Strategy & Programmes Committee   *SPT*

Transport Scotland Bus Open Data Consultation

Date of meeting   13 June 2025   **Date of report**   28 May 2025

Report by Head of Bus Strategy & Delivery

1. Object of report

To seek approval from the Committee for SPT's response to the Transport Scotland Bus Open Data Consultation.

2. Background to report

Members will recall that the Transport (Scotland) Act 2019 included powers to require bus operators to provide to the public more information upon request on services, including routes, timetables and fares. It was envisaged that such information would be made available electronically by bus operators in Scotland, similar to the Bus Open Data Service (BODS) approach already in place in England.

The powers however do not include provisions for operators to routinely publish Open Data on bus patronage, or taxpayer funded concessionary travel trips, except when services are cancelled via the registration process.

The Scottish Government now intend to introduce secondary legislation which defines what specific information is required to be published by local bus operators, timescales for submission, and to determine admissible electronic formats for such data. It is envisaged that this will allow for consistency across Scotland and to align with the rest of the UK. Transport Scotland is consulting on the proposed approach to this secondary legislation. The consultation ends on 21 June 2025. Further details are available at:
https://www.transport.gov.scot/consultation/scottish-bus-open-data/.

SPT was recognised at the 2023 Scottish Transport Awards for excellence in public transport information provision, noting the organisation manage Scotland's largest Real Time Passenger Information (RTPI) system, a comprehensive database of registered local bus services and overseeing the production of printed roadside bus service information across Strathclyde, in partnership with participating bus operators. SPT also provides input to the NAPTAN bus stop database which is managed by the UK Department for Transport. Bus Open Data is anticipated to assist such activities.

3. Outline of Proposals

In terms of scope, the Bus Open Data Consultation focuses on the following key data:

- Information pertaining to routes, stopping places, timetables, fares and tickets;

- Information pertaining to changes or proposed changes to routes, stopping places, timetables, fares and tickets; and

- Information pertaining to the operation of services including (but not limited to) real time information about the location of vehicles operating the services and the times at which they stop, (or are expected to stop),and information about the operation of services in the past.

With reference to the above data types, the consultation covers the following areas:

- What information is directly relevant to bus users;

- Which types of bus service should be in scope;

- Timescales for delivering Bus Open Data;

- Frequency of data provision by bus operators;

- Guidance required for the bus industry to deliver open data; and

- Technical formats for data to be provided.

The key aim of the Bus Open Data Consultation is to gather views from all interested parties to inform secondary legislation. This includes identifying any additional data which should be brought into scope.

SPT is supportive of Transport Scotland's aims in relation to Bus Open Data. The type of data sharing proposed can support SPT and partners in planning, delivering and communicating about bus services across the west of Scotland. Such data will also be made available to third party developers to be utilised in journey planners and other applications.

In terms of a timeline to deliver Bus Open Data, Transport Scotland have proposed the following phased approach within the consultation documents:

Proposed date	Time after regulations come into force	Requirement
April 2026		Bus Open Data regulations in force.
October 2026	Six months	Local Authorities required to keep NAPTAN (bus stop) data up to date.
April 2027	12 months	Bus operators to submit timetable data.
October 2027	18 months	Bus operators to submit simple fares data.
April 2028	24 months	Bus operators to submit complex fares data, punctuality data and real time data.

The result of the above programme would be the full introduction of Scottish Bus Open Data by 2028 – subject to the initial date of April 2026 being achieved. This would be nine years after the primary legislation, and five years after the introduction of the Bus Open Data System in England, which was introduced in a phased manner from 2021 to 2023. SPT therefore encourages Transport Scotland to progress with all possible urgency.

Within our draft response, SPT has highlighted that for Bus Open Data to be successful in Scotland, further consideration of the availability of skills, resources and systems needed in order to support the roll out, delivery and maintenance of such systems.

To an extent, SPT already supports many operators with back-office systems relevant to bus open data, providing expertise across scheduling, ticketing, real time information and other specialist fields. SPT will require additional funding support from Transport Scotland in order to support operators with the additional requirements of Bus Open Data legislation. SPT notes that a similar level of technical support is not likely to be available across the rest of Scotland.

Omission of data on bus patronage, particularly government funded concessionary travel trips, is a significant weakness of the current Open Data legislation in Scotland. SPT has highlighted that such information is readily available to bus operators (and Transport Scotland in respect of Concessionary Travel) and should have been included to support improved planning of public transport infrastructure and services across Scotland.

SPT has provided specific responses to all relevant sections of the consultation and SPT's full draft response is included in Appendix 1 for consideration.

4. Committee action

The Committee is recommended to approve the draft response to the Open Data Consultation as detailed in Appendix 1 of the report.

5. Consequences

Policy consequences	*Bus Open Data aligns with the aims of the Regional Transport Strategy.*
Legal consequences	*None at present.*
Financial consequences	*None at present.*
Personnel consequences	*None at present.*
Equalities consequences	*None at present.*
Risk consequences	*None at present.*
Climate Change, Adaptation & Carbon consequences	*None at present.*

Name	Gordon Dickson	**Name**	Valerie Davidson
Title	**Head of Bus Strategy & Delivery**	**Title**	**Chief Executive**

For further information, please contact Gordon Dickson, Head of Bus Strategy & Delivery on *0141 333 3407*

The Bus Open Data Consultation 2025

S1 Consultation Identifier Questions

Q1. Are you completing this on behalf of yourself or an organisation?

☐ Individual
☒ Organisation

Q1b. If an organisation, please list below.

Strathclyde Partnership for Transport

S2 Questions on Types of Service

Q2A Do you agree with our approach that only services registered with the Traffic Commissioner, or within a Local Transport Authority franchise area should be required to provide open data?

☐   Yes
☒   No

Q2B If 'No', which of the following services not in scope would you like to include, with the understanding that there is no central list of these services.?

☒   Long distance coach services, where stops are more than 15 miles apart

☐   School and college services, where the only passengers are students and educators

☐   Substitute services for railway services which have been temporarily interrupted

☐ Excursions and tour buses which do not run regularly

☐ Free bus services, such as an internal car park bus run by a shopping centre

☒ Other, please use the box below to provide details of your answer

We propose that Section 19 services are exempt from the requirements.

We note that in England, Section 22 services are also exempt from Bus Open Data Service (BODS) requirements but we do not consider that these services should be excluded.

S3 Questions on the Use and Disclosure of Information

Q3 Do you have any concerns over the use of the Open Data in this way?

☐ Yes

☒ No

☐ Don't Mind

☐ Don't Know

S4 Questions on The Prescribed Information – Passenger Views

Q4A Do you consider yourself as having additional access needs when using public transport? This could mean features of the bus or bus stop itself, such as audio announcements, or features on the vehicle, such as a wheelchair accessible space?

☐Yes
☐No

☐Prefer not to say

Q4B From the following list of routine information, please tick all of the information you would find useful if made available to you when planning a bus journey, if it were available.

☐ Who operates the bus service? (e.g. which bus company runs the service)
☐ What the bus might look like (e.g. it has purple livery, or it is a green bus)
☐ The name or number of the services (e.g. the X8, 'The Town Service' etc)
☐ The names of the bus stops the bus will call at, in order
☐ The days and times the bus will arrive/depart from each bus stop
☐ The service(s) a ticket is valid on (For tickets that operate in a zone, the service numbers, routes or bus stops included in the range of the ticket)
☐ The ways that you can pay the fare (e.g. cash, contactless, etc)
☐ What format the ticket will be in (paper, smartcard, digital, tap on/off etc)
☐ The cost of the ticket
☐ The difference in price if you bought it in another format or in another way, For example if a ticket is cheaper if you buy in advance or online, compared to buying onboard, or has a discount applied if bought through an app
☐ Where you can buy tickets? (e.g. Online, in person at a shop, or only on the bus etc)
☐ The places you will you see information about fares, tickets, special offers or routes? Such as, advertised on board buses, on a bus operator website, via a third party app etc.
☐ All of the above

☐   None of the above

☐   Other (please describe)

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Q4C Assuming all of the routine information you would find useful were available, how would you prefer to obtain a ticket for travel? Please rank the following methods in order of preference. If you are entitled to free travel, please disregard the options for payment, and rank the following methods in order of preference by type.

Option 1   I would like to obtain a paper ticket for a specific journey, using cash, contactless payment, or mobile payment (for example, Apple Pay)

Option 2   I would like to 'tap' a personal bank card or electronic bank card to make unlimited journeys up to a set fare cap

Option 3   I would like to hold a physical (plastic) card that I can add a balance to or that would result in a 'Bill' at the end of a set period

Option 4   I would like to use a app on an electronic device which allows me to pre-pay for a journey (or a number of journeys)

Please list the options in order of preference:

Q4D Which of the following 'real time' information would you find useful in planning your use of a specific service/services, if it were available?

☐ Live Bus stop arrival and departure times

☐ Live timetables

☐ Live disruption updates

☐ On-board capacity (e.g. how full the bus is)

☐ Number of wheelchair accessible spaces and if it is in use

☐ If there is Wi-Fi/Power/Charging facilities, and if they are operational

☐ If there are toilets on board, and if they are operational

☐ If the bus has audio/visual capability, For example, it announces or provides information about the current and next stop visually

☐ Which payment types the bus can accept e.g. cash, contactless, card etc.

☐ The emissions created by the bus

☐ All of the above

☐ None of the above

☐ Other. Please use the box below to provide details of your answer

Q4E Specifically thinking about the bus stop or stopping place of the bus, which of the following would you find useful to planning your journey, if it were available?

☐ Accessibility features

☐ Name of the bus stop (for the purposes of finding it on a timetable)

☐ Location Description (busy streets may have multiple similarly named stops)

☐ All of the above

☐ Do you have any other comment on bus stop information? (please describe below)

S3 Questions on The Prescribed Information – Industry views

Technical Questions on Routes

Q5A Do you agree with our approach to require the information listed above, about timetables, stopping places and about route information?

☐   Yes

☒   No

☐   If you do not agree, how would you amend the proposed list?

In general, the proposed approach is appropriate, with the following observation.

"Services registered with the Traffic Commissioner" include demand responsive transport (such as SPT MyBus services). These services may not have the same data available such as timetables and routes.

Q5B What barriers, if any, do you foresee in organisations being able to provide this information?

The major barriers for the provision of all bus open data will be the level of digital maturity/expertise of some operators, along with the practical challenge of carrying out the work required along with existing workload and responsibilities.

While timetable, route and stopping place information should already exist for all relevant services, the technical capacity of operators to make this available as open data will vary significantly. For some operators there will be no major barriers, for others there will be challenges relating to resource and capability.

SPT already provide back-office support to some operators, particularly those running subsidised services, but this type of support may not be available to all operators across Scotland.

A comprehensive and consistent approach to supporting operators across
Scotland will be required.

SPT and other relevant authorities will require appropriate funding support to
enable the extent of technical assistance that may be required by operators.

An additional barrier may be incompleteness of formal data sets for stopping
points in rural areas ("road end" pick up/drop off points), this information would
need to be more formally documented.

Q5C How often do you believe this information should be updated? We propose that information should be updated no less than two weeks before any change takes place, and in any case, not less than every 12 months?

Agreed, in line with existing processes for new and amended registrations which
requires initial information 10 weeks in advance and detailed information typically
two weeks in advance. Noting that two weeks may not allow enough time to
reliably ensure publication of updated information in all formats including printed
roadside information.

Technical Questions on Fares

Q6A Do you agree with the proposed definitions for simple and complex fares concerning tickets?

☐   Agree

☒   Neither agree nor disagree

☐   Disagree

☐   Don't Mind

☐   Don't Know

☐   If you do not agree, how would you amend the proposed list?

The question and the concept of simple and complex ticket types demonstrate the extreme complexity for customers trying to interpret ticketing and payment options for bus travel across Scotland.

Open data can provide an important change by improving transparency and accessibility of fares data, but will not in itself resolve confusion and uncertainty – visibility of all available ticket options may create even more confusion.

The benefits of open fares data will be multiplied by simplification of the available options.

Q6B Do you agree or disagree that the requirement to provide fares information should be phased in over time, with the initial provision of simple fares information required first, with complex fares information to follow?

☐ Agree

☒ Neither agree nor disagree

☐ Disagree

☐ Don't Mind

☐ Don't Know

Do you have any suggestions for any other information about tickets and fares that should be included? Please explain why this would be useful

Noting that a phased approach was adopted for BODS in England (with the same timescales of 24 months apart), we suggest learning from that experience and proceeding accordingly.

There is a risk that a phased approach will leave customer with easy visibility of some fares such as standard single fares, but no easy visibility of more complex fares, which might offer better value for money.

There should also be requirements for fares information to be updated in advance of any planned changes (for example to inform customers' future journey planning), with suitable timescales to allow information to be made available to customers.

If long distance coach services are included in scope for open data, consideration will need to be given to the dynamic pricing adopted by some operators for these services.

Technical Questions on Real Time Information

Q7A Do you agree with our list of requirements for real time location information, and real time facilities and accessibility information?

☐ Yes

☒ No

If no, how would you amend or expand the list, and why?

Location information should specifically include Schedule Adherence.

Q7B What barriers, if any, do you foresee in organisations being able to provide this information?

The major barriers for the provision of all bus open data will be the level of digital maturity/expertise of some operators, along with the practical challenge of carrying out the work required along with existing workload and responsibilities.

Some of the data required particularly in Stage 2 is simply not available from some operators at present and hardware and software changes may be required to facilitate this.

SPT already offer relevant support to some operators making use of technical expertise within the organisation.

A comprehensive and consistent approach to supporting operators will be required. SPT and other relevant authorities will require appropriate funding support to enable the extent of technical assistance that may be required by operators.

Q7C Do you agree with our two stage approach with supporting guidance, or would you prefer to see all the requirements of stage two prescribed in statute openly from commencement? Please give a reason for your answer

A two-stage approach is acceptable subject to clarification and further discussion on the content of the two stages.

As much as practically possible should be included at Stage One.

Q7D We propose that real time information needs to be as close to 'real time' as possible. We would therefore like to hear your views on an acceptable feed time for location services

☐   Data provided within one minute while the service is in operation

☐   Data provided within the average time between stops on the route (For example, if the average travel time between two stops is 3 minutes, an update would be required within three minutes)

☐   Data provided within a timescale set by geographic location, detailed separately in guidance(For example, within one minute in a city region, but within 5 minutes in a rural area)

☐   Data provided within one minute, but with the possibility of exemptions set in guidance (For example, guidance could set a process to agree and identify geographic areas with low connectivity where the timescale could be longer, or could simply list agreed areas which would be automatically exempt)

☒   Another timescale (please provide)

The aim should be for the maximum available refresh rate, with the same standard applied in all locations. Every 30 seconds as an absolute minimum.

Real time information is currently supplied by most operators via Ticket Machines which have GPS/GPRS built in. Data quality is equally important as refresh rate and could be improved by separate systems for capturing and transmitting vehicle location data.

Technical Questions on Bus Stop Information

Q8A Do you agree with our proposal to include the above information as part of the new statutory duty for local transport authorities to provide bus stop information?

☒ Yes

☐ No

If no, how would you amend or expand the list, and why?

Q8B How often do you believe this information should be refreshed? For example, every three months, every year, after any change, etc?

The requirement should be for updates immediately after the implementation of any changes to bus stop infrastructure.

Otherwise it would be appropriate to ensure a review and refresh of data once or twice per year.

S4 Questions Training, Compliance and Enforcement

Q9A Do you (or your organisation) operate bus services in Scotland?

☐Yes
☒No

Q9B How prepared do you believe the industry is for bus open data requirements under the new Regulations in Scotland

Large operators with south of the border operations should be well prepared, from experience with the Bus Open Data Service (BODS) in England.

Others, particularly SME's, may be less well prepared and may face resourcing and technical challenges.

Within the Strathclyde area, the industry is supported to an extent by SPT given our knowledge and experience in this area. This may not be the case in some other parts of the country.

SPT and other relevant authorities will require appropriate funding support to enable the extent of technical assistance that may be required by operators.

The other key parties will be ETM suppliers, who should be fully engaged in the process to plan for open data provision.

There may be a requirement for a centralised support hub to ensure a consistent national standard of all data being shared.

Q9C What topics and content would you like to see included in the guidance?

Guidance should be comprehensive to provide practical support operators in the consistent implementation of the Regulations.

Q9D Do you think you will require specific tools or training to be compliant with the new Regulations?

Operators will require access to appropriate scheduling systems.

Currently the use of different software packages can lead to variations in file formats produced (for example TransXchange).

The following TXC versions are being utilised across the transport industry depending on the age of systems used by operators and RTPs.

TXC versions v2.1, v2.4 & v2.5, BODS TXC (England & Wales open data format)

Suitable training and guidance will be required to ensure consistency of outputs.

Q9E What is your view on the proposed requirement for new data to be provided two weeks in advance of any planned changes for tickets, routes, fares, or timetables?

Please refer to our response to Q5C.

Q9F What financial impacts, if any do you foresee for businesses in meeting the new bus open data requirements under the new Regulations?

Committing staff time to meet the bus open data requirements will have a cost impact. There may be a requirement to carry out additional staff training. There may be new back office/software costs (scheduling package, ticketing management package).

Transport Scotland have funded some small operators to produce SIRI feeds, this is a short-term package, if discontinued the operators will need to cover those costs on an ongoing basis.

Many operators will not be able to justify additional staff costs or software costs (which can be significant) and would require third party support instead.

S5 Timescales

Q10 Do you agree with the proposed timescales requiring the submission of the prescribed data?

☐Yes
☒No
If you do not agree with the proposed timescales, what would you alter, and why?

The Transport (Scotland) Act 2019, including provisions for bus open data, is now six years old. Notwithstanding some challenging circumstances in the interim period, the secondary legislation should ideally have already been introduced, allowing the benefits of bus open data to be realised for the benefit of passengers.

From the current position, the proposed timescales appear to be reasonable. Operators and relevant authorities should be appropriately supported to ensure no further delays.

S6 Data Standards

Route and Timetable Information

Q11A To align with the format the majority of organisations use, and to align with timetable standards in England and Wales, we propose to require the use of the TransXChange data standard. Do you agree that we should set TransXChange as the standard for timetable information?

☒ Agree

☐ Neither agree nor disagree

☐ Disagree

☐ Don't Mind

☐ Don't Know

If you would like to share the reason for your answer, please do so here.

TransXChange is an appropriate standard, but it is essential to ensure that operators produce consistent outputs regardless of different scheduling software tools used.

Q11B What barriers, if any, do you foresee if legislation requires Scottish bus operators to provide information in this format?

The major barriers for the provision of all bus open data will be the level of digital maturity/expertise of some operators, along with the practical challenge of carrying out the work required along with existing workload and responsibilities.

Q11C This question is to capture the point of view of a data user, rather than a data provider. From the point of view of a body using, what standard(s) should data be provided in from the data hub for data consumers?

- ☒ TransXChange
- ☒ NetEx
- ☒ GTFS

- ☒ SIRI-PT
- ☒ ATCO CIF
- ☐ JESS

- ☐ Hastus
- ☐ Other
- ☐ Don't Mind
- ☐ Don't Know

If you would like to share the reason for your answer, please do so here.

TransXChange:

SPT as a data user requires both:
- Registration format TransXChange files (used to record the initial registration service change for consultation, preparation of Roadside publicity and updating of websites) and
- Realtime format TransXChange files(file created once the registration has been passed by the Office of the Traffic Commissionaire and contains further details such as Journey numbers/journey start times, details of bus

> stopping patterns, positioning journeys/dead run journeys, bus
> workings/blocking information – all of this is required for Realtime
> predictions).
>
> The latest possible version of TransXChange should always be used.
>
> JESS data is no longer produced by SPT or available.
>
> All other popular formats for Developers considering making use of Bus Open
> Data should be made available (e.g. TransXChange, NetEx, GTFS, SIRI-PT,
> ATCO CIF) and reviewed periodically by Transport Scotland.

Fares and Ticket Information

Q12A To align with the fares standards in England and Wales, we propose to require the use of the NetEx data standard. Do you agree or disagree with this preferred standard?

☒ Agree
☐ Neither agree nor disagree
☐ Disagree

☐ Don't Mind
☐ Don't Know

If you would like to share the reason for your answer, please do so here.

Q12B What barriers, if any, do you foresee if the BOD Regulations require Scottish bus operators to provide information in this format?

The major barriers for the provision of all bus open data will be the level of digital maturity/expertise of some operators, along with the practical challenge of carrying out the work required along with existing workload and responsibilities.

Q12C From the point of view of a data user, what standard(s) should data be provided in from the data hub for data consumers?

☒ NetEx
☒ GTFS
☐ Other
☐ Don't Mind
☐ Don't Know

If you would like to share the reason for your answer, please do so here.

Real Time Information

Q13A We believe that real time data should be provided in the SIRI data standard to collect more raw data and to align with English and Welsh standards. Do you agree or disagree with this approach?

☒ Agree

☐ Neither agree nor disagree

☐ Disagree

☐ Don't Mind

☐ Don't Know

If you would like to share the reason for your answer, please do so here.

The specific technical details relating to SIRI feeds would require more discussion and clarification.

For example, SPT would not ingest Siri SX from other parties through our systems but is capable of producing Siri SX outputs for third parties.

Q13B What barriers, if any, do you foresee if legislation requires Scottish bus operators to provide information in this format?

The major barriers for the provision of all bus open data will be the level of digital maturity/expertise of some operators, along with the practical challenge of carrying out the work required along with existing workload and responsibilities.

Q13C From the point of view of a data user, what standard(s) should data be provided in? This would mean what format would the data be provided in from the data hub for use by data consumers?

☒ SIRI

☒ GTFS

☐ Other

☐ Don't Mind

☐ Don't Know

If you would like to share the reason for your answer, please do so here.

> SIRI – Minimum requirement is SIRI VM (vehicle monitoring) this contains all the data about the location, service, direction, start time destination etc of a service. This can then be matched to the Realtime TXC data which is loaded into a third part system (Novus RT for SPT) and that system can provide Realtime predictions.

Bus Stop Information

Q14A Do you agree with our proposal to use the NaPTAN data standard for this information?

☒ Yes

☐ No

If you would like to share the reason for your answer, please do so here.

Q14B What factors, if any, could be a barrier for local transport authorities in maintaining bus stop information this way?

Lack of suitable Asset Management systems may be a barrier for some authorities. SPT have recently installed the Hexagon (previously Infor) system for this purpose.

Q14C How often should this information be updated?

☐   Every time there is a change

☒   As often as possible but not less than every three months

☐   As often as possible but not less than every twelve months

☐   Other (please explain)

S7 Any Other Comments

Q15 Are there any other comments you wish to provide in relation bus open data?

All requirements for open data should be delivered as quickly as is practically possible.

There are various other data sets which could support and enable the effective planning and delivery of bus services if they were required to be provided as open data. These include:

- Passenger loading (patronage data). A full and comprehensive data set would enable and support more effective network planning for the benefit of bus users.
- In the absence of all bus patronage data being shared, there is an absolute requirement for open data to include number of concessionary passenger journey (including 60+, disabled and under 22 passengers). The national concessionary schemes are delivered using public (taxpayer) funds and it is appropriate that the relevant data is widely available for all relevant data users.

Applying the same principles of improved open data sets across the wider transport sector could further improve bus operations such as:

- Road works register.