

Data 2023-2028 Strategy

It all begins with data. Data is the driving force of the modern economy, fuelling innovation and has been a lifeline during the pandemic. We need to harness the power of our data to innovate, experiment, boost productivity and improve public services.

From [Department for Digital, Culture, Media and Sport Policy Paper (2020), National Data Strategy]



The scope of this Strategy covers data in a broad sense, from how we capture, manage and govern it, to how it can be used to create actionable insights and inform our decision-making and future plans.

Data is key to delivering our organisational objectives and this five-year Strategy outlines how we will collect, improve and use data to underpin policy, decisions and actions in our effort to improve services and outcomes for the people and communities of Nottinghamshire.

The work to develop this Strategy has been done with key stakeholders in the Council, recognising the importance of continuing engagement at all levels. By doing this, we were able to identify examples of good practice, our current challenges as an organisation, and what is needed to be a truly 'data driven' and data mature council.

This Strategy complements and enables other key strategies, namely our [Nottinghamshire Plan 2021-2031](#), the [Health and Wellbeing Strategy](#), and the [Nottinghamshire County Council Digital Strategy](#).

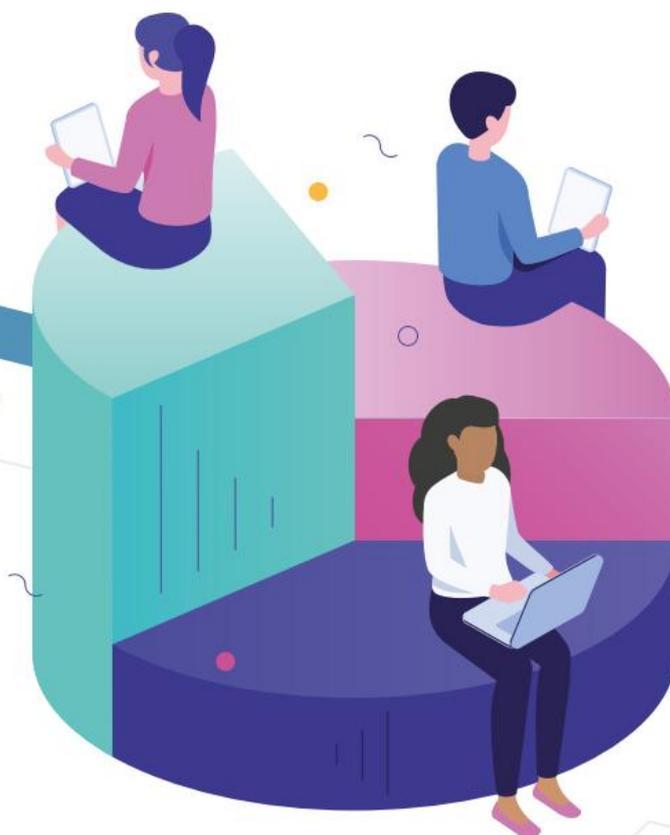
Definition of data:

1. Factual information (such as measurements or statistics) used as a basis for reasoning, discussion or calculation
2. Information in digital form that can be transmitted or processed.



Contents

Our vision	4
Outcomes for people and places	4
Our performance, productivity and potential	5
Where we are now	6
Our data principles	7
What we will do	8
Establish strong organisational data governance	8
Modernise our data architecture	9
Hold, use and share data safely and ethically	9
Build a collaborative and positive data culture across the Council	10
Monitoring and review	11
Further reading	11
Glossary	12



Our vision

Data will be used proactively across the Council to generate understanding and insight. It will support evidence-informed decisions about what, how and where we deliver services, targeting our resources to the people and places where we will have greatest impact. Our data will be of a high quality and integrated across systems and the wider partnership, to enable us to understand people's experiences, trends and predict potential future needs.



Our Nottinghamshire Plan recognises that good quality data is critical to achieving our objectives and that effective use of data will enable us to transform our services, maximise efficiencies and deliver better outcomes for the people and communities we serve and the people that work for our Council.

Apart from our people, data is our most important asset and is considered as part of everything we do. Data provides insight into our customers and the people we support, our decision making, business processes and ultimately provides evidence of our impact and how we are performing as a council. We need to focus on using our data to create efficiencies, delivering cost efficient and quality services. We need to govern, manage and control our data as we would do for any other asset.

Becoming a data-enabled council will benefit the people of Nottinghamshire, by allowing us to make our processes and services more efficient and effective

in meeting people's needs. Data will help us understand existing and emerging needs to help us reduce, reshape or develop our existing services or commission new services and assess our performance in line with statutory duties or best practice.

We will prioritise data developments to improve:

Outcomes for people and places

Data is a powerful tool for improving outcomes for Nottinghamshire's people and communities. It can also enable transparency, improve engagement and strengthen democracy.

We will use data to understand needs and identify where we can have the most impact and ensure resources are targeted to best help people and places who will benefit most from support.

Data helps us to promote equity, tackle inequality and support vulnerable and disadvantaged communities.

By delivering this Strategy, our workforce will have access to high quality data that helps them to understand the life stories of the people they are working with. This will improve the experience of people accessing our Council services and will mean people do not have to keep repeating their story. It will also enable us to work together with people and partners to create positive and sustainable change that helps people to stay healthy, happy and safe in their homes and communities.

We will keep listening so that people's feedback and other data can inform our plans to improve what and how we deliver, working closely with partners to get the best for people.

Our performance, productivity and potential

Data will help us to understand where and how we can continue to improve how we operate as a council, how we support our workforce and how we deliver services. Data can help us to understand more about people and the services needed across a large geographic footprint to target change and transformation activity effectively for maximum impact.

By using our data effectively, we can make the best use of our resources and encourage a more commercial approach across the Council, adopting creative and innovative ways of working that deliver value for money.

We will ensure our workforce is data literate, with the skills and confidence to leverage our data effectively. Data ownership, and the responsibility this entails, will be embedded across the Council.

We will ensure that our managers have the skills and tools to utilise accessible and effective management information reports to identify and address performance challenges at Council, department, service and team level. This will ensure that we are able to evidence our compliance with statutory and regulatory requirements and the impact that we deliver for the people and communities accessing our services.



Where we are now

We are proud of the county we serve, and the many achievements of our Council. We have lots of strengths to build on. Inevitably, in a big organisation like Nottinghamshire County Council, we have some areas of excellence and some pockets that need improvement. This means that we all have a role to play in learning from what we already do well and continuously improving how we operate. We recognise that data has an important role to play in supporting us to become a forward-looking and resilient Council.

As demand for services increases and local government finances face increased pressure, we need data-led innovation to succeed. Below are some of the data related challenges we face that this Strategy seeks to address:

- Much of our data is held across different systems, which can make it harder to access, integrate and analyse. In addition, some data is captured by our partners, and we are not always able to access relevant partner data because we do not have the right agreements or mechanisms in place to share data effectively and safely. This makes it more difficult to generate insight, understand our customer life stories and monitor inequalities.
- We need to develop our systems to enable us to capture, analyse and interrogate data to understand what life is like for people and the outcomes or experiences of people, places or communities. Developing our ability to do this will mean that we can generate insight for different demographics of people who access the Council's support or services.
- There is more to do to embed consistent data standards and governance for the Council and with our partners. By fully embedding these foundations, we will ensure that terminology and definitions are consistent and that we are able to use data easily when working with partners, for example, Health, Police and other local authorities.
- There are also additional demands brought about due to changes in legislation or government and Council policy. Some of our older systems can struggle to incorporate these changes meaning off system processes are developed increasing the time it takes to understand and use our data.

Our data principles

We have identified four priority areas where action is required which are covered in the next section 'What we will do'. The 12 data principles below cover key areas that will allow us to take advantage of the opportunities that data offers:

- 1.** Our data standards are consistent to ensure data is validated and captured once to use many times.
- 2.** Our systems and processes will prioritise data integrity. This means data validation, and no duplication or off system data.
- 3.** Data is shared safely, lawfully and ethically beyond organisational boundaries, for example the NHS, plus other councils, and partners.
- 4.** Our datasets are defined and understood.
- 5.** Our reporting is flexible across systems.
- 6.** Robust data quality mechanisms ensure the reliability of data.
- 7.** We know who is responsible for data quality and who owns it, recognising that data needs to be shared across business areas to gain greater insights.
- 8.** Communities of practice are created which share skills, best practice, and build capability.
- 9.** The right people have access to the right information at the right time and know how to use it to make informed decisions.
- 10.** We will foster a data-enabled culture.
- 11.** We will build and look to retain the best analytics capabilities available.
- 12.** We will enable ownership and responsibility of data in a lawful, ethical and transparent manner, including decisions about the use of data.



What we will do

In developing this Strategy, we have identified the work that is currently taking place across our Council to improve our data and how we use it. We will support the good work already taking place and test, learn and scale up what works across the Council to improve our data skills, systems and analytical capabilities incrementally and iteratively.

We will seek to establish a whole-Council framework to create consistency and coherence, supporting us to move with pace and agility to achieve our vision and establish strong foundations across all areas of the Council for further innovation and improvement.

Below are the current activities we've identified which are a snapshot of what we need to do now. They may change over time, and we will develop a phased and achievable delivery plan each year, ensuring we prioritise delivery of the ones which will bring the most value at that time:

1. Establish strong organisational data governance

- **Embed a Council-wide data governance framework** - this will improve our data governance to reflect best practice thinking within the organisation and ensure that there is clarity about responsibility and accountability for data.
- **Consolidate data standards** - we will build a set of data standards trusted by our stakeholders and partners, which will allow us to capture consistent and unified data at source. This will support a greater ability to make better long-term use of our data and allow services to put in place solutions to fix data quality issues at source.
- **Review the data we hold and its quality, prioritising key datasets** - this will put in place clear measures and targets for holding data of a high quality that is consistent, well-defined and as up to date as possible, so that we are confident in it being considered a 'single version of the truth'.
- **Start a Council-wide data directory** - we will map out the data we hold so we have a live record of what and where our data is, who owns it and for what purposes it can be shared. This will include a glossary to help us understand the language we use to describe data.

2. Modernise our data architecture

- **Review our current data architecture (including databases, applications, integration, security, workflows, information architecture design and any other associated data processes)** - this will allow us to better meet our analytical needs and identify opportunities to develop and improve our capabilities.
- **Strengthen system requirements and data standards for all new systems whether procured or developed** - this will ensure they support our approach and configuration needs.
- Explore our options to create greater analytical capability (for example expansion of our existing data warehouse/development of a data lake).

3. Hold, use and share data safely, lawfully and ethically

- **Ensure we continue to manage the use of data responsibly** - we will have processes in place that ensure we process, blend, share and use data we need in a secure way to ensure people's data rights are respected and they can trust us with their data.
- **Streamline data sharing across our systems, to develop an approach to data sharing** - this will enable us to use our data to its full potential, whilst also safeguarding the privacy of all stakeholders, including the people of Nottinghamshire.
- **Explore platforms that enable data sharing with partners** - this will be used for the publication of open data and secure sharing between organisations. Using a single platform for collaboration will ensure the consistency of data sharing practices and will make it easier to build automation into the data exchange process, reducing the time from analysis to action, a frustration identified by stakeholders.
- **Ensure we include ethical practice in our use of data, reflecting on the Data Ethics Policy developed by the Office for National Statistics (ONS)** - ensuring our collection and use of data continues to be fair in its representation and treatment of people and meets the aims of the Public Sector Equality Duty.
- Continue to ensure all legal, ethical data protection and security implications are considered in a consistent, timely and proportionate way.

4. Build a collaborative and positive data culture across the Council

- Understand what would be required to make data and analysis accessible to our workforce. This will set a baseline and identify the steps we need to take to enable our workforce to engage, as required in their varied roles, with data capture, analysis and translating this insight into actions. We will use this information to put in place learning and development opportunities, which enable identified gaps in knowledge and skills to be filled.
- Look to maximise awareness of existing, internal courses and establish distinct training programmes for officers (focussed on data management, using insight tools, basic data analysis skills and data literacy), and analysts (focussed on storytelling and impact measurement) while also making them aware of the legislative and ethical context for data use.
- Build communities of practice. We will create working groups and online networks that allow for the sharing of data best practice and/or to work on specific outcome-driven problems.



Monitoring and review

Ownership of this Strategy rests with the Data Working Group which is responsible for agreeing, monitoring, promoting and reviewing its implementation. Due to the pace of change, the Strategy will be reviewed every year, with the first review being due in September 2024. An action plan will be developed to support this Strategy, the key elements of which will be incorporated into the annual work plans of relevant service areas and teams. Progress will be monitored quarterly. Monitoring will also include reports to our Digital Board and our Corporate Leadership Team, where appropriate.

The next major review of our Data Strategy will take place during 2028/29.

Further reading

[Nottinghamshire Plan 2021-2031](#)

[Nottinghamshire Health and Wellbeing Strategy](#)

[Nottinghamshire County Council ICT Strategy](#)

[Nottinghamshire County Council Digital Strategy](#)

[Nottinghamshire County Council Information Governance Framework](#)

[National Data Strategy](#)

[Local Government Association Data Maturity Model](#)



Glossary

Analytics/ analytical	This term covers the discovery, interpretation and communication of meaningful patterns in data.
Data	Data can be just about anything, from a number inputted into a computer system, to a sentence written in a report or words spoken in a meeting. It can be held within a system, in emails/documents or recordings of meetings. Data is not only things that are recorded in digital format but also anything recorded on paper.
Dataset	A dataset is a collection of data that is stored together.
Data architecture	Data architecture is the conceptual, logical and physical data assets and how they are stored and managed throughout their lifecycle.
Data asset	A data asset is anything that is comprised of data. A data asset may be a system, database, document or web page.
Data catalogue/ data directory	A data catalogue is a detailed inventory of all data assets in an organisation, designed to help data professionals quickly find the most appropriate data for any analytical or business purpose.
Data enabled/ data driven	A data enabled or data driven organisation is one that is able to use data, skills, tools and resources as part of its wider capabilities, to meet the challenges and changes it is faced with.
Data governance	Data governance is a structured approach that provides standards, processes and tools to organise and enhance the value of data.
Data literacy	Data literacy is the knowledge or ability to communicate, read and work with data. It includes the critical thinking skills required to interpret data and communicate the significance to others. Data literacy empowers you to ask questions, make decisions and collaborate with others.
Data maturity	Data maturity is the journey towards improvement and increased capability in using data. Data maturity is a measure of an organisation's ability to use data, along with how well the organisation leverages those capabilities.
Data standards	Data standards are the guidelines by which data is described and recorded, so that the format of the data is the same across different sources and applications. Standards make it easier to create, share, exchange, combine, understand and integrate data and also reduces the time spent cleaning and translating data.

Data lake	A data lake is a system or repository that stores data in its natural or original data form various sources. A data lake allows different types of analytics such as reporting, visualisation, big data processing, real-time analytics and machine learning to be performed on the data.
Data Protection Act 2018	The Data Protection Act 2018 sets out data protection laws in the UK, supplementing the General Data Protection Regulation (GDPR). It seeks to empower individuals to take control of their personal data and to ensure that organisations are accountable for their lawful use of personal data.
Data warehouse	A data warehouse pulls together data from many different sources into a single central, consistent data store. This system enables an organisation to run sophisticated analytics on huge volumes of historical data to support decision making.
Disadvantaged communities	A community that is experiencing economic, health or environmental burdens.
Information	Like data, information is all around us, but unlike data it has been given meaning and context to tell us something. Information includes things like documents, web pages, leaflets, reports and dashboards.
Insight	Insight is information that has been tailored to the specific needs of what someone wants, and the outcome that we want to achieve. Good insight takes an outcome-first approach rather than a data-first approach which means that insight can lead us to action, whereas information often does not.
Integration	Integration means the design and implementation of services that connect systems with each other to share data. Each integration is designed to manage the specific data elements that are being shared.
Off system	Off system means when data or information is stored away from any main data stores or systems meaning (1) it is fixed data and not live anymore, (2) there may be more than one version of the data stored in different places, (3) it is hard to bring it together with other data to create insights.
Partnerships	Our Council supports the people and communities of Nottinghamshire with the help of a number of other organisations for example NHS (National Health Service), other local authorities, Police, housing providers, education and partner agencies that provide services.

