

CORPORATE AND COMMUNITIES OVERVIEW AND SCRUTINY PANEL 19 JANUARY 2023

DATA ANALYTICS

Summary

1. The Corporate and Communities Overview and Scrutiny Panel has requested a further update on the data analytics and PowerBI work that was discussed at the meeting of the Panel on 17 January 2022.
2. The Cabinet Member with Responsibility for Corporate Services and Communication and the Strategic Director for Commercial and Change have been invited to attend.

Background

3. The Corporate and Communities Scrutiny Panel received a Data and Analytics Report at its meeting on 17 January 2022, during which the Head of Business Intelligence described a number of activities to further develop the use of data and analytics across the Council, including:
 - Data Sharing Agreements (DSA).
 - A new performance management approach and the adoption of PentanaKPI.
 - A brief description of Worcestershire Insights (a Public Health led project to create an external observatory of Worcestershire data using InstantAtlas).
 - Work with partner agencies across the Integrated Care System (ICS) to develop analytics using data from the join health and social care record.
 - A proposed approach for adopting more consistent use of PowerBI across the Council for dynamic and interactive reporting, both internally and externally.
4. The Panel has requested an update on the activity described, focussing on three areas in particular:
 - Power BI Strategy.
 - Worcestershire Insights / Instant Atlas, including more detail about the data that is available.
 - Publicly accessible data.

PowerBI Project Progress to Date

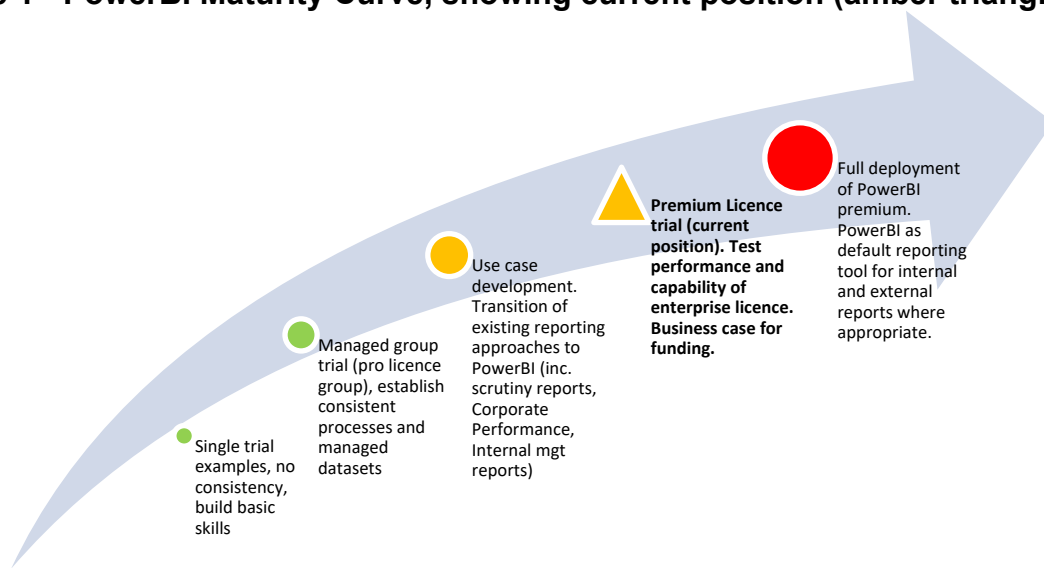
5. PowerBI is a Microsoft application that allows for rapid interactable visualisations of data (i.e. reports that allow the user to interrogate content via interaction with charts and tables), which can be shared either internally or in the public domain. PowerBI is not the only application that supports this, and the Council already produces business intelligence (BI) reports using alternative methods; Structured

Query Language Service Reporting Service (SSRS) reports are particularly common in Adult Social Care for example. PowerBI is not the optimum solution for every Council report but is clearly an application that can (if used appropriately) deliver significant improvements to a wide range of business intelligence services and reports that contain data.

6. Since the January 2022 meeting of this Panel, the Council has established a PowerBI Deployment Project, sponsored by Public Health and led by the Head of Business Intelligence. This is a joint BI and Digital Project supported by the Corporate Programmes Team to develop a consistent and sustainable approach to the adoption of PowerBI across the organisation, where this is the most suitable application. It was agreed early on that a formal project approach would be suitable for PowerBI deployment because of potential risks involved by simply rolling it out organically.
7. Originally established as a stand-alone project group, the PowerBI Information Governance Group (PBIIGG) has now been formally constituted under the Corporate Information Governance Board (CIGB) to ensure that there is appropriate governance, given that deployment of PowerBI (or any other similar visualisation application) has implications for how the Council manages its data, and in particular can lead to increased risk of disclosure of personal or sensitive data if this is not appropriately mitigated. The purpose of the PBIIGG is summarised below:
 - Establish a clear process for identifying and adding new PowerBI developers, including IT processes, and support requirements to create a PowerBI developer community of practice.
 - Decide learning outcomes and key content for PowerBI training being developed by Learning and Development (L&D) team.
 - Develop Standard Operation Procedures (SOPs) for developers and administrators.
 - Utilise MS Teams to create a PowerBI Developer hub where operational guidelines, templates, training, and support materials are stored, and individuals are encouraged to share best practice and discuss any development issues with colleagues.
 - Provide technical expertise around the roll out of PowerBI and management of subsequent risks, primarily in relation to Information Governance and Data Security.
 - Effective management of workspaces to publish reports and dashboards
 - Identification and effective management of certified datasets.
 - Develop the process to ensure reports meet the criteria to be published publicly.
 - Ongoing oversight of published reports and workspaces and the removal of published reports when no longer required.
 - Create a robust system for data retention and archiving of reports/ dashboards.
 - Business Case for future development of PowerBI including enterprise licence considerations, and potential further investment.
8. Figure 1 depicts a maturity curve showing the progression of the Council's PowerBI approach over the last 12 months. From an initial position of isolated

examples with no supporting infrastructure 12 months ago, the Council is now in a position to trial a Council-wide or Premium Licence.

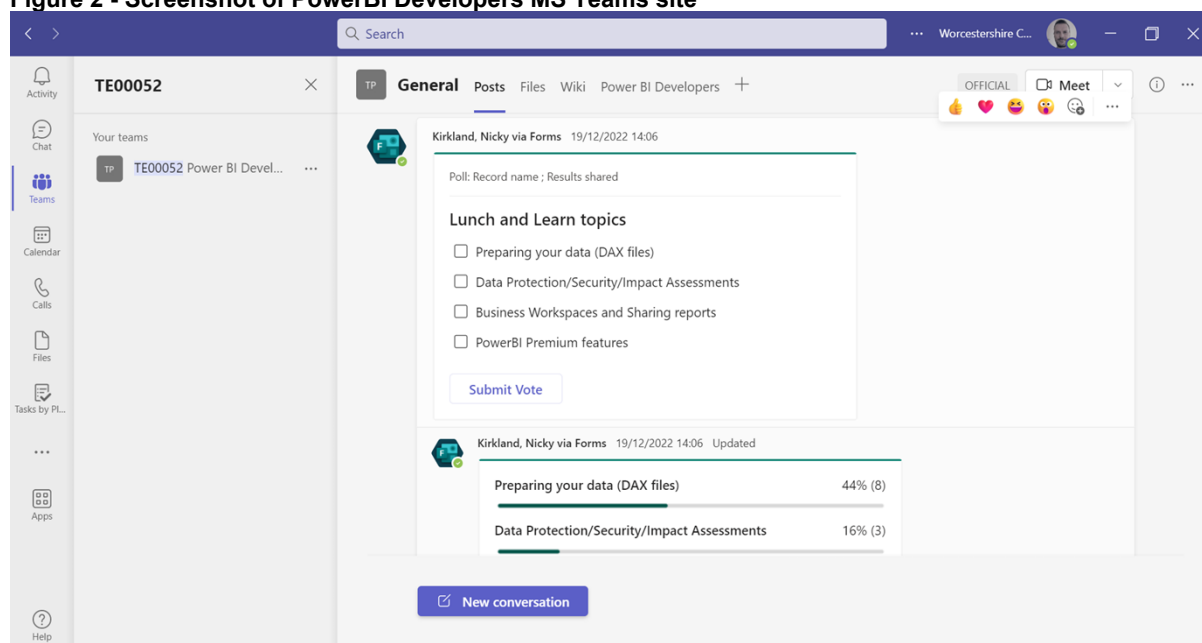
Figure 1 - PowerBI Maturity Curve, showing current position (amber triangle)



9. The Key achievements to date can be summarised as follows:

- The Pro licence group has been established with approximately 200 individual PowerBI pro licences purchased for 2022/23 to enable the Council to develop examples of PowerBI reports and explore the proof of concept. (Note, under the Microsoft licence model a licence is required to both write and read a report, unless it is created for the public domain). This approach has allowed the Council to experiment and develop a limited number of reports before committing to a wider enterprise licence.
- A cohort of approximately 50 PowerBI developers has been identified from across the Council. This group has received introductory training, a PowerBI pro licence (required for production and sharing of reports) and membership of a newly created PowerBI developers' group, administered through a dedicated MS Teams site, to provide peer support, FAQ, guidance, advice etc. across the whole cohort. See Figure 2 below for a screenshot of the MS Teams Developer site.

Figure 2 - Screenshot of PowerBI Developers MS Teams site



- The remaining licences have been allocated to Senior Managers, Cabinet Members, Scrutiny Chairmen (and Vice-Chairmen), and designated key officers (business partners, project managers, finance officers) as the most likely audience for the majority of PowerBI reports shared internally (i.e. those that are not or not yet shared in the public domain).
- A number of use cases have been developed with some already live or near to launch. Some examples are summarised below.

Table 1 - Examples of PowerBI reports that are live or in development

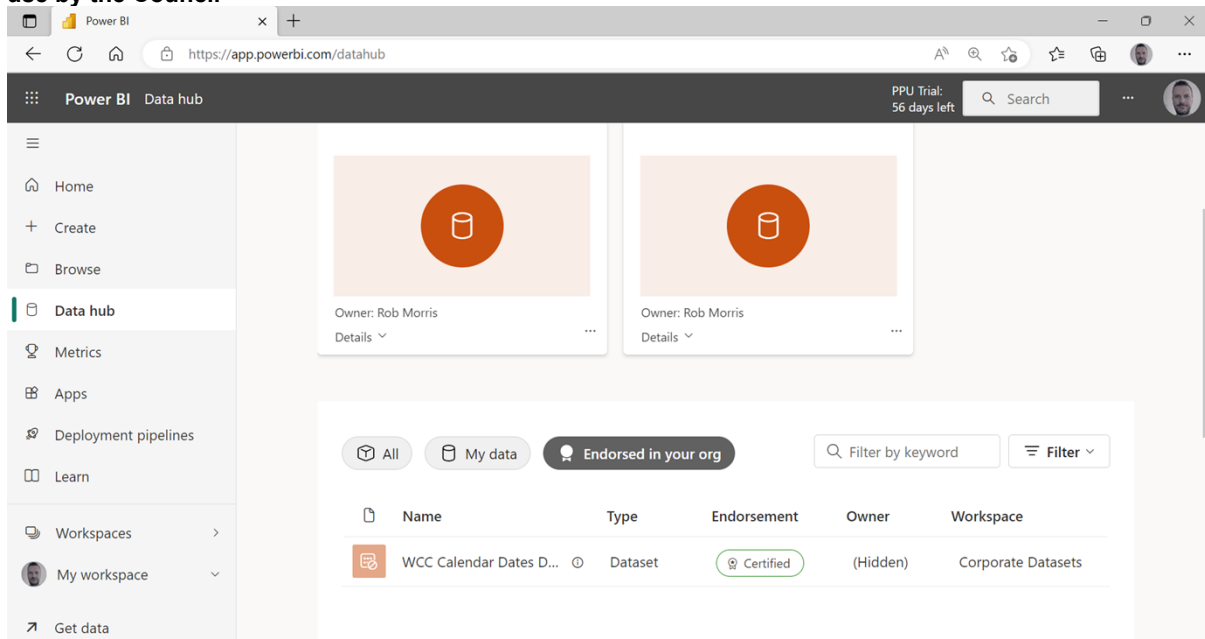
Report Title	Location (if external)	Description	Status
COVID Situation Report	Worcestershire COVID-19 situation dashboard Worcestershire County Council	Public report showing latest COVID-19 statistics across the County, and regional and national comparisons.	Live
COVID Vaccinations Report	Worcestershire COVID-19 vaccinations dashboard Worcestershire County Council	Public report showing latest vaccination statistics across the County.	Live
Demographics	Population Statistics and Projections Population Statistics and Projections Worcestershire County Council	Public report showing population projections across the County including district, ward and electoral division level ONS data.	Live
Resident Viewpoint	Worcestershire Viewpoint Panel Worcestershire	Public summary report showing results of the Countywide residents' viewpoint survey by district and year	Live

	Viewpoint Panel Worcestershire County Council		
Corporate Performance Monitoring	N/A	Summary of progress against the Corporate Plan	Live March 2023
Corporate and Communities Scrutiny Performance	N/A	Performance report summarising key performance indicators relevant to Corporate and Communities Scrutiny Panel	Live March 2023
Other scrutiny panel performance report	N/A	Performance reports summarising key performance indicators relevant to scrutiny panels	Proposed live May 2023
Transformation and Change Team (TaCT)	N/A	Report on capacity, productivity and cost of the TaCT team summarising amount of time (and subsequent cost per resource) that is spent on each corporate plan pillar, portfolio and associated projects by the directorate they support. The report looks at how the resources within the team are allocated and analyses the amount of time and cost associated to a project, portfolio and directorate. The report allows decisions to be made on priorities and appropriate resources as well as to keep track of all associated costs. (Resource cost vs project benefit)	Live
Adult Social Care Survey (ASCS) Reports	N/A	Presentation of findings of the ASCS and Survey of Adult Carers (SACE), and key headlines of associated National Indicators.	Proposed live early 2023
Adult Social Care Admissions	N/A	Internal management report	Live
Care Quality Commission Care (CQC) Home Report		Details and summary of current care home placements recorded in the Liquidlogic Adult Social Care Case Management System Controcc combined with the current CQC rating of the provider (where available). Includes all types of Care home activity long term/short term/post hospital service that are delivered on a care home contract. Key measures: <ul style="list-style-type: none"> • Number of providers at each rating. • Percentage of people with providers at each rating. 	In progress

		<ul style="list-style-type: none"> • Overview of individual care homes. • Overview of care homes in a group. • Analysis of additional payments by CQC rating 	
CQC Domiciliary Care Report	N/A	<p>Details and summary of current domiciliary home care users, combined with the CQC rating of the provider (where available). Includes any days and hours of care delivered on a domiciliary home care contract.</p> <ul style="list-style-type: none"> • Number of providers at each rating. • Percentage of people with providers at each rating • Overview of individual providers 	In progress

- An internal data mart of certified datasets has been established to allow developers to access a central data hub of datasets for use in PowerBI reports (see Figure 3 below). These datasets will be managed by the digital team and made discoverable to developers with access on a permissions basis (to ensure information security). Certified datasets will only be made available once they have met predetermined criteria for data quality, uniqueness, timeliness etc, thus ensuring that reports use a defined standard of source data wherever possible. Nominations for new certified datasets, removal of datasets, or changes to permissions will be managed via the PowerBI IG group.

Figure 3 - Screenshot of PowerBI developer Data Hub, showing Certified Datasets that are Endorsed for use by the Council

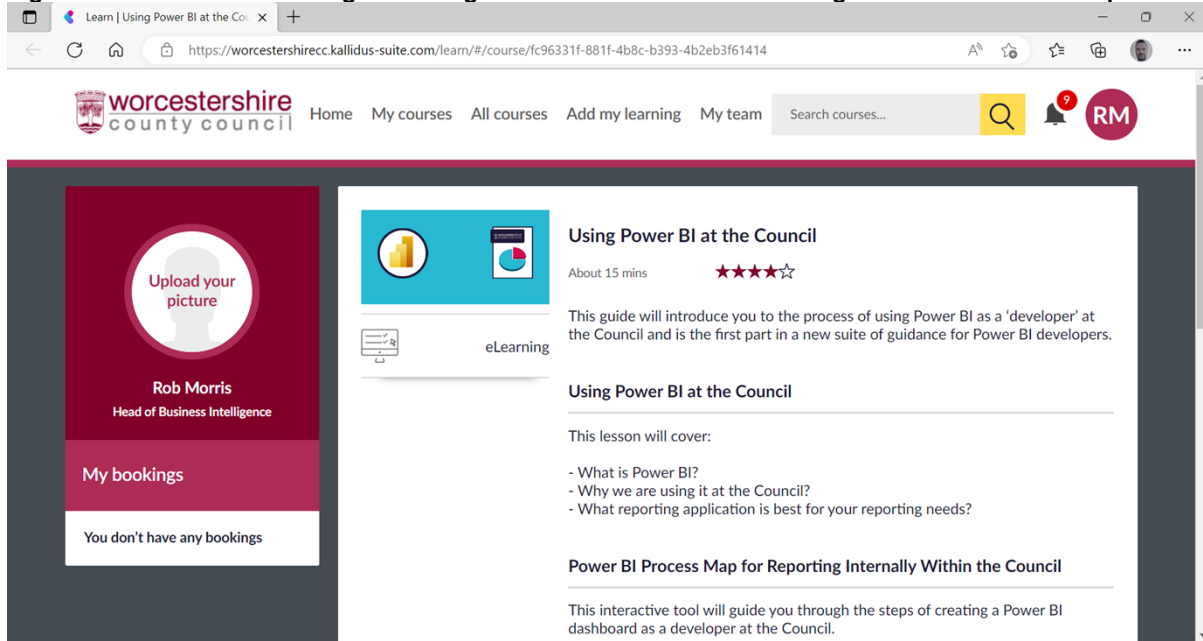


- Processes have been developed to support developers in the creation of new reports that meet the required standards of design, accessibility, route to publication, data security, and permissions. The purpose of this is to drive greater consistency in how PowerBI is being used, and to provide a better experience for users.
- Corporate workspaces have been created in preparation for sharing PowerBI reports with designated groups (such as the Senior Management Team and Cabinet etc). Workspaces are managed in a similar way to Microsoft Teams sites, with a designated owner who is responsible for membership and permissions, and a log of created workspaces and owners maintained by the Information Governance team.

PowerBI Project Next Steps

- The initial licence model of individual licences for readers and developers has been expanded and the Council will have the use of a Council wide enterprise licence (PowerBI premium) for 2023/24. Pro licences are still required for developers but under the enterprise licence we have the facility to create and share reports with any combination of the Council's staff / elected members and those in other agencies securely, without the need for individual licences.
 - PowerBI premium increases the potential reach of PowerBI and theoretically allows for whole council reports. Some experimentation will be required to determine the relative performance of reports written for different audiences (to understand for example the extent to which the running and use of reports slows down as more users access them). At this stage, we anticipate that reports published under a P will support large numbers (100+) of concurrent users, however there will be an upper limit which will need to be determined.
PowerBI premium also provides the facility for the Council to share reports securely with other organisations and potentially allows for development of sold services (income generation).
10. Internal training / awareness courses have been developed by the Learning and Development team for use by new developers and other users of PowerBI. An example is shown in Figure 4 below in Kallidus (the Council's training platform). This provides basic awareness for those new to PowerBI (developers or readers) and helps to determine whether PowerBI is the appropriate application to use, and step by step guidance to using PowerBI in the Council. These courses are not intended to replace the wealth of training material available online, but to support developers to produce reports in a consistent way across the organisation.

Figure 4 - Screenshot showing the 'Using PowerBI at the Council' training course for new developers

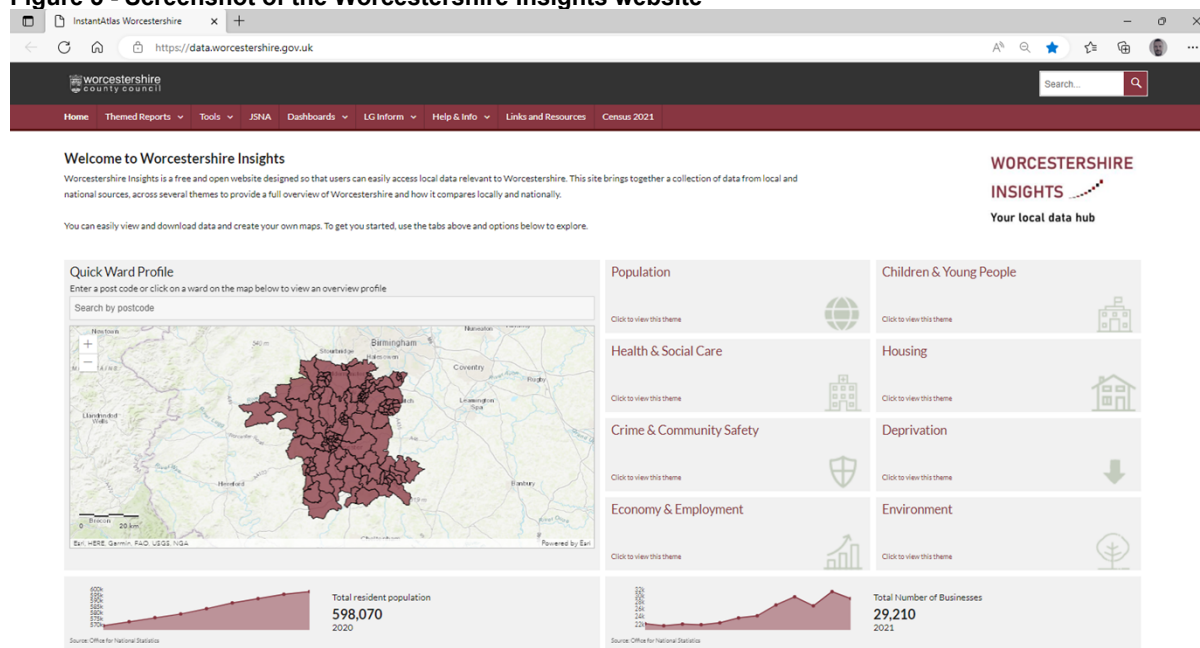


11. Market engagement for a provider to support the Council with advanced training requirements to support a small number of super users has begun and procurement is expected before the end of the financial year.

Worcestershire Insights / InstantAtlas

12. In 2021, the Council identified the need for the provision of a single view of data about the County. This will benefit not only Council staff (particularly commissioners) but also local residents, businesses, suppliers, voluntary and community sector organisations (VCS) and partner agencies.
13. Led by Public Health, the Council procured InstantAtlas to create an observatory of publicly available data, called *Worcestershire Insights*, to supplement the Joint Strategic Needs Assessment (JSNA).
14. Worcestershire Insights has been customised to provide local intelligence and insight about thematic topics and geographical areas in Worcestershire. Bespoke reports cover topics such as health and social care, and general population summaries which supply the most current data available (<https://data.worcestershire.gov.uk/>). The platform is available from the Council's website and requires no specialist software or training to use.

Figure 5 - Screenshot of the Worcestershire Insights website



15. The JSNA also continues to be updated, with the latest JSNA summary recently being presented to Health and Wellbeing Board. Top level findings of this summary include widening inequalities, an ageing and changing population, pressure on health services and mental health and wellbeing issues. The report is at <https://www.worcestershire.gov.uk/jsnapublications>.

Publicly Available Information

16. There are a number of ways in which members of the public may wish to interact with the Council's website for the purposes of deriving information about the Council and/or the County. This includes details about Council meetings, Council services, public consultation, relevant news stories. Residents may also wish to explore data and intelligence relevant to the Council.
17. In terms of data, this can be broadly split into two categories: information about the County (including demographics, economic data, health intelligence etc), or performance information (including corporate plan monitoring, cabinet reports, scrutiny reports).
18. Data about the County is largely already in the public domain through OpenData platforms, like the Office of National Statistics (e.g. Census 2021 data). The Council is not the controller for this data, but we have a role in promoting and signposting local residents, businesses, partner agencies and VCS organisations to this information. Worcestershire Insights (see above) is the model for delivering this in Worcestershire.
19. Data and intelligence about the operation of the Council includes performance information, and data relating to the Council's statutory duties. In some cases (for example Corporate level performance) the Council has a statutory duty to provide this reporting. For committee meetings, Council, Cabinet etc. the Council must publish material in accordance with legal requirements for agendas and accompanying reports at least 5 clear working days before a meeting in an

accessible format. Whilst the Council acts to ensure compliance with these requirements; the format is not prescribed, and the customer experience varies depending on which part of the website the resident accesses.

20. To coincide with the development of the Council's website, performance and scrutiny reports will be brought together under one landing page so that these are easily discoverable by users of the website, and PowerBI will be used as the default application for this, to provide a consistent experience, which allows for greater levels of interaction. This site will act as a single view of Council performance for members of the public. Currently, two PowerBI reports are in late stages of development for inclusion on the website. The Corporate Plan monitoring report is due for publication at the end of Q4, and the Corporate and Communities Overview and Scrutiny Panel report (which was discussed at the Panel meeting on 1 November) is due for full roll out at the meeting in March 2023. Further reports will be developed for other Scrutiny Panels in 2023/24.
21. In whatever format the Council decides to publish material, it must conform with accessibility requirements. The accessibility regulations came into force for public sector bodies on 23 September 2018. The full name of the accessibility regulations is the Public Sector Bodies (Websites and Mobile Applications) (No. 2) Accessibility Regulations 2018. The accessibility regulations build on existing obligations to people who have a disability under the Equality Act 2010 (or the Disability Discrimination Act 1995 in Northern Ireland). Our website must meet the international WCAG 2.1 AA accessibility standard.

Purpose of the Meeting

22. The Panel is asked to:
 - consider and comment on the information provided in the report
 - determine whether any further information or scrutiny on a particular topic is required

Contact Points

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Background Papers

In the opinion of the proper officer (in this case the Democratic Governance and Scrutiny Manager (Interim Monitoring Officer) the following are the background papers relating to the subject matter of this report:

[Agenda for Corporate and Communities Overview and Scrutiny Panel 17 January 2022](#)

[All agendas and minutes are available on the Council's website here.](#)