DfT BODS

8th June 2023

Building BODS for the future

Ignition event

Contents

Building BODS for the future

On 9th June over 45 individuals representing over twenty-five organisations, came together, in person, for a one day Ignition event; *Building BODS for the future.*

The overarching purpose of the event was to consider what success could look like in the future for BODS and co-create a view of the actions that might be needed to get there. Specifically participants worked together to:

- Review the vision for BODS, including a view of current success stories and future opportunities
- Validate our vision for BODS considering the future requirements through the lenses of Consumers, Operators, Regulators, Local Authorities and Passengers
- Capture a view of the priority actions we may need to take to maximise on our opportunities
- Outline quick wins that will accelerate delivering an even more successful BODS programme

Exec summary

This was a fantastic session involving a wide range of BODS stakeholders, sharing and aligning their vision for the future of BODS. We hear your feedback and are looking forward to taking forward the key ideas and priority actions identified together.

Key Ideas

- Extend our data where there's a case
- Distributed description messaging
- Review registration and interoperability with other systems in bus and other sectors
- Create a broader community engagement and education forum
- Supporting small operators

A Selection of Priority Actions

- Street manager (DfT) integration – disruptions/cancellations
- Waze / Pigeon integration
- Regional single point of contact
- Clarity on whether services are in / out of scope e.g. school services
- Greater contact with smaller operators

Participants

Abdul Noor, *TFWM*
Adam Akram, *KPMG*
Alex Proctor, *Stagecoach*
Andrew Addo-Smith, *Lincolnshire County Council*
Ben Foulser, *KPMG*
Ben Murray, *KPMG*
Chris Cavanagh, *KPMG*
Chris Sherry, *Passenger*
Craig Standen, *Vix*
Dan Claydon, *Passenger*
David Grachvogel, Vix
Dr J Harrison, *DfT*
Emily Ostridge, *KPMG*
Ewa Glowacka, *KPMG*
Gavin Miller, *CPT*
Gerard Whelan, *KPMG*
Isri Rai, *KPMG*
Jason Mann, *Ticketer*
Jason Thrupp, *DfT*
Jenny Millard, *KPMG*
John Furzeland, *OTC*
John Wilkins, *DfT*
Josh Goodwin, *Bustimes.org*
Justin Bloom, *Vix*
Kiran Bal, *TFWM*
Mark Jones, *TFW*

Matt Law, *UrbanThings*
Mel Knight, *KPMG*
Michael Archer, *r2p*
Michael Meilton, *Wiltshire County Council*
Mike Hughes, *CitySwift*
Mike Nolan, *Traveline*
Nati McCLuskey, *Simplifai Systems*
Norman Kemp, *Nu-Venture*
Paul Hillman, *Stagecoach*
Paul Smith, *Omnibus*
Pete Ferguson, *Prospective*
Peter Deed, *r2p*
Philip Lavin, *CitySwift*
Roger Court, *Kent County Council*
Simon Franklin, *UrbanThings*
Simon Royal, *DfT*
Spencer Brittain, *KPMG*
Steven Penn, *KPMG*
Tim Rivett, *DfT*
Tom Andelon, *DfT*
Tony Brown, *Essex County Council*
Triumph Okojie, *DfT*
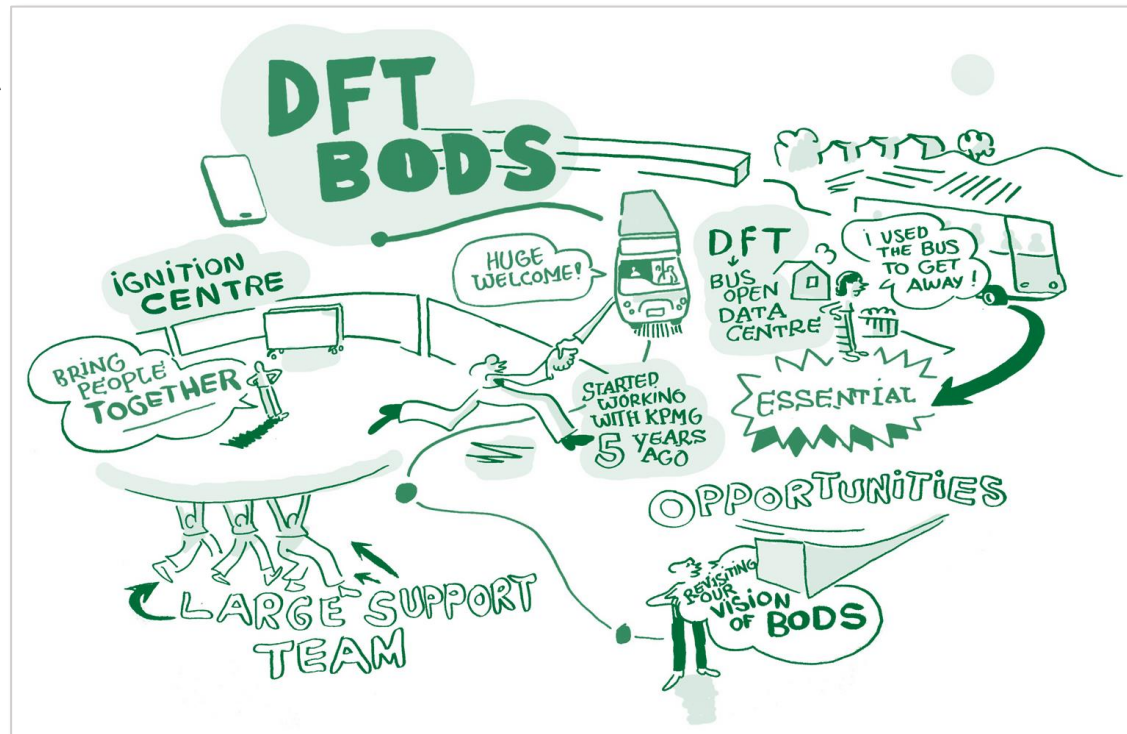Umair Malik, *DfT*
Yusuf Ermak, *KPMG*

Welcome and introduction

Melanie Knight (KPMG) welcomed participants to the event and reflected on the great work that has been done so far, Melanie also shared a personal view on the importance of buses to her life and highlighted the impact of the work that is being done for bus users. Simon Royal (DfT) thanked participants for taking the time to prioritise the event and shared the overarching purpose and objectives of the event.

Melanie Knight
*KPMG Partner
Corporate Services
Transformation*

" *This is the first time in a long time that I have been in an in-person forum with so many representatives* "

" *If it wasn't for the bus I don't know where I would be today* "

Simon Royal
*DfT
Head of Road Safety
and Local Transport
Digital Data Projects*

BODS today and BODS in the future

The day began with a dynamic warm up exercise where participants were asked to think about and draw what the BODS of today looks like to them, and what it might look like in the future. Small groups of 4-5 then reported their illustrations out to the group. A future vision for a more joined up BODS, improved connection between producers and consumers and ease of use were some of the themes that came through multiple groups.

BODS programme to date

Triumph Okojie (DfT) shared the BODS vision with participants, bringing to life elements that underpin the vision. Triumph also reflected on the BODS programme to date, highlighting core benefits and successes as well as stakeholder feedback. Potential future opportunities were also presented to show where there is potential for even more future success.

Triumph Okojie
DfT
Digital Projects Lead (BODS)

" *Sharing and collaborating within the industry enables us to support our stakeholders.* "
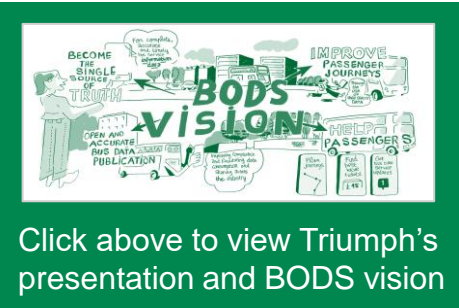
Click above to view Triumph's presentation and BODS vision

" *We need to trust the data, what BODS tells you, happens.* "
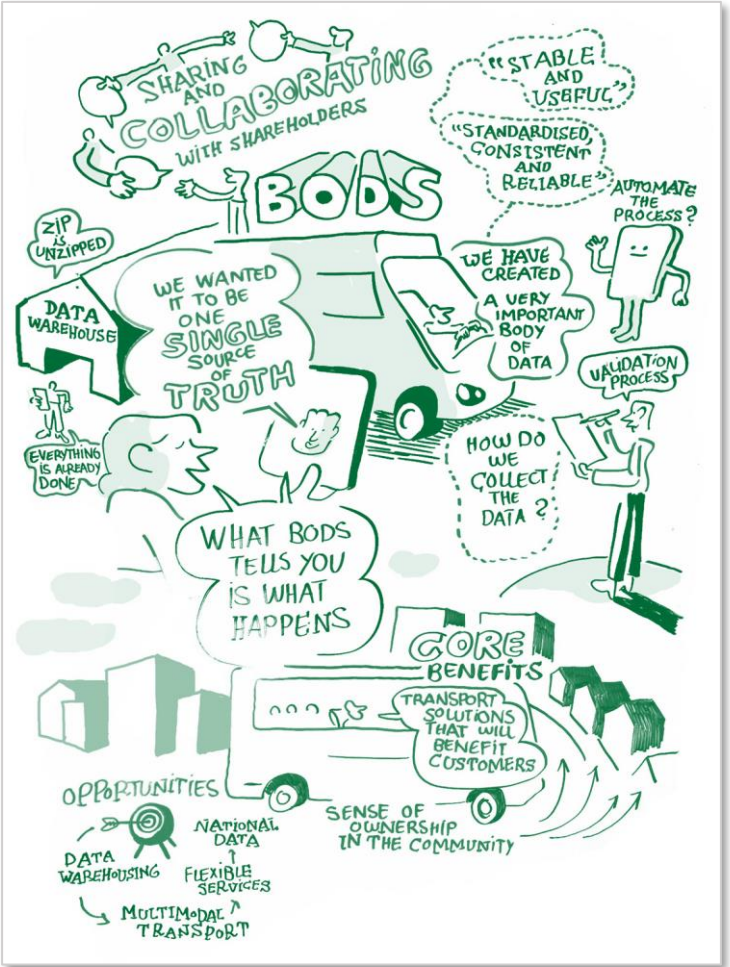
BODS programme to date

Following Triumph's presentation, participants had the opportunity to share their own reflections on the BODS programme to date. Participants were divided into five teams where they were asked to consider how BODS has delivered on its vision to date, the successes they've experienced so far and the potential future opportunities for BODS.

CITI BUS

Abdul Noor
TFWM
Ben Foulser
KPMG
Chris Sherry
Passenger
Dr J Harrison
DfT
Gavin Miller
CPT
Gerard Whelan
KPMG
Isri Rai
KPMG
Jason Thrupp
DfT
Michael Archer
r2p
Tony Brown
Essex County Council

EVORA

Alex Proctor
Stagecoach
Andrew Addo-Smith
Lincolnshire County Council
Ewa Glowacka
*KPMG*
John Furzeland
OTC
Josh Goodwin
Bustimes.org
Justin Bloom
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Prospective
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FUTURA

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Simplifai Systems
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RTIG
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DfT

INTEGRO

Chris Cavanagh
KPMG
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Emily Ostridge
KPMG
Matt Law
UrbanThings
Mark Jones
TFW
Mike Hughes
CitySwift
Norman Kemp
Nu-Venture
Roger Court
Kent County Council
Triumph Okojie
DfT

AERO STAR

Dan Claydon
Passenger
Jason Mann
Ticketer
Jenny Millard
KPMG
John Wilkins
DfT
Kiran Bal
TFWM
Michael Meilton
Wiltshire County Council
Paul Smith
Omnibus
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r2p
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CitySwift
Spencer Brittain
KPMG

BODS programme to date CitiBus

Current view of BODS success and rationale

"Great concept but a way to go"

"We wanted a data warehouse from day 1. Too difficult today to analyse data"

"Grade: C-"

"Benefits still need to be sold to operators: still a compliance onus"

"Need tools to visualise data and check its right / of suitable quality" – without having to read the TransXChange standard and the various supplements

Not at all ———————————————————————— **Completely**

- Long way to go to provide value
- Operators have to invest significantly to provide BODS data
- 'Box ticking' to be compliant
- Data in BODS can be / often is stagnated

- CPT (? Rural Ops, ✓ Large Ops)
- Tech costs
- Benefits – capture passengers
- Frequency and complexity of update
- ? Is a one-size fits all approach suitable?

- Some good use cases and data. But fragmented, incomplete inconsistent, inaccurate data

Successes

Improved data availability – event if incomplete / in accurate – trends (e.g. corridor journey times)
- Adoption of contactless ETMS
- Improve Ops / LA relationships
- Provide LA's for better insights (e.g. school services)
- More standardised data provision – fast delivery of value
- Level playing field
- Brought long standing data issues to a head (what is a bus stop?)
- Single guiding mind / authority

Potential Opportunities

- Provide tools to help people export data in required format
- Reduce the cost to comply
- Build bridge between operators / consumers
- Link up with Office of Traffic Commissioner
- Extend to Scotland and Wales
- "Sell" to smaller Operators
- Address interpretations of standards, bring together and machine readable repository

BODS programme to date – Evora & Futura

Current view of BODS success	Current view of BODS success

Not at all   Completely   Not at all   Completely

Outline your rationale	Outline your rationale

• AVL
• Vehicle journey codes and block numbers
	• Accurate and complete
	• Single source of truth – timetables – fares – real time location
	• Improve passenger experience
	• Consistent data provision across England (ex. London)
	   • Enabling a consistent experience for passengers
	   • Increasing ridership

Successes	Potential Opportunities	Successes	Potential Opportunities
• If BODS is lost – quite inconvenient • Small operators • AVL and Forres – but needs to be improved • Standardisation of data *Potential it can unlock but not there yet	• Journey planning • DQ – timetables particularly • Operators – support to theme • More tools like CFDS and visualisation • Link registration with BODS (tool) • GTFS for all data • Transparency for data matching	• Ahead of Europe • Developers are using it – free apps provide bus on a map and timetables • 80% fares and location, 90% timetables	• Align between England (incl. TfL), Scotland, Wales, NI • Be more pragmatic in the approach to filling the gaps • Multi modal • Accuracy, consistency and completeness of dataset

BODS programme to date – Integro & AeroStar

Current view of BODS success	Current view of BODS success

Not at all — Completely

Not at all — Completely

Outline your rationale

- Lost use of passenger data through flat fares
- Coverage – willingness to engage
- Accuracy –
  - Disruptions technology
  - Resourcing difficulties for operators – competing priorities for operators
- Policy
- Compliance
- Registrations reform

Outline your rationale

- 50% < BODS < 70%
- Capture incorrect data
- ✓ Usable
- X Missing data
- X Operational vs static data
- X Onerous on operators
- X Harsh wording on errors
- Spectrum of DQ

Successes

- Live vehicle location data for majority of operators across England
- Reduction of barrier to consumption of data

Potential Opportunities

- Combining existing datasets e.g. Street Manager. Disruptions technology.
- Stop arrival data
- Feedback mechanisms

Successes

- Wiltshire real – time – good passenger experience
- Commercial opportunities – Spain ☹ UK ☺

Potential Opportunities

- Simpler data correction
  - 95 / 95 A
- Connected feedback
- Interpolate missing data
  - Historical input
  - Cancellation
- ~~Warehouse~~ > Repository

Future perspectives

Ben Foulser (KPMG) shared his thoughts on the exciting future of the bus industry, highlighting bus market trends and his belief that there are numerous reasons to be optimistic about the future of bus travel. Ben also emphasised the current government initiatives relating to the industry and shared his view on the future of bus data, relating it back to opportunities for BODS. John Wilkins (DfT) highlighted the importance of the work being done through BODS and the need to collaborate to continue to build on the successes of BODS today, for the future.

Ben Foulser
KPMG
Director Infrastructure
Transport Technology

"More people commute to work by bus than all other forms of our public transport combined. It's an incredibly important tool in our economic future."

CLICK HERE FOR PRESENTATION

"You can trust that the BODS team within DfT is working really hard to deliver all the things that you want. We have a clear direction and vision that aligns with where you want to be. We need you to come on that journey with us."
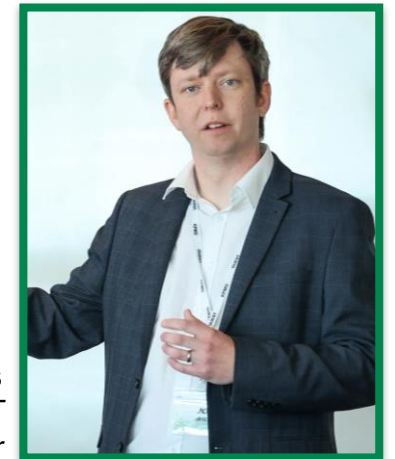
John Wilkins
DfT
Deputy Director

Putting ourselves in a future position of success

Looking back from a position of success in 2026, participants were asked to think about the future of BODS and reflect on being a world-leading example of open source data. Participants were split into five teams, each focusing on a different BODS stakeholder lens; Consumers, Local Authorities, Operators, Passengers and Regulators.

Firstly, teams shared their perspectives on what a hugely successful journey to 2026 would look and feel like from their different stakeholder lenses. Following lunch, participants were then asked to synthesise their BODS 2026 vision, and bring to life two key ideas to accelerate towards 2026.

CONSUMERS

Alex Proctor
Stagecoach
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LOCAL AUTHORITIES

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REGULATORS

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KPMG
Tony Brown
Essex County Council
Umair Malik
DfT

Putting ourselves in a future position of success

CONSUMERS

What does this successful world look and feel like in 2026?

- Single, real-time, complete, accurate source of the truth
  - AVL + RTI
  - Timetables
  - Fares – across all media, products and operators (inc. capping and milt-operator)
  - Disruptions inc. planned/unplanned – inc. cancellation
- Passengers can make the right choice for them in advance or in real time
  - Multi-model journey planning
  - Multi-model ticketing (and single payment)
  - Multi-person ticketing (e.g. families)
- Occupancy
- "Cool" AI and ML embedded into BODS to support operator data capture (inc. timetable change prediction)
- Consumer feedback loop inc. real-time on service status and quality
- All bus stops have real-time information
- Includes community transport and DRT
- Happy operators who consumers don't need to engage with or if they do, the information is correct

| What can we do now with our data that we couldn't before?	What are the benefits for consumers?	What were the biggest changes we made to get here?	What was the big first step we took back in 2023 to drive this change?
- Consumers can confidently make informed decisions about multimodal travel - I can access data more readily and easily as a customer - Consumers are confident that these is certainty of long-term provision and a long-term roadmap for improvements and enhancements - Customers have wider information that informs lifestyle choices - Consumer can provide feedback and have confidence that it has been received and analysed		- Simplify the process to provide data (Technically, Regulatory, Lost) - Gamify? Rewards? - Balance compliance, enforcement and support - Consider shifting onus – LA's - regional BODS teams? - Tightening existing standards and define new standards (e.g. occupancy) - #pax / %pax / wheelchairs? - New data sets to augment and/or validate BODS - E.g. passenger counts - More investment - Move clever capabilities (e.g. AI + ML) in BODS - Within BODS or 3rd party providers – innovation competition?	- PRIORITY #1 - Build the business case for further investment - Build local capacity to support operators - Provide a platform to promote innovations to the bus community - Engage with the Bus Centre of Excellence - Plan the next innovation competition

Putting ourselves in a future position of success

LOCAL AUTHORITIES

What does this successful world look and feel like in 2026?

1. DRT AND services included. (could every door be a bus stop?). 'Book a bus' (MPLTA example)
2. Greater AUL > Better traffic prioritisation for buses
3. Real-time accuracy feedback / validation (Adoption, safety, accessible)
4. Disruptions data captured directly (street manager integration)
5. Data ownership clarity (stop location, in use)
6. Devolved nation integration
7. Better franchise management
8. Better bus investment decisions
9. Integrating "notes" field data
10. Better mainstream APP (Google) integration
11. Redirected data submission 'friction'

What can we do now with our data that we couldn't before?	What are the benefits for local authorities?	What were the biggest changes we made to get here?	What was the big first step we took back in 2023 to drive this change?
	1. Better road management reduced congestion 2. Reduce car usage 3. More active travel 4. More efficient and successful transport comms 5. Better transport planning 6. More trusted service, more reliable, better experience, less complaints 7. Sustainability 8. Better investment	1. Adding DRT 2. Siri-SX into BODS integrated with street manager (disruptions) 3. Devolved nation integration 4. Passenger feedback through consumer products 5. "Book a bus" functionality enabled	1. Update TransXChange profile for DRT 2. DRT integration
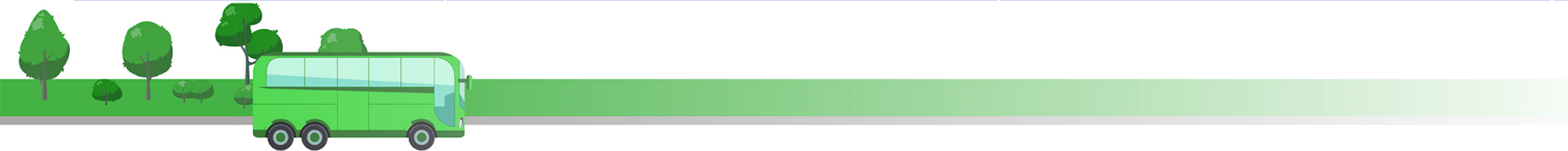
Putting ourselves in a future position of success

OPERATORS

What does this successful world look and feel like in 2026?

- All issues for compliance are resolved – OTP, Routes, YSMICLAD
  - Highways authority cause timetables issues e.g. diversions in one week
  - Tough to keep up to date with roadworks
  - Timetable will not be followed – dynamic scheduling?

- All locations sent to BODS with end of day share of data
- Data is same on all channels and sources
- Historical data is complete
- Data handled once tools available to allow operators can easily create compliant data

| What can we do now with our data that we couldn't before?	What are the benefits for operators?	What were the biggest changes we made to get here?	What was the big first step we took back in 2023 to drive this change?
• Potential on demand x less instant	• Less effort to achieve compliance • TC knows why performance wasn't 95% • Issue • Loss of historical fares data due to introduction of flat fare (only buses where bought ticket, not end fare stage)	• Ensure consistency of access for equipment and systems • Education • Access to planned disruption data - Accurate dates (not a 'window' when it may happen) • Controlling abilities of utilities to dry the road (low charge) • Improved data quality checking • Promote missing live data to ABODS if in operator systems • Recognise there are rural SULs and not everything is like London or a large city	• Data accuracy checking before submission

Putting ourselves in a future position of success

PASSENGERS

What does this successful world look and feel like in 2026?	• Available, accurate information delivered when and how needed • Dynamic journey plan • Multimodal – use and pay • Accessibility data • Single transport solution (MaaS) where operators offer services • Live data • Franchising • Good rural transport • On time • Fares and ticket API are the same • Open data between operators for tickets • Accurate and useful • Up to date • Service that meets customer need

What can we do now with our data that we couldn't before?	What are the benefits for passengers?	What were the biggest changes we made to get here?	What was the big first step we took back in 2023 to drive this change?
• Occupancy • Confidence in arrival – improved accuracy • Live update in performance • 2 way data • Data security / sharing • Project coral aggregator • Bus stop data	• Travel without worry • Accessible to all • Travel in comfort • Travel safety • Convenient / simple • Royalty	• Improved data reliability • Route and timetable linked to co-location • Performance data published and acted on • Trusted infrastructure for fares and settlement data BASED ON • Revenue expenditure to drive service improvements • Long term commitment / stability	• 2050 commitment to bus service development plans so all pieces can grow to the best they can be to provide a complete / interconnection solution
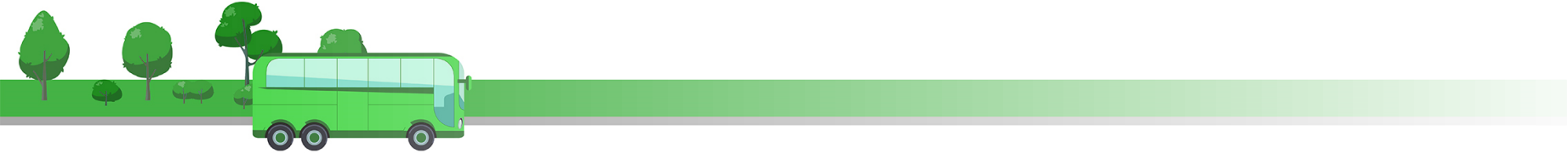
Putting ourselves in a future position of success

REGULATORS

What does this successful world look and feel like in 2026?

- Single source of registration truth (inc EP areas)
- Fair to all (operators large / small, passengers)
- Education
    - Greater understanding of punctuality tools
    - Better understanding of data quality
- Better substantiation of concerns
- Level playing field
- Smooth disruption information delivery
- More fares data visibility

What can we do now with our data that we couldn't before?	What are the benefits for regulators?	What were the biggest changes we made to get here?	What was the big first step we took back in 2023 to drive this change?
• Indications of non-punctual services / ops • LA access to data • OTC access to data • Identify missing data • Identify services / operators that no longer run • Compare with legacy systems • Evaluate competition	• Cost effective • More accurate from LA perspective • More transparent because data is more public • More efficient • Passenger satisfaction • More emphasis on punctuality	• Single source of registration truth • Education • BODS ecosystem has evolved • Disruptions – visibility / management • Better relationships between stakeholders • Support mechanism for smaller operators	• Collaborative working with education

Putting ourselves in a future position of success – 2026 Visions

CONSUMERS

Passengers are confident in making the right choices using a single, real-time, complete and accurate source of the truth for all public transport (including community transport)

Passengers can provide real-time feedback on service status and quality

LOCAL AUTHORITIES

All registered services included and available in BODS, including DRT

BODS is a part of the normal running of an operation

BODS is the trusted first port of call for bus data

OPERATORS

BODS joined up and integrated with operational management and all other parts of bus ecosystem

PASSENGERS

Beryl never sees a ghost bus when she travels to rural Sommerset to see Beverly

Confident that she sees every bus that should be there on her travel app on her phone

She buys her ticket with frictionless payment

REGULATORS

- Reliable Data Flow
- Single source of truth (in EP areas too)
- Fair to all
- Education
  - Punctuality tools
  - Data quality
- Better understanding of concerns
- Level playing field
- Smooth delivery of disruption delivery
- Fares visibility

Putting ourselves in a future position of success – Key Ideas

LOCAL AUTHORITIES

Key Idea 1
- Add DRT to BODS
- + Integration documentation (API)
- + DRT Provider Information

Key Idea 2
- Disruption information
- Integration with Street Manager
- SIRI feed

OPERATORS

Key Idea 1
- Recognise the needs to small and rural operators
- Have different resources and needs to urban operators

Key Idea 2
- End-to-end data process is more than BODS
- Data quality
- Roadworks

REGULATORS

Key Idea 1
- Collaboration
- Education
- Support
- Stakeholder relationships

Key Idea 2
- Level Playing Field
- Link registration and BODS
- Single source
- Fair to all stakeholders

PASSENGERS

Key Idea 1
- No ghost buses
- Operators can push a button to say 'bus be cancelled'
- Data passed along

Key Idea 2
- Frictionless ticket
- Cross operator fares options
- Contactless payment on phone
- Extra points for using Apple Pay within the travel app

CONSUMERS

Key Idea 1
- Single platform for BODS data provision
- With on-hand support and training
- With tech enablement (e.g. OCR, ML, AI) (potentially enabled by innovation comp.)
- "BODS Professional Services" (outsourced data input) – accredited
- With incentive /reward for consistently high data completeness and quality
- With cost effective solutions for zero-cost for operator compliance (e.g. ruggedised smartphones for AVL/RTI provided/loaned for free)
- With operator community channel/forum

Key Idea 2
- Tighten existing standards to remove interpretation – "TransXChange"
- Define new standards for data we want (in collaboration with consumers) – inc. occupancy, consumer feedback
- Collect and link to new data sources
- Expand to Scotland and Wales (and TfL)

Driving towards our future success

Following the future position of success exercise, a group discussion was had to think about some of the emerging themes to focus on and continue to develop in the final round of work. The group agreed on five big ideas (see below) and were asked to sign up to the idea they wanted to focus on most.

Building on the earlier rounds of work, teams were then asked to build out their ideas, by exploring the benefits and thinking about some of the quick wins and actions needed to help accelerate towards a future position of success.

TRUSTED DATA (WITHIN OUR AUTHORITY) WITH CONSISTENT ENGAGEMENT/ FEEDBACK

Ben Murray
KPMG
Dr J Harrison
DfT
Kiran Bal
TFWM
Mark Jones
TFW
Michael Archer
r2p
Mike Hughes
CitySwift
Mike Nolan
Traveline
Peter Deed
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EXTEND OUR DATA WHERE THERE'S A CASE

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Tom Andelon
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Yusuf Ernak
KPMG

REVIEW REGISTRATION AND INTEROPERABILITY WITH OTHER SYSTEMS IN BUS AND OTHER SECTORS

Alex Proctor
Stagecoach
Craig Standen
Vix
David Grachvogel
Vix
Ewa Glowacka
KPMG
Gavin Miller
CPT
Isri Rai
KPMG
Jason Thrupp
DfT
Paul Smith
Omnibus
Steven Penn
KPMG
Umair Malik
DfT

BROADER COMMUNITY ENGAGEMENT AND EDUCATION FORUM

Dan Claydon
Passenger
Matt Law
UrbanThings
Paul Hillman
Stagecoach
Pete Ferguson
Prospective
Simon Franklin
UrbanThings
Tim Rivett
RTIG
Tony Brown
Essex County Council

SUPPORTING SMALL OPERATORS

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Andrew Addo-Smith
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Wiltshire County Council
Norman Kemp Nu
Venture
Philip Lavin
CitySwift
Roger Court
Kent County Council
Spencer Brittain
KPMG

Driving towards our future success

Idea title	Trusted data (within our authority) **with consistent engagement/feedback e.g. timetable, fare, location**
Idea edit	*Distributed description messaging*

Idea description	Benefits
Waze for a bus and other 3rd party apps can enable passengers and operators to more easily alert BODS of disruptions.	Passenger know about issues that relate to their journey. This will increase perception of reliability and avoid cases where a bus does not turn up when it is expected to do so.

Idea title	Extend our data where there's a case

Idea description	Benefits
• Location frequency (high) for traffic optimisation • Accessibility data • Disruptions data integration • Cancellations / diversion (Siri-SX) • Roadworks / prediction algorithm • Interoperable • Multimodal data	• Improved flow (through traffic lights) • Improved accessibility – equity • Optimise ticket pricing • Greater BODS adoption • More reliable information • Better regulation of services / level play field • Operator • Algorithm optimisation • Better journey planning • Lower operator support costs • Better passenger experience • Better insights • Better planning

Quick wins / actions	Who should be involved?
1. Waze / Pigeon integration	1. Passenger, driver
2. QR for feedback – predictions	2. Bus operator control rooms
3. Ticket machine feedback – journey cancelled button	3. RTI operators to use this data and feedback about punctuality and journey with no location

Quick wins / actions	Who should be involved?
1. Street manager (DfT) integration – disruptions	1. DfT, Operators, LA, Consumers
2. Publishing / internal frequency improvement	2. DfT BODS supplier, Device (Ticker, Vix) Operators, Consumers
3. Accessibility / fleet list NaPTAN	3. DfT, Operators, Consumers, LAs
4. Cancellations	4. Operators, DfT, Device provider, Consumers, LAs

Driving towards our future success

Idea title	Review registration and interoperability with other systems in bus and other sectors

Idea title	Broader community **engagement** & **education** forum (including consumer & operator)
Idea edit	*Create a broader community engagement and education forum*

Idea description	Benefits
Streamlining processes related to registering bus services. Integrating BODS with related systems to enable a complete picture to be easily presented to passengers.	• Reducing operator costs / time • Improved compliance and reliability • Increased trust • Data reflecting road works / road management • Improve customer information

Idea description	Benefits
• Communicate objectives of BODS • Share knowledge and experience • Support	• Sharing value of BODS • Idea generation with evidence • Understanding BODS – benefits, value, goals • Contacts and connections – expertise • Problem solving • Raise visibility / profile of BODS • Coordination • Everyone has an equal voice – inclusive for all operators • Safe space to discuss BODS

Quick wins / actions	Who should be involved?
1. Adding registrations to TransXChange profile – operator only supply TransXChange once	1. OTC (including EP's)
2. Clarity on whether services are in / out of scope e.g. school services	2. DfT
3. Street manager integration with disruptions	3. Technology suppliers

Quick wins / actions	Who should be involved?
1. Regional single point of contact • Inc use of digital forums	1. Local / regional group of – L.A, Operator, Tech, 'BODS'
2. Communicate – purpose, mission, vision of BODS and small op. case studies (value benefits)	2. DfT / KPMG / 'BODS champion' coordinator
3. BODS roadshow – open top bus tour	3. Existing industry groups

Driving towards our future success

Idea title	**Supporting small operators**
Idea edit	• Affordable and accessible tooling • Local authority support – funding? / revenue • Reduce cost and offers effort for operator • Improved tooling for operators • Have a data quality tool within BODS to convert inputs to required standard

Idea description	Benefits
• Nationwide local authority support for smaller operators • LAs to provide this • Support to operators of a certain size and provide the data to BODS • Alongside improved tooling for operators which they can choose to use if they wish	• Reduction of burden on resources of smaller operators • Control over data quality for local authority • Greater coverage within the dataset

| Quick wins / actions	Who should be involved?
1. Greater engagement	1. Government / policy makers
2. Potential reduction of burden on operators	2. Local authorities
	3. Operators

Sponsor reflections and close

The event closed with Yusuf Ermak (KPMG) thanking everyone for their ideas, feedback and participation throughout the day. Yusuf highlighted the importance of driving the next steps to ensure momentum from the session continues. Simon Royal (DfT) echoed Yusuf's thanks to all participants for their contribution to the event and reflected on the passion in the room about the success of BODS. Simon noted the next steps, including a review of the tangible actions from the day, and concluded the event by highlighting how "awesome" 2026 will be in the world of BODS!

Yusuf Ermak
KPMG Partner
Advisory
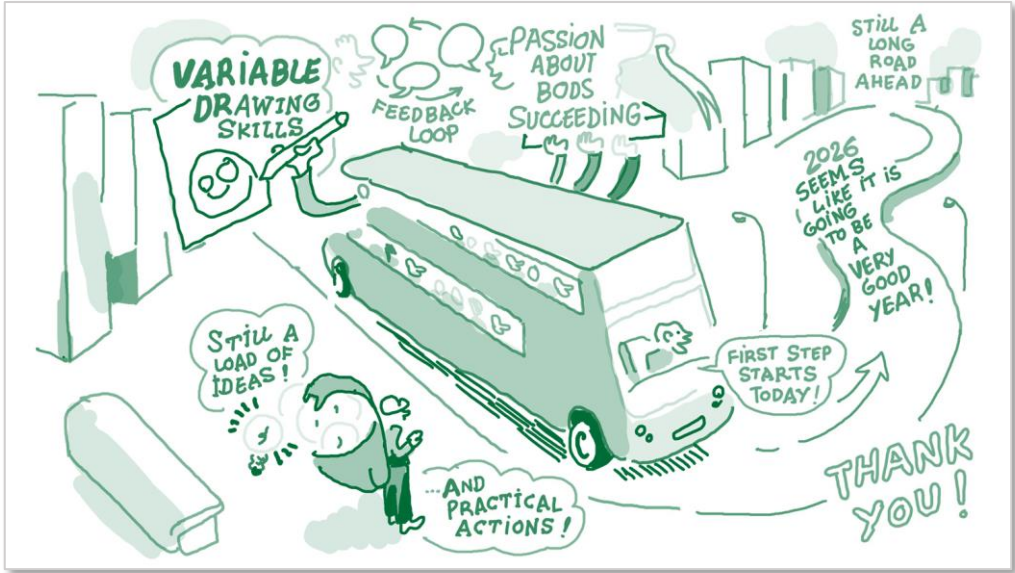
Simon Royal
DfT
Head of Road Safety
and Local Transport
Digital Data Projects

" *I have worked on BODS for many years and I have learnt so much from today's discussion.* "

" *The people in this room are passionate about BODS.* "

" *What is going to be our moonshot?* "

" *The first step is today.* "

BODS programme to date

Triumph Okojie *DfT, Digital Projects Lead – Bus Open Data Service*
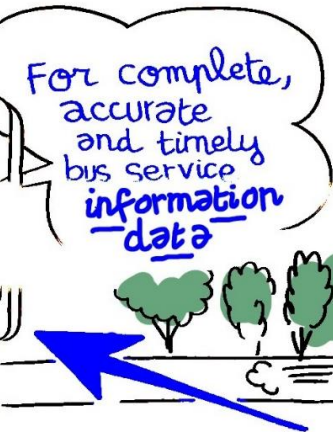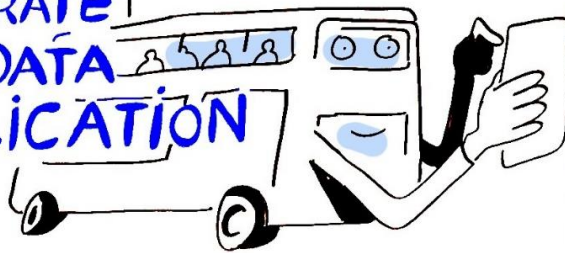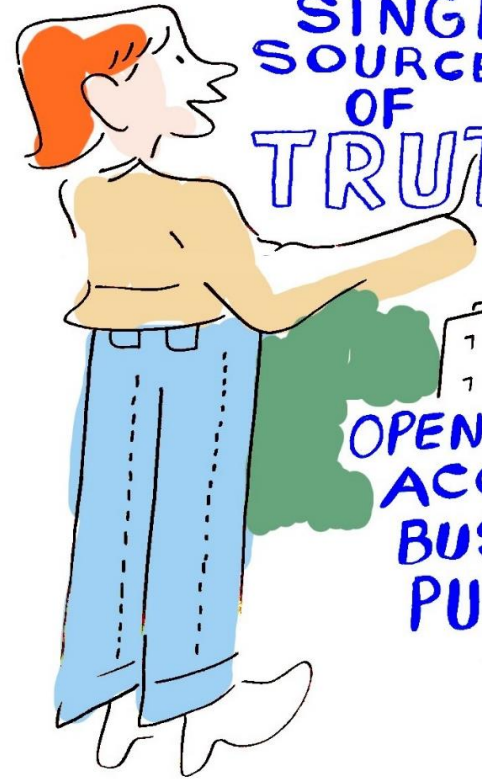
BODS Core Benefits

Journey Planners

- BODS Data is used by the UKs foremost journey planners.
- Easy-to-use, standardised formats – API and bulk download data is delivered in industry standard formats of GTFS, TXC, SIRI-VM, NeTEx
- Reducing barriers to entry for innovators and developers using transport data and thus benefiting the passenger

Service Insight

- Single point of data access for Local Authorities to support the optimisation of their bus network and make better informed decisions.
- Fostering increased community engagement by provide a platform for communities to actively engage with and understand the bus network, creating a sense of ownership and accountability for public transport.
- Opportunity to govern the entire network, collaborate with DfT and industry to support the National Bus Strategy

BODS Core Benefits

Service Performance

- By providing bus operators real-time data on the performance and efficiency of bus operations, BODS would assist bus operations and decision making improvement thereby improving the overall quality of the bus network.
- Real-time data will provide valuable information to authorities, enabling them to respond to incidents and improve the overall safety and reliability of the bus network.

Single Source of Truth

- BODS as a single source of truth for English bus data, enabling the creation of transport solutions that offer passengers easy-to-use platforms to access bus schedules, route information, and real-time location updates, thereby improving their overall experience of bus travel.
- Ultimately reduce the bus operator interaction with government, thus eliminating the opportunity costs of such interactions.
- Provide government with greater statistical and analytical capabilities that may inform supportive and favourable government policy an initiative.

Department for Transport

BODS Stakeholder Feedback

"[BODS] brings together Bus transport data: standardised, consistent and reliable, which is essential for small innovative companies like us to have, when entering the market and building their TOM."

- Matt Law, Urban Things (BODS data consumer)

"[BODS] remains stable, useful, and is unlocking valuable insight for operators, transport planners, and the public. We hope that the methodology that has been adopted here forges a path for other areas of public services and data sources, as we strive for ever more open and accountable national infrastructure."

- Graham Pether, Head of Bus Applications, Go-Ahead Group

"KPMG has proved to be resourceful and adept at using a range of techniques and support mechanisms to engage with bus operators and data consumers, whilst the experiences and understanding of digitisation in other industries that they have been able to bring to the programme has been helpful in reducing the time to deliver, and achieve the current levels of adoption of BODS."

– Tim Rivett, General Manager, RTIG (trade body for public transport technology stakeholders)

BODS Opportunities

BODS Opportunities

Accessibility
Emmissions
Registrations
Standards review

Extended datasets/ Consolidation

Inclusion of data such as block information would facilitate accurate cross journey predictions for data consumers.

Cross journey predictions

Data warehousing

Moving from indexing service to data warehouse would enable querying of more granular data and facilitate historical data analysis.

Coverage of Scotland and Wales to create a National Dataset across Great Britain

National Data

Multimodal Transport

Incorporate multi-model transport data such as tram / ferry data.

Historical AVL and Timetable data would enable training of machine learning models to gain deeper insights into published services.

Historic data

DfT Data Initiative Integration

Flexible services

Inclusion of flexible services would increase the completeness of BODS data as a representation of all English registered services.

Integration with other DfT data Initiatives for interconnected systems across UK transport sectors.
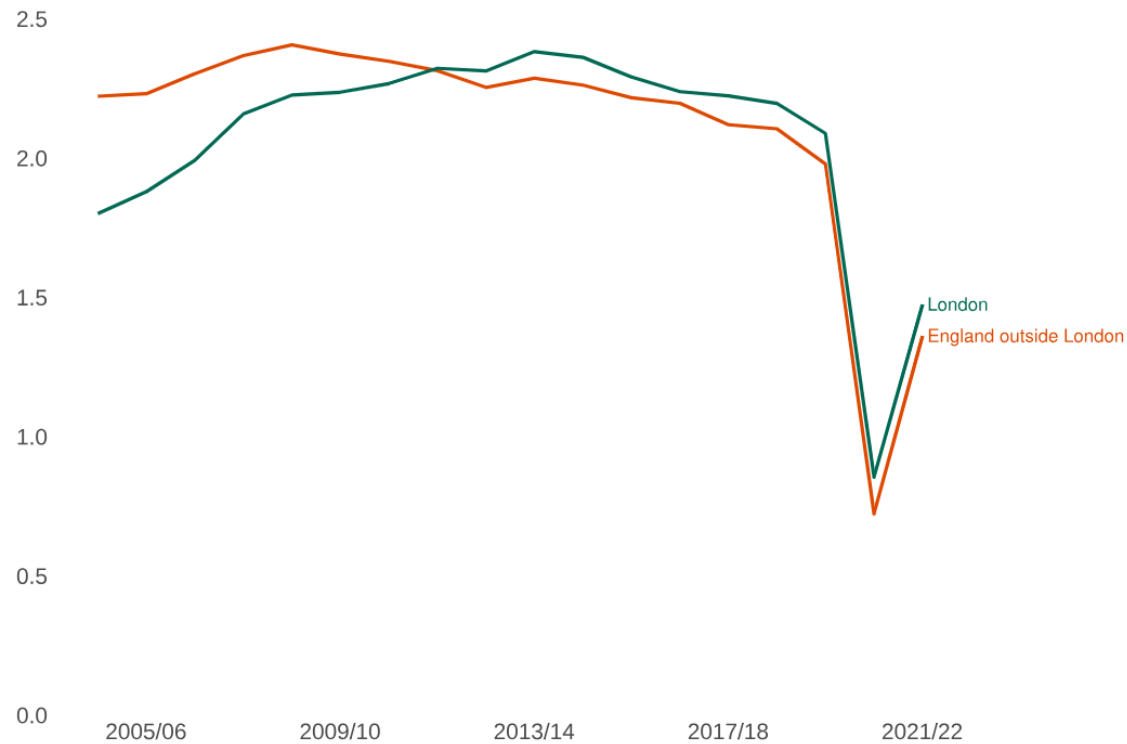
Department for Transport

Future perspectives

Ben Foulser *KPMG, Director Transport and Infrastructure Technology*

John Wilkins *DfT, Deputy Director*

Chart 4: Local bus passenger journeys in England outside London and London, financial years ending 2005 to 2022 (BUS01a)

> " There was a decrease in the number of buses used by local bus operators in England by 4.2% from 33,000 in the financial year ending 2021 to 31,000 in the financial year ending 2022 "
>
> Annual bus statistics: year ending March 2022 (revised)

> " 23 per cent of bus services in England, amounting to 2,800 services, have been cut since the launch of the Bus Back Better Strategy on 15 March 2021 "
>
> Campaign for Better Transport

Buses account for **over 60% of public transport** journeys.

More people commute to work by bus than all other forms of public transport combined.

More than half of students could not travel to education or training without the bus.

A **10% improvement in local bus connectivity is associated with a 3.6% decrease in social deprivation**. University of Leeds

Bus commuters add **£64bn to the economy** each year. University of Leeds

Bus shoppers spend **£21bn per annum in city centres**. Greener Journeys 2016

Wider social impacts add **over 30% to the benefit-cost ratio of bus investments**. KPMG LLP

Local bus operators in England employ an estimated **100,000 full time equivalent staff** DfT with the bus and coach **supply chain supporting a further 83,000 jobs** University of Leeds

"A full double decker bus can take **up to 75 cars off the road**" Greener Vision

If everyone switched just one car journey a month to bus, there would be **a billion fewer car journeys and a saving of 2 million tonnes of CO_2**. Greener Journeys (2013)

A brand new diesel car with a single occupant can emit more nitrogen oxides than a new bus carrying 50 or more passengers. Diesel cars emit 10 times more toxic pollution than trucks and buses, data shows | Pollution | The Guardian

KPMG

In some areas **patronage by students and young people had returned to, and in some cases exceeded, pre-pandemic levels**. Weekend patronage has also recovered strongly.
Arriva and WECA written evidence for the TSC Implementation of the National Bus Strategy review

In the most recent survey carried out by independent passenger watchdog Transport Focus, **88% of customers across the UK reported being satisfied with their bus service**, with **value for money up from 70% to 73%,** and bus outperforming rail in all categories bar frequency of services.
Bus User Survey - 27 January 2023

"Early evidence suggests a **positive impact of patronage of the £2 flat fare,** recently extended to October 1 2023"
£2 bus fare cap evaluation: interim report January 2023

"National Express has reported revenues of £774.4m in its first quarter, **a 17% increase on 2022**".
Revenue grows at National Express despite UK bus strikes | TheBusinessDesk.com

"International investors swoop for UK bus and train groups"
£2 bus fare cap evaluation: interim report January 2023

"The Bus Service Improvement Plan process has **brought out the best in many local transport authorities and bus operators. We have been impressed by the ideas and innovation produced and the enthusiasm and commitment shown**. We note the prevalence of bus priority plans as part of urban bids and demand-responsive transport schemes as part of rural ones, a sign of the very different challenges bus services face in different parts of the country"
National bus strategy: one year on (parliament.uk)

Commitments

Demand Responsive Transport	Fifteen LTAs were allocated **funding for DRT schemes totalling over £37m** as part of the BSIP process. A further seventeen pilot schemes have also been funded by **£20m from the Rural Mobility Fund**.
Ticketing	Through Project Coral, Government is working with partners in local government and the bus industry to develop a **technical solution to enable multi-operator ticketing**
Zero Emission Buses	£150m has been allocated to create the **UKs first all-electric bus town by 2025 in Coventry,** with Government committing to **end the sale of new, non-ZEBs by 2032** at the latest
Municipal Bus Companies	Following calls from the Transport Select Committee, a **call for evidence on ending the ban on municipal bus companies** is anticipated to be launched in late 2023
BSOG Reform	The Transport Select Committee has called for a **consultation on BSOG reform** to happen imminently
Franchising	A handful of **authorities are either actively progressing franchising or preparing for it** through development of business cases

Future of transport data

"Removing barriers to data sharing could unlock the full potential of the UK's transport network, providing a value of £14bn by 2025"

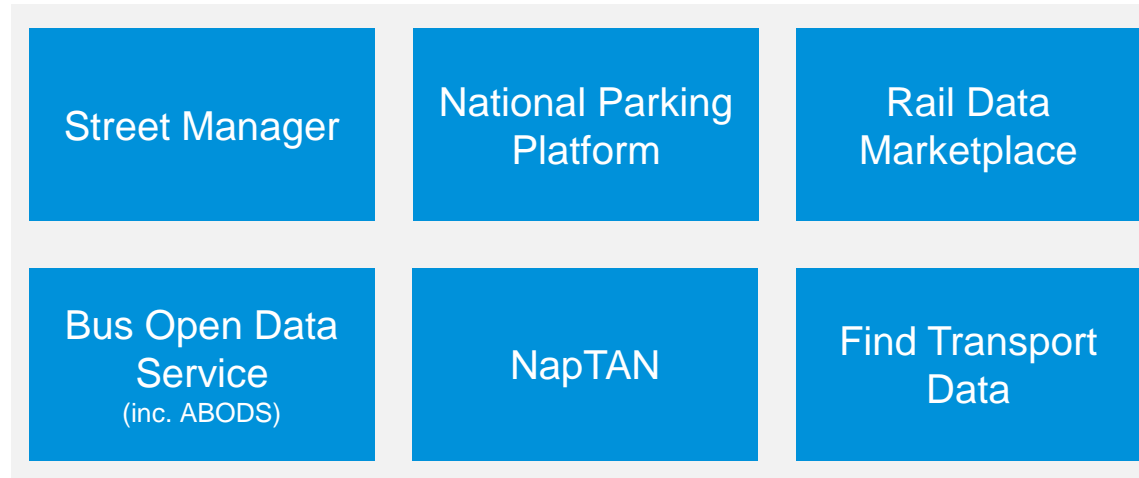ODI, Transport Systems Catapult, and Deloitte, 2017

"Better operational and policy insights and new apps and services that help 'nudge' behaviours towards more active travel and decarbonisation"

Transport Data Strategy

MaaS Code of Practice

TRO Data Model

Street Manager

National Parking Platform

Rail Data Marketplace

Bus Open Data Service (inc. ABODS)

NapTAN

Find Transport Data

OPCD Alpha

National Digital Twin Programme (NDTP)

"The release of open data by TfL is generating annual economic benefits and savings of up to £130m for travellers, London and TfL itself, and £14m per annum in GVA"

Deloitte, 2017

Bus Back Better

- **Bus stops should show accurate information about the services stopping there**. Every town, city and rural area should have easy to access, up to date maps, showing all local bus services.

- We will make sure that apps can **provide passengers with accessibility data about bus stations and stops.**

- We will be providing **funding for predictions information which will inform the passenger how many minutes away their bus is from the bus stop and on average how long the journey will take**.

Future of Transport

- **Data from new mobility services must be shared where appropriate** to improve choice and the operation of the transport system.

Transport Data Strategy

- …long-term aim to provide a **scalable, common, platform for sensor data, and act as a part a transport specific urban component to the national digital twin**.

HMT's Economic Data Innovation Fund (EDIF)

- Better data to support **contribution to Bus Strategy, including the design of future bus network and potential franchising models**

- **Improved data discoverability** by linking to 'Find Transport Data' metadata catalogue.

- A model for data sharing – including common standards, definitions etc. – that could be applied to all the UK's major urban centres to **create digital twins and support the creation of more liveable cities and 15-minute communities/urban villages**.

- **New datasets** e.g. air quality, meteorology, traffic flow, micro-mobility and active travel

Document Classification: KPMG Public