Department for Transport

Transport Data Action Plan

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Department for Transport
Great Minster House
33 Horseferry Road
London
SW1P 4DR

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Any enquiries regarding this publication should be sent to us at
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Foreword

Transport underpins daily life in every community. When we get transport right, we help people reach jobs, education, healthcare and loved ones; we support businesses to grow; and we raise the quality of public services. None of this is possible without data: timely, accurate and relevant information lets us plan our journeys with ease, and design a modern, efficient, safe and inclusive transport system that puts people at its heart.

Since our Transport Data Strategy, we've made really strong progress on data use in transport. I am delighted to see so many examples where organisations across the sector have developed tools, products and services that use data in innovative new ways to benefit transport users. But there is more to do. For too long, data has been locked away, siloed or difficult to find and use effectively. Without further change, we risk missing the opportunity to embrace the incredible wave of advancing technology and innovative thinking we see all around us. We especially need to acknowledge the whole of someone's journey, getting to and from transport services, and adapting to any changes along the way. Data is also an area where we could make a much-needed improvement in the experience of disabled people using the transport system.

Our Data Action Plan therefore sets out how the department will, in partnership with the wider transport sector, continue to move towards a future where data will be used for its potential, and be a firm foundation for our country's transport system. This plan lays out how we will make data easier to **share and find**, ensure it is **trusted and interoperable**, build **skills and leadership** to use it well, stay focused on **user needs**, and embed strong **governance, protection and ethics**.

This aligns with Better Connected, and focuses on unlocking the power of data so that we can deliver the transport system that people deserve. It outlines practical actions we will take with partners across local and national government, industry and academia to build the data foundations for a more reliable and connected system. We are not alone: there is a concerted effort across government to create better growth and harness opportunities through data, and we will continue to work with, and learn from, our colleagues in other departments.

We've all seen how quickly technologies can change. As we deliver these actions, we will continue to review and evolve this plan as technology and expectations change.
To truly deliver transformative change, we need a collaborative effort, so I invite experts and organisations to work with us to build a data ecosystem that makes transport better for people.

Jo Shanmugalingam
Permanent Secretary, Department for Transport

Executive summary

Transport keeps the country moving by connecting people, places, and goods every day, supporting the economy and our wider society. As technology and digitisation advance rapidly, new transport solutions are emerging to meet the public expectations for reliable and seamlessly connected transport services. Timely, accurate and relevant data is essential for this.

To realise a transport system that works for everyone, across their whole journey, we must treat data as an asset. When data is transformed into clear, reliable and actionable information, it allows people to make journeys with confidence and in comfort. It also drives service improvements, empowers local decision making, and unlocks innovation. Trusted data underpins our capability to use technology and artificial intelligence (AI) powered tools confidently and responsibly. This is an important part of the government's missions and Department for Transport's (DfT) priorities, including kickstarting economic growth, improving transport users' experience, and reducing environmental impacts.

Despite its importance, data is not being used to its full potential across the transport system. Barriers still exist across organisations and environments, from data availability and compatibility, to data being deprioritised, and not receiving the necessary time or financial investment. To address this, we've engaged widely across the sector to understand these challenges and identify opportunities to change. This action plan sets out how the DfT will support DfT agencies and arm's length bodies, local government, and industry (such as operators, innovators, academics) to improve the transport system by using data effectively.

Our vision

We want people to have the information they need to make the journeys they choose, and organisations to have the data they need to improve the services they deliver. We are working towards a transport system where high-quality data, and ultimately information, flows more easily.

The Data Action Plan (DAP) will bring us closer to a world where:

- data is **shared** between organisations and with the public, maximising its use
- data is trusted, well understood, and of sufficient **quality** to be confidently used for technology and innovation
- data is recognised as a valuable asset, invested in and embedded in organisational **culture** and **leadership**
- data enables organisations to address transport users' **needs** and support government priorities
- data is used securely, **ethically**, responsibly and legally to maximise the benefits for transport users

Sharing, Discoverability and Access

To make data useful, it must be shared with those who need it. We are simplifying access and sharing of the right data across modes of transport, as well as public and private sectors. This will allow organisations to use more data, and consistent data, to improve services, and provide more information to transport users.

Action 1

We will champion more data sharing, removing unnecessary barriers and enabling responsible access to data.

Action 2

We will promote suitable APIs as the expected method of sharing transport data where appropriate, by developing APIs for new and existing DfT published datasets, and encouraging other organisations to do the same.

Action 11

We will develop a Transport Data Marketplace, exploring the best way to bring in and link to existing marketplaces, creating a single port of call for transport data.

Data Standards and Quality

To create a joined-up transport system, our data must work across organisations and modes of transport. We're ensuring data is clear, trusted, and linked to other data. This will mean data can be processed quicker, with more confidence, and provide a consistent picture between different modes of transport and different organisations, allowing services to be more aligned and integrated.

Action 3

We will work towards a consistent view of data standards for the transport system to use.

Action 4

We will further explore the use of technology to improve the quality of data in the transport system.

Skills, Culture and Leadership

Data only generates value when people and organisations are equipped and eager to use it. Senior leaders, not just specialists, must champion data-driven approaches. We have seen a lot of innovation and progress from across the transport system, and we will share best practice examples and existing materials from leaders in this space. We will lead further discussions and organise learning opportunities and collaboration for those in the transport sector, so all can benefit from the efficiencies data can create.

Action 5

We will create further opportunities for organisations to learn from each other, bringing together a wide range of data expertise to benefit all.

Action 6

We will further embed a positive culture around data in transport organisations, promoting materials and examples to inspire leaders and enable wider capability building.

User Needs and Communication

Data should reflect the real-world needs of people and organisations, especially as those needs change. We are making sure the data used to make transport decisions is based on real life experiences. We are engaging the public, those working in transport, and user advocate groups, to ensure priorities remain relevant as those needs change. By combining better data with ongoing discussions, we will make transport more responsive to users' needs and help everyone understand how data is used and why.

Action 7

We will ensure that the data used to design and run the transport system accurately represents the needs of all the people who travel.

Action 8

We will engage with transport experts and stakeholders to ensure work involving data reflects real-world needs.

Governance, Protection and Ethics

Data should always be used responsibly, legally and ethically. Our responsibility includes making sure data is being used to improve the transport system and bring benefits to people. We're focusing on governance frameworks, protecting personal data, and promoting ethical standards across the transport system, while also exploring where data can create more value. This will continue to evolve, as best practice changes. This will build public trust, reduce legal risk, and increase the use of data with confidence.

Action 9

We will ensure that we are maximising the value of data in the transport system to support government missions and transport priorities.

Action 10

We will help organisations apply relevant guidance and frameworks to enable our vision of an integrated, data-driven transport system.

While these actions are planned by the department, change will only be possible if we work together with those across the transport system and beyond. Many organisations are already tackling data barriers and bring deep expertise and experience that is essential. We invite those working on these challenges to contact us, so we can support and celebrate your work, and use it to shape a better transport system for everyone.

Introduction

The Transport Data Action Plan (DAP) sets out:

- our renewed and updated vision for transport data as an asset for growth
- the actions the department will take to support this vision over coming years
- the anticipated influences of our actions, for both people and the many organisations involved in transport data
- examples of success

This plan updates our 2023 Transport Data Strategy and was developed in line with Better Connected which sets out a clear vision – for transport to work well for people, for it to be safe, reliable, affordable and accessible so they can get on in life and make the journeys they need to easily. We have published an update to reflect further commitments outlined in Better Connected. The DAP is a living document that will evolve to keep pace with the fast-changing data and technology landscape, and we will provide updates accordingly.

By implementing these actions, we are not only advancing our vision but also aligning to cross-government strategies such as the Industrial Strategy, the roadmap for modern digital government, and the AI Opportunities Action Plan (supported by our Transport AI Action Plan). We also align to best practice for public value in The Green Book, The Magenta Book, and The Rose Book. As strategies and the data landscape changes, we will keep adapting and communicating our progress and collaborating across the sector to reflect its needs.

The primary audience is those working with data across the transport system, especially local government, but its principles are relevant to everyone in transport, as data is fundamental to how services operate and improve. Our aim is to ensure everyone understands the role and value of data, using clear and accessible language despite the technical nature of the topic. While we concentrate on England, many datasets cover Great Britain, and wider, and we will co-ordinate with devolved governments where changes affect them.

Local transport is shaped by different types of organisation, including Strategic Authorities (SAs), local councils, and other specific local authority configurations. We use ‘local government’ to recognise that all local organisations have an important part to play in delivering transport to an area.

Every mode of transport has different data concerns and considerations, due to different ownership and responsibility models, priorities and primary uses. We will work across all of them to understand how to embed these ideas into modal strategies and work programmes. For example, freight is an important part of the transport system, and data is just as important for freight as any other aspect of transport. While the actions set out in this plan are not specifically focused on freight, the principles still apply across the sector. The data

considerations in the upcoming new plan for freight have been developed to align with the DAP and the vision it sets out, and work will continue to develop in parallel.

This document was developed with the assistance of generative AI. All content has been reviewed and approved by humans, who retain full ownership and accountability.

Why we need to take action

The importance of transport

Transport affects everyone. Throughout our lives, we travel, receive visitors, and rely on the delivery of essential resources. An efficient and functional transport system boosts economic growth, the number one mission of this government. Transport also influences our health and wellbeing. Studies show well-designed transport infrastructure allows us to lead happier, healthier lives. It can increase social connection, reduce stress, and promotes exercise.

Our transport system is changing. Rapid technological progression and growing digitalisation creates opportunities to provide better transport and raises public expectations. Engagement on the Transport Data Action Plan (DAP) highlighted that:

- people want reliable information to make informed transport choices according to their needs
- technology and artificial intelligence (AI) can be embraced to improve our transport system
- decision makers need evidence to ensure public funds create a reliable and efficient transport system

Data is vital to achieving these priorities. The public sector invests around £30 billion annually in data assets, with an estimated potential economic value of £15-200 billion (Value of Public Sector Data Estimate). Realising the value in transport data will require improving the availability, interoperability and confident use of data across transport organisations. While data alone does not lead to change, it underpins improvements and innovation across the transport system. We heard that many promising ideas for improvements have stalled, or not reached their goals, because of limited data availability. This lack of accessible and quality data is a barrier to change, and therefore to economic growth.

Informing individual choices

Transport users have diverse lives, needs and destinations. Our engagement, which is detailed in Annex A, raised repeatedly that people want to plan their journeys and adapt to changes using up-to-date, reliable information that meets their personal needs. When travelling across multiple modes of transport and locations, they want joined-up services and joined-up information. If someone has requirements for their journey, such as access or assistance provision, they want to know if that's available and how to request it. When journeys are disrupted, people want timely updates and clear guidance for their onward travel.

Achieving this experience requires reliable, accurate and timely data. This data needs to be compatible with the technology that will transform it into easy-to-understand

information for everyone. To ensure a truly seamless end-to-end travel experience, this data must cover the entire journey often across different modes of transport, from planning and booking to real time updates.

Crucially, these improvements must work for everyone. A recent report by the Transport Select Committee highlighted disabled people face greater transport barriers, including the information available to them about their journeys, particularly during disruptions. Additionally, those on lower incomes are often more reliant on public transport, and reliable and up-to-date data can help people better access opportunities. Differences in the availability and quality of journey information lead to unequal impacts across different groups of people.

Embracing technology and AI

Technology has always shaped transport and changed how we travel and move goods. Emerging areas such as automation, micromobility and drones promise greater transformation and all rely on robust, reliable data foundations.

Technology doesn't only consume data, it also generates it. Every innovation, from connected devices to smart sensors, generates valuable insights that help us understand and improve the transport system. To realise these benefits, technology should be developed with an appreciation for secure and legal data gathering, for operational and strategic insight. To make this possible, data must be collected in a

AI accessibility tools

Text-to-speech and sign language screens in stations

Micro-mobility apps

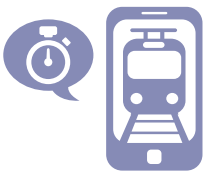
E-scooter and bike-sharing platforms

Account-based ticketing

Including contactless rail payments

Real-time public transport tracking

Apps showing live bus, tram, or metro arrivals



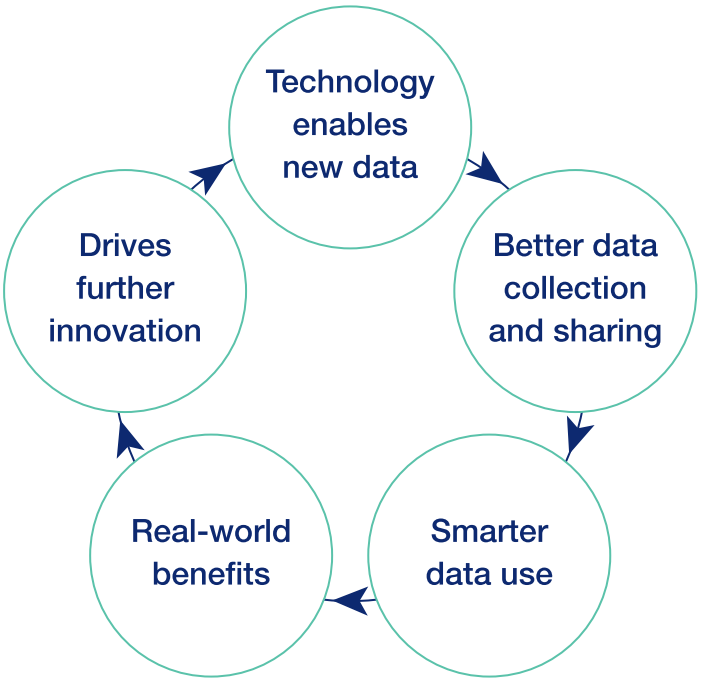
Smart port automation

Automated cranes and cargo handling systems

Driver assistance technology

Cruise control and parking assistance

consistent and sharable format so it can be reused across organisations and applications, where appropriate. For example, connected vehicle technology is now widely deployed across the UK fleets. These vehicles collect and share data on road condition and usage to improve safety and efficiency, not only for the immediate use of individual cars, but to report issues of the system for the wider benefit of all.



The use of AI is becoming more prevalent in daily life, unlocking efficiencies with its power and potential. Transport is no exception. In the recently published Transport Artificial Intelligence Action Plan, the department set out to:

- adopt AI responsibly to deliver better transport for all
- maximise the economic benefits from AI applications in transport, whilst reducing transport's environmental impacts
- secure the UK position at the forefront of transport-related AI applications
- utilise AI to enhance the quality, efficiency, and effectiveness of DfT

The AI Action Plan acknowledges that data is an essential 'raw material' for AI. Therefore, AI cannot provide useful insights unless the data is in the right condition to support this.

Creating a better transport system

Just as technology and AI depend on strong data foundations, so does the design and management of the transport system, which has a lasting impact on people's lives. Transport decisions can influence public and private expenditure and shape the economy. This involves collaboration across public, private, academic and charitable organisations and those making decisions need the best available information to succeed.

Data is central to this. When combined with analytical methods, data can predict future transport use under different scenarios and its influence on people and businesses. It provides an accurate picture of what is happening on the ground and helps measure and evaluate the effectiveness and impact of past decisions. When data is helpful and reliable, improvements and investment provide real benefits, such as job creation, positive environmental impacts or travel comfort. Sometimes, decision makers lack the data needed to make informed choices. With improved data, decision makers can better target investment,

so interventions have meaningful influence and achieve strategic goals.

Data can highlight inequalities, so that decision makers can identify or address the gaps in opportunity and provision effectively. We can use this data to build tools to inform decisions and target interventions. The department's Connectivity Tool highlights areas where people struggle to reach jobs, education or leisure opportunities, helping target improvements that support economic growth and fulfilling lives. The department is also developing a transport poverty tool, which will aim to capture where poor transport connectivity and affordability limits people's access to employment and essential services. Designing physical and digital services inclusively will result in better access to work, education and essential services, and create improved financial, educational, health and social outcomes.

These decisions range from local improvements to major national infrastructure projects. When data is interoperable (usable across different systems, organisations and modes of transport), it unlocks more transformative ideas, such as Mobility as a Service (MaaS) models, and integrated ticketing.

Some organisations are already using data and advanced methods of analysis for planning, monitoring and management. Faster processing generates insights quicker than before, and tools like digital twins feed off real-time information and allow changes to be tested before implementation. However, many organisations have said they are less confident with advanced data use. Legacy systems can prevent modernisation and access to the cost savings, efficiencies, and innovation, that better data can unlock.

Areas of progress

Over recent years, data has been embraced and become more important across many parts of the transport system, and wider. A lot of impressive work has been undertaken, and some of those projects are celebrated here:

- The Rail Data Marketplace (RDM) makes it easier for almost 4,000 registered organisations to access over 220 data products, many for the first time. This enables innovation on products, and more information on rail journeys to be provided to passengers.

- The Bus Open Data Service (BODS) contains up-to-date data on bus locations, timetables and fares, released in a way that can be easily digested by journey planning apps. This has allowed customers to better understand bus services, giving them more confidence and reducing waiting times at bus stops.

- National Public Transport Accessibility Nodes (NaPTAN) contains data on all public transport stops in Great Britain and is being expanded to contain more information useful to passengers. This feeds into journey planning apps, allowing passengers to navigate to public transport, as well as providing a consistent view for town planning and infrastructure projects.

- The Rail Customer Experience Survey is a new data collection on passenger satisfaction, with regular updates and a large data sample, which has been joined to operational data to give further insight into the service linked to the response. This allows organisations to understand what matters to transport users and the reasons behind different levels of satisfaction, leading to a better service.

- Digital Traffic Regulation Orders (D-TRO) have been standardised and collected, providing a central store on the legal rules for road use, such as speed limits or parking restrictions. This allows the information to be shared, and understood, across systems, increasing the accuracy of information in details passed to drivers, and making highly automated vehicles safer.

- The Mayoral Data Council has been established to allow Mayoral Strategic Authorities to discuss data, recognising this is an area of great importance. This allows central government to disseminate information, gather feedback, and for local areas to learn from each other on important topics.

- The National Parking Platform (NPP) is an open platform, developed by DfT in partnership with the wider transport sector, that connects multiple parking service providers to hundreds of locations nationwide, made possible by the integration and agreement of international data standards across multiple providers. This allows drivers to use their preferred parking app for parking payments, with the possibility of train ticketing apps using this system to book parking at stations also being explored.

- The Rail Safety and Standards Board have created a catalogue of the standards needed throughout the rail industry, as well as helpful guidance and research into how and why to use them. This allows organisations to understand the requirements of them, and the benefits to using standards, in a clear format.

- The Maritime and Coastguard Agency (MCA) have been changing their culture around data, moving from a phase of embedding a sense of value in the data they have to picking out specific projects for improvement. This has led to the MCA becoming a more data-driven organisation, where people consider how best to use data in their work, increasing the safety of the coastline.

- National Highways has launched a Developer Portal supported by a Wayfinder Partnership Programme, to share data on the Strategic Road Network (such as speed limits, closures and diversions) in an automated, service friendly way. This allows the best data on roads to be shared with road users via multiple innovative route planning products.

Opportunities for further progress

While our sector have developed important areas, our engagement highlighted clear areas for improvements.

People should be at the heart of transport. Feedback indicates some groups continue to be overlooked, and the transport system can feel fragmented and complicated, especially to those with specific needs. Limited travel choices, disconnected services and knock-on effects from delays create understandable frustration. Information to plan and monitor journeys remain disjointed and inconsistent.

Technology adoption is uneven and underutilised. Feedback consistently points to a lack of data preventing technology from being widely deployed and adopted. Where technology is implemented, unreliable data often provides unreliable results or data is not shared for broader benefits. Data innovation may also be evident in one part of the transport system, but isn't created in a way that can easily be applied to other areas, embedding siloes further.

Data-driven approaches vary across organisations. Leadership does not always value data, nor invest in the efficiency that data skills and projects could unlock. The capability gap is likely to widen unless addressed. Existing data sharing guidance is seen as hard to find, access or understand, resulting in duplication of effort and unnecessary costs.

What is our vision

Better Connected vision

Better Connected sets out a clear vision – for transport to work well for people, for it to be safe, reliable, affordable and accessible so they can get on in life and make the journeys they need to easily. The strategy centres around three principles:

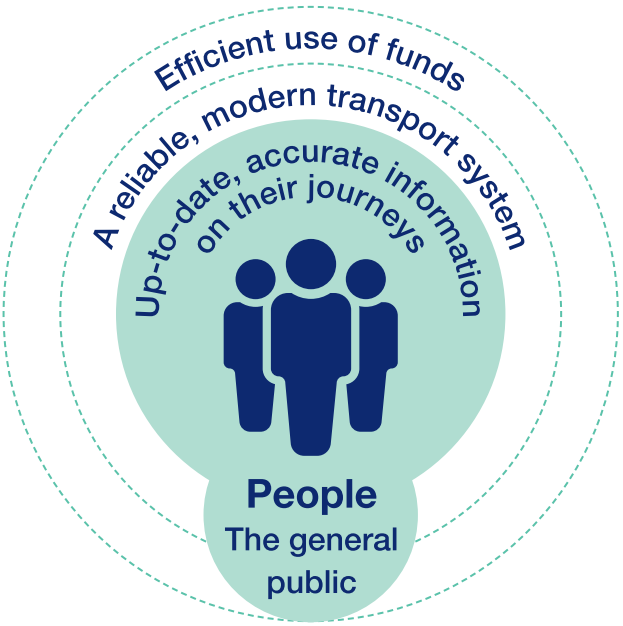
- Put people at the heart of everything we do
- Use transport to create better connected places
- Work in partnership with local leaders and experts

Data is an essential part of this strategy, recognising its vital role in enabling improved integration across the whole transport system. The strategy also outlines commitments for data, which will be carried out through this action plan.

Our vision for transport data builds on this foundation, and accounts for other cross-government strategies, which can be found in Annex B.

Our vision for transport data

Everyone will have access to the information needed to plan and adapt their journeys. Transport businesses can plan with increased confidence and organisations access data to design, operate, and improve services. Comprehensive and reliable data will create innovation and technology, supporting a more modern and reliable transport system.



- Data will be widely shared and reused, reducing duplication and unnecessary time and costs, while maintaining safety and security. This ensures organisations have consistent evidence across the sector and people have access to more information when using the transport system.
- Data will be understood and trusted across organisational and situational boundaries, allowing data to be used properly across the transport system. Quality will be transparent, continuously improved, and data will be used confidently for a range of appropriate purposes.
- Organisations will recognise data as an essential and valuable asset, investing in skills and capacity to unlock data potential. A culture of shared learning and knowledge transfer will connect the data community and transport organisations.

- Data will come from a diverse range of sources and technologies to create a fuller picture of the transport system, answering more nuanced questions. Clear expectations will encourage better data use. Data will be designed, interpreted and used to meet the needs of all transport users.
- Data users will act confidently and responsibility. They will use data securely, ethically, and legally, while also maximising the benefits to improve the transport system and generate growth.

Integrated transport data system

To realise our vision for transport data, we need a data ecosystem that enables seamless, and secure, data sharing across the transport system. The transport system is managed by many organisations, each with different functions, objectives, and systems, represented by the 'solar system' in our Performance Report. The department and its arm's length bodies, local government, and industry (such as operators, innovators, academics), each play a critical role and have established digital and data structures. Our aim is not to centralise these systems, but to make them interoperable and connected so that data flows smoothly across boundaries, where appropriate.

This integration matters because it enables organisations to work more effectively. Operators can access real time insights to improve service delivery and operations. Local government can make evidence-based decisions and plan investments with confidence. Innovators and academics gain access to rich data sets that push research boundaries and charities can hold government and operators to greater account.

The data ecosystem must be built on strong principles of open standards, interoperability and clear governance. We will promote and create guidance and frameworks that remove barriers, and support organisations according to their needs. The department will use its convening power to foster collaboration, shared learning and maintain an overarching view of the system. Integrated data will combine diverse sources, creating a richer picture of the transport system, which is important to assessing influence of public investment and ensuring the best use of public funds.

We invite experts and organisations across the transport system to work with us. Please email ✉ dataactionplan@dft.gov.uk with relevant information, insight and resources.

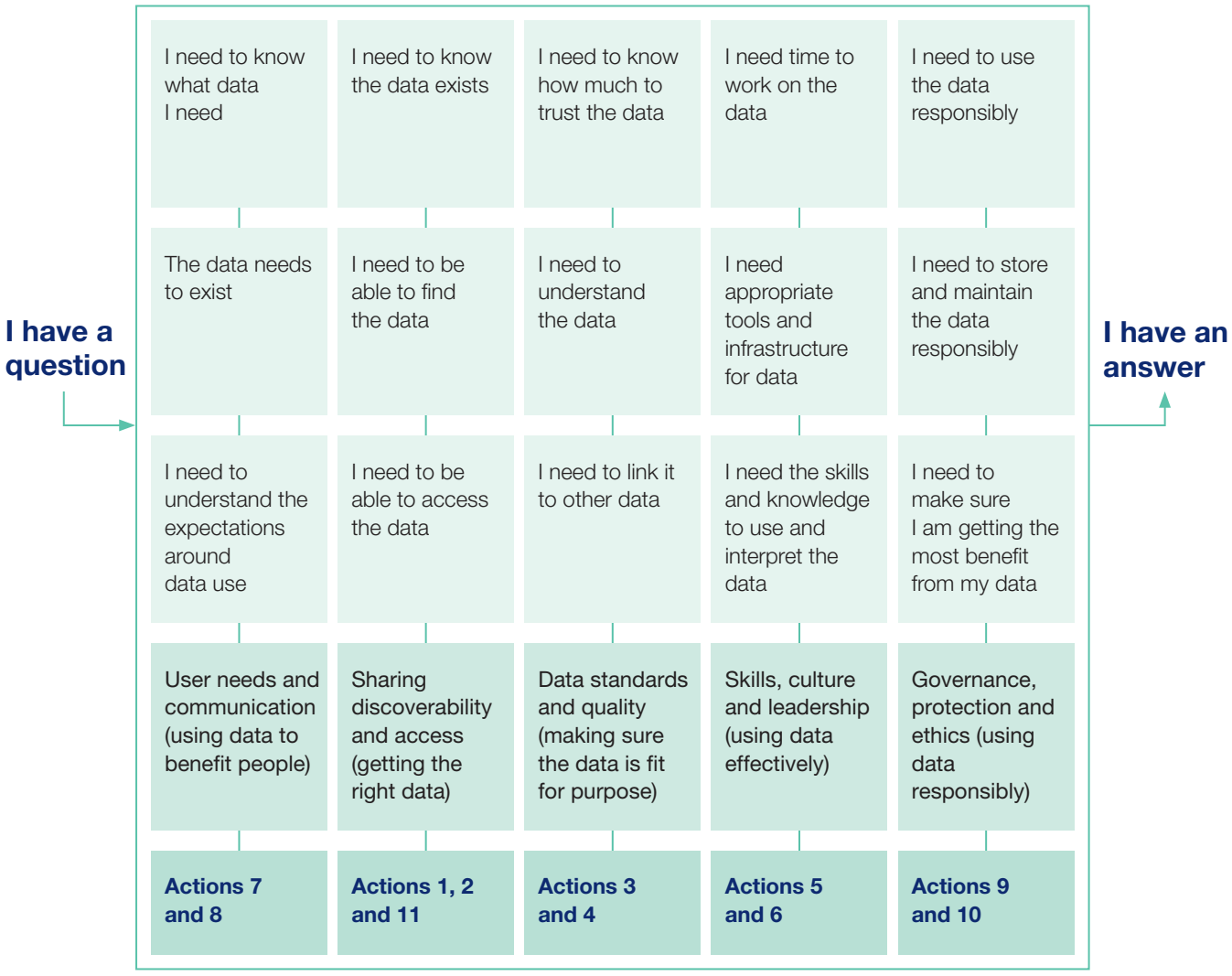
We would particularly welcome contact from people to work with us on:

- Data to support disabled people's transport experience
- Data standards
- Increasing data capability in the public sector
- Valuing data
- Barriers to achieving the DAP vision

Working with data

There is no single solution for using data effectively. Engagement shows challenges vary across the transport system. In some areas, stakeholders know the data doesn't exist, while in others, the data was available but difficult to understand and apply. The themes in the Transport Data Strategy remain relevant, and we have used them to structure our actions, which should address these challenges.

We recognise that all of these are required for us to achieve the benefits we've identified from better data use. The diagram outlines what needs to be in place to move between asking a question and finding a reliable, data-driven answer. These shouldn't be viewed strictly in a linear order, but all considered before, during, and after any project considering data.



Vision scenario

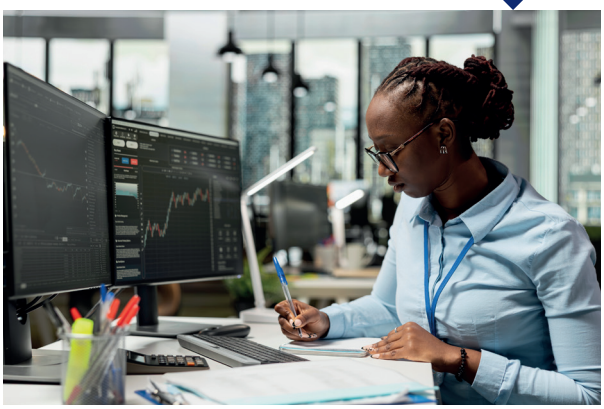
Example vision scenario: Caroline, a transport analyst

Caroline, a transport analyst in the town of Garington, is asked to explore whether train delays are affecting local bus usage at the bus stop by the train station.

Caroline has a well-maintained data catalogue and accessible APIs available to her, and she quickly identifies the relevant datasets: the bus usage estimates and train delay records. She is confident in the data accuracy due to the quality assessments by the data owner. She knows exactly which data is relevant to her, as the bus stop and train station details are linked to an up-to-date central resource, so she knows which are in Garington.

She also discovers that a colleague has previously analysed train delays for the same station. With consistent data formats and shared tools, she's able to perform the same analysis quickly, bringing in more up-to-date data. This saves time and avoids duplication.

Caroline finds that small delays have little influence on bus demand, but delays during peak weekday evenings, of over 20 minutes, have a noticeable influence.



A colleague from another local authority suggests considering weather, especially extreme and unpleasant conditions. Caroline integrates publicly available Met Office data to improve her work, seeing rain and snow decreases bus usage further, regardless of delay times.

She presents her work and stores it with appropriate documentation, following best practice, allowing others to use and build on in the future. The wider team considers increasing bus frequency during periods with a high likelihood of train delays, as well as improving rain shelter at the bus stop.

Caroline has helped the people of Garington have a better experience, giving them more comfortable choices of travel in different circumstances. She's also made the town itself more connected.

Actions

Sharing, Discoverability and Access

Co-ordinating data to minimise travel disruption

The Regional Transport Coordination Centre (RTCC) manages disruptions to Transport for West Midland's travel network, integrating data from over 20 sources via an operations dashboard and incident management system. It creates timely, accurate and consistent travel information to the public and stakeholders via different outlet channels, such as social media, to keep the public informed. By leveraging real-time data and technology, the RTCC improves performance management and minimises impact on the travelling public.

Getting the right data

We want a transport system where data is shared responsibly, easy to find and accessed with confidence. Currently, too many data users don't know what data is available, or how to access it. Others are frustrated that not all useful data is shared, or it is shared in formats that make access and processing challenging. These barriers create duplication of efforts, creating unnecessary complexity and costs. It also means transport users often lack access to accurate information, reducing their trust and their power to plan journeys effectively.

Building on existing initiatives across the sector, the department will set clear expectations, promote best practice and encourage appropriate reuse of data. Our role is to support data users to share, find, and access transport data more easily, laying stronger foundations for emerging technologies and cross-sector innovation.

Action 11 has been added, following the commitments made in Better Connected.

Action 1

We will champion more data sharing, removing unnecessary barriers and enabling responsible access to data.

Sharing data isn't a binary concept, it exists on a spectrum, depending on its sensitivity (shown in the Open Data Institute's (ODI) data spectrum). We want to remove unnecessary barriers and enable responsible access to foster a culture where openness is the norm, not the exception. Open data benefits both public and private sector organisations, supporting a wide range of users and use cases as technology and capability evolves. Sharing data openly reflects our commitment to transparency, innovation, and improved decision making, while reducing administrative burdens. We will **ensure DfT data is available and discoverable through appropriate data marketplaces.** We will encourage public bodies and local government to do the same.

The government has committed to support the development of data exchanges, recognising how sharing data responsibly can unlock growth and potential benefits from wider data use. We will **continue to work with Department for Science, Innovation and Technology (DSIT) on both business data sharing arrangements, including business data sharing infrastructure and data exchanges, and the development of the National Data Library's approach to sharing public sector data** to ensure appropriate linkages and consistent information about datasets is available, as well as widely understood across the transport sector.

Our arm's length bodies play a critical role in the transport data ecosystem, they hold and manage large amounts of transport data that are critical to transport planning, operations and public services. To support a unified approach, we will **help embed data sharing principles into existing and new arm's length bodies in transport, including the future Great British Railways (GBR)**, once established**.** Empowering these organisations to share data as standard practice will have huge benefits across the transport system.

We want all organisations to consider data sharing from the start of projects, ensuring data created is useable, shareable, and understandable for further work and wider insight. To support this, we will **create guidance around data sharing and ownership in commercial arrangements for procuring products and services.** Where public money is used to procure services and data, it should create the maximum public value. **We will explore how we can embed appropriate data sharing in DfT contracts to set an expectation across the sector,** while adhering to ethical and legal considerations. We will also consider contract variations and renewals.

The UK transport sector includes many commercially driven organisations, and it's important to respect legitimate commercial sensitivities, national security, privacy and intellectual property considerations. However, there is a risk these considerations can be applied too rigidly, creating unintended barriers to data sharing. In some cases, data can be shared openly under appropriate licences or shared directly between organisations. To help navigate these sensitivities, we will **provide practical guidance on how and when non-personal datasets can be made open at different levels of aggregation, or under specific sharing conditions.** This will help organisations appropriately address sensitivities, such as personal data protection or commercial confidentiality, while balancing public interest. Personal data can only be shared in line with UK data protection legislation, unless fully anonymised. We support DSIT as they consider expanding the range of standardised licenses for making public sector data available, considering how best to apply this in transport.

Where sharing data is not possible, sharing information about data (metadata) is useful. We will **create guidance about metadata and what to share publicly** enabling others to understand where the data exists and how

to access it, on datasets that may be sensitive themselves. This allows organisations to approach relevant owners and arrange data sharing under agreed conditions, avoiding duplication of data collection or missed opportunities. Making metadata more openly available should increase opportunities for data sharing. However, where data is prohibitively expensive for public organisations, we will explore collective approaches to reduce costs. For example, **we are exploring options to open access to the 'Data for Road Safety' system to other public authorities**, working with National Highways to understand the possible options for this.

To enable public sector bodies to monitor the use and influence of public funding more effectively, we will **ensure data is being shared consistently with relevant public bodies, including DfT, on projects, funds, and organisational data.** This will improve understanding of outcomes, increase informed decisions, and ensure that public services are designed around real needs. It also creates better transparency and improves evidence for future investment in transport systems.

In some cases, data sharing can be granular and targeted. Smart Data schemes enable secure, consented sharing of customer or business data – typically with trusted third parties – to drive innovation, boost competition, and help users make better-informed decisions. The Department for Business and Trade is leading on a cross-departmental programme of work to identify ways Smart Data can unlock economic growth and benefits for the country. **We will continue to work with the Department for Business and Trade to identify and test the feasibility of use cases of Smart Data in transport**. We will publish our findings and the joint research will inform a call for evidence in 2026 on Smart Data in transport. A successful Smart Data scheme in transport would create opportunities for private sector tools that help transport users and operators by either allowing greater access to data or bringing together specific data sets for personalised use.

Action 2

We will promote suitable APIs as the expected method of sharing transport data where appropriate, by developing APIs for new and existing DfT published datasets, and encouraging other organisations to do the same.

To support an efficient and scalable approach to data sharing, we expect the transport sector to use application programming interfaces (APIs) as the standard interface for shared data where appropriate. Using APIs properly means data can be queried specifically, securely, on demand, and in an automated way. Easy-to-use interfaces can also be built over them for access. If the raw data is updated, APIs are useful to draw in up-to-date data regularly. By lessening the data processing needed, and supporting automated data querying, APIs can reduce costs for organisations and reduce the environmental impact of computing power. They also improve data usability and enable more dynamic transport services and products

underpinned by better, more up-to-date data. As APIs continue to develop, it is possible to ensure they can integrate with Large Language Models (LLMs) and are therefore able to inform many artificial intelligence (AI) applications.

To encourage adoption, we will **undertake an assessment of all DfT open data sources, with an assessment of the feasibility to create an appropriate API for each**. Then we will **begin to create APIs for DfT data sources.** We will consider a range of possible datasets, such as **the DfT owned Automated Traffic Counter (ATC) data.** By **sharing ATC data through a data marketplace and the existing Road Traffic website,** we will continue to demonstrate the value in APIs.

We want APIs to become the norm for organisations to share and access data, which will enable applications and products to draw from more data sources. There will be some cases where datasets are not suited to APIs. Some legacy systems may require a lot of time and effort to change how they work. To help us identify barriers and opportunities for adoption, we have **commissioned, and will publish, user research into the potential for local government and other organisations to use and understand APIs for transport data.** This includes exploring possible commercial approaches. We already recognise that not all organisations will be API ready, and so we will **ensure all DfT APIs maintain the functionality to download data in a flat file format,** allowing organisations to download data as before until they are ready to transition to APIs.

To embed API-first thinking across our operations, we will **review commercial guidance and consider adding an expectation into all contracts for suppliers to build useful, secure APIs to share data,** in line with the blueprint for modern digital government. It's essential this remains available after completion of the contract to enable sustained use and to be shared appropriately.

Smart Data, which is the approved, secured sharing of data with authorised third parties, relies on APIs, and could provide personalised travel options, or show operators up-to-date service usage. As more transport data is shared via APIs, we will create more opportunities for Smart Data and other innovative products.

Action 11

We will develop a Transport Data Marketplace, exploring the best way to bring in and link to existing marketplaces, creating a single port of call for transport data.

The government has committed to support the development of data exchanges, recognising how sharing data responsibly can unlock growth and potential benefits from wider data use. There are already many successful data sharing platforms across transport, but most concentrate on a specific use or mode of transport. We need to build on these successes, respecting existing data structures, apps and digital services already used across the transport system. However, to create a truly

multi-modal product, and to fulfil our commitment in Better Connected, we need to explore how to make a single port of call for anyone working with transport data.

In order to be successful, a Transport Data Marketplace must be useable by all modes of transport. **We will undertake user research, identifying the requirements for all transport data users to easily identify and locate the transport data they need**. We will also **gather views on the additional benefits of existing data sharing platforms and catalogues**, such as sharing data via APIs, sharing consistent metadata, and facilitating data sharing agreements. We will consider these, and other possible functionality, as we establish the scope and aims of the Transport Data Marketplace.

We will undertake a discovery project to identify feasible options to create a Transport Data Marketplace. We will assess a range of options, identifying the costs and benefits of each, and understanding how they interact with the wider data ecosystem. We will work towards delivering a single, trusted catalogue for transport data, making it easier for organisations to search, identify, and access datasets across different modes. This will improve discoverability and help all parts of the transport system make better use of the data that already exists. We will work with organisations to ensure this marketplace is aligned with existing data catalogues and other marketplaces, making updates easier and avoiding the need to rebuild existing data products, unless sensible to do so. To avoid duplication and confusion, we will also **retire Find Transport Data as a service**.

Data Standards and Quality

Working together across government to create a practical and low burden information infrastructure

The Central Local Information Partnership (CLIP) provides an effective channel for DfT and local authorities to support policy, data developments and ensure consistent standards and data quality. CLIP serves as a governance function for the Single Data List, which manages the datasets that local government are required to submit to DfT. CLIP enables shared data standards and metadata consistency, enabling interoperability, reduced administrative burdens and fostering a more efficient and effective system.

Making sure the data is fit for purpose

We want a transport system where data is understood and trusted by those who need to use it. We've been told that if data is shared, it's not always easy to use. Some data is shared using appropriate data standards, with metadata (such as the uses, the origin, the quality and limitations), in a machine-readable way, but this is inconsistent. Not everyone is aware of which data standards are appropriate, which exist, or which are used in other parts of the transport system. Across the complex transport system, terminology and names are often misunderstood, making it laboursome to join data up. There are also frustrations at the quality and completeness of some data, noting that legacy data collection methods have been in place for a long time.

Recognising the expertise required in developing data standards and acknowledging the work already done in this space, the department's role is to convene the experts from across the system. We should aim for a state where anyone who needs to know what data standards to use can access this information and understand why it's important. We should also be conducting research to support new technology and methods to collect data and take steps to improve data quality where possible. We have an opportunity to capitalise on the appetite for data standards for interoperability, and the growing body of work done by programmes and organisations. This includes the Data Standards Authority (DSA), the British Standards Institute (BSI), the National Digital Twin Programme (NDTP) and associated wider approach to UK Data Sharing Infrastructure Initiatives being developed by DSIT.

In this section, 'data standards' refers to agreed rules for how data should be structured, named and shared. To avoid confusion, we won't refer to 'standards' as an expectation of quality.

Action 3

We will work towards a consistent view of data standards for the transport system to use.

In recent years, many areas of transport have embraced data standards, recognising their importance and the benefits they bring. However, these have often been developed for a single mode of transport, or a narrow-focused topic. Existing guidance and best practice will provide maximum value when it is clear which standards are used and how they relate. Where differences exist for valid reasons, we should be clear on how to translate between these standards. A consistent approach will make it easier to exchange and link data and avoid data silos. Our transport system can't be integrated unless our data is, so we need to make sure we have clear and consistent standards in place.

The National Digital Twin Programme (NDTP) is working across sectors to create a consistent data sharing infrastructure, including an ontology that enables better interoperability between stakeholders. Working closely with NDTP, DfT is developing a Transport Data Ontology, a structured way of defining and linking the many parts of the transport system. The ontology will provide a foundation for organisations and data sets to talk to each other without miscommunication. This approach will be linked to existing data standards, and will help to identify which data standards could be used. As this work develops, **we will publish the transport ontology work the department's Digital Twins teams are leading**. To make this understandable for a wide audience, **we will ensure guidance on ontologies is available for less technical audiences.**

The transport system is vast, and the Digital Twin Programme is prioritising areas based on their high priority use cases. Beyond this, we will identify other areas that would benefit from clear definitions and mapped data standards. To do this, **we will host events with the industry to understand the priority areas for additional use cases. We will also identify existing work on data standards and explore how to consolidate the previous mapping exercises into a single view.** In areas where expansion of the ontology would benefit the wider sector, **we will co-ordinate this work in collaboration with experts and publish the results** for open use. We will also explore with experts how best to keep this work up to date.

As this work develops, we will identify gaps and standards that are no longer fit for purpose. **We will provide clear guidance and principles about new data standards,** drawing off existing work and best practice and making them fit for the future, including machine readability. Where non-transport specific standards exist, such as geospatial data, we will explore how best to communicate them.

Data standards are important for new and improving technologies, such as APIs, Smart Data or digital twins. Data can't be shared effectively via APIs unless the underlying data is structured in a sensible, standardised way. Smart Data schemes require data

standards to ensure secure data transfers and display consistency. Complicated, cross-modal models and digital twins require data standards to ensure the vast amount data received is interpreted correctly and automatically. **We will publish use cases on data standards and their effective use, demonstrating their current and future benefits.**

Linking data across systems becomes difficult if elements are named or referred to differently (for example, station names are spelled differently). To address this, **we will review naming conventions and terminology across the transport system and identify areas where inconsistencies cause issues for data integration.** We will develop resources that map the variations into standard codes, allowing different systems to link data while preserving the original names within existing platforms.

Action 4

We will further explore the use of technology to improve the quality of data in the transport system.

Data does not have to be perfect to be useful, if the quality and appropriate use is clearly communicated. However, if there are data quality issues, it is likely the data, and the information or advice based on it, will be unhelpful. It is also possible that over time, and as data is used for more purposes, that the data quality is no longer sufficient. This will negatively influence the transport system, as well as reducing overall trust in all data. It's not just technology that will help improve data quality, but this is an area of potential we are choosing to explore.

On the Rail Data Marketplace (RDM), quality is self-reported and then fed back on by users. **We will engage with users of the RDM and understand if there needs to be more proactive steps taken to assist quality assessments**. This will include reviewing metadata and the usefulness it provides. By providing more confidence in the assessments of data quality, data will be used more confidently for appropriate purposes.

Data sources are increasingly important for operating and improving the transport system, and to improve the data quality we also need to consider improved data collection methods. New technology can provide more complete data than manual collection methods. As a step towards new data sources, we will **publish our report on the market for sensor data and applications.** This will demonstrate to transport organisations the coverage and quality of data that sensor data provides**.** As another source of data, **we will undertake research into camera data collected across the transport system,** assessing how this data could provide more value for transport operators and users. There are already good examples that can be learned from and shared more widely.

One of the more recent leaps forward in technology is connected vehicles, where data is collected and shared. **We are exploring the use of data from vehicles and infrastructure to deliver connected services for road users and operators.**

Using existing data and linking to it, rather than recollecting data, can reduce errors and prevent duplication. This also allows for data to be augmented by other data sources and therefore used for wider insight. **We will encourage the linking to existing data sources in data collection where possible, enabled by more effective data sharing.** We will share case studies where this has been done effectively. For example, the Rail Customer Experience Survey asks the passenger to select the service they are travelling on rather than filling the information in manually. This allows the results of the survey to be automatically and reliably linked to operational data about this service, including any delays.

We will explore how we can make DfT data more useful for more purposes. For example, accurate rail replacement bus stop data will support journey planning during planned disruption on the railways. **We will collect and publish the new rail replacement bus stop data through National Public Transport Accessibility Nodes (NaPTAN).** Historical bus location data could provide additional valuable insight into the sector, allowing further analysis and innovation. **We will explore sustainable solutions to sharing Bus Open Data Service (BODS) historical data,** while managing technical and cost considerations.

Skills, Culture and Leadership

Transforming complex transport datasets into actionable insights for wider audiences

Transport Scotland and Clearview Intelligence developed an insights data platform that translates outputs into written insights, supporting leadership teams in their data-driven decisions and fostering a culture where data is accessible to all levels of data-literacy. The next phase introduces a Large Language Model (LLM) interface to allow users to type questions for natural conversations, improving accessibility and interoperability. This approach is innovative and removes barriers to data literacy, creating a culture of data-driven decision making.

Using data effectively

We want a transport system with strong data-driven organisations, where data is used confidently to improve operations, planning and policy. We're aware that the data skills and culture in transport organisations is varied. Some organisations feel unsupported and left behind, while others are duplicating work that others have undertaken. Many data experts shared that they struggled to get budget for investment. This was due to a lack of wider appreciation for the importance of data and the benefits of their work. Many shared that leaders were interested in technology without appreciating the need for solid data systems to support it.

It's the department's role to champion data and promote a data-driven approach, particularly in the public sector, such as in arm's length bodies and local government. This must be done while supporting the work of other government departments, such as the Ministry for Housing, Communities and Local Government (MHCLG), to avoid duplication or confusion. Our engagement showed that an effective way to build capability is for organisations to learn from each other. We must make sure this learning is shared across all parts of the country and the transport system.

Action 5

We will create further opportunities for organisations to learn from each other, bringing together a wide range of data expertise to benefit all.

Across the transport system, organisations have proactively established ways to discuss transport data. These conversations often include local government, arm's length bodies, private operators, consultants and academic or research institutions. Throughout our engagement, we heard that these are valuable, but it was clear that not everyone felt included. Smaller and more rural organisations face barriers to participate or engage consistently. Some of these conversations were modal specific, even though learnings they were sharing did not need to be.

We will avoid setting up new knowledge-sharing forums, and instead lean into what already exists, while increasing their reach. We will **liaise with existing groups across local government and the wider transport system, attending and proactively contributing to discussions on transport data.** This will help more organisations share lessons quickly and widely, so that new learnings can be taken forward. We will use these discussions to collect feedback on our efforts and identify new priorities and actions for us to take on.

We will run events, where helpful, either as part of existing forums or one-off events, to allow organisations to exchange ideas on specific topics. We have already established that discussions on data standards, commercial guidance and data valuation would be helpful. These targeted conversations will allow insights and learnings to reduce duplication and improve the on the ground outcomes. We will use such conversations to build consensus where needed, for example on best practice.

Data capability is not evenly distributed geographically, with rural or smaller local authorities reporting they feel less well supported and understood. **We will hold conversations with local government in areas with lower data capability and assess the feasibility of setting up a partnering scheme with larger organisations to help with skills or specific projects.** Through the scheme, rural or smaller authorities can access the skills and project support they need, ensuring the benefits of better transport data are reached everywhere. **We will explore other ways of supporting these organisations, adapting to their feedback and specific needs.** This should ensure transport users in all parts of the country are benefitting from the advancements data can bring.

Action 6

We will further embed a positive culture around data in transport organisations, promoting materials and examples to inspire leaders and enable wider capability building.

There are many materials and resources available for people to learn new skills around transport data, and access is often free. For these to be used, this learning needs to be prioritised, even in time-pressured and budget-constrained environments. Leaders need to understand the importance of investing in data and people's skills to unlock significant efficiency benefits, cost savings and stay ahead as technology evolves.

To build capability consistently and ensure every authority can plan and use data effectively, **we will create a roadmap of data maturity,** setting out how developed organisations may be in terms of data use**.** This will allow transport organisations to

assess their level, identify next appropriate steps and access relevant resources. It will also identify strengths and gaps in capability across the sector, enabling us to target support where it's needed most. We will align with the Mayoral Data Council data maturity work and support them as appropriate.

To give organisations the right tools, and build confidence among data users, we will **promote existing guidance and resources on data.** We will **ensure they are consistent with our vision and identify where new guidance is needed.** This will make good data practices easy to understand and adopt, encouraging initiatives to design data use and collection from the outset. Adopting a data-driven mindset allows for smarter use of data and increases the likelihood data can serve multiple purposes, saving time and money.

As a priority, **we will assess the need for further guidance on the use of data to support business cases and transport investment,** in line with existing appraisal and modelling guidance**.** Our aim is to help organisations embed data in daily work, improving monitoring of transport infrastructure and effectiveness of investment. This includes **supporting authorities to plan data collection, use and sharing from project outsets,** building on the Digital Twin Infrastructure Data Requirements, so data can provide wider insights. Collecting the right data will help build a picture of life cycle costs, which will inform better cost estimations and support more informed investment decisions in the future. It will also allow lessons to be learned on value for money and improve future spending.

Justifying investment in data can be challenging when transport infrastructure and services compete for funding. To make the case clearer, **we will work with DSIT on their Value of Data framework, ensuring it is applicable to transport data.** Alongside this, **we will publish guidance on how to apply this framework in transport contexts, with real-world examples.** Stronger evidence and practical examples will empower organisations to make the case and secure funding for data projects, leading to upfront investments that save money, reduce duplication and increase evidence-based decision making.

We are committed to innovation through our Transport Research and Innovation Grants. **Over the next four years we will invest £2 million in digital twin projects to pilot new approaches, build expertise and demonstrate leadership in the adoption of advanced data technologies.** We want to improve the sector wide capabilities and enable collaboration across levels of technology to ensure we are preparing our transport system for the future.

User Needs and Communication

Creating the first UK open dataset combining surveys and mobile data

The FUSION project, co-funded by HM Treasury's Economic Data Innovation Fund and DfT's Digital Twin programme, combined survey and mobile data from 3,500 participants, capturing 2.1 million journey legs in the six-month period. The generated open datasets enable DfT to improve inclusive modelling and allow effective assessment the impact of events and new policies on the population. This lets us better understand the transport challenges people face. FUSION is a replicable model for local authorities to help build a better overview of their population, their behaviour, and their needs.

Using data to benefit people

We want a transport system designed to accommodate people's needs, including for the movement of goods. This will continue to evolve over time. Recent changes in people's travel behaviour, and the transport needs of specific groups of people, have been repeatedly raised as issues that aren't currently fully addressed by the data easily available to transport organisations. As use of data improves, there are more requests for increasing granularity and frequency of data. This, along with other changes in the technology and data landscape, means some organisations struggle to keep up to date with what is expected of them and how to best use data in transport.

Clear, two-way communication and ongoing engagement is essential to understand needs, explain changes or influences and identify opportunities for improvements. The department will continue to engage with the transport sector and users, including the freight and logistics system, to understand their needs to make sure data provides value and supports inclusive user-focused services.

Action 7

We will ensure that the data used to design and run the transport system accurately represents the needs of all the people who travel.

We want data to help organisations design better services, infrastructure and policy that reflects people's needs. As more relevant data is collected and published, particularly around transport access needs, it will enable tools and insights to improve the information people need to plan their journeys. We know there are gaps in the data available on passenger needs and behaviour, which limits organisations' ability to gather meaningful insight.

To provide more data on transport user needs and behaviour, we will investigate further data sources and make use of better technology. To start, **we have published the FUSION dataset on travel behaviour and patterns, linking survey data with mobile phone app data.** This public dataset will support planning, research and

innovation, based on evidence about real people's lives on a large scale.

We need to know what the current transport data landscape looks like to establish what already exists and avoid duplication of data collection. **We will publish our Transport Data for Artificial Intelligence Innovation: Discovering, Prioritising and Analysing High-Potential Data Sets research,** which identifies the high value datasets for policy and innovation. This will increase the understanding of what data is available and allow organisations to be aware of more possible data sources. **We will undertake a gap analysis of data on transport users with different needs**, using the Transport Personas as a basis and develop plans to fill them. We will include considerations of those who don't travel, but may if they felt better served.

Improving the transport experience for disabled people and those who face barriers in transport has been identified as a priority, following a review by the Transport Select Committee and work carried out by others across the transport system. One important element of this means improving information for disabled people to use. Feedback from those who rely on this information showed it is particularly poor quality, and that the influence of this is more keenly felt. **We will develop a plan for improving the quality of transport data for disabled people and those who face barriers in transport.** Some parts of the sector have already been working on this, and we will build on what they've done and ensure efforts are joined up across modes. Working closely with the Disabled Persons Transport Advisory Committee, and other important stakeholders who have expertise in this space, we will ensure the plan sets clear actions to improve data quality. This should make the experience for all passengers more equal and improve transport for all.

Feedback is important for continuous improvement in data quality and increasing trust in transport data. We want it to be easier to identify and address concerns around transport data, so we will **create a feedback mechanism around transport data quality issues. We will explore opening this to transport organisations initially, then wider to the public.** We will treat feedback appropriately and sensitively, using it to understand how we can improve the availability and quality of data for transport users. We will investigate the use of AI to analyse the feedback and suggest improvements. This will allow us to harness the power of AI-powered tools to respond to the concerns of transport users influenced by data availability and quality.

Action 8

We will engage with transport experts and stakeholders to ensure work involving data reflects real-world needs.

The pace of change around data and the technology it enables is accelerating, and user expectations are evolving alongside. Transport organisations must stay informed, and we will work closely with user and stakeholders to understand their priorities and challenges. Through ongoing

engagement and feedback, we can ensure our actions are guided by real-world needs. This approach will help organisations adopt best practices and new technologies that provides real benefits for people, reducing cost, risk and improving efficiency.

To ensure the plan is grounded in real-world needs, **we will continue to engage with experts in data throughout the transport system to monitor and challenge the DAP after publication**. Their insights will inform our next steps, ensuring the DAP remains responsive and meets the needs of the sector.

To ensure there is consistency and alignment across the sector, **we will circulate existing guidance on data**, helping organisations understand how these principles apply to their work**. We will use established forums to present and discuss guidance with a wide range of stakeholders,** ensuring it is practical and relevant. We will seek feedback on areas of interest that would benefit from further, or clearer guidance, as well as make best use of the work that exists in other areas of transport. This includes important and evolving areas of interest, such as data security.

The DAP should be accessible and actionable to all organisations in transport. By making sure it can be used and understood, we aim for organisations to be able to apply the same principles in their own work, working together to achieve our vision for transport data. To achieve this, **we will develop a digital resource that makes the DAP more accessible and easier to apply**. We will update this resource with additional guidance, case studies, shared resources, and supporting documents as the operating context evolves and our commitments are updated.

Governance, Protection and Ethics

Robust framework for evaluating new datasets for release

The FRESH Model is a rail industry tool for evaluating datasets against five criteria: Feasibility, Relevance, Effectiveness, Sustainability, Harm. Supported by the FRESH App and overseen by the cross-industry Data Delivery Task Force, it has seen a 67% increase in Network Rail's open data releases, with 72% of datasets screened deemed suitable for publication. FRESH is free to use and can be accessed via the Rail Data Marketplace.

Using data responsibly

We want a transport system that maximises the value and influence made possible by data, within the realms of safe, ethical, legal data usage. While governance and protection are vital when handling data, it is also our obligation to use data assets to provide the best value for the public. We have been told that some guidance on data governance is misunderstood, and misused to restrict its value, with organisations not taking advantage of the growth available from transport data. We've also been told there are complex governance barriers that stop organisations from embracing the vision set out in this document.

The department plays a critical role in setting clear guidance and expectations around data, always upholding the law, best practice and principles. We should be enabling organisations to be confident in their understanding and interpretation of up-to-date guidance, so they can also bring out more benefits of data to improve the transport system.

Action 9

We will ensure that we are maximising the value of data in the transport system to support government missions and transport priorities.

Data has the potential to transform our transport system. If we create a suitable data ecosystem, it will become one of the firm foundations we build all future infrastructure, services and decisions on. Our major projects should be leading the way in creating these foundations. To unlock long-term cost savings and lowering barriers, these projects should be embedding forward-thinking data strategies around collection, sharing and automation to enable future innovations to thrive.

Within the department, we will review and improve our governance processes, creating a central team to establish processes for the data elements of all projects that require DfT funding. Where possible, we will embed this in existing processes and frameworks, ensuring data is a constant feature in the project life cycle, and those working on it do not have unnecessary admin and bureaucracy**. We will publish any developed guidance, including checklists and frameworks for how people can align with the DAP vision**. By making expectations transparent, we enable

consistent decisions and help others adopt the same principles with assurance. Targeted investment in data and AI governance will provide oversight and guidance for significant projects, ensuring our improvements provide benefits across the transport system.

We will continue to co-ordinate closely with important transport technology and data projects across government, which will encourage some of the transformational change in our transport system. This includes the National Digital Twin Programme, the DfT AI programme, and mobility work in the Geospatial strategy. We will **support them to follow the principles set out in this action plan.** This alignment will help ensure major investments create the data groundwork for future projects, and lessons learned are valued and transferable. This will reduce costs for future projects, increase lessons for others to replicate, and allow others to reuse the data and technology created for these projects.

We will take a strategic view of data assets in transport, and the benefits they provide. In line with the data valuation framework DSIT are creating, **we will assess the value and benefits of DfT funded datasets.** This will help us will establish opportunities to unlock further public benefit, including from datasets held by our arm's length bodies and delivery partners.

There are many well-established governance processes adopted in data, with roles and responsibilities set out in existing frameworks. **We will review these roles in the light of maximising the value and benefits of data and communicate the way existing roles are expected to uphold this across organisations.**

We have committed to making sure data is shared with the department in Action 1 for monitoring and learning purposes. We want to make it easier for local government to submit data regularly to DfT on expenditure and delivery on DfT funded projects and statistics, so **we will continue the development of a web portal interface to help local authorities seamlessly submit data, automatically linking submitted data with internal systems to produces outputs for monitoring and statistical analysis.** This will reduce administrative burden and will ensure local data feeds efficiently into national systems, giving us a bigger picture of government investments.

Action 10

We will help organisations apply relevant guidance and frameworks to enable the vision of an integrated, data-driven transport system.

We want organisations to be confident using data effectively by understanding the ethical and legal responsibilities they have. It's also important these are not misinterpreted as overly restrictive, and organisations understand what remains possible. This will allow wider use and sharing of data, increased public trust and reduce the risk of legal challenges. The existing guidance and principles on data governance, protection and ethics needs to be actively used in

practice, so we need to embed these principles in real-world conversations and decisions.

There are many pieces of guidance, produced by central bodies, by the department, by regulators, and by organisations in the transport system, explaining our responsibilities with data. **We will identify existing guidance that would be of high benefit to local government, and circulate it via existing groups and websites, and discuss in appropriate forums.** We want to help organisations apply the best practices in their work and we understand the challenge is often finding the guidance and having shared learning. To address one area of guidance immediately, **we will publish our Principles and Ethics guidance** to make sure the foundations for responsible data use are clear and accessible. This increases our transparency and allows everyone to know what they can expect alongside their legal rights.

We need clarity and consistency across modes, both internally and externally, so **we will establish and publish a comprehensive framework for transport data**. The framework will map the transport system in detail, define structured data layers for infrastructure, service and people. It will incorporate an ontology to create a common language and increase interoperability. By providing a single reference point it will allow us to understand gaps and opportunities to guide investment, for different aspects of transport data. This includes data standards, as described in Action 3. **We will disseminate across the DfT family and our arm's length bodies** to embed a shared approach, with publication enabling wider sector adoption.

We will also seek feedback on areas where organisations feel guidance, legislation or existing frameworks is holding them back from some of the actions and ambitions set out in this and other documents. **We will assess what barriers are occurring for organisations, and work in partnership to understand how to best approach these.** We will share learnings and ethical, legal solutions with the wider transport network.

As the regulatory landscape evolves, we need to stay current. **We will review the new and updated guidance published by the Information Commissioner's Office, following the Data (Use and Access) Act.** As technology advances and brings new opportunities and risks, **we will actively monitor and interpret new governance frameworks surrounding AI,** ensuring transport and data implications are understood. We want everyone involved in transport to understand what these changes mean in practice, so **we will bring these issues to existing forums for discussion, and we will hold dedicated sessions with local government** to ensure everyone is informed.

Considerations for data use

While we look to expand our use of data for the transport system, we must be mindful of:

Ethics

Those involved in data processing and use must do so ethically. Broadly, this means data must be used fairly, transparently, safely, and in a way that holds users accountable. There is a government-wide framework to help people assess this, and we will be publishing specific principles as part of this action plan (Action 10).

Security

As digital security becomes a more complex and active issue, data must be stored and transferred securely. Transport is an essential part national infrastructure, and targeted disruption could have serious consequences. Just as importantly, people deserve to know data around their travel behaviour, needs and preferences are safe from cyber-attack. Consideration for national security should be made when making data available, as well as any security consideration from increased insight due to joining data together.

Data Protection

Linked to this, all personal data is still protected by UK data protection laws. While it is important to make best use of the data available to us, to make our systems meet customer needs and to reduce time and cost of collecting further data when it is already available, this must always be done respectfully and in accordance with UK data protection laws.

Cost

Moving to a more connected data system and using smarter methods to share data (such as APIs) should reduce the overall cost of data storage by reducing duplication of data storage. However, it is important to be mindful of the cost of data systems, particularly the ongoing costs of maintenance and security, and how these costs may scale as more data is collected. The benefits of collecting and using data can justify the cost, but these expenses are significant and should not be overlooked as a key use of public funds.

Environment

Cloud hosted digital infrastructure is more efficient than local digital infrastructure. Many companies hosting and processing data in the Cloud are considering the environmental impacts of their data storage and processing, trying to make sure the creation of materials, the power needed, and the cooling of the processors is done in a more sustainable way. However, this is still an area of concern, and as we store and use more data, we should be mindful of the environmental impacts, and our legally binding Net Zero target.

Inequality

Fairness is an aspect of data ethics and protection. Linked to this is the acknowledgement that inequality could be made worse without mindful consideration and action, including when using data. For example, there are areas of the country with far fewer people working on data, and fewer opportunities to take advantage of the data they create. Without consideration this may make people in those communities have worse transport systems and less funding. Data collection can also be biased, so the inclusivity and completeness of data collection should always be an important consideration.

Audit and accountability

Accountability is also an aspect of data ethics and protection. With more access to tools for considering and analysing data, more people can generate insights and make decisions. It is imperative that decisions made about public sector funding and by public sector officials are auditable and justified. This includes making sure data is archived for appropriate lengths of time (though this can be proportionate to the scale of decision), and tools used are replicable and explainable.

Next Steps

The vision outlined in this document is designed to unlock the full potential of data in transport, provide benefits for the public and create a better transport system for all. Through extensive engagement and building on the past success, we have identified priority areas where DfT can make meaningful influence and move us towards this vision.

These choices reflect current departmental commitments and budgets, ensuring the actions listed are deliverable within this parliament. An indicative timeline is provided in Annex C, though this will adapt as circumstances change.

While DfT plays an important role, we recognise the need to support wider industry. We will continue to engage across the transport system to assess and identify where further support is needed. By implementing these actions, we aim to empower public sector and industry (operators, innovators and academia) to create effective and innovative products and services. Improved data sharing and interoperability will allow organisations to work together towards the same goals. This is essential for creating a better transport system that works for all people and organisations.

To ensure the DAP makes effective changes, we will adopt a proportionate monitoring approach. This includes tracking delivery, learning from feedback and adjusting course when necessary. Each action will have clear outcomes which are reviewed regularly. We will bring together stakeholders to reflect on ongoing work, share insights and identify areas for improvement. The ongoing engagement across the sector, set out in our actions, will play an important role in supporting our monitoring plan. We will continue to work closely with local government, industry and other stakeholders to ensure our approach maintains relevant and effective. By fostering collaboration and learning, we aim to keep the DAP responsive and effective for the transport system and the people who rely on it.

Progress against one theme or area is unlikely to deliver the potential benefits we've identified. Each theme on its own is not enough, and we need to make progress across all of them. Data needs to be shared as well as understood. Organisations need to have time to work on data and be confident in their responsibilities. We will keep this in mind as we monitor progress.

The pace of change in digital, technology and data is increasing. Exciting breakthroughs and new public expectations create opportunities for organisations to deal with existing challenges with technology and data. Ensuring we keep adapting to new best practices, and priorities, for example AI and the use of APIs for data sharing, is important to staying ahead of the evolving landscape, and meeting public expectations. We know that the digitalisation of the

transport system will bring new challenges, especially from increasing complexity and security threats. We will continue to work to understand this complexity, explore the potential new risks and opportunities it opens up and work to mitigate cyber and other risks to keep the system running safely, smoothly and efficiently.

We will continue to communicate openly with the transport sector about our approach and incorporate our ongoing engagement into future iterations of the DAP. Updates to the action plan will be published when they best fit the needs of the evolving transport system and wider data landscape.

We invite experts and organisations across the transport system to work with us. Please email ✉ dataactionplan@dft.gov.uk with relevant information, insight and resources.

We would particularly welcome contact from people to work with us on:

- Data to support disabled people's transport experience
- Data standards
- Increasing data capability in the public sector
- Valuing data
- Barriers to achieving the DAP vision

Annexes

Annex A – Engagement

This annex sets out our approach to engaging the transport sector in shaping an action plan that reflects to the voices of those designing, using and creating transport data, as well as the people who rely on the transport system. We adopted a comprehensive engagement approach, working across all levels and bringing in a range of perspectives from public and private sectors.

The DfT Transport Data Strategy, published in 2023, was developed through extensive engagement and collaboration with the wider transport data community. Since publication, we've gathered feedback on what has worked well and where adaptation is needed. Building on this foundation, alongside Better Connected, we focused on identifying actions that would best support DfT's vision for transport and enable data to underpin that vision. As part of this process DfT engaged widely across the sector, we participated in strategy-related activities with a focus on data, including:

- The Intelligent Transport System (ITS) UK Workshop
- Review of the integrated national transport strategy Call for Ideas, Regional Roadshow reports and People's Panels
- Participation in the Mayoral Data Council
- Roundtable discussions with industry to share experience and insights
- Joint event with ITS UK on data, incorporating the DfT Personas

We have discussed this work with organisations such as The Urban Transport Group, The Disabled Persons Transport Advisory Committee, local government (via bespoke events and existing forums), mayoral strategic authorities and The Transport Technology Forum (at conferences and data sub-groups).

A wide range of public sector, academic and private organisations have contributed their advice and experience into this action plan. This included people reviewing drafts, showcasing their work, and sending us helpful materials. This included Gartner and the British Standards Institute, as well as the many organisations referenced throughout this plan. PA Consulting worked with us on case study development and delivery of our engagement events for local government.

We've worked closely with our colleagues across the department, agencies, arm's length bodies and other government departments.

To ensure comprehensive inputs and technical advice, we sought advice and support from a group of ‘Critical Friends’, including:

- Anna Jordan, Alchera Technologies
- Daniel Clarke, Greater Cambridge Partnership
- Graeme Scott, Arcadis
- Hayden Sutherland, Ideal Interface
- Max Sugarman, Intelligent Transport Systems UK
- Miranda Sharp, METIS DIGITAL
- Stuart Lester, West Midlands Combined Authority

We are grateful to everyone who helped us and contributed to this work.

Annex B – Alignment to other governmental strategies

The Transport Data Strategy

The principles of the Transport Data Strategy (TDS) are still relevant. These are:

- Data should be open by default and using open standards
- Data should be protected and appropriately governed, maintaining public trust, while not using security and privacy as blockers to innovation where privacy protecting solutions can be found
- Data and algorithms should be used ethically
- Data generated through public investment should be used for public benefit
- Data from new mobility services should be shared where appropriate
- We should test the market before commissioning new services and solutions
- Where these principles are not met and the case for intervention can be made, we will consider the use of regulation or legislation

The TDS committed to actions across the same five themes, identified through extensive engagement, adopted in this Data Action Plan (DAP). The department has made progress and has aligned with evolving priorities.

In **Sharing, Discoverability, and Access**, we have continued to make more data available and findable through multiple initiatives, with the encouragement and support of our central data team. We champion open data, open-source code and APIs. We produced guidance on data sharing, linking to other helpful resources. There are now many initiatives supporting those who want to share data, and we will champion these rather than launch separate ones. We are continuing this work with the actions in this DAP.

The Rail Data Marketplace has continued to grow and expand in users and datasets, with almost 4,000 registered organisations. In 2026 it is expected over 300 data products will be available on the site, many that haven't been available before. We currently also maintain the Find Transport Data marketplace. We will continue to review ongoing work on data platforms across government to ensure we are aligned.

We have continued work on delivery data sharing services, such as the Street Manager service. This allows utility companies and highway authorities to share when maintenance work will be undertaken, allowing for better planning and minimising disruption for road users. While powered by an API, the easy-to-use user interface has led to over 180 users able to check up-to-date data.

We committed to developing the data-driven services in local public connectivity. The Connectivity Tool was launched in 2025, providing a tool for those working in local or central government to understand how any location in England and Wales is connected to everyday services. This will allow decision makers to understand potential impacts of new transport schemes, or areas that currently have lower transport connectivity than others.

In **Data Standards and Quality**, we recognised the importance of sensor data. This has been considered in our development of transport digital twins, and we will continue to determine how this can data be improved and shared wider, in line with the National Digital Twin programme.

We have continued to expand data in important areas, including in our National Public Transport Access Network (NaPTAN) dataset. NaPTAN is open and listed on the Rail Data Marketplace for use. We've committed to further developments in Action 4.

We committed to supporting the Future of Transport programme, which was created by a previous government. We are supporting Better Connected, which highlights the need for interoperability, and the importance of data to enable future technological solutions.

We committed to the creation of a data standards panel, and a data standards catalogue. As data standards remains an important concern, we are recommitting to the development of a consistent view of standards. This will include considering where new standards may be needed, or old ones need to be adapted for newer uses. We will use existing governance and advisory processes to inform this, rather than creating a new panel specifically.

We have already assisted in the creation and development of new standards, including open standards on EV charging, road quality, and parking. The international parking standard has made it possible for the National Parking Platform to be developed, directly benefitting drivers and simplifying the process for paying for parking via app.

In **Skills, Culture and Leadership**, we have continued to engage with experts in our projects. This includes the Turing Institute and the Open Data Institute, as well as many more. Instead of establishing an expert group on data, we have sought the opinions of groups that are already established and will continue to do so. We formed a group of experts to advise us on the DAP and will explore how best to seek expert advice on the implementation of our actions.

We are aware of several initiatives that have been created to train people further in coding and data skills, from various organisations. There are also wider initiatives outside of transport concentrating on this. The Mayoral Data Council has been recently established to represent data across all Mayoral Combined Authorities. We are not intending to duplicate work, so will support these.

There are several initiatives that have been supporting the development of skills in transport. The Transport Technology Forum remains a well-used and respects resource of information, which has been developing the Manual for Streets, and now the Manual for Smart Streets, for all to use.

We have held multiple events, including hackathons, within the department to unlock potential and create learning opportunities. The Transport Research Innovation Grants have continued to fund important innovation work such as Alchera Data Technologies whose AI-powered digital twin optimised bus Traffic Light Priority, using multi-modal data to benefit local authorities and support public transport. Another example is 1Timetable Limited whose Core Timetable API provides a collaborative platform enabling reliable, easy and secure sharing of schedule, vehicle and crew data for public transport operators. These innovations reflect the department's commitment to empowering people with data and leading innovation through collaboration.

In **User Needs and Communication,** the evaluation for open data projects was published. The barriers and lessons learned have helped shape the direction of the DAP and have broadly been mirrored in our engagement at this time. While the value of data investment remains a challenging area, work has been started by DSIT to come up with a common framework. In addition, DfT commissioned work to establish the economic value of Digital Twin technology in integrated network management. We will consider further exploration of data investments and how to value and evaluate them.

The transport data community has continued to develop over the time. DfT has maintained a presence at events and continued to engage and share knowledge where possible. Considering restricted time and money across national and local levels of government, we are establishing ways to communicate widely via established and helpful forums. During our engagement, we saw representatives from different areas of the country discuss their work with others and take away learnings and fresh perspectives.

In **Governance, Protection and Ethics**, the government has passed new legislation under the Procurement Act 2023 that will improve procurement of services and can be applied to ensure those involved agree clear data ownership, sharing and publication upfront, of non-personal and non-sensitive data. We have committed to ensuring this is understood widely so that it can be applied across procurement agreements.

We have been heavily involved in the National Digital Twin Programme and have progressed our work on digital twins within DfT. We have engaged widely across the transport system to explore the potential for this technology and begin to set up the foundations needed. This has involved considerations of data standards, a transport ontology, and a data sharing infrastructure to enable the success of this technology.

We're publishing our work on data ethics and will explore further governance and how we can ensure existing frameworks are used appropriately within DfT and wider.

Other governmental strategies

Better Connected

Better Connected sets out a clear vision – for transport to work well for people, for it to be safe, reliable, affordable and accessible so they can get on in life and make the journeys they need to easily. Its three key principles are: put people at the heart of everything we do, use transport to create better connected places and work in partnership with local leaders and experts. The strategy sets out the areas we will prioritise to achieve this vision, including to simplify payments and information, empower local leaders, and champion data and technology.

The DAP sets out further detail on the actions the department will take to ensure data can be used to give people the information they need about transport and give organisations the data they need to improve the services they deliver. The DAP builds on the commitments set out in Better Connected, including:

- "we will publish an improvement plan to increase the data available to help those with accessibility needs plan their journeys" (AA3 in Better Connected, Action 7 in DAP)
- "we will explore options to support knowledge exchanges for local authorities and other practitioners" (DTI2 in Better Connected, Action 5 in DAP)
- "we will go further by developing a Transport Data Marketplace" (DTI4 in Better Connected, Action 11 in DAP)

In addition, the DAP commits to actions that Better Connected acknowledge as essential to create a more interoperable data ecosystem that supports innovation and integration. This includes making sure APIs are used widely, increasing the skills of those in organisations to work better with data, and allowing a consistent view of data standards.

The extensive engagement undertaken to develop Better Connected has also contributed to the evidence base for DAP, and the two documents were worked on in partnership.

Transport Artificial Intelligence Action Plan: Transforming Ambitions

The DfT AI Action Plan identifies data as one of the raw materials of AI. AI can contribute wide reaching benefits across transport to people and organisations, as identified in the section on 'Unlocking Value'. This value requires a firm foundation of data to be realised.

It identifies APIs as a way of effectively sharing data for use by AI innovators. We are committing to more APIs used for sharing data in Action 2.

The AI action plan also identifies how bias in training data may result in unethical and irresponsible use of AI models. We are committed to improving the quality of data, Actions 3 and 4, which will help to reduce any bias. We are also committed to ensuring appropriate governance and protection is followed, in Action 10. This means that data quality and appropriate uses, including for AI models, can be understood.

A blueprint for modern digital government and a roadmap for modern digital government

The Department of Science, Innovation and Technology has produced three documents on how government should make best use of technology and AI, which relies on data.

The State of digital government review sets out the potential for government to use its digital assets and potential to benefit the public, and the ways these are not being achieved.

The Blueprint for modern digital government sets out where the government should aim to be, with a vision of easier lives (for the general public), faster growth (of the economy), firmer foundations (of public services), smarter organisations (within the public sector) and higher productivity and efficiency.

The Roadmap for modern digital government commits to actions to deliver this vision. This includes the commitment for the National Data Library vision to be published in 2026, and more schemes to build digital and data capability in the public sector.

Of the six priorities identified in this work, three are directly applicable to the DAP:

Priority 3 – Strengthen and extend our digital and data public infrastructure: expanding GOV.UK One Login and other common components, enabling access to data through the National Data Library, strengthening cyber and technical resilience and building more responsibly

Priority 4 – Elevate leadership, invest in talent: elevating digital leadership to the centre of public sector decision-making, investing in the digital and data profession and competing for talent and raising the digital skills baseline for all public servants.

Priority 6 – Commit to transparency, drive accountability: publishing and acting more on performance data, and doing more of the work of government 'in the open' so that people can help shape changes that affect them

In the DAP we commit to investing in our data infrastructure and providing evidence for the case for further investment. We recognise the important of leadership and talent, committing to support the initiatives already being driven within the transport system. We commit to publishing more data and making it more accessible, increasing transparency, but also increasing the decision-making power for all.

The blueprint also commits to further use of APIs, making it an expectation that all new services in central government will have an open API. We will begin to assess our existing data for APIs (Action 2) and will consider APIs as included as standard in our guidance for procurement.

The Modern Industrial Strategy

The UK's Modern Industrial Strategy sets out the country's direction of travel to achieve strong, secure, and sustainable growth for the economy. One of the top priorities identified is to 'Capitalise on the value of UK data'. It also identifies the importance of data skills, and how good data is needed to monitor and evaluate public spending.

In the section on data, DSIT commits to developing a data valuation framework. DfT are involved in this work and will produce materials to help others apply this within transport. This should allow local government to understand, and experience, the benefits of investment in data.

The government commits to investing £36 million to develop and deliver new Smart Data schemes. As committed to in Action 1, we are working with the Department for Business and Trade on one of these schemes, on a discovery research project into the possible applications of Smart Data in transport. The project examines how secure, consent-based, and interoperable data sharing could support more reliable, inclusive, and efficient transport systems. This commitment will ensure any future Smart Data Transport Scheme is grounded in operational and user needs.

The National Data Library (NDL) is also committed to in the strategy. We will continue to work with DSIT development of the NDL's approach to sharing public sector data and identify how best to join up our data marketplaces with the NDL and other approaches to business data sharing as mentioned in Action 1.

DSIT commit to a data-led approach on Monitoring and Evaluation of the Industrial strategy. In Action 1, we commit to data being shared back with DfT, which will allow us to monitor and evaluate the transport system and public spend.

Annex C – Indicative timescales

The actions identified in the Data Action Plan (DAP) are categorised as follows:

- **Immediate**: Actions that are already completed or starting now
- **Ongoing**: Continuous work already started
- **Next**: Planned to start within the next year
- **Future:** Planned to start after next year

Actions	Immediate	Ongoing	Next	Future
Action 1: Champion more data sharing, removing unnecessary barriers and enabling responsible access to data				
Ensure DfT data is available and discoverable through appropriate data marketplaces		✓		
Continue to work with the Department for Science, Innovation and Technology (DSIT) on data sharing arrangements, and the National Data Library		✓		
Help embed data sharing principles into existing and new arm's length bodies, including the future Great British Railways		✓		
Create guidance around data sharing and ownership in commercial arrangements for procuring products and services			✓	
Explore embedding appropriate data sharing in DfT contracts to set an expectation across the sector			✓	
Provide practical guidance on how and when datasets can be made open at different levels of aggregation or under specific sharing conditions			✓	
Create guidance about metadata and what to share publicly even if the data itself cannot be shared				✓
Explore options to open access to the 'Data for Road Safety' system to other public authorities			✓	
Ensure data is shared consistently with relevant public bodies, including DfT, on projects, funds, and organisational data			✓	
Continue discovery work with DBT into Smart Data use cases in transport, publish findings, and consider recommendations for further actions			✓	

Actions	Immediate	Ongoing	Next	Future
Action 2: Promote suitable APIs as the expected method of sharing transport data where appropriate, by developing APIs for new and existing DfT published datasets and encouraging others to do the same				
Promote suitable APIs as the expected method of sharing transport data where appropriate, by developing APIs for new and existing DfT published datasets and encouraging others to do the same			✓	
Create APIs for DfT data sources, exploring the DfT owned Automated Traffic Counter (ATC) data			✓	
Share ATC data APIs through the data marketplace and the existing Road Traffic website				✓
Commission and publish user research into the potential for local government and other organisations to use and understand APIs for transport data	✓			
Ensure all DfT APIs maintain the functionality to download data in a flat file format for organisations not ready to use APIs		✓		
Review commercial guidance and consider adding an expectation for suppliers to build useful, secure APIs to share data			✓	
Action 11: Develop a Transport Data Marketplace, exploring the best way to bring in and link to existing marketplaces, creating a single port of call for transport data				
Undertake user research, identifying the requirements for all transport data users to easily identify and locate the transport data they need			✓	
Gather views on the additional benefits of existing data sharing platforms and catalogues			✓	
Undertake a discovery project to identify feasible options to create a Transport Data Marketplace				✓
Retire Find Transport Data as a service				✓
Action 3: Work towards a consistent view of data standards for the transport system to use				
Publish the transport ontology work the department's Digital Twins teams are leading and translate for less technical audiences			✓	

Actions	Immediate	Ongoing	Next	Future
Host events with the industry to understand the priority areas for additional use cases in the transport ontology	✓			
Identify existing work on data standards and explore how to consolidate the previous mapping exercises into a single view			✓	
Co-ordinate the work to expand the ontology in collaboration with experts and publish the results for open use			✓	
Provide clear guidance and principles about new data standards, drawing on existing work and best practice				✓
Publish use cases on data standards and their effective use, demonstrating current and future benefits				✓
Review naming conventions and terminology across the transport system and identify areas where inconsistencies cause issues for data integration				✓
Action 4: Explore the use of technology to improve the quality of data in the transport system				
Engage with users of the Rail Data Marketplace to understand if there needs to be more proactive steps taken to assist quality assessments				✓
Publish our report on the market for sensor data and applications	✓			
Undertake research into camera data collected across the transport system, assessing how this data could provide more value for transport operators and users				✓
Explore the use of data from vehicles and infrastructure to deliver connected services for road users and operators		✓		
Encourage linking to existing data sources in data collection and share effective case studies		✓		
Collect and publish new rail replacement bus stop data through NaPTAN	✓			

Actions	Immediate	Ongoing	Next	Future
Explore sustainable solutions to sharing Bus Open Data Service (BODS) historical data		✓		
Action 5: Create further opportunities for organisations to learn from each other, bringing together a wide range of expertise to benefit all				
Liaise with existing groups across local government and the wider transport system, attending and proactively contributing to discussions on transport data		✓		
Run events, where helpful, as part of existing forums or one-off to allow organisations to exchange ideas on specific topics		✓		
Hold conversations with local government in areas with lower data capability and assess the feasibility of setting up partnering schemes with larger organisations			✓	
Explore other ways of supporting organisations with lower data capability, adapting to their feedback and needs				✓
Action 6: Embed a positive culture around data in transport organisations, promoting materials and examples to inspire leaders and enable wider capability building				
Create a roadmap of data maturity			✓	
Promote existing guidance and resources on data, and ensure they align with our vision and identify where new guidance is needed	✓			
Assess the need for further guidance on the use of data to support business cases and transport investment				✓
Support authorities to plan data collection, use and sharing from project outsets				✓
Work with DSIT on the Value of Data framework and publish guidance on applying it in transport contexts			✓	
Fund digital twin data innovation projects through Transport Research and Innovation Grants	✓			

Actions	Immediate	Ongoing	Next	Future
Action 7: Ensure that the data used to design and run the transport system accurately represents the needs of all the people who travel				
Publish the FUSION dataset on travel behaviour and patterns, linking survey data with mobile network data	✓			
Publish Transport Data for Artificial Intelligence Innovation research identifying high value datasets for policy and innovation	✓			
Undertake a gap analysis of data on transport users with different needs				✓
Develop a plan for improving the quality of transport data for disabled people and those who face barriers in transport			✓	
Create a feedback mechanism around transport data quality issues, initially for organisations and potentially for the public				✓
Investigate the use of AI to analyse feedback and suggest improvements				✓
Action 8: Engage with transport experts and stakeholders to ensure work involving data reflects real world needs				
Continue to engage with experts in data throughout the transport system to monitor and challenge the DAP after publication		✓		
Circulate guidance on data and help organisations understand how these principles apply to their work		✓		
Use established forums to present and discuss guidance with a wide range of stakeholders		✓		
Develop a digital resource to make the DAP more accessible and easier to apply	✓			
Action 9: Ensure that we are maximising the value of data in the transport system to support government missions and transport priorities				
Publish developed guidance for DfT governance, including checklists and frameworks			✓	
Co-ordinate closely with transport technology and data projects (e.g. National Digital Twin Programme, DfT AI programme), supporting them to follow the principles set out in this action plan		✓		

Actions	Immediate	Ongoing	Next	Future
Assess the value and benefits of DfT funded datasets in line with the DSIT data valuation framework to unlock further public benefit				✓
Review governance roles to maximise the value and benefits of data and communicate expectations for these roles				✓
Continue to develop the web portal interface to help local authorities seamlessly submit data to DfT, automatically linking submissions with internal systems for monitoring and analysis		✓		
Action 10: Help organisations apply relevant guidance and frameworks to enable the vision of an integrated, data-driven transport system				
Identify existing guidance of high benefit to local government and circulate it via existing groups and websites		✓		
Publish Principles and Ethics guidance to make the foundations for responsible data use clear and accessible	✓			
Establish and publish a comprehensive framework for transport data, incorporating our transport ontology to increase interoperability				✓
Disseminate the framework across the DfT family and arm's length bodies to enable wider sector adoption				✓
Assess barriers in guidance, legislation, or frameworks, and share legal and ethical solutions with the wider transport network		✓		
Review new and updated guidance published by the Information Commissioner's Office (ICO) and monitor new governance frameworks for AI, bringing issues to forums and holding sessions with local government		✓		