CSMC	**Date of meeting: 9/11/2019**
Briefing Note	

Data Management.

Introduction / Background:

1. The Council has a performance management framework, which was set out at Executive in October alongside the Council plan, and is included as Annex A.

2. This paper has been requested by the Corporate Scrutiny and Management Committee in order to give a greater understanding of the performance information that is available within the organisation, the products that provide this information, and some of the data management structures that are in place.

3. The Business Intelligence Hub provides data support for City of York Council, as well as to a variety of partners and other external bodies. Since its formation in 2015 the Business Intelligence Hub has been working to realise the efficiencies that a combined data and performance function can bring to an organisation; this has included; implementing a range of standardised processes, technologies and user-focussed end products and establishing resilient knowledge and skills.

Statutory frameworks and data availability:

4. A key focus of Business Intelligence Hub data activities is to help the Council meet its statutory requirements around submission to central government. City of York Council has a statutory obligation to return a framework of approximately 200 datasets to central government annually, of which Business Intelligence complete around 150. A number of local authorities have poor data practices and struggle, or fail, to submit the statutory data on-time or accurately, but having a centralised approach has allowed York to meet these challenges.

5. Each dataset has to be extracted from systems, validated, checked and signed off prior to submission. This statutory framework is intended to allow comparison between City of York services and provision to residents within legal expectations. Examples of datasets which have to be returned include;

SALT – Adult Social Care	LAHS – Housing
DEFRA – Environment and Waste	SSDA903 – Children's
HR - Workforce returns	CYC – Service Satisfaction

6. As a Unitary Authority, City of York Council has a full range of Local Government level datasets including but not limited to Social Care, Education, Highways and Waste. The

majority of datasets are processed directly by the Business Intelligence Hub in order to provide management and performance reporting. A few areas of the organisation still have limited data capacity, and/or smaller data needs, and these services submit performance information to the Hub which assimilates it into the various data structures.

7. There are approximately 5,000 active key performance indicators stored within the organisation's Performance Framework, with about 1,000 of these having a variety of benchmark's which allow comparison with statistical neighbour groups, regional or national patterns. A number of the indicators can be split geographically such as; wards, localities, other public sector boundaries and housing areas. When these additional sub-divisions are taken into account, the number of indicators increases to approximately 19,000. All indicators have policies and procedures, both manual and technical in place, to maintain data accuracy, and in relevant places practices annually audited.

CYC data products:

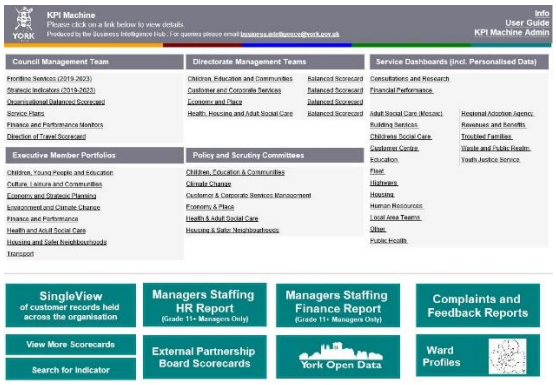
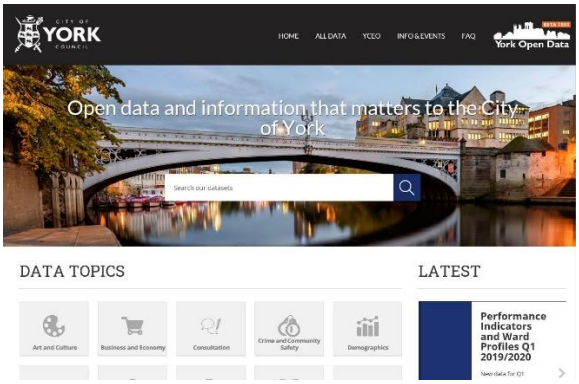
8. The Business Intelligence Hub is responsible for the production of a wide suite performance documents aimed at supporting the scrutiny of CYC's service delivery. These products include:

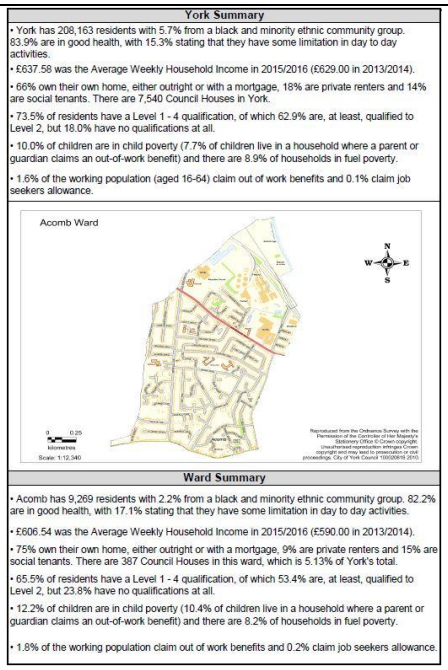
    a. Finance and Performance Monitors;
    b. Scrutiny Finance and Performance Monitors;
    c. Service Plans;
    d. Ward Profiles;
    e. Performance reports for variety of external/internal boards;
    f. Performance reports for variety of external/internal projects;
    g. Performance updates for CMT, DMT, and head of service structures;
    h. Performance Clinic briefings (focussed on key areas);
    i. Cost Control documents (mainly employee information);
    j. Operational performance scorecards;
    k. Ad-hoc performance requests.

9. In order to process, provide and store the above performance documents, the Business Intelligence Hub has built a series of products and tools to help monitor, inform, collaborate and drive the organisation's business processes and decision making.

10. These products have been "built" in house to meet York's need, rather than a bought in product suite, and have the technical and resilient capabilities that can be met within the financial, skillset and knowledge envelope of both the Business Intelligence Hub and the wider Council. This is a similar setup to other Local Authorities, but we feel that the below products are of high quality due to; the number of Councils that have enquired whether they would be able to use our products on a wider basis; and the recognition that some of the products have received both regionally and nationally. Products are:

End products	Provides
KPI Machine	A single repository and access point for performance and management information for the organisation.

	Performance data is available to all “managers”, and management information and reporting available to all relevant “system users”. These methods help to control access and maintain data protection requirements. Access is via desktop icon, and all performance products mentioned in this paper, from service plans to consultation results, are made available via this product.
 	
OpenData	The organisation’s method for publishing datasets for public and business consumption to support greater openness, transparency and accountability (www.yorkopendata.org.uk). The platform was named by NESTA in 2017 as one of the top 5 open data platforms in the UK.
SingleView	Provides access to summarised information at a customer level shared from across the organisation for the purposes of supporting vulnerable customers and increasing process efficiency. SingleView was 1 of 3 finalists in the Guardian Public service awards in 2018 for Digital and Technology projects. Access to the SingleView is governed by an individual’s access to other IT case management systems, and the entry point is through KPI machine.
Manager Dashboards	A dashboard tool, accessed via the KPI machine to see core staffing and personnel information. This tool is available to senior and front-line managers.
Ward Profiles	Detailed and extensive information and analysis on each ward in York that is refreshed quarterly and published on the Open Data Platform.



York Summary

• York has 208,163 residents with 5.7% from a black and minority ethnic community group. 63.9% are in good health, with 15.3% stating that they have some limitation in day to day activities.

• £637.58 was the Average Weekly Household Income in 2015/2016 (£629.00 in 2013/2014).

• 66% own their own home, either outright or with a mortgage, 18% are private renters and 14% are social tenants. There are 7,540 Council Houses in York.

• 73.5% of residents have a Level 1 - 4 qualification, of which 62.9% are, at least, qualified to Level 2, but 18.0% have no qualifications at all.

• 10.0% of children are in child poverty (7.7% of children live in a household where a parent or guardian claims an out-of-work benefit) and there are 8.9% of households in fuel poverty.

• 1.6% of the working population (aged 16-64) claim out of work benefits and 0.1% claim job seekers allowance.

Ward Summary

• Acomb has 9,269 residents with 2.2% from a black and minority ethnic community group. 82.2% are in good health, with 17.1% stating that they have some limitation in day to day activities.

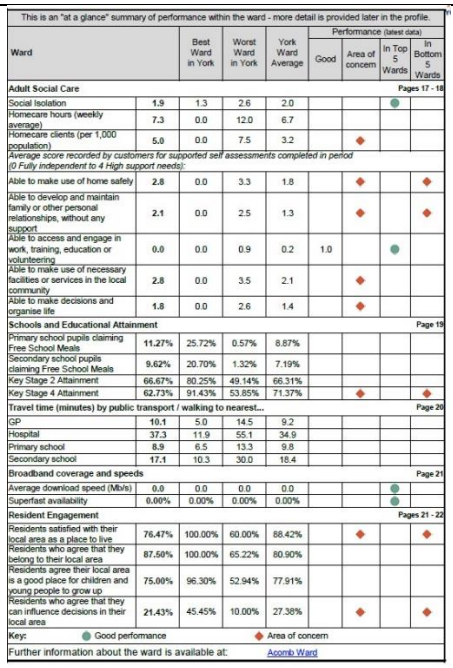
• £606.54 was the Average Weekly Household Income in 2015/2016 (£590.00 in 2013/2014).

• 75% own their own home, either outright or with a mortgage, 9% are private renters and 15% are social tenants. There are 387 Council Houses in this ward, which is 5.13% of York's total.

• 65.5% of residents have a Level 1 - 4 qualification, of which 53.4% are, at least, qualified to Level 2, but 23.8% have no qualifications at all.

• 12.2% of children are in child poverty (10.4% of children live in a household where a parent or guardian claims an out-of-work benefit) and there are 8.2% of households in fuel poverty.

• 1.8% of the working population claim out of work benefits and 0.2% claim job seekers allowance.



This is an "at a glance" summary of performance within the ward - more detail is provided later in the profile.

Ward		Best Ward in York	Worst Ward in York	York Ward Average	Performance (latest data) Good	Area of concern	In Top 5 Wards	In Bottom 5 Wards
Adult Social Care								Pages 17 - 18
Social Isolation	1.9	1.3	2.6	2.0			●	
Homecare hours (weekly average)	7.3	0.0	12.0	6.7				
Homecare clients (per 1,000 population)	5.0	0.0	7.5	3.2		◆		
Average score recorded by customers for supported self assessments completed in period (0 Fully independent to 4 High support needs):								
Able to make use of home safely	2.8	0.0	3.3	1.8		◆		◆
Able to develop and maintain family or other personal relationships, without any support	2.1	0.0	2.5	1.3		◆		◆
Able to access and engage in work, training, education or volunteering	0.0	0.0	0.9	0.2	1.0		●	
Able to make use of necessary facilities or services in the local community	2.8	0.0	3.5	2.1		◆		
Able to make decisions and organise life	1.8	0.0	2.6	1.4		◆		
Schools and Educational Attainment								Page 19
Primary school pupils claiming Free School Meals	11.27%	25.72%	0.57%	8.87%				
Secondary school pupils claiming Free School Meals	9.62%	20.70%	1.32%	7.19%				
Key Stage 2 Attainment	66.67%	80.25%	49.14%	66.31%				
Key Stage 4 Attainment	62.73%	91.43%	53.85%	71.37%		◆		◆
Travel time (minutes) by public transport / walking to nearest...								Page 20
GP	10.1	5.0	14.5	9.2				
Hospital	37.3	11.9	55.1	34.9				
Primary school	8.9	6.5	13.3	9.8				
Secondary school	17.1	10.3	30.0	18.4				
Broadband coverage and speeds								Page 21
Average download speed (Mb/s)	0.0	0.0	0.0	0.0			●	
Superfast availability	0.00%	0.00%	0.00%	0.00%			●	
Resident Engagement								Pages 21 - 22
Residents satisfied with their local area as a place to live	76.47%	100.00%	60.00%	88.42%		◆		◆
Residents who agree that they belong to their local area	87.50%	100.00%	65.22%	80.90%				
Residents agree their local area is a good place for children and young people to grow up	75.00%	96.30%	52.94%	77.91%				
Residents who agree that they can influence decisions in their local area	21.43%	45.45%	10.00%	27.38%		◆		◆

Key: ● Good performance ◆ Area of concern

Further information about the ward is available at: Acomb Ward

Data Quality Tool	A method of monitoring data quality issues and allowing the production of reports to identify precise records that do not meet data quality standards including formatting, structure and duplication.

Focus on SingleView

11. SingleView utilises Microsoft Reporting Services and the organisation's Master Data Management solution to display and share an appropriate level of customer information between different departments and teams. The information shared is thematic and each department to department view within SingleView is customisable, allowing granular control over the information shared.

12. Using SingleView a Social Worker, for example, working in a Front Door team can access relevant information about an Adult from Revenue and Benefits and Housing Services without needing to log into several different case management systems. Through SingleView, staff can gain a more holistic understanding of an individual customer and that individual's interactions with Council services, leading to more efficient and focused service delivery.

13. The use of SingleView has been pivotal – for customers and staff - in service transformation within City of York Council. It has reduced the requirement for case management systems to hold complex information from other services, provided a simple method of integrating disparate systems, minimised the need to purchase large volumes of software licenses, and reduced requirements for staff to learn many different software packages. Customers benefit from greater decision making efficiency and more holistic service delivery.

14. The SingleView project was developed and project managed in-house by City of York Council's Business Intelligence Hub using existing budgets, servers, experience and staff. We believe the total cost of the project was in the region of £15,000. However, the project

depended on the delivery of the Master Data Management solution during 2017. SingleView was one of three finalists in the “Digital and Technology” category at the Guardian Public Service Awards in November 2018.

Focus on York Open Data

15. In support of the transparency agenda, 1,100 datasets are made available through open data practices. York Open Data (www.yorkopendata.org) was launched in March 2015 and offers residents and businesses free access to a wealth of information about the city, to help to build new solutions to all kinds of challenges such as those around sustainability, transport, energy and community engagement. The site covers a diverse range of topics from council and city performance to community assets or geospatial data. Data is provided either as live feeds, through the Council data architecture, or as monthly and quarterly updates.

16. New data is published regularly and existing datasets are kept up to date, building a rich picture of the city. It was created as part of the council’s continued commitment to being accountable, efficient and effective through publicly sharing as much of the information it is either the custodian of, or is available to publish in cost-effective manner.

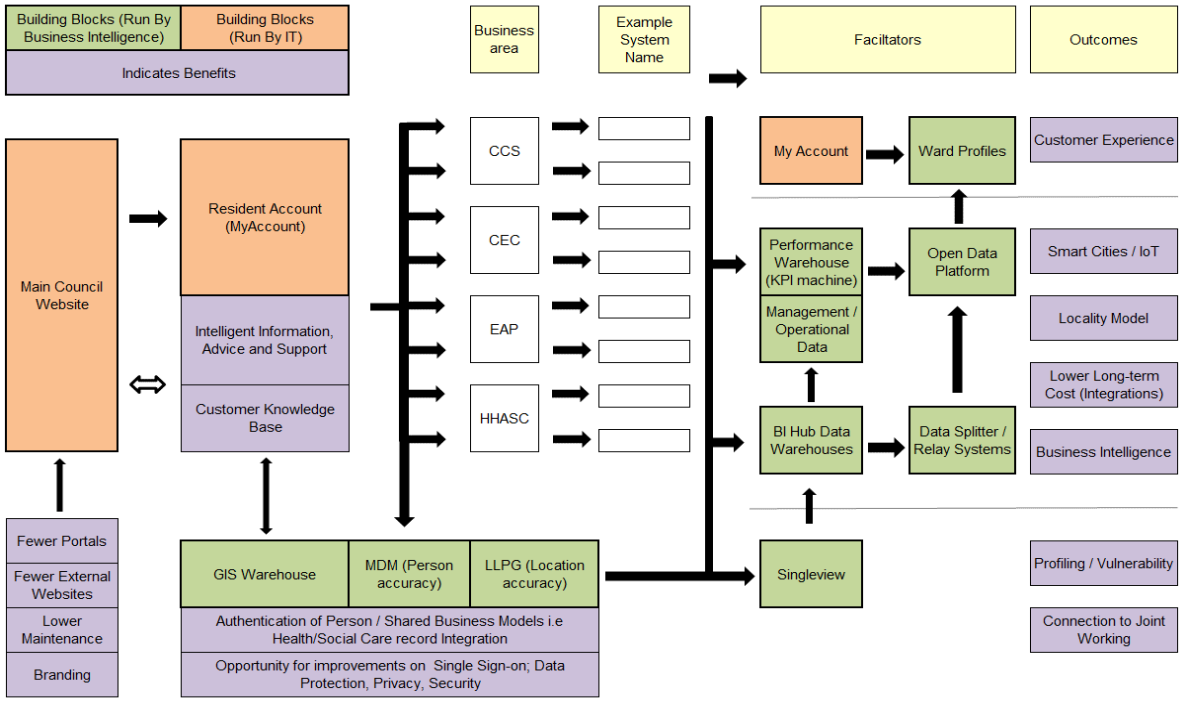
17. We have worked and engaged with a wide variety of bodies and organisations within the city to provide the datasets requested, whether this been the University and academic sector, through to ward committees and the voluntary sector, all whom are looking for a robust evidence base to support their activities. Through these ongoing conversations we have been requested to provide more “local” information and therefore many of these datasets are now provided with geo-spatial referencing to allow the data to be mapped by members of the public or commercial organisations wanting to understand the circumstances affecting York residents and their local area..

18. In an average year, since inception, the York OpenData website has around 100,000 visits per year, serves c. unique 14,000 users. Whilst recognised nationally, NESTA in 2017, that York publishes a significant greater proportion of its data than other Local Authorities, challenges to expanding datasets remain in; cost of publication due to technological barriers, data quality, and re-licensing and re-use implications.

Focus on Architecture

19. CYC has benefitted from a fairly stable architecture of systems installed and maintained within CYC’s infrastructure network which means that standardised and embedded practices can be put in place for data architecture. This architecture is not without its challenges; legacy, complexity and flexibility, to name three, and most importantly needs to be able respond and absorb the ongoing programme of system upgrades, replacement and new requirements.

20. The following diagram describes the organisation’s data architecture and indicates the benefits of each element which is managed by either Business Intelligence of ICT:



21. To facilitate the growing demand for digital services, demand for greater variety and complexity of data, the architecture within CYC and across Local Government will see significant change over future years; many systems supporting frontline services have reached the end of their life; suppliers are now opting to operate, manage their systems, and hold data within the Cloud – outside of CYC's infrastructure network; and there is a greater a need to have shared personal identifiers (NHS number etc.) within systems in order to share information accurately across the public sector landscape.

22. Working with software suppliers will continue to be an important aspect to maintain the status quo and looking to the future. In this new digitally-driven, cloud based environment access to data and information for reporting purposes remains key but heavily relies on suppliers providing the right tools and the right level of access into the back-end databases. CYC Business Intelligence Hub has taken steps by upgrading reporting hardware and software to help facilitate connections into the Cloud, however, the risk of significant disruption to the flow of key performance information remains unless time and effort is given to understanding and reacting to these changes.

Interesting future "data" projects BI involved in:

23. LHCR (Local Health and Care Record) - is a nationwide initiative to join together the data from health and social care providers. The "vision" is a system-of-systems sitting in the cloud which can be called upon and will, almost instantly, retrieve information stored by a GP, Local Authority and a Hospital about a patient/client/customer. The primary focus of development in this area is clinical; the ability to support patients/clients/customers with a better quality Health and Care Plan by joining up data. However, a powerful secondary focus is population health management. It is hoped that, by linking care and health providers, it will be possible to analyse and better understand the flow of the population between services, anticipate demand and address problem groups proactively.

24. At a strategic level within CYC, it is the population health management that will be of most advantage. This information should allow Public Health and Adult Social Care to better

understand City-wide circumstances and take proactive decisions to benefit the residents within York; for example, services should be able to assess the recent admission to hospital of patients/clients/customers within an age range for falls and ensure sufficient equipment is available for loan. Business Intelligence Hub will be key to this project in making sure data can be extracted, transformed, achieve a quality level, and provided to this project.

25. STEP – is a research project aimed to drive York towards being the first city in the UK truly ready for the coming revolution in managing whole city mobility. Key activities include; building a platform to ensure the City can meet the challenges of big data, and connected/autonomous vehicles; creating a modelling layer that allows us to run City wide transport models in near real time; and thirdly implement a decision making layer to provide better real-time management of the transport network and implement transport policies more effectively. Business Intelligence Hub will be involved in a number of stages of this project, hoping to embed the newly created data into its corporate products.

26. Opening LA Transport Data - BI has won a DfT Innovation Fund grant to deliver a project that aims to automate the publishing of currently closed traffic datasets owned by the council. Examples of these are real time datasets, such as UTC data, traffic counters or parking data. The project will run alongside other City of York Council (CYC) DfT funded projects to provide a piece of work required to deliver the wider STEP programme.

Annex A – Performance Management Framework 2019-23

Annex A - Performance Manag

Author: Ian Cunningham – Head of Business Intelligence 28/11/19