

CORPORATE AND COMMUNITIES OVERVIEW AND SCRUTINY PANEL 5 NOVEMBER 2019

WORKING WITH DISTRICT COUNCILS AND OTHER PARTNERS TO SHARE INFORMATION

Summary

1. The Corporate and Communities Overview and Scrutiny Panel has requested from its Work Programme, an overview on how the Council currently shares information with District Councils and others. It is envisaged that this could be used as the basis for developing a framework for future information sharing initiatives.
2. The Cabinet Member with Responsibility for Transformation and Commissioning and the Director of Commercial and Commissioning have been invited to attend the meeting.

Background

3. There is a great deal of technological change happening in our society that is disrupting how we live and work. We are actively participating in this *'fourth industrial revolution'* in which current data related disruptive technologies such as the 'internet of things' (sensors that transmit data), cloud computing, robotics, virtual reality, drones, 3-D printing, biotech, energy storage, artificial intelligence and machine learning are changing the way people live, work and relate to each other.
4. Residents and businesses now demand us to share data with both security and common sense in mind. Public authorities, like any modern organisation, therefore need to share information in order to provide efficient and effective services. Worcestershire Office of Data Analytics ([WODA](#)) was therefore set up with this purpose and to help change our culture.
5. It can be helpful to split information sharing into two areas: 'personal data' and 'open data'.
 - (i) **'Personal data'** involves sharing personal information about individuals and when this occurs we comply with all relevant national and international legislation and guidelines. Sharing data across 'partner agencies' will facilitate collaborative working as the partners have a common thread in that they interact with the same residents and businesses. These partners hold a comprehensive and complex range of information and by linking this critical data, you unlock the value – both for the organisations and the residents. In a Worcestershire County Council (Council) context, this is essential for lots of purposes such as preventing, reducing and delaying the need for care, improving educational attainment and supporting vital services such as blue badge.

- (ii) **‘Open data’** is non-sensitive information that is available to everyone to access, use and share. In a Council context, this currently includes public health information available via the joint strategic needs assessment (JSNA), real-time information for transport, and planning data that is made available to support economic growth.

The protocols and arrangements for data sharing (i.e. the how)

6. All Partners across Worcestershire have signed off a WODA data sharing charter which sets out our principles to person related data sharing as summarised below:

"Worcestershire partners will therefore deliver cultural and systematic change in the way we approach data sharing across the county. Collectively, we will work from a default premise of the 'duty to share' data being equal to the 'duty to protect' it. That is, in all circumstances, we will share data unless there is a legal or ethical reason not to."

7. A tiered approach to information sharing is taken as below:

- Tier 1 – Overarching charter/ principles – Worcestershire Office of Data Analytics (WODA) data sharing charter was signed through their governance by all Worcestershire public sector partners in 2018
- Tier 2 – Information Sharing Agreements (ISA) between different organisations – legal content within the above framework
- Tier 3a – Putting the ISAs into practice operationally – providing access specific data sets to specific groups of people for specific purposes
- Tier 3b – Providing non-social care staff access to our social care system (currently resolved using Privacy Impact Assessments (PIAs))

Arrangements

8. For the past two years, the WODA Information Governance Group has met every six to eight weeks to improve information sharing across our partners and has been chaired by the Council. This group has been progressive with an aim to provide service design support for secure and legal information sharing. To digitalise the protocols, our partners have invested in a low-cost ‘information sharing gateway’ that allows partners to easily collaborate, create, view and store sharing agreements online using a national system – all using the same General Data Protection Regulation (GDPR) compliant template. This will allow us to extend easily to future partners such as GPs or out of county organisations. Partners can therefore sign off sharing agreements electronically and risks can be mitigated, and mitigations agreed upon electronically. At a glance, partner security credentials can also be viewed to assist demonstration of due diligence.

9. These arrangements therefore help to ensure compliance with the law and thereby avoidance of enforcement action by the Information Commissioners Office (ICO) or other regulators. We also gain better public trust by ensuring that legally required safeguards are in place and complied with.

10. The current partners using the electronic ‘information sharing gateway’ are:

- Worcestershire County Council

- Worcestershire Children First
- All District Council's – Redditch, Bromsgrove, Wyre Forest, Wychavon, Malvern, Worcester City
- Worcestershire Clinical Commissioning Group's
- Worcestershire Health and Care NHS Trust
- Worcestershire Acute Hospitals Trust
- Herefordshire and Worcestershire Fire Authority
- West Mercia Police

11. Over time other organisations such as probation, voluntary organisations and GPs will sign up as part of some of our key transformation programmes.

Examples of where we currently share data

12. By getting shared datasets in the hands of multi-agency workers, they can work together to make better decisions. There are many examples of sharing data to help facilitate collaborative working. For example:

- Front-line teams effectively responding to emergencies by sharing data on the incident
- Providing better personalised care to residents by joining health and social care information
- Using data to identify the families most at need and target effective interventions at the right time so resources are targeted effectively to make the biggest impact and minimise risk
- Using data and data related technologies to improve our economy

13. A small sample is shown below which *demonstrates different purposes*:

- **Informing decision making (using Open Data via Geographical Information Systems)**

Using the Geographical Information System (GIS), the Council provides a platform for making information on infrastructure such as public rights of way walkways and stiles accessible to WCC, parish and district councils, landowners, volunteers and other members of the public. The Council is responsible for the management of the public rights of way network in the county. This responsibility is carried out primarily by the Council's Countryside Service Access Team. With nearly 16,000 individual public rights of way there is a considerable range of issues to address including vegetation growth, signposting and waymarking, repair and replacement of bridges, blocked paths, stiles and gates in need of repair and drainage and surfacing.

Necessary work is carried out through a number of different work programmes including general maintenance and improvement, larger scale projects (such as large bridges, or drainage and surfacing work) and partnerships with local volunteers and parish councils. Some of the work is done in response to problems reported by volunteers using the GIS system and some through planned programmes such as the summer strimming or signposting programmes.

By providing open data therefore, WCC cuts maintenance costs considerably by sharing this outlay with partners and public volunteers.

- **Informing decision making (strategically and operationally) and delivering smarter solutions and services for Incident Management (using cloud computing)**

We have implemented a national intelligence solution that allows the secure collation, mapping and dissemination of vulnerable person data from our social care system to multi-agency Category 1 and 2 Emergency responders using mobile devices enabling:

- More comprehensive, evidence based contingency plans developed and tested ahead of crises
 - First responders to be supported through intelligence to mitigate harm, in particular, death, injury, loss and distress and therefore deliver against our Civil Contingencies Act 2004 responsibilities
 - Emergency Responders with the location of known vulnerable people and some insight into their vulnerability classification
 - Reduction, by 11 hours, of the associated delay with collating disparate sets of data which has been shown to lead to a significant delay and an inability to focus resource deployments in the most efficient and effective manner during emergency situations
- **Understanding our residents needs to delivering smarter solutions and services by automating key business processes to drive efficiencies (using Machine Learning)**

NHS Pathfinders Project (funded by NHS Digital and Local Government Association) - is allowing us to discover how we can become much more predictive in how we use data for preventive purposes. In order to keep people living independently, WCC provides assistive technology to people. Assistive technology refers to devices or systems that help maintain or improve a person's ability to do things in everyday life. These can assist with a range of difficulties, including problems with memory and mobility. Working with a specialist commissioned provider (Predict X), we are creating an algorithm to predict when people using this assistive technology are likely to present to A&E which is costly and adversely affects the health and well-being of the individual and therefore social care provision. This will allow us to put preventative measures in place to keep people independent for longer.

We are in the process to submit a further bid to NHS Digital to continue this project in conjunction with other partners such as Association of Director of Adult Social Care (ADASS) and the Academic Health Science Network (AHSN).

- **Using data as an asset and starting to think, if not literally, how to monetise data (using new 5G technology via Advanced manufacturing Consortium)**

The Worcestershire 5G Testbed is testing 5G for industrial application. It is part of the UK drive to achieve Industry 4.0 and create a more connected, creative and dynamic economy for businesses and investors, on a local and national scale.

The Consortium recently announced the switch on of Britain's first-ever live 5G factory trials, marking the first stage in Britain's journey to reap the benefits of Industry 4.0 through the creation of smart factories. The trials allow manufacturers to test the potential of 5G investments – from factory floor production, reconfiguration and real-time analysis, to steering a machine's movements from a remote location.

Results from the trials will be fed into the wider 5G ecosystem to form a blueprint for how the model can work nationally. Early results indicate that 5G could improve manufacturing output by as much as 1 to 2%, which would hold enormous benefit for the UK economy and make a real, tangible difference to national productivity and output levels.

As 5G becomes increasingly integrated with traditional manufacturing systems, the manufacturing process will become intelligent and dynamic, able to self-optimize performance and operate automatically. The deployment of 5G will allow smart factories to become a functioning reality, representing a leap forward from traditional automation to a flexible, fully connected and agile system.

The level of automation permitted by smart factories promises a host of benefits, including real-time linkages to customer demand forecasts, reliable quality, predictable production capacity and lower cost of production. The heightened visibility, pace of production and efficiency allowed by smart factories are key drivers that will contribute to driving higher productivity levels in manufacturing. Work underway at Worcestershire 5G Testbed is providing invaluable insight that will prove key to stimulating innovation in the manufacturing sector, not just in Worcester, but across the UK.

Best opportunities for further data sharing including predictive analytics

14. There are so many places we could continue or start to improve our information sharing and therefore it is helpful to break down the opportunity into five areas:

- (i) informing decision making (strategically and operationally)
- (ii) Understanding our residents needs
- (iii) Delivering smarter solutions and services
- (iv) Automating key business processes to drive efficiencies
- (v) Using data as an asset and starting to think, if not literally, how to monetise data

15. Virtually all parts of the Council would benefit from improved information sharing within the five areas indicated above. These range from continuing our existing progress (e.g. adding further vulnerable people datasets to our local resilience cloud platform so we can better respond to emergency situations) through to automation, predictive analytics and income generation.

16. In future, to fully unlock the value of personal data, it is likely that communities will need to form a type of 'data trust' that give people and organisations confidence when enabling access to data in ways that provide them with some value (either directly or indirectly) in return. For example, by acting as a 'broker' to enable compliant information sharing that enables our agencies and other partners to securely store and link partner data, it will be possible for us to scale data with partners and enable machine learning to better understand the causation of vulnerability and options for delivering different interventions. At a basic level, it will therefore provide robust protection for people and their data.

Information about the recent successful bid of £70k.

17. In 2018, Worcestershire County Council, alongside District partners, signed up the Government Digital Services (GDS) Digital Declaration. It is a collective ambition for local public services in the digital age and our commitments to realise it by delivering services that are efficient, modern, responsive and simple and delightful to use.

18. Ministry of Housing, Communities & Local Government (MHCLG) are funding collaborative projects that aspire to solve shared local service problems in a common way and scale nationally in keeping with the principles of the local digital declaration. MHCLG funded WODA as one of sixteen national projects to undertake a discovery project that examined how registration data for births, deaths and marriages could be securely and ethically shared to improve public services enabled by the Digital Economy Act 2017. This provided WCC with benefits such as:

- Income to partly cover the cost of base budget employees
- Free-of-charge digital and agile training from GDS for project and extended technical and non-technical teams across County and Districts
- Opportunity to work alongside a leading not-for-profit consultancy who have improved our digital methodology / ways of working
- Insight into using Registrations Data which has led to improvements in our Social Care Case Management roll-out
- Demonstrating WCC as a national leader in digital and data techniques which has helped in other funding bids

19. Following this successful 'discovery project', Worcestershire are now entering an alpha stage having secured a further £73k for this data project aimed at reducing the time that families on the social housing list wait for a property. One of six national projects funded, Worcestershire will work with partners such as General Registry Office, Redditch & Bromsgrove and Suffolk Office of Data Analytics (SODA) to deliver the project. SODA, who has now secured base budget funding from their partners, has provided many collaboration opportunities in the past eighteen months to WODA. Both were recognised in the recent Nesta Report accessible using the link below:

<https://www.nesta.org.uk/report/state-offices-data-analytics-uk/>

Purpose of the Meeting

20. The Corporate and Communities Overview and Scrutiny Panel is asked to:

- Consider the information in this report;
- Determine whether it would wish to carry out any further scrutiny; and
- Agree whether it would wish to make any comments to the Cabinet Member with Responsibility for Transformation and Commissioning

Supporting Information

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Background Papers

In the opinion of the proper officer (in this case the Head of Legal and Democratic Services) the background papers relating to the subject matter of this report are:

Worcestershire Partnership Data Sharing Charter

https://www.wlep.co.uk/wp-content/uploads/Worcestershire-Data-Sharing-Charter_Partnership_WODA_2017.pdf

WODA Business Case for Change

http://www.worcestershire.gov.uk/woda/info/2/about_woda/14/woda_first_100_days