

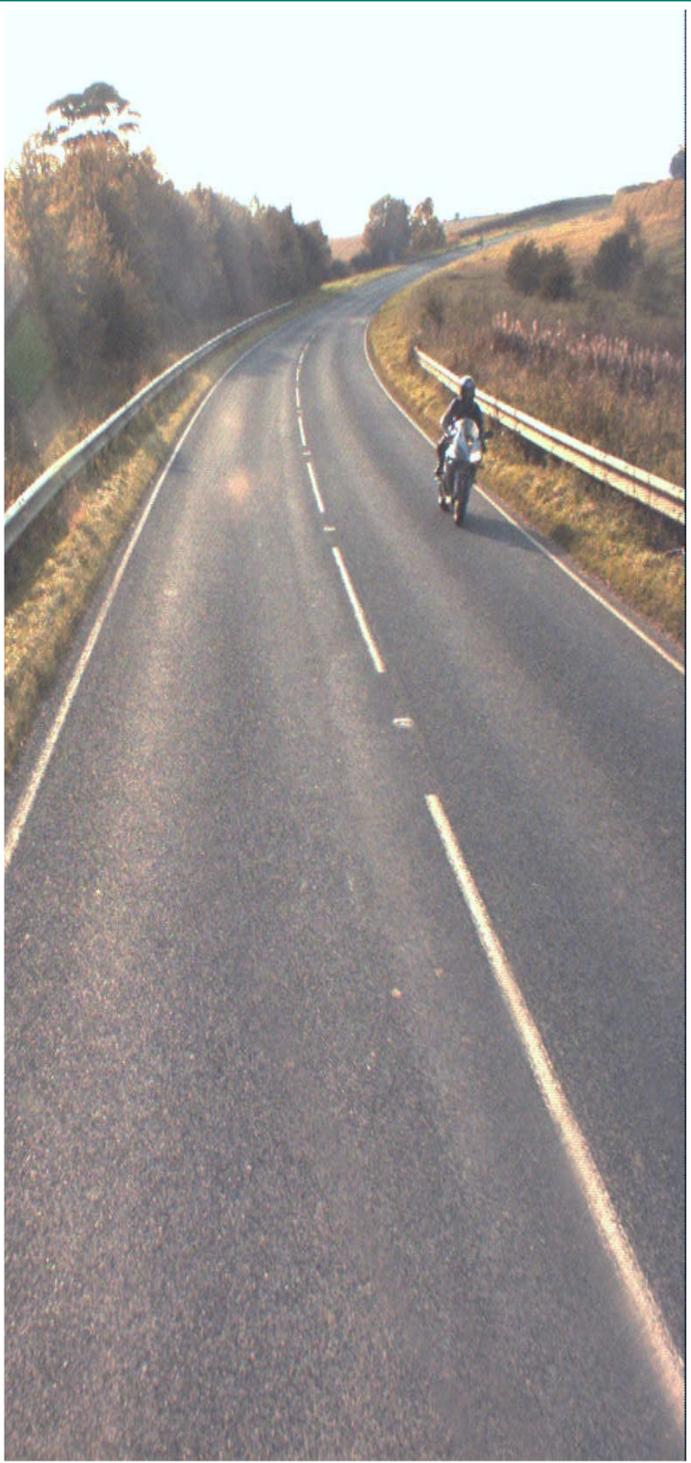
East Riding of Yorkshire Council

Transport Asset Management Plan

2016 – 2029

Appendix A

Data Management Strategy



"Keeping East Riding moving"



EXECUTIVE SUMMARY

Why do we need a Data Management Strategy?

The Data Management Strategy (DMS) forms part of the Council's Transport Asset Management Plan (TAMP) and has been developed to help identify the information held by the authority with regards to highway assets and the data required in the future to ensure effective management. A clear understanding of what assets we have, what we need and their condition is essential to determining where our budget should be directed to achieve the most sustainable outcome.

This document sets out the proposed structure and approach to developing a DMS. Council officers are currently working on this detailed and complex piece of work, and this will be published alongside the next TAMP refresh in 2018/19.

What does the Strategy include?

To comply with national guidance the Strategy has been structured around seven asset types and assesses the data available for each asset, where the information is held, and who maintains the data. The Strategy focuses primarily on the most significant assets where better information will prevent poor investment decisions.

A DMS is a way of documenting information and demonstrating the benefits of data. It will identify our requirements and establish a regime to collect, update and dispose of data to deliver a sustainable and resilient network.

What have we learnt?

Investment must be directed to where it will provide the greatest support for our Corporate Priorities and the objectives of our Local Transport Plan whilst adhering to national guidance and best practice. The authority needs to improve the management of our highway asset information and record keeping and communicate this information between departments more effectively.

How is it applied?

The investment in good asset management and data collection has already been beneficial. The application of lifecycle planning to guide long term investment and a structured hierarchy applied to reactive maintenance has increased effectiveness and value for money. For example, investment in energy-saving street lighting has helped reduce annual energy costs. An asset-based approach to highways, reliant on good data, has led to the service successfully securing internal and external funding to address the numerous issues that the highway service faces.

What do we still need to learn?

The Council recognises that the development of a DMS is only part of the process of embedding good asset management within the highway service. The strategy will be continuously updated as we improve record keeping and data storage and enhance our understanding. The Strategy therefore outlines areas for further improvement and sets out how they will be implemented as part of the delivery of asset management in highways.

I IMPLEMENTING EFFECTIVE ASSET MANAGEMENT

- 1.1 The local highway network and other local transport infrastructure assets together represent by far the biggest capital asset for the UK public sector. The East Riding's transport network is used daily by the majority of the public and is fundamental to the economic, social and environmental wellbeing of the area. It helps to shape the character and quality of the East Riding and makes a key contribution to wider local authority priorities including supporting the economy, social inclusion, community, road safety, education and health.
- 1.2 The Council is committed to the efficient and cost effective management of the highway asset and recognises that asset management provides the required approach to maintain the network to the highest practicable standards. Implementing asset management requires a clear understanding of what is available, how it helps to achieve the corporate vision and how it is performing.
- 1.3 The Data Management Strategy (DMS) sets out our approach to providing the data essential to the delivery of the highway service. Through data-led management of the components of the highway asset, the Council intends to ensure that it has an appropriate understanding of the highway and facilitate the delivery of the required outcomes effectively and efficiently in a well-planned manner.

2 AIM OF THE DATA MANAGEMENT STRATEGY

- 2.1 The DMS will provide data that will inform the Local Transport Plan (LTP) and the Transport Asset Management Plan (TAMP) and help to provide a well-managed, cost-effective and high quality highway network.
- 2.2 The overarching aim of the Council's DMS, is:

The Council will record and maintain relevant and up-to-date information to ensure an effective well-managed highway network

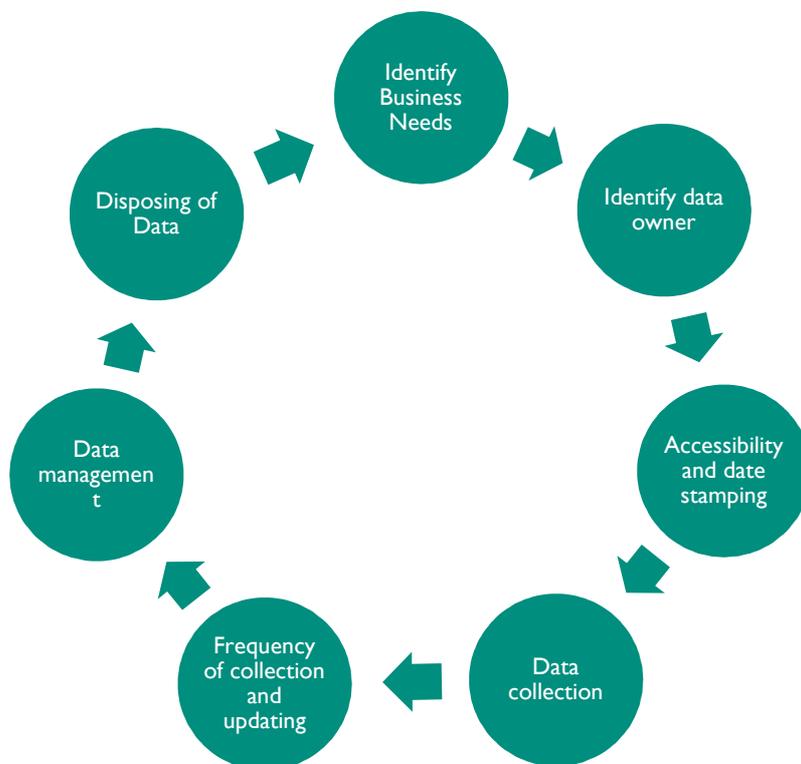
- 2.3 The aim of the DMS is to deliver our Corporate Priorities and the LTP objectives whilst adhering to national guidance and best practice. This will be achieved through the development and improvement of data-led asset management and to develop a sustainable resilient network.

3 DATA MANAGEMENT OBJECTIVES

- 3.1 The DMS follows the principles of information management set out in the East Riding of Yorkshire Council Information Strategy 2014-15 which recognises the Council is firmly committed to robust information management and governance in order to support the delivery of efficient and effective services.
- 3.2 This strategy serves as a basis for the development of detailed transport asset management planning and its implementation, including enabling the organisation, its technology and its processes to adapt to change and progressively improve through gained experience and learning.

3.3 To provide the required information, the DMS will follow the data management cycle, set out in Figure 1 below.

Figure 1: Data management cycle



3.4 **Identify Business Needs** – Data will be assessed to demonstrate how it supports the Corporate Priorities and the objectives of the LTP and the TAMP. Demand for data is widespread and the concerns and interests of other services including Legal, Finance, Operations and our Customers will be considered. However, the benefits of the data will be weighed against the resources necessary to acquire and maintain it.

3.5 A number of datasets are a statutory requirement or provide a legal record, whilst others are good practice set out in best practice guidance. Applying the data strategy, a **data catalogue** will be developed that will consider whether data is statutory, necessary or simply desirable, considering the merits of continued retention of the data.

3.6 **Identify data owner** – An “owner” for the data is required to be responsible for managing the data collected. Typically the data owner will be the asset manager. As well as the Data Owner, a **Data Editor** is identified whose responsibility it is to take on the day to day collection and maintenance of the data. The Data Owner takes the lead and ensures that the Data Editors manage the data effectively. Ultimately Asset Strategy Head of Service is the **Information Asset Officer (IAO)** for Asset Management and the data held for the TAMP.

3.7 **Accessibility and date stamping** - The Council will ensure the protection of all information assets within the custody of the Council. In line with the ICT Security Policy, officers will have access to information assets, systems and services pertinent to their current role. This will conform to the principle of least privilege so that employees are only permitted access to

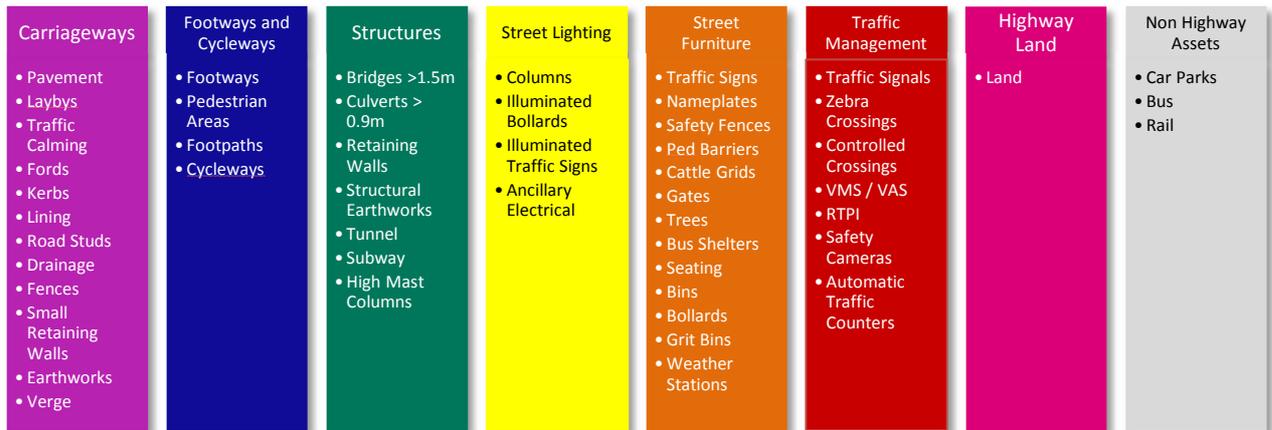
information and resources that are required for the role. For the purposes of the Council's Records Management Policy, all records are properly titled, referenced and indexed.

- 3.8 **Data collection** – When determining the method of collection, the strategy adopts the most cost effective method whilst considering accuracy, reliability and repeatability of data. Collaboration (e.g. in procurement) between authorities will be considered as appropriate with the objective of delivering cost savings.
- 3.9 **Disposing of data** – Archiving or disposal of data will be dealt with in accordance with the Council's Records Management Policy. The performance of highway assets, historical information and trends are invaluable to support strategic decisions and the retentions periods have been recorded within the Asset Strategy Information Asset Register.
- 3.10 **Frequency of collection and updating** – A risk based approach will be applied, particularly where assets pose low risk to the performance of the network and are unlikely to require capital investment. The strategy enables decisions about the life expectancy of all data types to be made. The data owner will determine the procedure and frequency of collection and updating, the data editor will be responsible for implementing the process.

4 STRUCTURE & APPROACH

- 4.1 The Council needs to retain and keep up to date relevant information to effectively undertake its role as a highway authority and manage the highway infrastructure, This information is used to support and determine corporate, tactical and operational decisions to the benefit of the public, business, local community and workforce.
- **Corporate Data**, primarily concerns the achievement and performance of the highway service and is used to determine progress towards the Council's vision and adherence to the Council's Highway Policy. Data will form part of the Council's Corporate Performance Monitoring Regime.
 - **Tactical Data**, primarily allows the authority to look in more detail at the highway asset and determine strategic investment and direction to best deliver the highway asset management strategy. Data will establish the quantity and quality of the East Riding's transport network and be used by the TAMP.
 - **Operational Data**, primarily used for the day-to-day operations and the delivery of the highway service on the ground. The data will include the record of and response to site specific concerns and the daily interaction with the general public.
- 4.2 Whilst highway data will take a variety of forms, the Council has structured the record of data primarily to be street-based, broken down in asset components. The Council has adopted the component structure outlined by CIPFA, breaking assets down to asset components that are intended to cover the complete range of highway assets, plus an additional non-highway component based around supporting infrastructure. The transport component types are shown in Figure 2.

Figure 2: Transport component types



- 4.3 **Component Types** are broad categories based on the general function of the components. They divide the asset into categories of components and provide an appropriate basis for high-level management information.
- 4.4 The components types are further broken into **Component Groups**, used to distinguish between component types that have a similar function and form.
- 4.5 Further detail, if necessary, can be provided using **Elements** when systems become well developed. This will require individual depreciation and impairment models, such as different service lives and/or rates of deterioration.
- 4.6 For each component type, the DMS will be used to create a data catalogue establishing how data supports policy with a strategy specific to that asset type. The catalogue will assess the quantity and quality of the data. It will consider the asset components, what information is necessary, the accuracy and extent available, who the appropriate lead is and any further development necessary.
- 4.7 Where relevant, data will be recorded by street, based on the Unique Street Reference Number (USRN), therefore a robust Street Gazetteer is essential. Asset-related data will be recorded using the Confirm system to allow appropriate access and consistency between different service areas within the Council. The Council recognises the importance of Building Information Modelling (BIM) and will encourage the structure of data held and transferred to incorporate BIM principles where appropriate.
- 4.8 The DMS builds on the work already done in the development of the Council's TAMP; taking a risk based approach, prioritising the collection of data critical to the management of those asset components with the greatest value, where lack of data could lead to catastrophic failure, unsustainable costs, liability claims and loss of reputation. In addition data is prioritised based on business need. The data priority hierarchy is:
- Mandatory;
 - Essential; and
 - Desirable.

- 4.9 This approach allows any gaps in the data collected to be identified and assessed. A process of collecting and recording critical data which is absent can then be developed and prioritised by the data owner in consultation with the data editor.

5 MONITORING PERFORMANCE

- 5.1 The Council has developed a detailed and structured approach for the review of data and the DMS. The DMS and associated data catalogue will be reviewed on a regular basis to ensure that the information is up-to-date as data collection and maintenance is ongoing.

6 REFERENCES

[East Riding of Yorkshire Local Transport Plan 2015-2029](#)

[East Riding of Yorkshire Council Transport Asset Management Plan 2015-2029](#)

[East Riding of Yorkshire Council Corporate Priorities 2015-2018](#)

[East Riding of Yorkshire Council Information Strategy 2014-15](#)

[East Riding of Yorkshire Council Records Management Policy](#)

[East Riding of Yorkshire Data Protection Policy](#)

