

DECEMBER 2022

OS NGD Transport New Data Update

Contents:

- Transport Enhancement Updates – All transport enhanced or new data asks

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OFFICIAL - SENSITIVE - COMMERCIAL | December 2022



Geospatial Commission – The UK Geospatial Strategy

Nine Key Areas of Focus



1. Infrastructure



4. Environment



7. Ocean economy



2. Transport



5. Public Health



8. Retail



3. Housing



6. Emergency Response



9. Finance



Unlocking the power of location:

- Mission 1: Promote and safeguard the use of location data
- Mission 2: Improve access to better location data
- Mission 3: Enhance capabilities, skills and awareness
- Mission 4: Enable innovation

The National Geographic Database

The National Geographic Database is a new online delivery platform from Ordnance Survey and contains the authoritative data that describes the geography of Great Britain



The National Geographic Database

The National Geographic Database contains the 9 themed authoritative datasets that describes the geography of Great Britain

Today PSGA customers access this through numerous OS products and services, such as OS MasterMap Topography Layer

LA Contractors have access to same data under OS P&L terms where there is no commercial gain & no competitive advantage



The National Geographic Database

Easy access that's evolving:

- Customers will have direct access to all the National Geographic Database data from a single location
- With an improved data structure, increased currency and improved metadata



What are our transport customers key use cases?

Evidence based
policy-making

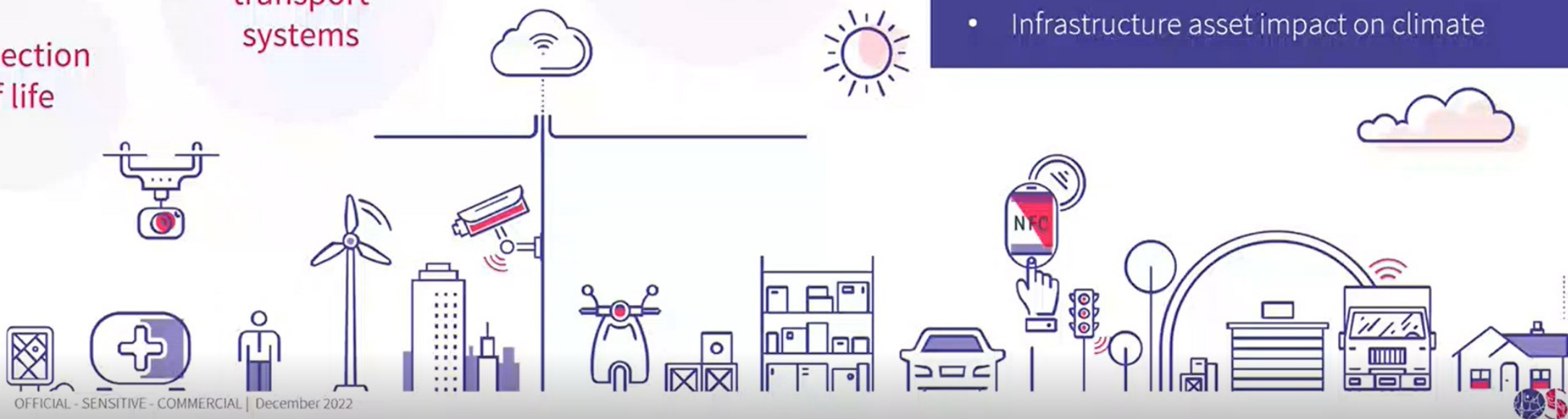
Environmental
monitoring
& regulation

Effective
citizen
services

Efficient
transport
systems

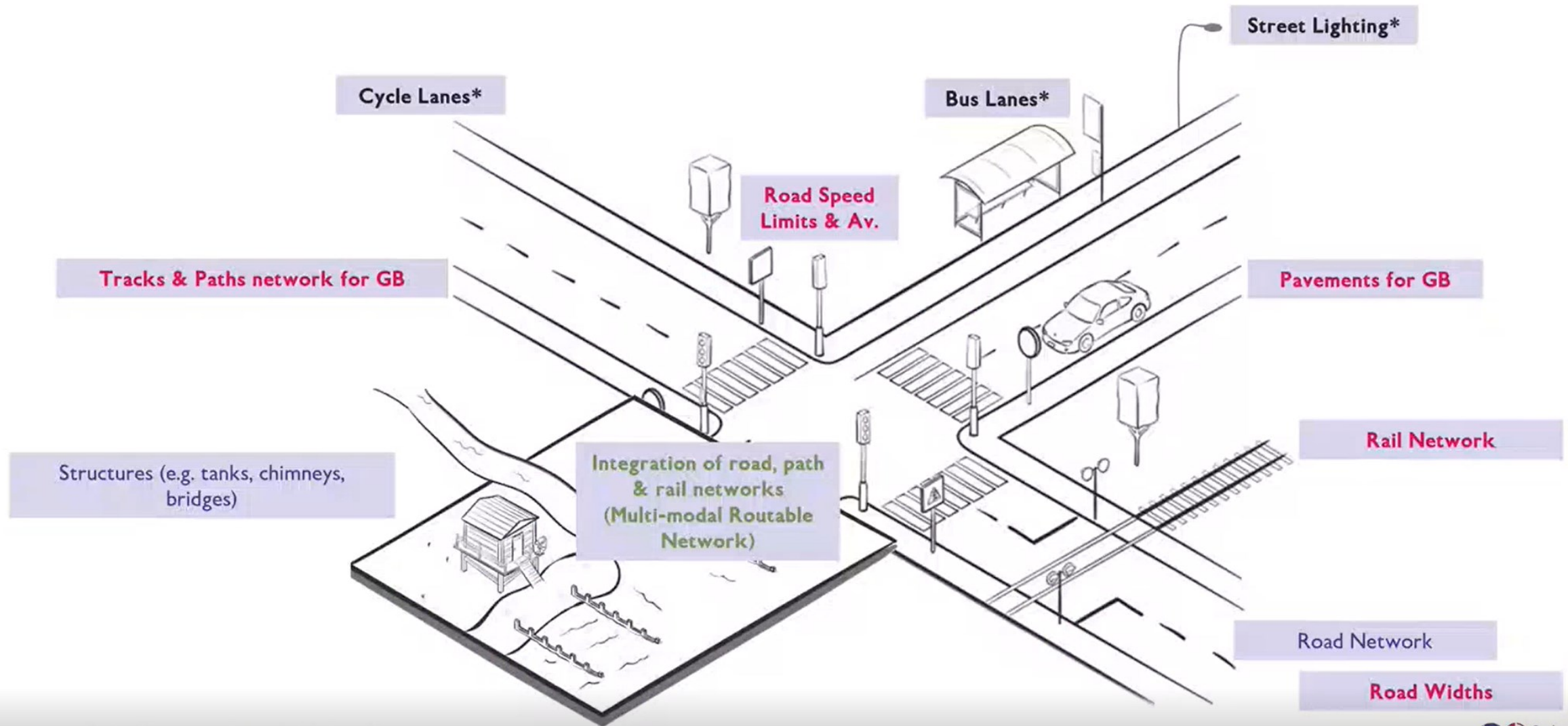
Protection
of life

- Monitoring a National Cycle Network development
- Safe routing of citizens
- Encourage active travel
- Efficient transport of goods
- Traffic analysis & modelling
- Emergency response & planning
- Infrastructure asset impact on climate



NGD – Transport – New Street Scene Information Under The PSGA

Under
development



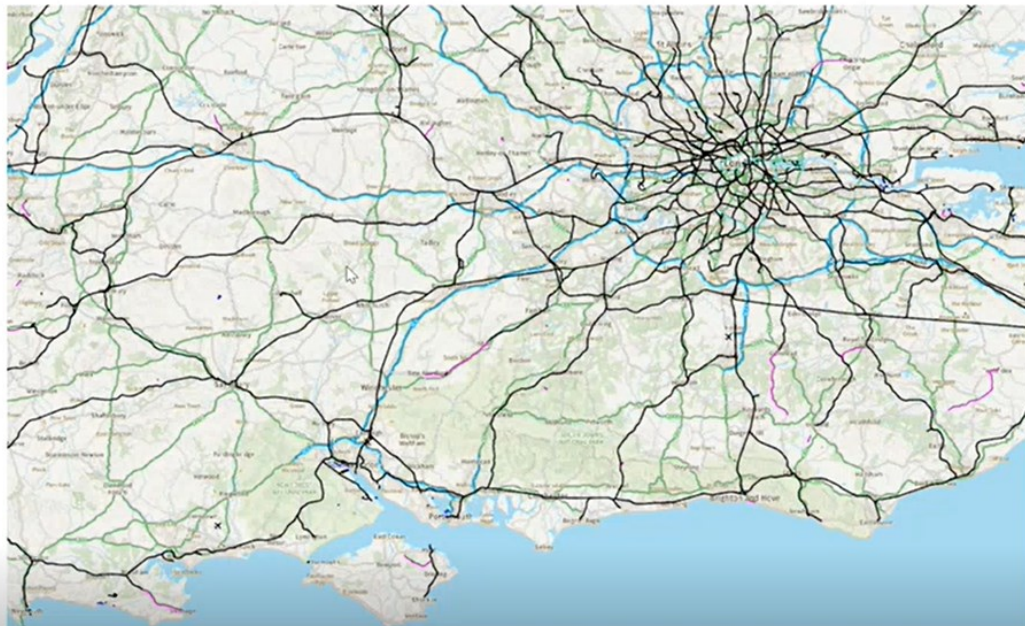
NGD New Data – Rail Network

Areas of focus:

Topologically simplified network

Refining Rail network definitions and connectivity.

Focus on design and output to support Multi-modal Routable Network.



NGD New Data – Cycle Lanes*

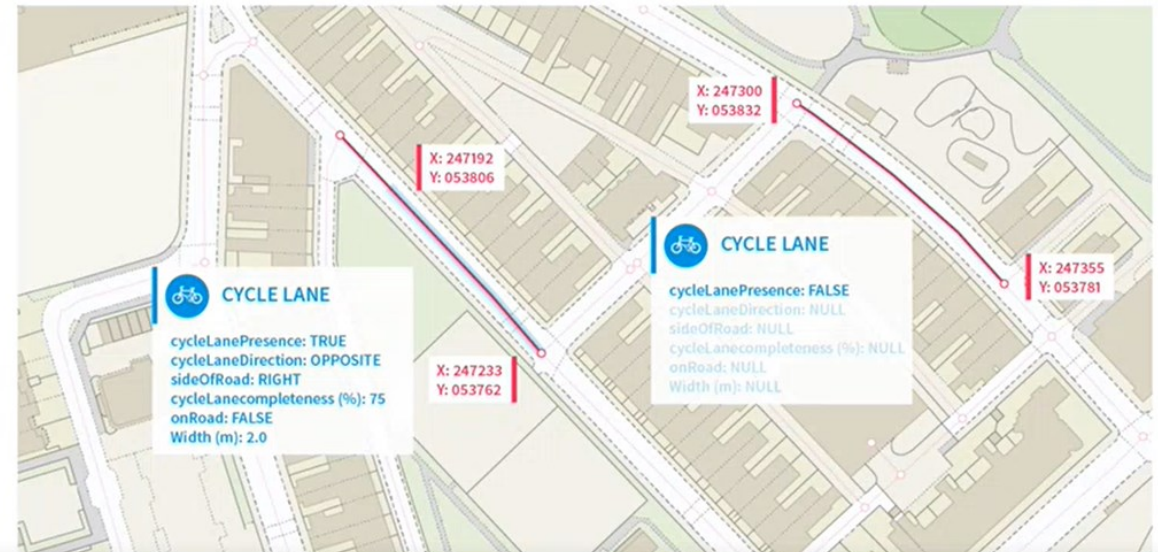
Under development

Areas of focus:

Develop a full GB set of cycle lanes

Provide start and end of cycle lanes including segregation types from other users

Route cycles within Multi-modal Routable Network



*subject to GC change request approval

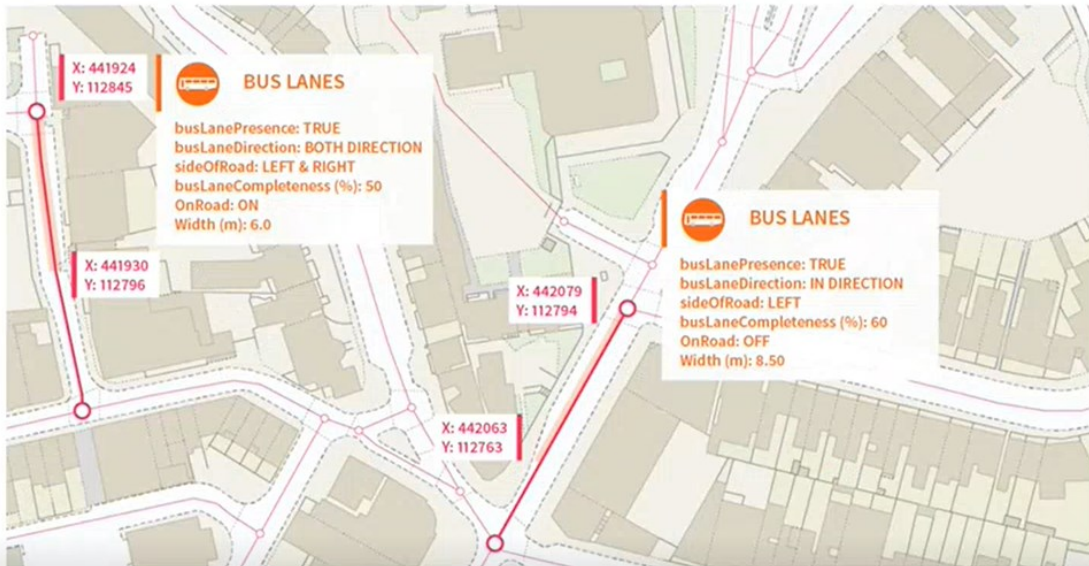
NGD New Data – Bus Lanes*

Areas of focus:

Develop a full GB set of bus lanes

Provide start and end of bus lanes and segregation from other users

Route buses within Multi-modal Routable Network



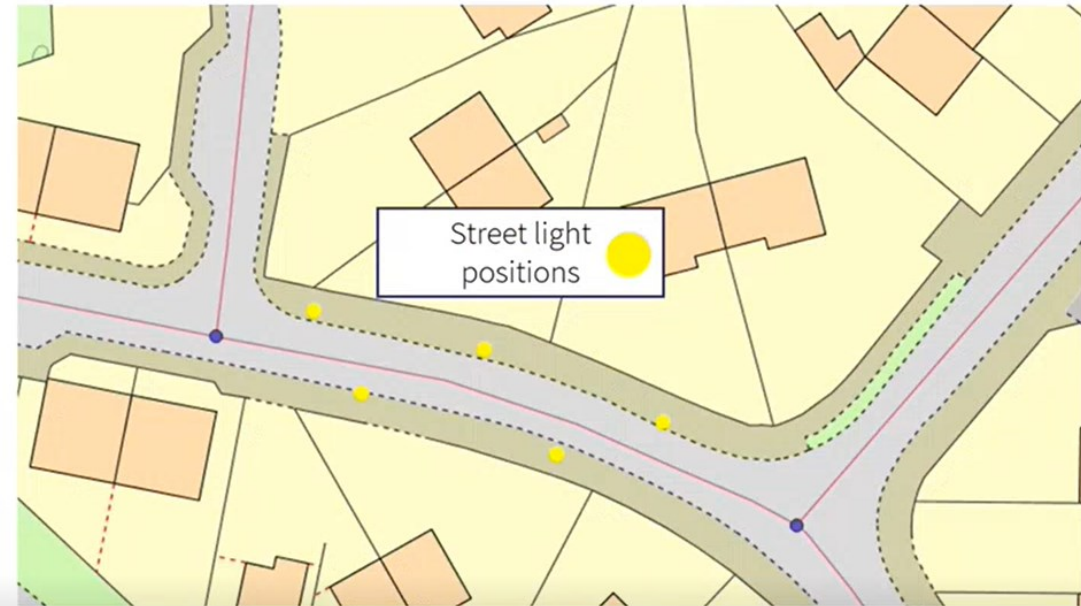
NGD New Data – Street Lights*

Areas of focus:

Develop a full GB set of street lights

Provide point locations of street lights on road, pavements, paths & cycleways

Lit routes within Multi-modal Routable Network



Integrated Transport Network Scope for PSGA

Contract scope

Transport Theme provide an integrated set of transport networks that are enhanced both in their coverage and attribution, to enable accurate multi-modal routing across all of Great Britain..

Areas of focus:

Develop a full GB suite of multi-modal networks

Create connectivity across the suite of network to enable multi-modal routing

Focus on an output that removes customer pains using OS products today and increases adoption of the NGD.

Key Use Cases:

Distance Analysis

Travel time analysis

Service and infrastructure planning

Policy definition and measuring investment success

Develop a full GB suite of multi-modal connected networks

Focus on an output that removes customer pains using OS products today and increases adoption of the NGD Hub.



OS Specific:

OSID, USRN, Start-End,
Length, Hierarchy,
Classification, Link
Provenance, Road
Width Min, Ascents

OSM Specific:

Access, Name, Foot,
High-way, Railway,
Ferry, Toll, Ford, Bridge,
Tunnel, Service, Car,
Cycle, Motorcycle,
Moped, PSV, Coach,
Bus, Goods, HGV, Taxi,
Horse, Trailer, Caravan,
Emergency, Hazmat,
Tracked Vehicle,
Disabled, Max Weight /
Length / Load / Width /
Laden Weight / Speed,
One Way, Layer,
Geometry, WayID

«FeatureType»
TransportLink[illegible]«FeatureType»
TransportNode

```
+ os_id: CharacterString
+ os_nodeType: CharacterString {0..1}
+ name: CharacterString {0..1}
+ ref: CharacterString {0..1}
+ geometry: GM_Point
```

FormValue

- + Single Carriageway
- + Dual Carriageway
- + Slip Road
- + Roundabout
- + Service Road
- + Enclosed Traffic Area
- + Traffic Island Link At Junction
- + Traffic Island Link
- + Track
- + Canal Path
- + Shared Use Carriageway
- + Footbridge
- + Layby
- + Path With Ford
- + Path
- + Path With Steps
- + Subway
- + Collapsed Dual Carriageway
- + Path With Level Crossing
- + Guided Busway
- + Ferry
- + Connecting Link
- + Funicular
- + Main Line Multiple Tracks
- + Main Line Siding
- + Main Line Single Track
- + Mineral
- + Preserved
- + Rapid Transport System
- + Tram

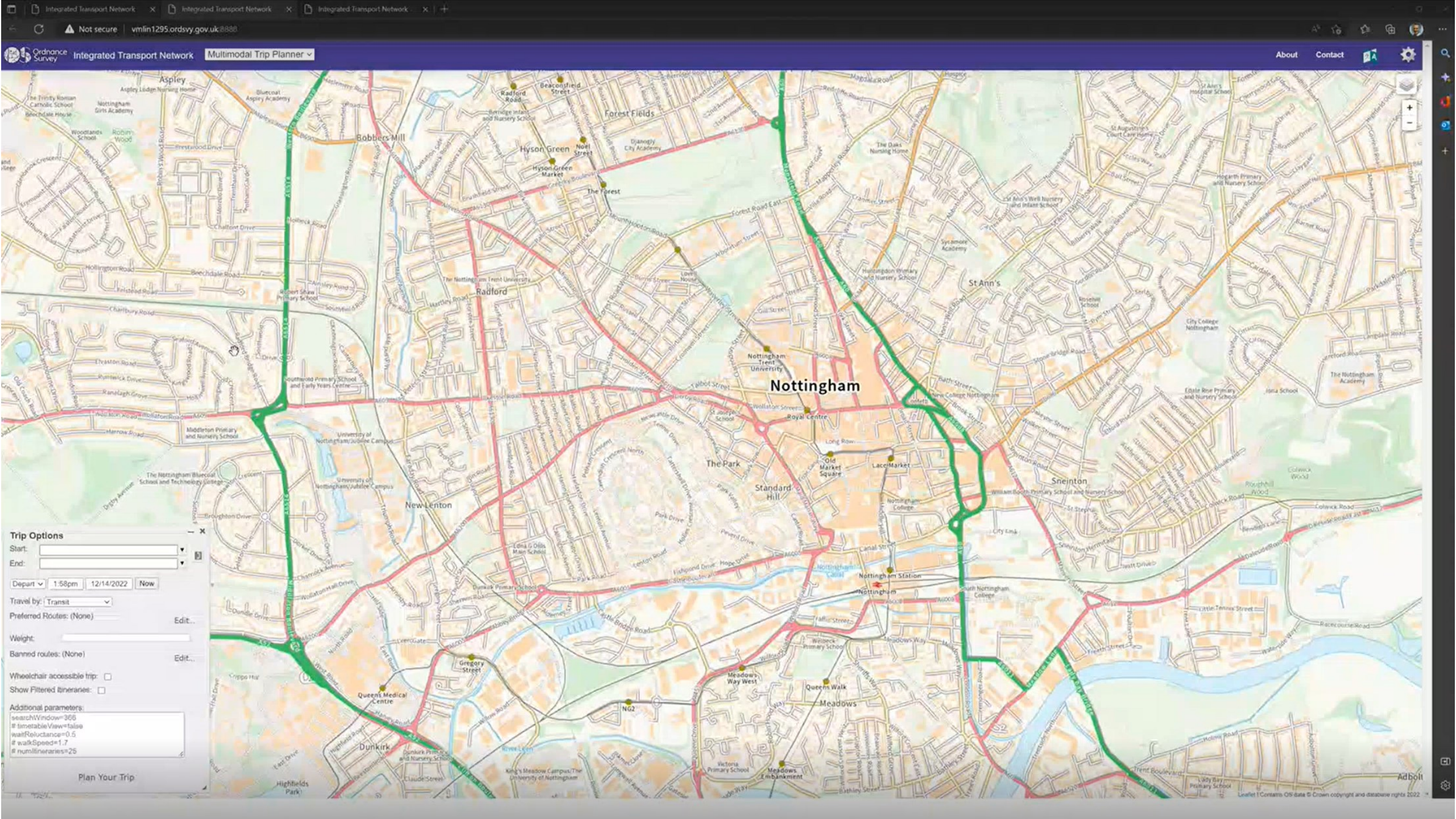
Codelists to be created for the `CharacterString` attributes where applicable (see [Prototype Documentation](#))

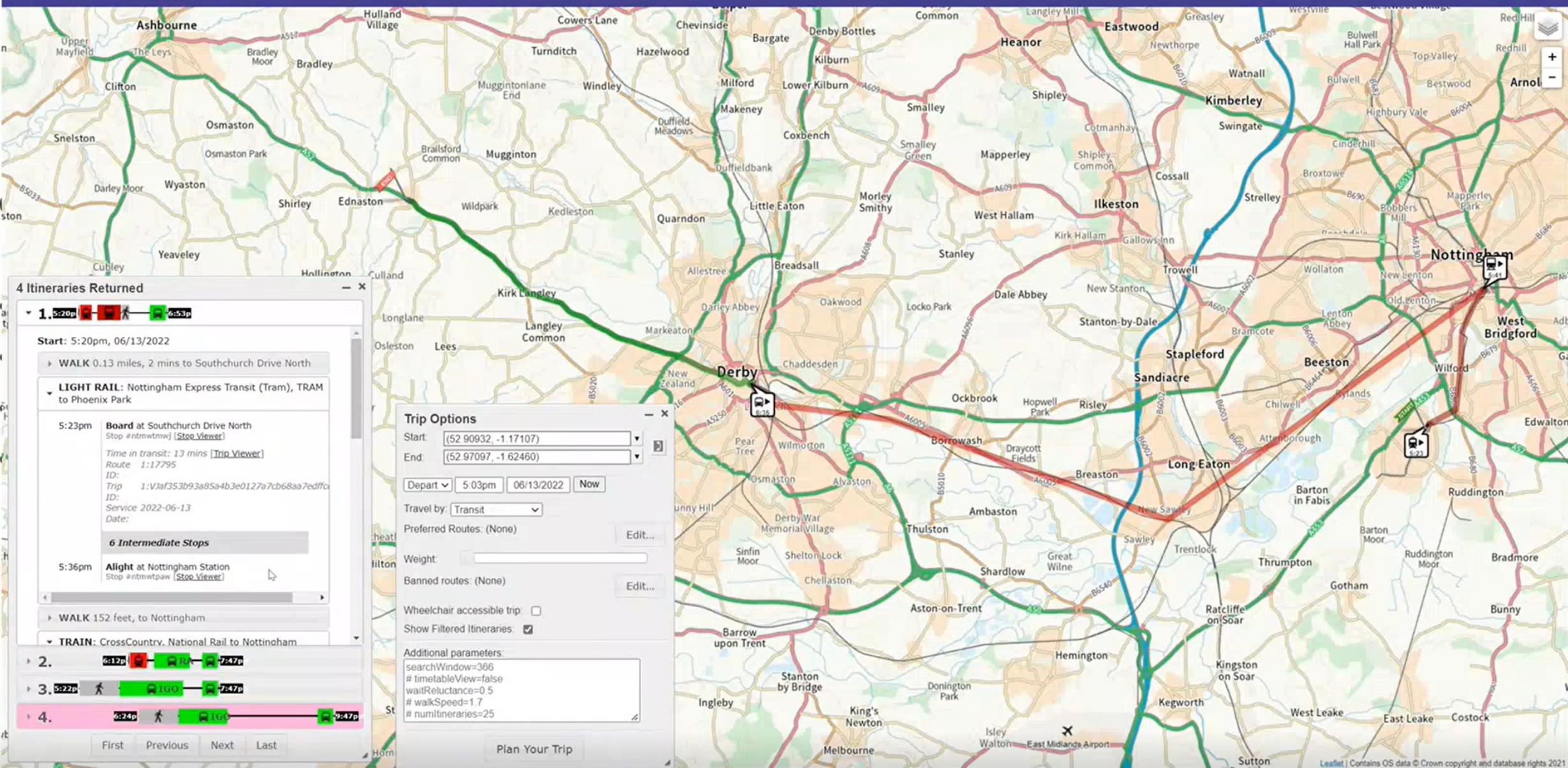
«FeatureType»
TurnRestriction

```
+ type: CharacterString [0..1]
+ restriction: CharacterString [0..1]
+ restrictionconditional: CharacterString [0..1]
+ restrictionchg: CharacterString [0..1]
+ restriction.goods: CharacterString [0..1]
+ restrictionlocus: CharacterString [0..1]
+ restrictionpsw: CharacterString [0..1]
+ restriction.polygonloads: CharacterString [0..1]
+ restrictionvideoloads: CharacterString [0..1]
+ sscript: CharacterString [0..1]
+ from: CharacterString [0..1]
+ to: CharacterString [0..1]
+ via: CharacterString [0..1]
+ os_id: CharacterString
+ geometry: GM_Curve
+ relationID: integer [0..1]
```

«CodeList»
HierarchyValue

- * Multiple Tracks
- * Siding
- * Single Track
- * Motorway
- * A Road Primary
- * A Road
- * B Road Primary
- * B Road
- * Minor Road
- * Local Road
- * Local Access Road
- * Restricted Local Access Road
- * Shared Use Road
- * Secondary Access Road
- * Restricted Secondary Access Road





Examples of different bus geometry - but does it matter?

Open Street Map



Ordnance Survey MM Highways



