping London moving

36 cabins
2 stations

Surface

853

- 45,000 gullies
- 6,000 traffic lights
- 138 variable message signs
- 430km of vehicle restraint systems
- 2,500 bus countdown signals
- 1,100km of footways
- 40,000 street lights
- 1,800 bridges & structures — 100km
- 6km of tunnel
- 2,600km of highways

Buses

19,000 stops | 12,000 shelters | 34 stations
8,500 buses
1,600 ticket machines
4,000 retail devices at Oyster ticket shops

Emirates Air Line

9 river piers
11,300 cycle hire bicycles
19,250 cycle docking points
40,000 trees

DLR

2
1,200
30
88
216
45 stations
149 trains
1,500 bridges & structures
12km of tunnel
88km of track

Overground

3
640
184
3
20
135 stations
65 trains
349 bridges & structures
49km of tunnel
124km of track

Trams

1
140
60 shelters | 39 stops | 15 stations
34 trams
11 bridges & structures
1km of tunnel
29km
47km of track

ELIZABETH LINE

Underground

16
1,716
996
430
184
16,000 bridges & structures — 500km
4 passenger conveyors
272 stations
600 trains
1,000 points & crossing units
350km of tunnel
1,000km of track

Legend: CCTV cameras · Escalators · Lifts · Validators · Gates · Depots · Drains

Delivery Projects

There are several AMIS initiatives that are delivering the systems consolidation strategy

London Underground Asset Management Information System (LUAMIS)

Alan Scott
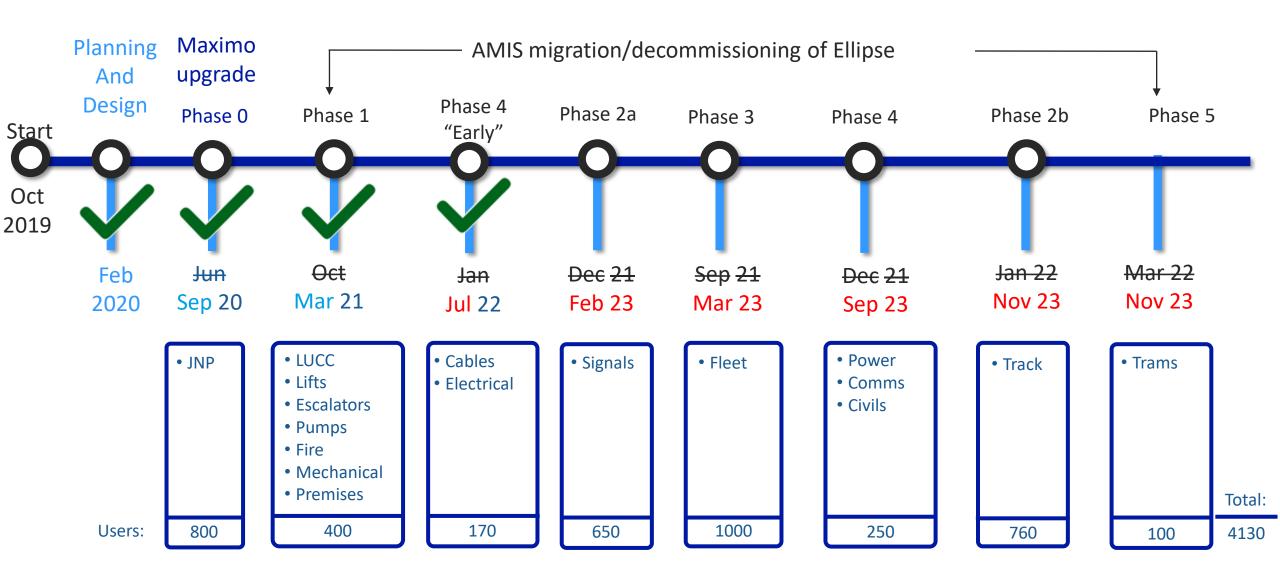### Head of Asset Systems & Reliability
alanscott@tfl.gov.uk

AMIS | Vision

AMIS will deliver one asset system for LU and Trams to achieve a safer, more reliable and affordable railway, providing a better service for our customers

The scope of AMIS is to decommission Ellipse and transition LU and Trams to the use of Metro Maximo
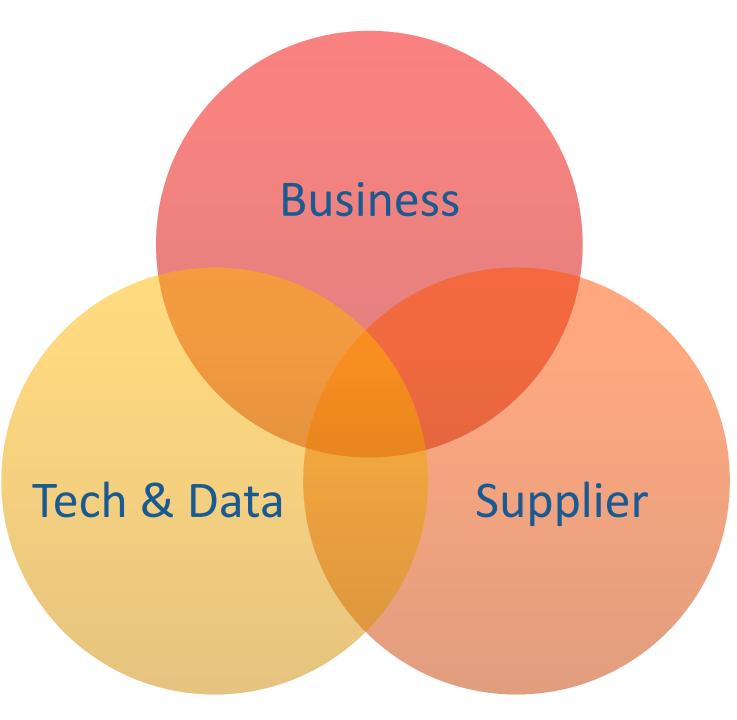
Why

We can't stay where we are because…

- We are currently maintaining and operating two asset management systems, Metro Maximo and Ellipse, which creates barriers for those in pan-LU teams.
- Segregating our asset information in this way creates gaps in our data and increases risks to the safety, performance and compliance of our operations.
- We are paying two sets of maintenance and upgrade costs.
- London Underground (LU) is now a single, fully integrated pan LU asset operations team. As such, we need a single asset management system that gives us a full and reliable picture of the business assets.

What

When this change has been successful…

- We will have one asset management system and mobile solution.
- Data will be consolidated, standardised and aligned including a single Asset Hierarchy.
- We will have one set of business rules and processes embodied by the system.
- We will have reduced our future upgrade, support and maintenance costs.
- We will be able to operate as one team.

How

To achieve this we will...

- Continue aligning and standardising our Asset Hierarchies, processes and reporting, so that the move to a single system is easier and we can get value from it early on.
- Consolidate our existing systems and functionality to create a stable foundation for the future.
- Work with the business and asset areas to understand your needs and make Maximo work for you.

AMIS | Timeline and Progress

AMIS migration/decommissioning of Ellipse

	Planning And Design	Maximo upgrade Phase 0	Phase 1	Phase 4 "Early"	Phase 2a	Phase 3	Phase 4	Phase 2b	Phase 5
Start Oct 2019	Feb 2020	~~Jun~~ Sep 20	~~Oct~~ Mar 21	~~Jan~~ Jul 22	~~Dec 21~~ Feb 23	~~Sep 21~~ Mar 23	~~Dec 21~~ Sep 23	~~Jan 22~~ Nov 23	~~Mar 22~~ Nov 23

• JNP	• LUCC • Lifts • Escalators • Pumps • Fire • Mechanical • Premises	• Cables • Electrical	• Signals	• Fleet	• Power • Comms • Civils	• Track	• Trams

Users:	800	400	170	650	1000	250	760	100	Total: 4130

LUAMIS Project Structure

Business

Tech & Data

Supplier

Lessons Learned

ALIGNED OBJECTIVES

ACCOUNTABLE AND ACTIVE BUSINESS LEADERSHIP

STRONG PROJECT MANAGEMENT

ENOUGH PEOPLE WITH THE RIGHT SKILLS

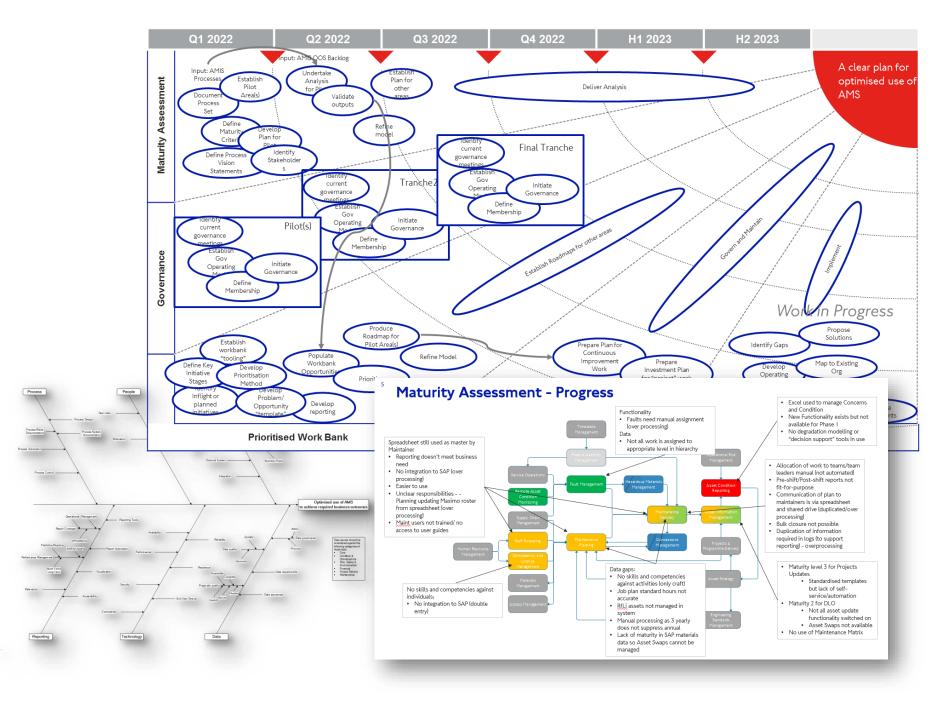Planning, Problem Solving, Critical Thinking, Ownership, Leadership

Post Go-live Time to embed

LUAMIS is part of a journey

Continuous improvement