

Data Strategy 2017-2019

Department of Transport, Tourism and Sport

Purpose and Introduction

The purpose of this strategy is to set about a realistic and appropriate plan to improve the availability, quality, management and use of data within DTTaS. In developing this plan, this document attempts to answer a number of key questions:

• Why is data important for the Department's work?

Section 1

Appendix A

- What is the wider context around data in the public sector in Ireland?
- What is the current status of data availability, quality, management and use?

Having attempted to answer those questions, the Department's Economic and Financial Evaluation Unit (EFEU) has considered different options for improving the availability, quality, management and use of data within DTTaS. These are set out in our proposed Action Plan.

The document is structured as follows:

Section 2	Data Principles
Section 3	Data Assessment
Section 4	Proposed Action Plan
Section 5	Next Steps

Primary Standards

Context and Developments

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1 Context and Developments

This section sets out the wider context for data use, management and availability in the Department of Transport, Tourism and Sport. It provides high level information and trends which are pertinent to the development of a Data Strategy in the Department.

1.1 Importance and Use of Data in DTTaS

The availability and use of data is, increasingly, a critical part of the Department of Transport, Tourism and Sport's work. Data is used in the operation, monitoring, delivery and evaluation of large elements of the Department's work. We rely on high-quality evidence and data to plan public investment and operate programmes. As the National Statistics Board's (NSB) 'Strategic Priorities for Official Statistics 2015 – 2020' states, "Clearly, the better the information produced by the statistical system, the greater the potential for effective decision-making, long-term planning and accountability".

Data is required to monitor and evaluate the delivery and the achievement of policy goals. In evaluating how programmes, projects and policies have performed in the past we rely on data to make robust and evidence-based judgements; data is an essential resource. In policy development, such as the National Aviation Policy, National Ports Policy or Smarter Travel Policy, data is a key input into decision making and in evaluating progress towards proposed targets. Data will continue to be a critical input in relation to policy developments in the future.

The Department's Statement of Strategy 2015-2017 states that the "availability of robust and timely statistics has become central to supporting evidence informed policy development and monitoring within the Department". The Statement of Strategy recognises the importance of data and commits to continued support and improvements in data and statistics collection. The Statement lists a number of priorities including 'encouraging more people out of their cars', 'maintaining the downward trend in road fatalities and injuries' and 'increasing employment in the tourism sector'. To assess the progress towards these objectives robustly, we need access to appropriate data sources. This further highlights the importance of data. The Department is currently engaging in early internal discussions about a forthcoming Statement of Strategy for 2018-2020. The need for high-quality data and statistics has been a feature of these early discussions.

Furthermore, significant developments being made across the Public Sector and wider technology community will mean that having access to high-quality data will continue to increase in importance. These are discussed further in section 1.3.

1.2 Current Status

A vast array of work has previously been undertaken in assessing data availability and use within the department. Much of this work was initiated in response to external work carried out by the NSB and the Central Statistics Office (CSO). The key reports and assessments in this regard are detailed below.

The CSO previously undertook an exercise to assess the level of data availability across government departments and the resultant publications were entitled 'Statistical Potential of Administrative

Records' (SPAR) Reports. The CSO published a number of SPAR reports and the 2003 report analysed data collection methods in six Departments including Transport. The assessment covered each of the Department's policy areas and concluded that "there is a general scarcity of data available for use within the Department" and "where data does exist, many of the divisions consider it inadequate for their purposes". Divisions stated that data was difficult to access, incomplete, out of date, ad-hoc or too limited in scope. As such the report made a number of recommendations including, but not limited to:

- Developing a national transport or mobility survey;
- Establishing a data or statistics section within the Department;
- Improving definition of performance and strategic goals;
- Improving measurement of congestion; and
- Better sharing of data between agencies.

Following the SPAR Report and the NSB's initiative in its strategy, the Department published the 'Department of Transport Data and Statistics Strategy 2009-2011' as a method to improve in this area. The strategy provided an in-depth assessment of where data gaps were present and how data use could be enhanced. It then set in place an implementation plan to improve. The resultant actions included:

- Ensuring that IT Strategy is aligned with data needs;
- Increasing the role and use of data and data analysis in the Department;
- Enhancing collaboration with other stakeholders through a Liaison Group;
- Working on addressing identified gaps such as vehicle kms of national fleet;
- Encouraging development of national travel survey; and
- Further developing of national modelling capability.

It is worth highlighting the numerous positive developments that resulted from this previous work, including the previous strategy. A significant action was the creation of a national travel survey for the first time. The survey allows for a comprehensive analysis of travel in Ireland and is firmly in line with international best practice. The CSO now hosts a Transport Statistics Liaison Group as a result of the strategy. Numerous data gaps identified have now been filled through collaboration with stakeholders, including in particular the CSO.

Notwithstanding the large amount of progress that has been made in recent years, there is still scope for improvement within the Department. This improvement would enable us to expand our ability and capacity to produce evidence to underpin policy, better evaluate how programmes/projects are performing and provide best value for money services. This strategy identifies some of the high level issues and areas. It also sets out, in the form of deliverable actions, a mechanism through which improvement will be delivered.

1.3 Wider Context

Data availability, management and use are a growing focus for individuals and organisations across a variety of contexts. In particular, the use of data and the related moves towards e-Government, open access and evidence-based policy are of particular importance to public administration across the world.

Internationally, processes and delivery undertaken by Governments have, like organisations in other sectors, come to rely more heavily on data. Examples of this range from day-to-day operations and policy development to more prominent initiatives such as the Open Government Partnership (OGP), which is a multilateral partnership which over 65 countries have committed to. The basic premise of the initiative is to make governments more transparent, accountable and responsive. A key element of this work is the push towards more Open Data¹, with Governments actively publishing data. In addition, other public administrations are putting more focus on data and its potential use. The UK Civil Service has made significant changes which can provide a guide towards best practice. A single Civil Service-wide site (data.gov.uk) has been developed where all data is stored. In addition, numerous other initiatives have taken place such as the National Audit Office (NAO) auditing the data storage of all government departments.

In Ireland, a number of initiatives have been undertaken in this space. The primary stakeholders are the NSB, the CSO and the Department of Public Expenditure and Reform (DPER). Open Data has been the focus of much recent work. In particular the following initiatives are notable;

- A national Open Data Portal has been launched by DPER (data.gov.ie) in addition to a number of best practice guides and a public consultation in preparation for the development of an Open Data Strategy for Ireland.
- A performance measurement initiative has also been launched by DPER entitled IrelandStat (irelandstat.gov.ie). The site contains performance indicators for major programmes and policies across government departments.
- The National Statistics Board recently launched its 'Strategic Priorities for Official Statistics 2015-2020' which focuses on data management and the production of official statistics within the national statistical system.

While these recent initiatives enhance the availability and use of data across the Irish system, the previous focus on Government departments developing data strategies has not been continued. The previous two NSB Strategies for Statistics (2003-2008 and 2009-2014) highlighted the need for, and reported on the progress towards, Government departments producing their own data strategies.

Given the work that has been undertaken nationally on this issue it is critical that any work undertaken by DTTaS to improve the general level of data availability, management and use is in line with wider standards of practice and involves consultation with the key stakeholders across the area of data and statistics.

The focus on the more sector-specific issues which departments face in relation to data is most appropriately undertaken by those departments individually, while also communicating with stakeholders and being aware of and involved in wider developments.

In assessing the wider context, it is clear that initiatives are underway in the area such as open data and administrative data. However, the requirement to improve basic availability, use and management of data within DTTaS lies with the Department, providing the rationale for developing this Data Strategy.

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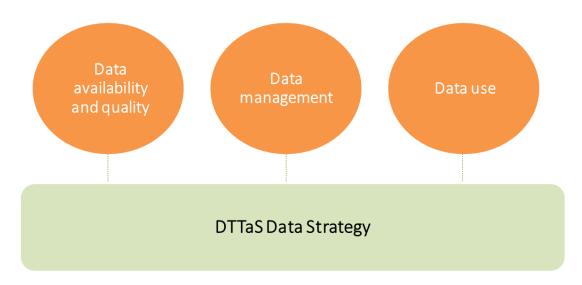
¹ Data which is freely accessible by anybody.

1.4 Data Strategy Framework

This section sets out how the Data Strategy process was carried out and what the structure of the strategy is. The strategy development was led by the Department's Economic and Financial Evaluation Unit. The process consisted of four primary steps.



The framework of the strategy focuses on three main 'Pillars' – data availability and quality, data management and data use. This structure allows for an analysis of each of the primary elements of the Department's work with data. The strategy focuses on these three Pillars across the various policy sectors of the Department.



Pillar 1 – Data availability and quality

Consideration has been given to the overall amount of high-quality data that is available to the Department. This includes a focus on what the Department requires in terms of policy development, expenditure management, evaluation and appraisal.

Pillar 2 – Data management

The second major area of consideration is data management. The focus here is on the quality of management of available and generated data. This includes, for instance, systems and processes in place for dealing with available resources.

Pillar 3 – Data use

The final primary area of analysis is on the use of data. This considers whether the Department is maximising the use of the data and processes that it already has in place. It considers in particular whether resources, capabilities and processes exist to ensure that the Department is maximising the potential of data in our work.

These three areas of focus are intertwined in the sectoral analysis of data that follows (see Section 3) and are clearly distinguished in the recommendations contained within.

1.5 Data Strategy Process

Step 1 - Internal Consultation

As a first step, an internal consultation was undertaken with each of the Department's policy sectors. These meetings helped to identify policy priorities and high-level issues around the availability, quality, management and use of data in the Department. This step helped to ensure that the overall strategy was informed by, and representative of, the priorities of the Department at a sectoral level.

<u>Step 2 - Strategy Development</u>

Following this period of internal consultation, a 'gap analysis' was undertaken of the status of data in the Department. This analysis was informed by the findings from the internal consultation, DTTaS' on-going work in evaluation, appraisal and analysis, and existing knowledge and expertise in the area of transport data. This involved assessing the input from policy divisions alongside the data and statistical experience within the analytical Unit and identifying some high-level 'gaps' under the three 'Pillars'. This gap analysis formed the evidence base from which the strategy's 'action plan' was devised.

Step 3 - Further Internal and External Consultation

Following the dissemination of a draft version of this document, the unit undertook a wider consultation. This was intended to allow for the Department's policy divisions, agencies, and external stakeholders (including DPER, CSO, and independent researchers) to submit their views on the strategy. Having received comments and feedback, this final iteration of the strategy and the resulting action plan was produced.

Step 4 - Strategy Implementation

Having been finalised and approved internally, the strategy is now published on the Department's website. The implementation of the strategy's recommendations will be overseen by DTTaS' analytical division – the Economic and Financial Evaluation Unit (EFEU) - in conjunction with the rest of the Department as well as relevant stakeholders and agencies.

2 Data Principles

This section sets out the principles which the Department will adhere to in the use, collection, publication and management of data and statistics. The principles are based on external and internal standards.² In addition to these principles other obligations, standards and compliance arrangements may be in place or be necessary at a Departmental or individual data source level. As such the principles outlined here set out the key tenets of the framework within which the Department intends to improve in this area. They guide the formation of this strategy and the Department's overall work in relation to data and statistics.

2.1 DTTaS Data Principles

Based on the operational nature of the Department and numerous external obligations and developments, DTTaS commits to adhere to a number of principles which will guide the Department's on-going work in this area.

Excellence in the use of data

The Department is committed to maximising the value of data to our work. This
means that the Department will identify data needs and wider opportunities to
utilise data where it would enable better decision making, including the process
for determining what data should be collected and how to identify relevant data
sources.

Driving for improvement

 The Department will continually try to identify opportunities to improve the availability, quality, management and use of data and statistics in the transport, tourism and sports sectors through open engagement with all relevant stakeholders, including agencies, operators, research bodies and academia.

Compliance with standards and best practice

• The Department is committed to complying in full with all necessary national and international obligations in the area of data and statistics.

Support of wider data initiatives

 The Department is committed to supporting wider initiatives to improve in the area of data and statistics including opportunities such as Open Data, the potential of Administrative Data and Performance Measurement as they relate to the Department's operation, and aims to act in line with these initiatives wherever possible.

² A summary of relevant external standards and practices is included in Appendix 1

3 Data Assessment

This section provides a high-level assessment of data availability, data management and data use in the Department. This assessment provides the evidence on which the Data Strategy's Action Plan (see Section 4) is based.

3.1 Overview

In general, a significant amount of data is available across the transport sectors. The National Travel Survey is helping to develop a more complete understanding of travel demand and behaviour in the country. For roads, data is available in the areas of road use, road infrastructure, road performance and road safety, though gaps and areas for improvement exist and have been identified. In addition, the National Vehicle Driver File represents the largest source of internally generated data in DTTaS. In public transport, more gaps exist, but data and statistics are becoming increasingly available, for example in the areas of public transport use and public transport infrastructure. In maritime, the Department has access to a wide range of data on maritime transport and safety, but improvements could be made to the international comparability of origin/destination freight data (see Section 3.2.2), and the availability of maritime passenger data. The basic needs within the aviation sector are being met, with the sector generally well covered in terms of passenger movements and use, with airport-specific reporting (e.g. number of passengers using Dublin Airport) and high-level origin/destination information being available. In sport, data around participation levels does not exist at a local enough level to create useful performance indicators for some sports capital projects. The Department does not have much of its own tourism data. External bodies such as CSO, Fáilte Ireland and Tourism Ireland collect a lot of relevant data, though further analysis would be useful in establishing whether sufficient data exists to plan tourism policy and spending, or to measure the performance of tourism programmes.

There is no central system or management of data in the Department. Rather, data belonging to and used by the department is produced and managed by a wide range of internal and external bodies. Dedicated functions to manage the Department's data library, or to record what data exists and where it is, can provide significant value in ensuring that staff in the Department are aware what data is available for them to use, and where it can be found.

A recent development in DTTaS is 'Transport Trends', an annual publication produced by the Department, which collates published data in transport plus internal administrative data, and describes recent trends and developments for use by ministers, staff and the wider public. In addition, all of the data used to put the publication together, along with data not used for the final publication, is stored in a single place and is accessible by all staff in the Department. The feedback on Transport Trends has been very positive.

As described in Section 1.2, the 2009 Data and Statistics Strategy led to the CSO chairing a Transport Statistics Liaison Group. Alongside that, there is an All-Island Tourism Statistics Liaison Group. This has seen numerous data gaps filled, and more generally establishes some oversight and coordination of data issues in those sectors.

In many ways, there is a high level of data use in the Department. The Public Spending Code requirements around appraisal and evaluation of investment and current expenditure necessitate using the available data in order to be compliant with those requirements. Feedback from policy divisions has been that they are keen to use as much data and evidence as possible for general policy development work, briefing Senior Management and Ministers, and publishing consultations.

3.2 Areas for improvement - data availability

3.2.1 Data availability

Despite the general availability of data across the sectors, each sector acknowledged there were areas where increased data availability should be sought, including motor insurance, road safety, freight statistics, maritime passenger data, attitudinal survey data pertaining to mode choice and sustainable travel to name a few.

It is also worth noting that it is not always easy for staff to identify where data gaps are — an issue of 'unknown unknowns': if certain data has never been available, it may not be obvious that it should be.

Given the size of DTTaS's remit, in order to identify and prioritise data availability gaps a more indepth review of policy priorities and data needs would be valuable. Section 4, which outlines the Data Strategy Action Plan, describes the sectoral data audits which could be carried out.

3.2.2 Data quality / comparability

Some gaps have been identified in the area of data quality, and international comparability of data. For example, there are a number of different sources of road accident statistics, which sometimes differ significantly. This can make comparison with Northern Irish statistics, for example, quite challenging. This also arises more generally where there are different sources of similar statistics such that **it is not necessarily obvious which source should be used as standard**. Origin/destination freight data has been raised as such an issue within the Department, with data differing between two surveys which are not directly comparable. Comparability was also raised with regard to aviation statistics, where there is a variance between IAA and CSO reporting of annual commercial flights. The Department intends to examine this issue further with the CSO in the Transport Statistics Liaison Group (TSLG). In these and similar instances, it is important that a standard source is identified, to ensure consistency.

In addition, the Department relies on external data and modelling. A general gap is that there is no formal process in place to identify the robustness of that data and modelling.

3.2.3 Performance measurement

A lack of sufficiently useful or measurable performance measurement indicators was a commonly identified gap. Policy officials from individual sectors in the Department and a number of stakeholders (DPER, Houses of the Oireachtas) have identified performance measurement as an area for improvement. Identified in particular was the way in which this process feeds in to the overall Revised Estimates of Expenditure process.

Performance metrics are a key component in evaluating the extent to which expenditure has met its objectives. Therefore they are a crucial tool in identifying areas for future expenditure, and in appraising the likely effectiveness of that expenditure. If performance metrics are not being adequately identified prior to the commencement of a programme or project, or if sufficient data isn't available to adequately capture them, this could undermine the Department's ability to achieve value for money.

3.2.4 Data ownership

Outside of administrative data, much of the data used and relied upon by the Department is collected and managed by other organisations, with the Department heavily reliant on sources such as the CSO, the Department's agencies, and other organisations.

This reliance on other organisations means that the Department needs to maintain and strengthen existing ties with them. This means identifying data sources that are useful, existing or otherwise, and working closely with these organisations to ensure that the Department has sufficient input into their strategies and plans for future data collection. There already exist liaison groups for transport, tourism, freight and other sectors — the Department must continue to actively engage with these groups, and consider whether more formal engagement on the subject would be useful in other areas (such as sport).

3.2.5 Timeliness

While the overall availability and quality of data is of key importance, so too is the timeliness of that data. The more recent data is, and the more quickly it can be updated, the more useful it is. In some sectors more timely data was particularly highlighted as something that would be valuable, for example, the production of monthly/quarterly public transport performance data or more up-to-date air passenger data.

There is an obvious limit to how frequent or recent data can be, due to the necessary time required to collect, compile and validate it. However, **improving cooperation and coordination between the relevant bodies which are involved in the collection or compiling of data** could allow processes to be streamlined and enable more effective prioritisation. This is another issue which will be further discussed in the TSLG.

3.3 Areas for improvement - data management

3.3.1 Capability

At the time of conducting the review, there was no dedicated statistical capacity within the Department. Some of the gaps described above could benefit from such a resource. For example, improving data management within the Department, producing useful statistics publications, and producing consistent, reliable forecasts and research are some of the opportunities identified within the Department. (A statistician is joining the Department in early 2017).

In addition, there are many data sources which could be further utilised and analysed, providing value to the Department's work, if the resources and capability were available within the

Department. The Human Resources division, for example, noted it had access to the raw data from the Civil Service Employee Attitudinal Survey, and had aspirations of analysing that to identify specific staff issues, but that it doesn't have the in-situ skills to do that without training or assistance.

3.3.2 Data oversight and management

A number of different divisions in DTTaS indicated that they had a considerable amount of data, but that it existed on different management systems, or that they were lacking a process by which this data could be managed and collated so that it was more useful and accessible, both within the area and more widely.

The lack of a centralised approach to data management means that the value of enabling data accessibility is not being sufficiently communicated, and that there is a lack of structured sharing of systems and best practice where those do exist.

A related issue is **the need to consider policy around data retention and data security**. Some areas under the Department's remit, such as Road Traffic Operator Licensing, require collecting and storing sensitive and/or personal data. It is important that any data management policy and system is appropriate with regard to sensitive data.

3.3.3 Accessibility

Another issue is that **there is a risk that potentially useful data is under-utilised**, either because it is not as accessible as it perhaps could be, or because there is not sufficient awareness of it.

In addition, it is clear from the section on data availability that between all of the different sources, there is a considerable amount of useful data in the Department and externally. The positive feedback to Transport Trends highlights the value of making this data available externally in an accessible, understandable manner, where appropriate. But there is a lot of data in areas such as tourism, sport, the Irish Coast Guard and the National Driver and Vehicle File which could potentially be put to more valuable use if it were similarly published, either as a similar type of document or as an easily utilised data bank.

3.4 Areas for improvement - data use

3.4.1 Forecasting and research

In a number of areas, including public transport and energy/emissions, it has been highlighted that there is a gap in terms of both the production of and consistency of forecasts of future activity. Reliable forecasting is a key component of policy making and planning, as it provides both a prediction of where future priorities will lie, and a baseline against which the value of policies and investments can be assessed.

A related gap is a relative lack of research conducted or commissioned by the Department. While there is a significant amount of research conducted externally, particularly in transport, there is a need for more focused research and analysis of areas which are relevant to key Departmental policy priorities. These could include the drivers of travel demand and mode choice, sustainable transport, potential social impacts of transport policies, drivers of tourism, and drivers of participation in sports. Increasing the amount of analysis done in the department, directly commissioning external analysis, or increasing the Department's influence on research priorities in the wider community, could provide a significant increase in our ability to forecast future activity, and the Department's understanding of issues such as those listed.

3.4.2 Quality assurance

The Department creates, collects and uses a large amount of data in carrying out its functions. Data is used and interpreted in consultations, other publications, responses to Parliamentary Questions, ministerial briefings and in many other ways. It is critically important that data and analysis be robust. With that in mind, it is proposed that there should be a dedicated system for quality assurance of data use.

4 Proposed Action Plan

Having identified high-level gaps in data availability, management and use across the Department and the transport sector, in this section we propose an action plan. The plan consists of 12 action points which, once implemented, can contribute to the positive development of work in the Department. The action plan is broken down into two categories:

- 1. **Shorter-term actions.** These are actions that involve maintaining or improving existing practices and processes. As such, it should be achievable to carry out these actions within current Departmental capabilities and resources.
- 2. **Longer-term actions.** These actions will require significant time and resources to carry out. Therefore, the extent to which these actions can be completed will depend on the resources the Department is able to dedicate to carrying them out (see Action S1).

These actions are set out across four headings: a general heading for overview, and actions in each of the three primary areas of analysis; availability/quality; management; and use.

General

Data availability / quality

Data management

Data Use

Our suggested approach to implementing this action plan is to **establish a Data Strategy Implementation Working Group** across the Department, to ensure ownership of the Strategy is shared. This Working Group would include members of the Economic and Financial Evaluation Unit, IT, Human Resources, as well as staff representing key policy divisions. The Group will oversee the implementation of this plan and will be responsible for reporting on progress to the Department's Management Board. The action plan will be put in place and completed over a two-year time period. Following the completion of this period, consideration will be given to the implementation of a follow-on strategy.

4.1 Short-term actions

Action S1 – Target Capacity Improvements

- Given the importance of data to the Department, it is critical that capacity exists within the organisation to make best use of the opportunities and demand that exist and will emerge.
- The Department will recruit a Statistician to assist in the overall implementation of this strategy and the on-going development of transport data and statistics. In this regard, the Department will look to harness any implementation of the proposed Irish Government Statistical Service.
- The Department will continue to support its staff in undergoing Continuous Professional Development in the area of data analysis, statistics and economic analysis, including encouraging and identifying appropriate training opportunities.

Action S2 – Improve Cross-Organisational Co-Operation

- There are a large number of stakeholders involved in the general development and use of transport data and statistics, including: the Department; the CSO; transport agencies such as TII, NTA, RSA; and academic/research bodies. As such, there is a requirement for cooperation and coordination between relevant agencies to target overall sectoral improvement, and to avoid duplication of efforts.
- The Transport Statistics Liaison Group and All-Island Tourism Statistics Liaison Group are already-established fora for this action. The Department will work with the other organisations in these groups to review their operation and membership, and investigate setting up further crossorganisational groups in other areas, such as sport. For example, there may be a requirement for more regular meetings, an active work programme and a broadening of the group's membership.

Action S3 – Data Audit Through Existing Processes

- Each year the Department assesses business cases and appraisals made by the Department's agencies to assess whether they are compliant with the Public Spending Code. The Department also conducts 'in-depth checks' of projects and programmes as part of the existing Quality Assurance Process, which also involve self-assessment checklists, and inventories of expenditure. Finally, the Department also conducts Value for Money and Policy Reviews, and Focused Policy Assessments, which are evaluations of a specific scheme or programme, generally while it is on-going.
- These existing processes each include, to some degree, an assessment or audit of the level of data available related to the monitoring and evaluation of a specific project or programme. DTTaS commits to ensuring that formal data audit, as part of existing processes within the Department, continues to be a fundamental part of the day-to-day activities of the Department. This will enable data gaps/needs to be identified, as well as improving the Department's ability to better identify them for future policies/programmes/projects.

Action S4 – Support Timeliness of Transport Statistics

- An important factor in the availability of data and statistics is timeliness. The quicker information is available the quicker we can see whether a policy or project is performing. In this regard the Department supports any improvements that can be made in this area.
- In particular, the Department will work in conjunction with the CSO and relevant stakeholders to explore the possibility of increasing the timeliness of transport statistics. In particular, in some areas statistics have a 12-month time lag. Aviation statistics are typically released at the end of May, Maritime and Road Freight statistics are released at the end of June and the Transport Omnibus (containing statistics on road use, public transport etc.) is typically released in mid-December. While recognising resource constraints, and the fact that collecting and compiling data is time consuming, any development to target releases earlier in the year would be welcomed. The CSO Transport Statistics Liaison Group would be an ideal forum to consider how stakeholders can work together to achieve this.

Action S5 – Support and Make Better Use of Existing Surveys and Datasets

- In order to maximise the value of existing surveys and datasets relevant to the Department's work, EFEU will include, as part of its workplan, an activity to conduct deeper analysis of existing surveys (including census data). Also, where there is a potential duplication of effort, consideration should be given to the pooling of resources and the development of a common approach.
- In 2009, the CSO undertook a pilot of a National Household Travel Survey following consultation with the Department and relevant stakeholders. To date, the survey has been carried out in 2012, 2013 and 2014. The completion of such a survey is critical to transport policy and puts Ireland in line with international practice. The Department supports the continued development and completion of the National Travel Survey on an annual basis.

Action S6 – Target Improved Data Management Processes and Systems

- DTTaS needs to ensure that data management processes and systems allow the Department to get the best value out of the data that it has, while also ensuring that requirements such as data security are met. This is necessary to facilitate the implementation of the other actions in this strategy.
- A working group, comprising EFEU, line divisions and the IT department will be established to investigate as to how existing data sources can be managed optimally. At a basic level, common systems and format standards should be implemented at a divisional level once agreed internally. This would ensure that a common approach and best practice are adhered to, within the Department and across relevant agencies and stakeholders, as appropriate. It would also be useful to compile a directory of data, internal and external to the Department, with a description of where the data is, and who the relevant contact points are.

Action S7 – Maintain Annual Production of Transport Trends and Look to Increase Publication of Statistics

- In 2015 and 2016 the Department's Economic and Financial Evaluation Unit published 'Transport Trends'. The report provides an annual overview of the key developments evident from the latest transport statistics and data. Its purpose is to act as an internal and external resource by providing an easy-to-access overview which covers the whole of the transport sector. As part of the wider process of improving data use within the Department, DTTaS commits to producing 'Transport Trends' on an annual basis.
- In addition, DTTaS and other organisations produce other publications such as the 'Bulletin of Vehicle and Driver Statistics'. These publications ensure that data is disseminated to the widest possible audience. DTTaS commits to supporting and looking for opportunities to improve these publications, as well as identifying opportunities for publications that are not currently being produced.
- Furthermore, the Department produces consultations, policy and strategy documents such as 'Investing in our Transport Future A Strategic Investment Framework for Land Transport', and 'People, Place and Policy Growing Tourism to 2025'. DTTaS also commits to ensuring that future publications continue to be underpinned by the best available evidence and data.

4.2 Longer-term actions

Action L1 – Establish Methodology for Sectoral Data Reviews

- Given the large variety of policy areas under the remit of DTTaS, there could be value in undertaking individual data audits for some of the Department's sectors, which are identified through a prioritisation exercise, in order to more specifically identify areas where improved availability, management or use of data would have value.
- EFEU will develop a methodology which can be applied to priority policy areas and issues, as deemed necessary by the Department's Management Board. The reviews would then be carried out by the Department's dedicated statistical resource (see Action S1) in tandem with the relevant line division(s).
- These reviews would consist of 'deep dives' which would detail the policy area's priorities, precise data requirements, the current level of data availability, management and use, and a limited number of specific recommendations to be implemented by the relevant divisions, agencies and EFEU.
- The output of this process would be a short document assessing data in the sector with a number of specific proposed actions.

Action L2 – Develop Internal Data Hub

- DTTaS will explore the development of a 'data portal' a dedicated resource, either internal to the Department or publicly accessible as appropriate, in which the data from the various sources described in this document would be collated into a single, accessible library.
- This concept has already been implemented on a small scale. As part of work on Transport Trends, the EFEU have developed an internal data hub which collates the primary external sources of data into one place for divisions and the Department to use. The purpose of this initiative is to improve the ease of use for line divisions within the Department and as such the general management of data and statistics in the Department.
- EFEU commits to the on-going maintenance and updating of this hub. Essentially this means updating the existing hub after each major external transport data release. However, subject to the necessary resources being available, the Department will seek to apply this concept on a wider scale. This will both support data use within the Department and facilitate the annual production of Transport Trends.

Action L3 – Target Improvements in Research, Evaluation, Modelling and Appraisal

- While data availability is an area of constant development and improvement within the Department and its external stakeholders, a space which has potential to be improved is the coordination and integration of data use in the areas of research, evaluation, modelling and appraisal. Improvements could be made to the extent that best practice is shared, duplication of effort is avoided and joint work is encouraged.
- The Department will seek to establish a National Transport Research Forum that facilitates these improvements. The group will contain representatives from the Department, the key transport agencies, other stakeholders (consultancy and research bodies) and academia. The group's mandate will be to target improvements in the previously highlighted areas. Through the group the Department would seek to positively influence the general development of transport research in Ireland.

Action L4 – Improve Level of Performance Measurement

- The Department and a number of stakeholders (DPER, Houses of the Oireachtas) have identified performance measurement as an area for improvement, in particular the way in which this process feeds in to the overall Revised Estimates of Expenditure (REV) process.
- The Department's EFEU and Finance Divisions will work together to improve the level of reported key performance indicators to feed in to the REV process in 2017. In particular the two divisions will work together to compile a performance report that sets out KPIs for each policy area. Observations, comments and finally approval will be sought from relevant policy divisions.
- Longer-term, identifying more effective performance indicators should take place prior to implementation, as part of the process of policy formulation and developing business cases and appraisals. The Department and its Agencies will work to identify how evaluation plans can be more effectively built into these processes.

Action L5 – Develop QA Process for Data Use

- In carrying out many of its functions, officials in the Department use data and/or make inferences on the basis of data. It is essential that a rigorous process is maintained within the Department to ensure that use of data is robust and conforms to standards and accepted best practice. It is essential that a high degree of confidence can be had that data use is indeed robust.
- EFEU will develop options for refining and implementing a formal data quality assurance process within the Department, which it will present to the Department's Management Board for approval.

4.3 Summary of action plan

Below is a summary of the Action Plan set out in this Data Strategy, including expected implementation dates, the responsible organisation(s) and unit(s), and the output that will be produced as a result of carrying out the action.

Short-term Actions				
Action	Detail	Implementation Date	Responsible	Output
S1	Target Capacity Improvements	On-going	DTTaS	Allocation of dedicated statistics and data resources
S2	Improve Cross- Organisational Cooperation	On-going	EFEU	Increased value and output of cross-organisational statistics group
S3	Data Audit Through Existing Processes	On-going	EFEU	Identification of data issues and potential improvements for individual policy areas
\$4	Support Timeliness of Transport Statistics	On-going	EFEU and CSO	Consideration of improvements to timeliness of transport statistics
S 5	Support and Make Better Use of Existing Surveys and Datasets	On-going	EFEU and CSO	Maintaining annual production of NTS and improved research and analysis of existing data resources within the Department
S6	Target Improved Data Management Processes and Systems	On-going	DTTaS	More accessible datasets within the Department, and a data management and retention policy that fits the Department's current and possible future needs
S7	Maintain Annual Production of Transport Trends and Look to Increase Publication of Statistics	On-going	DTTaS	Improved dissemination and awareness of key data and trends

Longer-term Actions				
Action	Detail	Implementation Date	Responsible	Output
L1	Establish Methodology for Sectoral Data Reviews	By Q4 2017	EFEU	Standard approach for assessing data issues within specific areas, to be used as and when prioritised
L2	Develop Internal Data Hub	On-going	EFEU	A 'data portal' which will allow for easy access to the Department's available data
L3	Target Improvements in Research, Evaluation, Modelling and Appraisal	On-going	DTTaS/EFEU	A significantly improved evidence base for policy development, investment decisions and programme/project evaluation
L4	Improve Level of Performance Measurement	On-going	DTTaS/EFEU	Performance indicators that are measurable, and enable direct assessments of outputs/outcomes against objectives
L5	Develop QA Process for Data Use	By Q4 2017	EFEU	A process which will ensure that data used within the Department is accurate and robust

Next Steps

Following the publication of this Data Strategy, the next steps for DTTaS are to manage and execute the implementation of the actions as set out above (see Section 4). Responsibility for these actions falls across the Department's divisions, and particularly on EFEU: as such, specific steps to address the relevant actions will be incorporated into the work plan of the Unit. The Department will also establish a Working Group for the Implementation of the Data Strategy. This arrangement will facilitate the necessary collaboration between analytical and policy divisions to ensure those actions that have been assigned broader responsibility for implementation are managed and executed as planned. Further communication and collaboration with external stakeholders (e.g. CSO) will also be progressed through forums such as the TSLG. Through these steps, DTTaS commits to the pursuit of improved availability, quality, management and use of data in order to better inform design, appraisal, implementation and evaluation of policies.