



# Sharing Best Practice

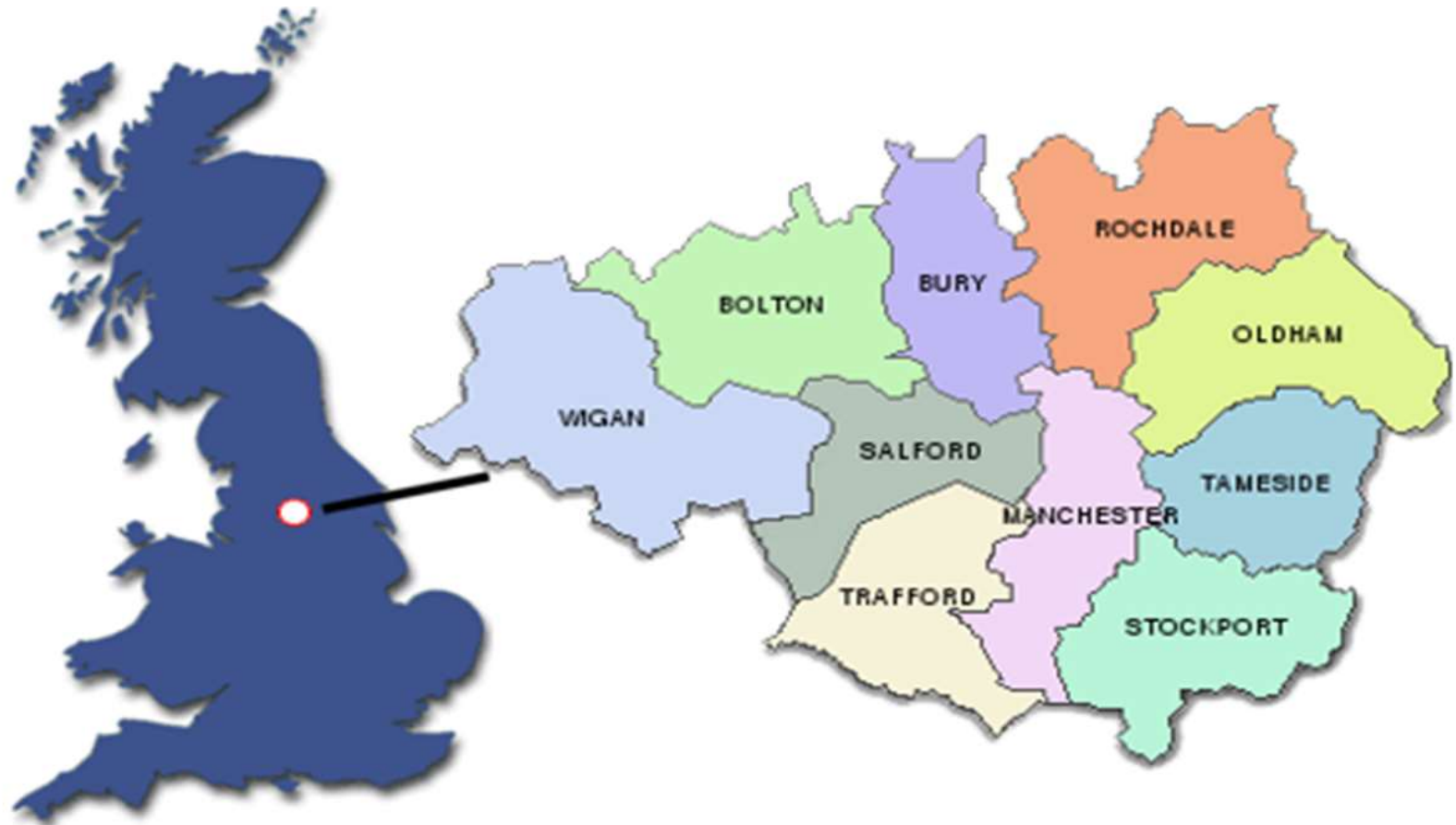
John Williams  
Highway Asset Manager

Date: 27 January 2023

# Overview

- **Highway Inspections**
- **Highways Surfacing**
- **Highways Drainage**
- **Highway Structures**
- **Street Lighting**
- **Winter Maintenance**
- **What's Next**

# Wigan Council - Overview



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# Wigan Council - Overview



- Regional & National Benchmarking

APSE Performance Network Benchmarking

2022 APSE Performance Networks



Best Performing Winners of.....

- Roads, Highways and Winter Maintenance
- Street Lighting

UK Council of the Year 2021

**GOLD WINNER:** Wigan Council

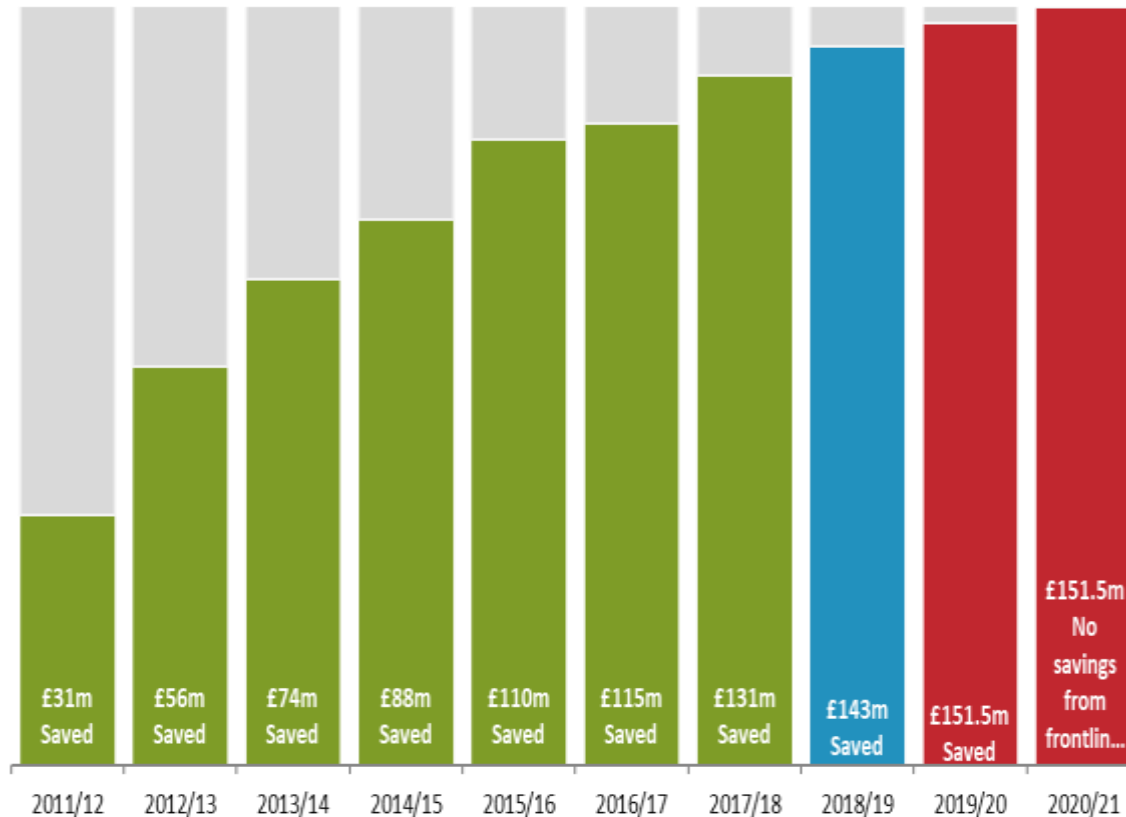
leSE UK Council of The Year 2021



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# Drivers for Change

Our response to austerity meant we have had to save over **£160m** since 2010 – and more to come



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# Highway Inspections

- One Council Team
- In-house inspection Team
  - Digital end-to-end process
  - Greater Manchester Inspection Policy
- 100% Highway Inspections completed on time
- Reactive repairs completed within target up by 29%
- Repeat visits to failed repairs down by almost 90%

# Highways Surfacing

- Asset Management
- Funding Profile
- Planned Maintenance
- Contractor Engagement
- Contractor Deal
- Different Conversation



Table 2: 2022-23 Capital Expenditure and Revenue Funding Split

Category	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Capital Expenditure	£10,000,000	£10,000,000	£10,000,000	£10,000,000	£10,000,000	£10,000,000	£10,000,000	£10,000,000
Revenue Funding	£5,000,000	£5,000,000	£5,000,000	£5,000,000	£5,000,000	£5,000,000	£5,000,000	£5,000,000



Wigan Council

## The Deal For Contractors

Helping us to deliver our vision of making our borough a Confident Place – Confident People

Wigan Council and Partner Organisations "Meet the Buyer" Event

Source: Contracts Finder  
Published: Wed 02 Mar 2022  
Deadline: Fri 03 Jun 2022

Are you a local business looking for future opportunities? The Wigan Council Business Engagement Team invite you to 'Meet the Buyers'. This is a fantastic opportunity to have a chat with commissioners from Wigan Council, Wighlington, Wigan and Leigh...

wigan; wigan council; construction work; architecture and construction; partner organisations; wigan council's current commissioning intentions; engineering and inspection; recreation, culture and sport; wigan council business engagement team invite; wigan council business engagement team;





# Case Study - Surfacing

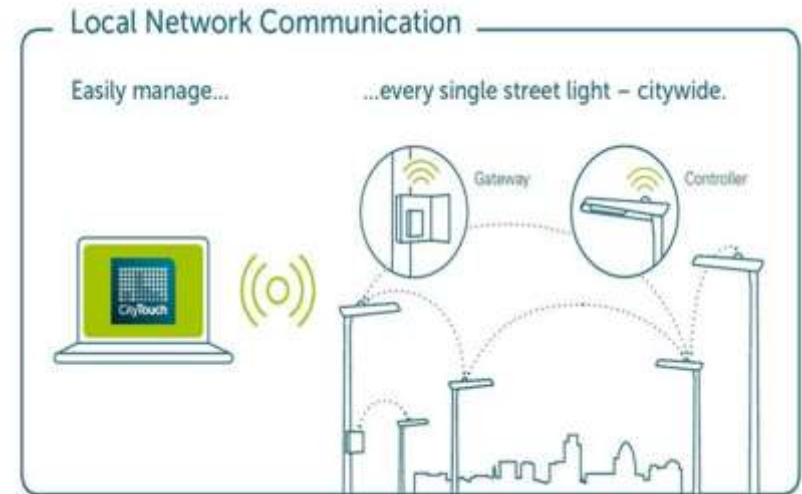


- Reduce Occupancy of the Highway (CO2, driver hours, fuel and traffic movements by 50%)
- Increase volume of planned/laid materials laid per shift
- Increase area of resurfacing with same budget
- Scale-able process

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# Street Lighting



- Review the lighting levels and hours of operation
- Right Light, Right Place, Right Time
- Transformation Through Technology
- Reduced Planned Maintenance
- Reduced Reactive Maintenance
- Reduced Energy and CO<sub>2</sub>

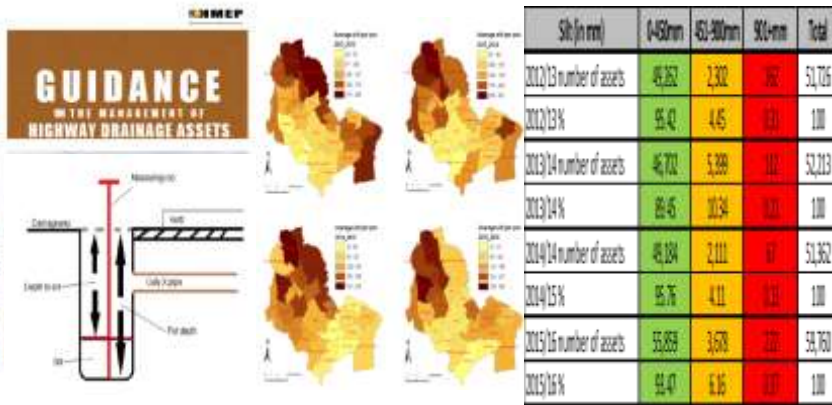
# Case Study – Net Zero?



- Solar Powered Lighting
- Avoidance of trenching and connections
- Reduced disruption to residents
- Scheme cost was reduced compared to conventional scheme
- Eliminate energy consumption and CO<sub>2</sub>
- Avoid energy charges – and inflation
- Feedback very positive comments
- Scale-able for certain locations
- Grid connected may be used to offset energy consumption
- Invest to Save – typically 1kW rated 1m<sup>2</sup> panel generates @ 150 to 200W per annum?

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# Highway Drainage



Silt (in mm)	0-450mm	450-900mm	900+mm	Total
2012/13 number of assets	45,852	2,302	187	51,705
2012/13 %	95.42	4.45	0.31	100
2013/14 number of assets	46,722	5,389	111	52,113
2013/14 %	95.45	10.34	0.21	100
2014/15 number of assets	48,894	2,111	47	51,362
2014/15 %	95.76	4.11	0.11	100
2015/16 number of assets	55,859	3,678	131	59,760
2015/16 %	92.47	6.16	0.37	100

- HMEP Guidance on the Management of Highway Drainage Assets (2012)
  - Improved asset data inventory
  - Efficient and effective use of budgets
- Developing our risk based approach
  - Asset condition data and performance
  - Profile on silt build up
  - Hierarchy - flood risk zone, resilient network
  - Defect category, investigation levels, response time
- Frequency – planned clean / inspection

Factor	Criteria		Likelihood of Event Occurring	Consequence of Event Occurring				
				Negligible	Low	Medium	High	Severe
Road classification	Strategic network, A, B, C, unclassified network		Negligible	1	2	3	4	5
Traffic use	Traffic flow data, footfall data		Negligible	1	2	3	4	5
Characteristics of street	Highway Gullies – Planned Cleaning Frequency		Frequency	4	8	8	10	
	Category	Reference	Priority	Response (working days)				
Condition data	A, B, C roads	1	1	2 Hours		2	10	
Insurance claims data	Resilient Network	1	2	10 Days		3	20	
			3	20 Days		4	30	
Wider policy or operational considerations	Known Flood Risk Areas	1	4	Considered For Future Investment		5	40	
	All Other areas	2						

# Case Study - Flood Risk

- Climate Change – Adaptation and Resilience
- Increased Frequency and Severity of Flood Events
- Transformation Through Technology
- Smart Asset Data Collection
  - Review of Risk and Frequency of Planned Clean
- Smart Gulley Sensors
  - Reduce Flood Risk (JiT)
  - Communications (BSR)
- Scale-able





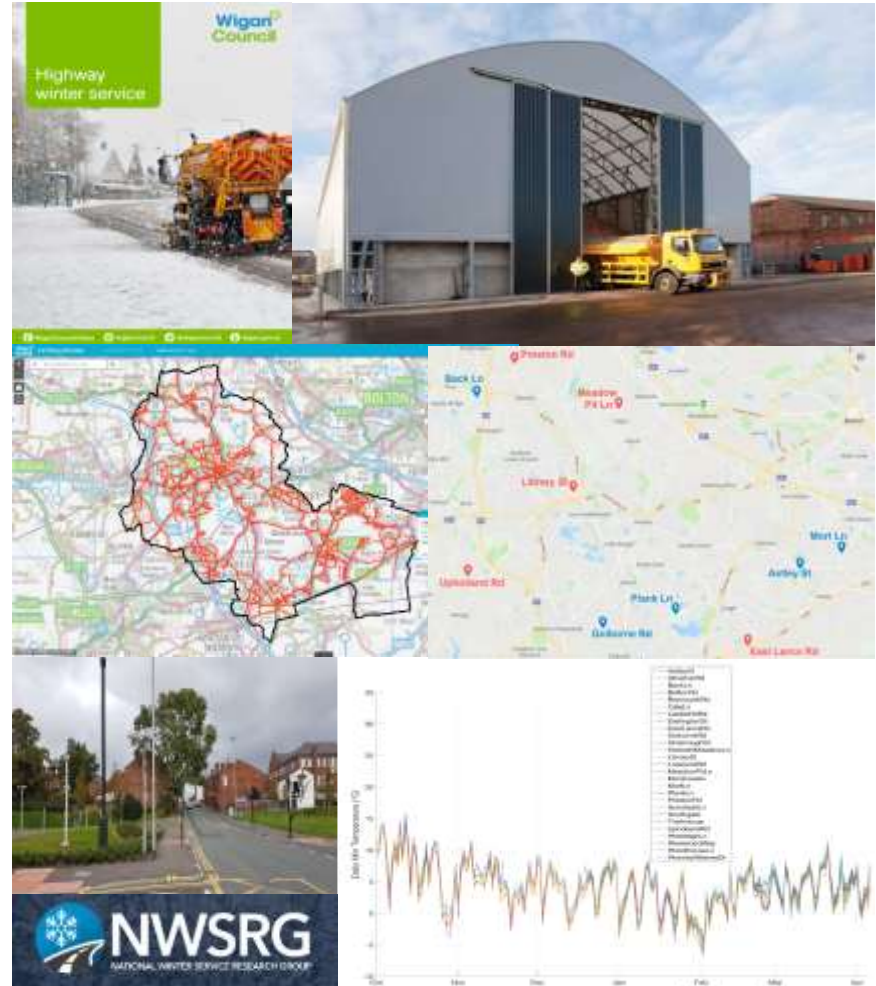
# Highway Structures

- Masonry bridges
- Waterproofing by Injection
- No excavation
- Scale-able
- Significant benefits



# Winter Maintenance

- FreshLook Review
- Invested in Salt Barn
- Coated Salt
- New fleet – Leased vehicles
- Route Optimisation - Webaspx (less routes)
- Spread Rates
- Winter Sensor trials
- Wide spatial variation in road surface temperature:
  - Some routes half as likely to fall below 0° C than others
  - Significant Variation of temperatures within a route





# Summary & Next Steps

- Develop a Culture of Innovation
- Create the conditions that unlock staff potential and ideas
- Empower and Engage staff in transforming services
- Build Partnerships – public / private
- Collaborate with others
- Share Risk and Benefits
- Next Areas
  - Staff development
  - Carbon reduction
  - Digital solutions
  - Customer Contact



**BeWigan** Because how we do things is just as important as what we do



## Our Behaviours

Everyone:

- Be Positive... take pride in all that you do
- Be Accountable... be responsible for making things better
- Be Courageous... be open to doing things differently



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**Thank you for your time  
and attention.**

**Q&A at end of session**