

Transport for Greater Manchester

A Collaborative Approach

Mike Purcell

Key Route Network Asset Manager

TfGM - What we do

- We deliver the transport policies set by the Greater Manchester Mayor and the Greater Manchester Combined Authority.
 - We're working hard to make travel easier through a better connected Greater Manchester.
 - Work closely with bus, tram and train operators to help improve the full journey experience.
 - Own Metrolink – the UK's largest light rail network – and plan for its future.
 - Promote and invest in walking and cycling as safe, healthy and sustainable ways to travel.
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Cont.

- Pay for bus services at times and in areas where no commercial bus services are provided.
 - Keep traffic flowing on some of Greater Manchester's busiest roads by managing the KRN.
 - Own GM's bus stations, stops and shelters and invest in new, modern transport interchanges.
 - Subsidise more affordable fares to help older people, children and disabled people get around.
 - Play a leading role in coordinating Greater Manchester's plans to reduce transport-related air pollution.
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Highways – the context

- GM largest economy in the UK, outside of London.
 - Well managed network is vital to growth – 1.6 billion trips each year by car, bus, taxi, goods, cycles, motorbikes, pedestrians
 - Over 10,000km of highway in GM (A & B roads 1,200km)
 - 2,300 traffic signals, including 1000 pedestrian crossings
 - 10 highway authorities and one Highways England (motorways)
 - Congestion costs GM £1.3bn/year
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TfGM Highways Structure

Highways Forecasting and Analytical Services (HFAS)

- Transport planning and modelling
- Modelling of transport management strategies
- Strategic review of Transport Assessments for major applications
- Data collection and surveys



Urban Traffic Control

- Second largest U.T.C. in UK
- Operate 2300 sets of traffic signals across Greater Manchester
- Junction design and commissioning
- Modification and upgrades to new sites
- Manage signal timings through computer controlled strategies
- Traffic signal modelling and analysis
- Review of Consultant's proposals and timings

1.	TfL 6,000 + signals
2.	TfGM 2,300 signals



 Bolton
Council

 Salford City Council

 Bury
Council

 STOCKPORT
METROPOLITAN BOROUGH COUNCIL

 MANCHESTER
CITY COUNCIL

 Tameside
Metropolitan Borough

 Oldham
Council

 TRAFFORD
COUNCIL

 ROCHDALE
METROPOLITAN BOROUGH
COUNCIL

 Wigan
Council

 highways
england
driving forward

Urban Traffic Control

VMS Signs



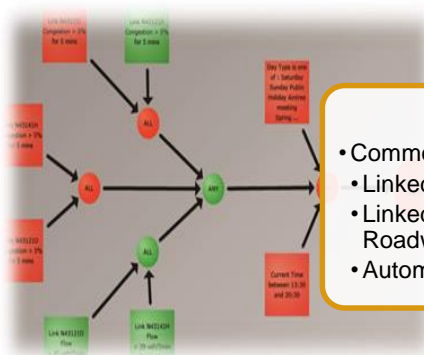
- Road closures
- Incidents
- Events
- Safety campaigns
- Journey times

Car Park Guidance



- Safe convenient parking
- Number of spaces
- Assist decisions

Common Databases



- Common Databases
- Linked to HE RCC
- Linked to district Roadworks databases
- Automated strategies

Innovation



- New Technology
- In vehicle systems
- Communicate with roadside infrastructure

Joint Road Safety Group and Drivesafe

- Deliver National Driver Intervention Scheme – Speed awareness courses
 - Taxi assessments, fleet driver training – public and private sector
 - Oversight and management of GM road safety strategy
 - Annual programme of publicity and campaigns
 - Analysis of collisions – high risk locations - Interventions
 - Provide advice to highway authorities
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Greater Manchester Road Activity Permit Scheme (GMRAPS)

- Support highway authorities with the administration of roadworks applications
 - Develop collaborative approach to activities that could lead to congestion
 - Links with 10 highway authorities and Highways England
 - Manages abnormal load routing throughout Greater Manchester
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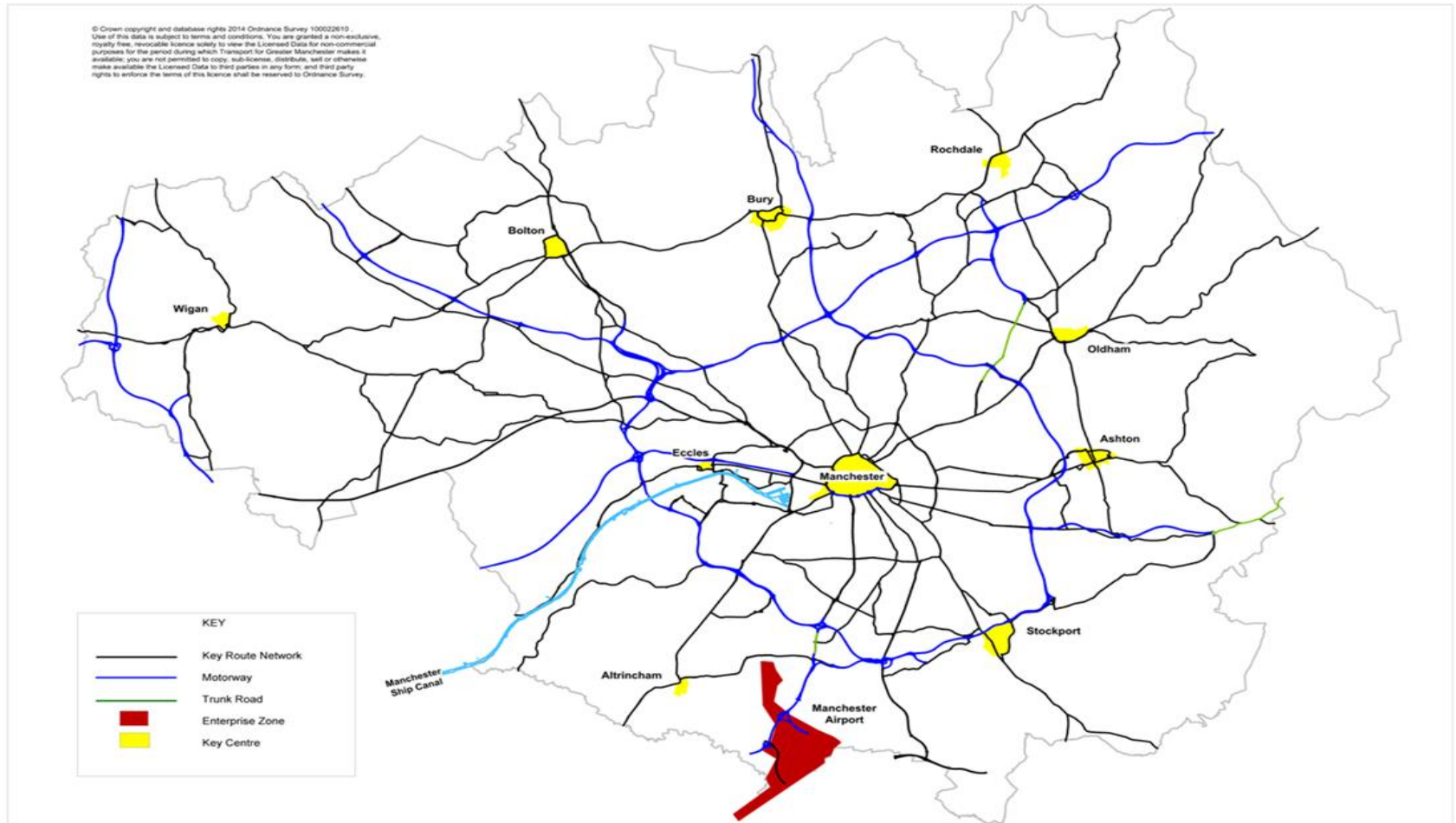
Key Route Network Asset Manager - my role

- Responsible for asset management of the GM KRN – 626km
 - Collaboration with the 10 GM LHA's
 - Identifying survey data requirements for the KRN
 - Monitor KRN asset condition
 - Management of KRN bridge asset management system – PONTIS
 - Development of a long term KRN investment strategy agreed in collaboration with LHA's
 - Development of asset management strategies for UTC traffic control
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Greater Manchester KRN

- The KRN encompasses about 626km of network,
 - 7% of all local authority roads,
 - 48% of A and B roads in GM, but carries 64% of all traffic on A and B roads.
 - KRN supports the critical mass of daily commuting and logistics movements,
 - KRN has a greater strategic economic importance
 - Develop and sustain excellent working relationship LHA's and Highways England
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GM Key Route Network



What is asset management

- Asset management enables an organisation to realise value from its assets in its achievement of organisational objectives.
 - The IAM summarise AM as **“The coordinated activity of an organisation to realise value from assets”**
 - In order to embed asset management we needed to develop policies, strategies and operational/delivery plans.
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Where did we start

Asset Management Policy, Strategy & Plan

- High level corporate AM policy has been developed – TfGM’s AMO hold a suite of policies, strategies and plans.
 - Policies supported by an AM strategies which must have direct links back to TfGM’s 7 strategic key objectives from our 2040 Strategy
 - Long term operational delivery/maintenance plans should be developed
 - An Asset Management Framework and a Performance Management Framework should be part of the strategy for service delivery and to monitor performance against service levels
 - Process mapping/lean reviews regularly carried out to ensure a lean process
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Asset Management Framework

Contains 4 key elements

1. Strategic
 2. Planning
 3. Enablers
 4. Delivery – who does what
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Asset Management Framework - Strategic

- National transport policies
 - Highway maintenance funding
 - TfGM Transport Strategy 2040
 - Local HA's policies & strategies
 - Stakeholder expectations
 - Legal constraints & statutory duties
 - LHA political arena
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Asset Management Framework - Planning

- Key objectives – aspirations
 - How will these be implemented
 - Performance through suite of KPI's and service levels
 - Data management
 - Life cycle planning
 - Works/maintenance programming
 - Service delivery objectives and outcomes
 - Evaluate and review
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Asset Management Framework - Enablers

- Leadership and support – paramount if we are to succeed
 - Competence and training are key
 - Risk management – Well Managed Highway Infrastructure CoP
 - Asset management systems – data - works – inspections
 - Programme development
 - Performance monitoring
 - Benchmarking
 - Evaluate and review
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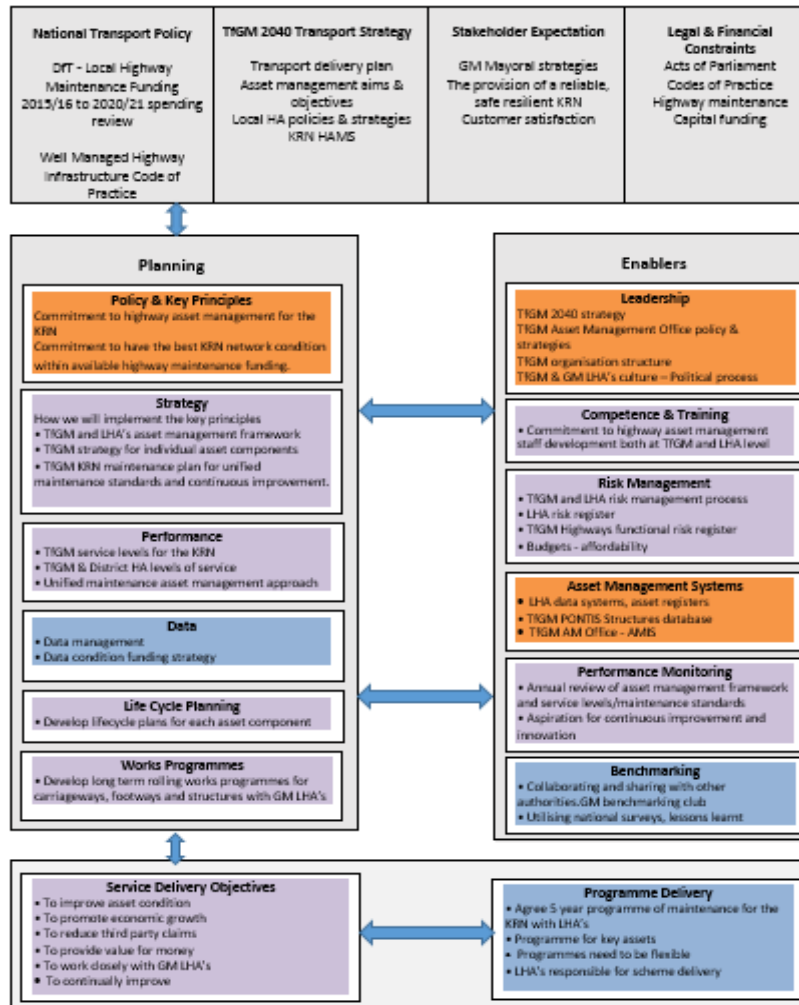
Asset Management Framework - Delivery

Delivery maintenance plan to include;

- Condition surveys
 - Provision for data funding and analysis
 - Site investigation/validation
 - Maintenance programme prioritisation
 - Review outcomes
 - Feed back into the Framework
 - Review Framework as appropriate – KRN is annually
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AM Framework

Figure 3 Organisational Context



Delivery Key for the Asset Management Framework TfGM LHA TfGM & District HA

Managing Individual KRN Assets - what we needed to know

- What assets do we have on the KRN
 - Where are they – mapped on GIS – Asset Management Systems
 - What condition are they in
 - How are they performing
 - What's their current value – DRC – depreciation
 - What's their replacement value – GRC
 - What is their optimum life cycle with intervention
 - What is their whole life cost with/without treatment interventions
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Where are we now

KRN Asset Management

- Developed and agreed with LHA's a KRN Highway Asset Management Strategy in 2017 aligning to TfGM's 2040 Transport Strategy
 - Agreed with LHA's a suite of KRN maintenance standards including condition surveys in 2017
 - Developed a UTC/ITS Asset Management Strategy in 2018
 - Developed a suite of lifecycle plans
 - Annual refresh of all strategies and plans
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DfT Incentive Fund

- Worked in collaboration with GM LHA's to develop a gap analysis
 - Developed an action plan to close the gaps and attain band 3
 - Developed and agreed a GM Framework for highway safety inspections
 - Developed a GM benchmarking club
 - All 10 GM LHA's take part in NHT customer survey and CQC
 - Have developed in collaboration with NHT a regional CQC report
 - GM Asset Management Group meet bi monthly to share best practice and innovation
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Resilient network

- Agreed a GM resilient network
 - Signed off by the Greater Manchester Civil Contingencies
 - Refreshed every two years
 - Identified critical assets
 - Resilient networks given priority in planned maintenance programmes
 - Agreed a common GM approach to works prioritisation
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KRN carriageway condition trends – key headlines

- Red condition from 2017 improved by almost 1%
 - Amber overall condition improved by 2.5%
 - Since deploying asset management principles from 2017/18 we now target low/mid to high amber condition
 - From 2017/18 low/mid to high amber has improved by 3%
 - This has been achieved by deploying preventative maintenance processes at the right time
 - This aligns with the KRN AMS.
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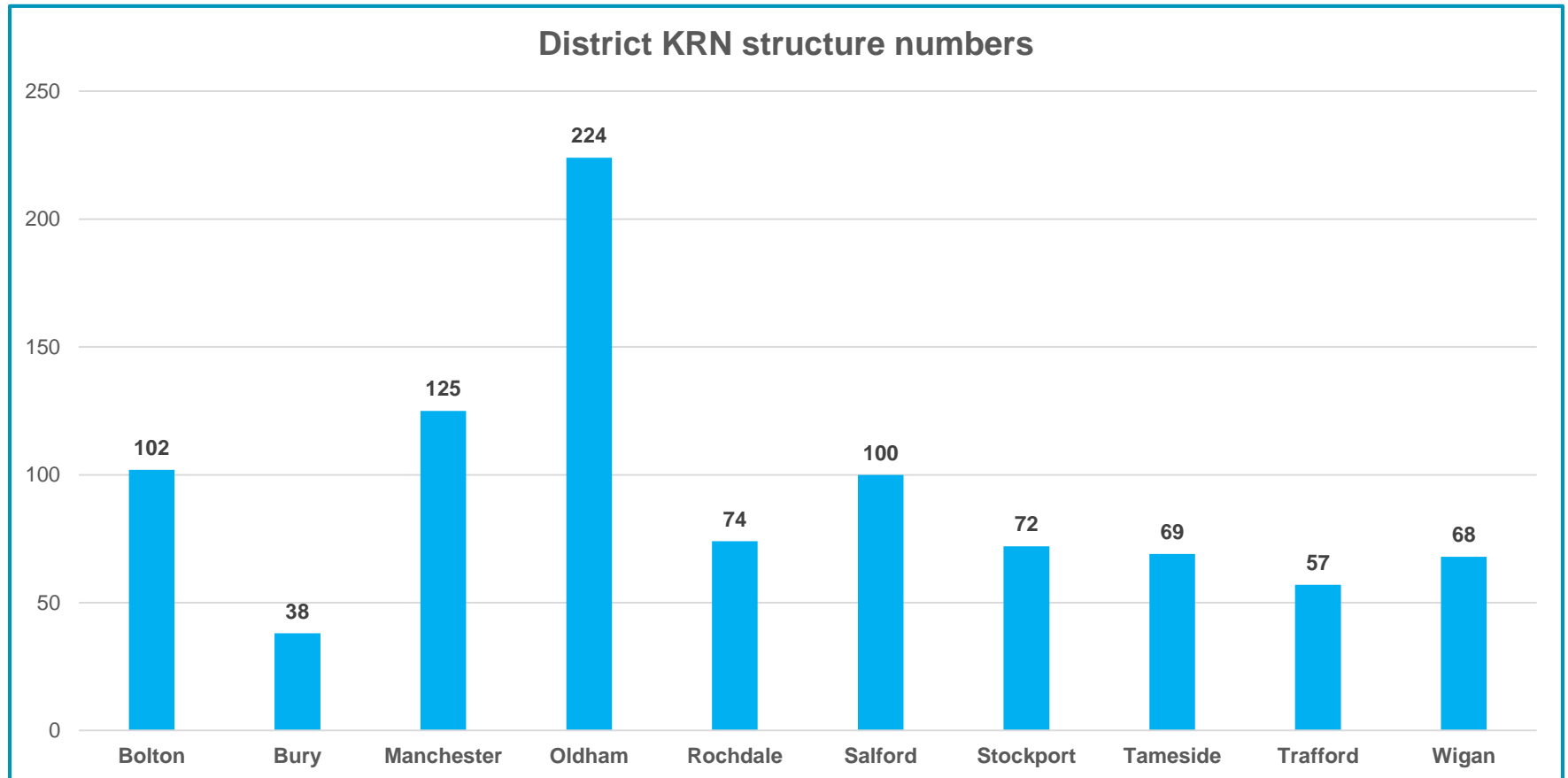
KRN Structures

- There are 929 structures on the KRN
 - With 3,291 in total across the region
 - A long term programme of planned maintenance and PI inspections agreed with LHA's
 - From 2018/19 to 2022/23
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Structures Asset Management

- PONTIS bridge management system was procured in 2016 – for all GM LHA's
 - All ten GM LHA's are now using the PONTIS BMS
 - Districts report through our PONTIS user group that the system is proving to be very good.
 - The PONTIS BMS contract is due for renewal next year and as such LHA's would like to continue with PONTIS
 - TfGM are currently negotiating a further five year contract
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Number of KRN bridges and structures across districts



Where are we heading

- Continue to share and embed best practice through task and finish groups
 - Actively seek innovation
 - Developing a 10 year GM Alliance contract for highway works which commences summer 2020
 - Develop a GM works prioritisation tool
 - A single GM highway condition survey contract
 - Move to join with LCRIG – Will Britain Blackpool
 - Be bid ready for funding opportunities
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Questions

Thank you for your attention
