



ORDNANCE SURVEY GB

OS Open Linked Identifiers - Technical Specification

Version History

Version	Date	Description
1.0	01/07/2020	Initial release
1.1	21/09/2020	Slight revision

Purpose of this Document

This is the Technical Specification (from now on referred to as the 'Specification') for the OS Open Linked Identifiers product. This Specification provides information on the contents and structure of this product. For greater insight into the product and its potential applications, please refer to the OS Open Linked Identifiers Overview and Getting Started Guide.

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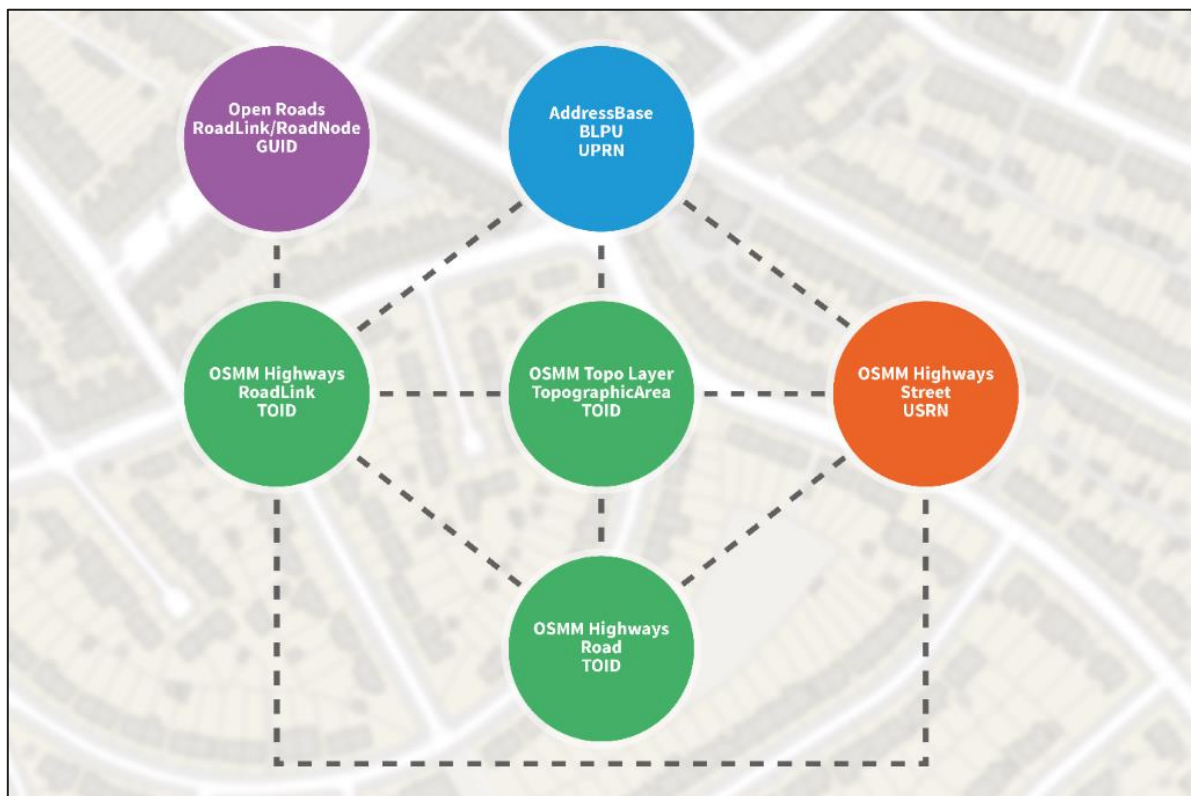
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1. Introduction

OS Open Linked Identifiers is a dataset containing the authoritative relationships between Unique Property Reference Numbers (UPRNs), Unique Street Reference Numbers (USRNs) and Topographic Identifiers (TOIDs), and metadata. Identifiers are labels that are assigned to representations in a dataset. They are at the heart of how data can be effectively published, retrieved, reused and linked.



Feature Type	Identifier Type	Source Product	Description
TopographicArea	TOID	OS MasterMap Topographic Layer	Polygon limited to either a building outline or road surface area.
RoadLink	TOID	OS MasterMap Highways	Section of road from junction to junction.
Road	TOID	OS MasterMap Highways	Collection of RoadLink with a given name.
BLPU (Building Land Parcel Unit)	UPRN (Unique Property Reference Number)	AddressBase Premium	An address location with postal address.

Street	USRN (Unique Street Reference Number)	OS MasterMap Highways	An identifier allocated to a street by a local authority.
ORRoadLink/ ORRoadNode	GUID	Open Roads	Road sections and junctions from our open data product. These features are referred to in OS Open Roads as RoadLink and RoadNode. In this product they are referred to as ORRoadLink and ORRoadNode respectively to distinguish them from the OS MasterMap Highways Networks RoadLink and RoadNode features.

OS Open Linked Identifiers enables you to connect the variety of relationships between UPRN, USRNs and TOIDs. These are extracted from premium products to provide you with the most up-to-date feature metadata sourced from AddressBase, OS MasterMap Highways Network and OS MasterMap Topography Layer. The more an identifier is used in other datasets, the more valuable the primary data becomes.

For example, OS Open Identifiers enables visualisation of data linked to the Highways RoadLink and Open Roads products. By sharing the road link mapping between Highways and Open Roads it enables data that has been collected and shared against the Highways' premium products to be visualised in the open geometry.

Identifiers are crucial to the process of sharing information and linking together datasets, allowing them to fit into many workflows in many different types of workplace to provide powerful insights and support analytics.

Unique Property Reference Number (UPRN)

A UPRN is a unique numeric identifier for every addressable location in Great Britain. The identifier is critical for property related information and can be found throughout OS's AddressBase products. An addressable location may be any kind of building, residential or commercial, or it may be an object that might not have a 'normal' address – such as a bus shelter or an electricity substation. UPRNs provide these addressable locations with a consistent, persistent identifier never being reused.

Unique Street Reference Number (USRN)

A USRN is a unique and persistent identifier for every street, road, track, path, cycletrack or way in Great Britain. It can be found in the OS MasterMap Highways Network products and is also a key component in OS's AddressBase suite of products.

Topographic Identifier (TOID)

A TOID is a unique identifier, consisting of the letters 'osgb' and followed by either thirteen or sixteen digits, associated with every feature in many of Ordnance Survey's large-scale products. The TOID is based upon the Digital National Framework concept and the principles that underpin it. In order for the TOID to be effective, it is essential that the reference given to it by OS remain unaltered in any way.

2. General Structure

The Open Linked Identifier data product is supplied in Comma-Separated Value (CSV) format, which comes with Product Version Information files formatted as JavaScript Object Notation (JSON).

Upon downloading the data you will receive zip files of the 11 Linked Identifier relationships. The generalised naming convention for each **Relationship ID** is:


{Data Identifier 1}_{Feature Identifier 1}_{Data Identifier 2}_{Feature Identifier 2}_{CorrelationType Number}

For example: *BLPU_UPRN_RoadLink_TOID_9*

Relationship IDs	Relationship
RoadLink_TOID_TopographicArea_TOID_2	RoadLink <-> TopographicArea
Road_TOID_TopographicArea_TOID_3	Road <-> TopographicArea
Street_USRN_TopographicArea_TOID_4	Street <-> TopographicArea
BLPU_UPRN_TopographicArea_TOID_5	BLPU <-> TopographicArea
RoadLink_TOID_Road_TOID_7	RoadLink <-> Road
RoadLink_TOID_Street_USRN_8	RoadLink <-> Street
BLPU_UPRN_RoadLink_TOID_9	BLPU <-> RoadLink
Road_TOID_Street_USRN_10	Road <-> Street
BLPU_UPRN_Street_USRN_11	BLPU <-> Street
ORRoadLink_GUID_RoadLink_TOID_12	Open Roads RoadLink <-> OSMM Highways RoadLink
ORRoadNode_GUID_RoadLink_TOID_13	Open Roads RoadNode <-> OSMM Highways RoadLink

2.1 Comma-Separated Values

Upon downloading the CSV data, you will have 11 zip packages for each relationship. Each zip package contains four files, for example *BLPU_UPRN_RoadLink_TOID_9.zip* extracts:

 BLPU_UPRN_RoadLink_TOID_9.csv	16/05/2020 09:31
 BLPU_UPRN_RoadLink_TOID_9_description.pdf	26/11/2019 09:51
 BLPU_UPRN_RoadLink_TOID_9_versions.json	14/05/2020 14:45
 licence.txt	13/01/2020 15:30

File	Description
BLPU_UPRN_RoadLink_TOID_9.csv	Linked Identifier data (CSV)
BLPU_UPRN_RoadLink_TOID_9_versions.json	Product version information

Licence.txt	OGI Licence
UPRN_RoadLink_TOID_9_202001_description.pdf	Product description

2.1.1 Linked Identifier data (CSV) attributes

This section provides the following information about each attribute of the CSV product:

Name and Description

The name of the attribute and what it is describing.

Type

The nature of the attribute, for example a numeric value or a code list value.

Multiplicity

Describes how many times this element is expected to be populated in the data. An attribute may be optional or mandatory; these are denoted by:

- '1' – Mandatory - There must be a value.
- '0..1' – Optional – If populated a maximum of one attribute will be returned.

These values may be used in combination.

RELATIONSHIP_ID		
Description: Unique identifier for the relationship. Made up of a concatenated string in the format: <i>{Data Identifier 1}_{Feature Identifier 1}_{Data Identifier 2}_{Feature Identifier 2}_{CorrelationType Number}</i>		
Type: text		Multiplicity: [1]
IDENTIFIER_1		
Description: The primary identifier of Source Dataset 1.		
Type: text		Multiplicity: [1]
VERSION_NUMBER_1		
Description: Version number of the primary identifier of Source Dataset 1. Where available, NULL otherwise.		
Type: integer		Multiplicity: [0..1]
VERSION_DATE_1		
Description: Version date of the primary identifier of Source Dataset 1. Where available, NULL otherwise.		
Type: date time		Multiplicity: [0..1]
IDENTIFIER_2		

Description: The primary identifier of Source Dataset 2.		
Type: text		Multiplicity: [1]
VERSION_NUMBER_2		
Description: Version number of the primary identifier of Source Dataset 2. Where available, NULL otherwise.		
Type: integer		Multiplicity: [0..1]
VERSION_DATE_2		
Description: Version date of the primary identifier of Source Dataset 2. Where available, NULL otherwise.		
Type: date time		Multiplicity: [0..1]
CONFIDENCE		
Description: Confidence value based on a comparison of feature dates between the two source features. Can be one of:		
<ul style="list-style-type: none"> Version information is correct Version information has potentially changed Version information has changed 		
Type: text		Multiplicity: [1]
Notes: May be a constant value of the possible ones for certain relationships.		

2.2 Product Version Information file (JSON)

The OS Open Linked Identifier data package also contains Product Version Information files. These are contained inside each relationship zip package as JavaScript Object Notation (JSON) format.

JSON is an open-standard file and data interchange format that uses human-readable text to store and transmit data objects consisting of attribute-value pairs and array data types.

The general structure of the metadata JSON is detailed in the table below:

filename		
Description: The name of the Linked_ID CSV file		
Type: text		Multiplicity: [1]
productPublicationDate		
Description: The product publication date.		
Type: date	Format: YYYY/MM	Multiplicity: [1]

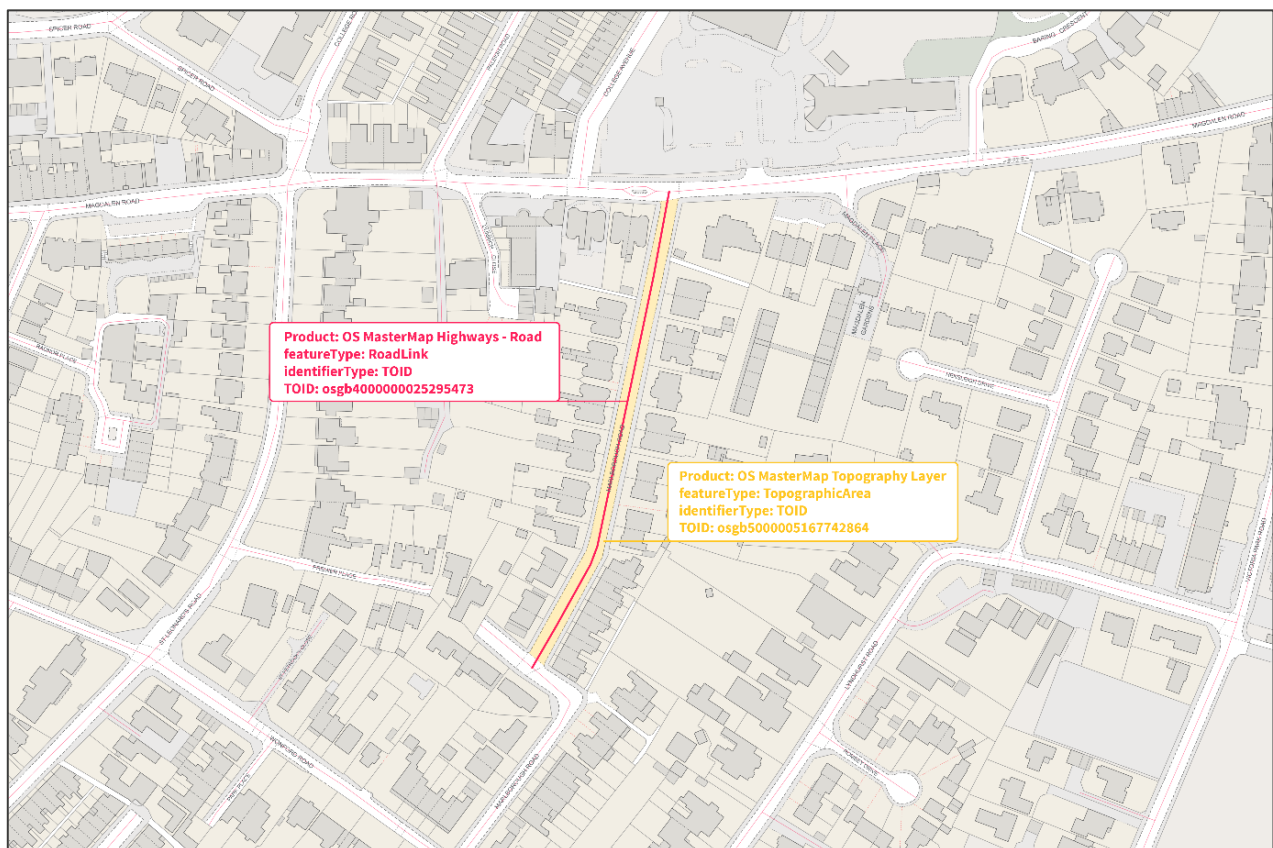
productPublicationName		
Description: The Linked_ID Epoch Number that the JSON file refers to. (In the format “Epoch {number}”.)		
Type: text		Multiplicity: [1]
Identifier1Source		
Type: Object		Multiplicity: [1]
Identifier1Source.productName		
Description: The product name of the source product for identifier 1.		
Type: text		Multiplicity: [1]
Identifier1Source.productPublicationDate		
Description: The publication date of the source product for identifier 1.		
Type: date	Format: YYYY/MM	Multiplicity: [1]
Identifier1Source.productPublicationName		
Description: The epoch number of the source product for identifier 1. If provided, in the format “Epoch {number}”.		
Type: text		Multiplicity: [0..1]
Notes: Not supplied if null value.		
Identifier1Source.featureType		
Description: The feature type of the source for identifier 1. Can be one of:		
<ul style="list-style-type: none"> • BLPU • Road • RoadLink • Street • TopographicArea 		
Type: text		Multiplicity: [1]
Identifier1Source.identifierType		
Description: The identifier type of the source for identifier 1. Can be one of:		
<ul style="list-style-type: none"> • GUID • TOID • UPRN • USRN 		
Type: text		Multiplicity: [1]

Identifier2Source		
Type: Object		Multiplicity: [1]
Identifier2Source.productName		
Description: The product name of the source product for identifier 2.		
Type: text	Type: text	Type: text
Identifier2Source.productPublicationDate		
Description: The publication date of the source product for identifier 2.		
Type: date	Format: YYYY/MM	Multiplicity: [1]
Identifier2Source.productPublicationName		
Description: The epoch number of the source product for identifier 2. If provided, in the format "Epoch {number}".		
Type: text		Multiplicity: [0..1]
Notes: Not supplied if null value.		
Identifier2Source.featureType		
Description: The feature type of the source for identifier 1.		
Can be one of:		
<ul style="list-style-type: none"> • BLPU • Road • RoadLink • Street • TopographicArea 		
Type: text		Multiplicity: [1]
Identifier2Source.identifierType		
Description: The identifier type of the source for identifier 1. Can be one of:		
<ul style="list-style-type: none"> • GUID • TOID • UPRN • USRN 		
Type: text		Multiplicity: [1]

3. RoadLink_TOID_TopographicArea_TOID_2

3.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



3.2 Relationship Extraction

This relationship is between the Topographic Identifier (TOID) of the RoadLink features in *OS MasterMap Highways Network* and the TOID of the TopographicArea of the corresponding road surface area in *OS MasterMap Topography Layer*.

The relationship is extracted from the relatedRoadArea attribute on the RoadLink features in *OS MasterMap Highways Network - Roads* product following its release.

3.3 Correlation Method

This relationship is determined by a line in a polygon intersection between the RoadLink centre line geometry and the TopographicArea polygon(s). Specifications of capture can vary between the two source products, therefore not every RoadLink in *OS MasterMap Highways Network* will be represented by a TopographicArea. The relationship is performed by Ordnance Survey while creating the *OS MasterMap Highways Network – Roads* product.

The two source products for these identifiers are on different refresh cycles. *OS MasterMap Highways Network - Roads* is updated monthly, whereas *OS MasterMap Topography Layer* is updated every six weeks. Therefore, some of the version information in the product may have changed and mean that the relationship is out of sync.

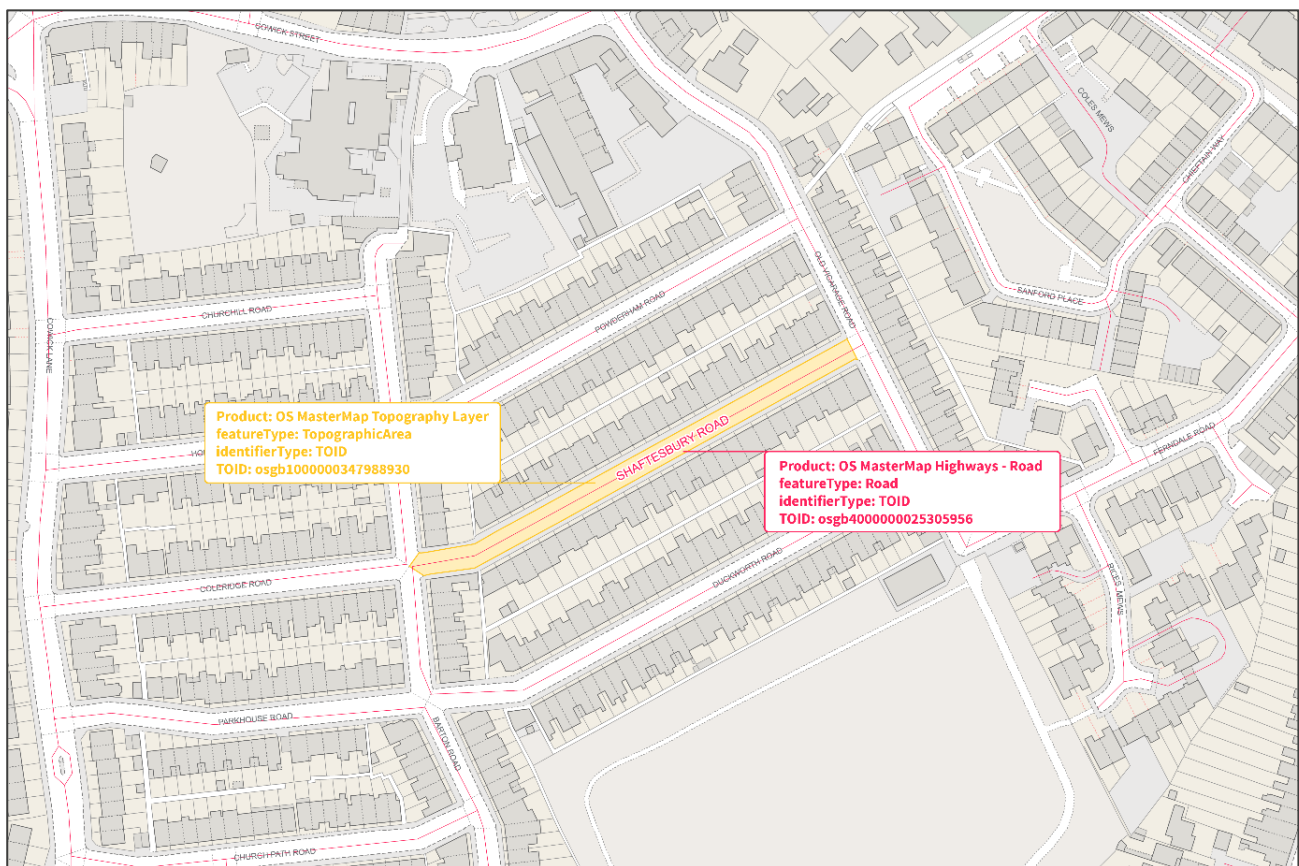
A Confidence Value is assigned to indicate the reliability of the version information provided in this product in relation to the version of the features used to form the correlation in the original product. The Confidence Value is given for each relationship, which is defined in this relationship as:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.
Version information has potentially changed	The version information could be different from the version of the feature that was used to create the correlation.
Version information has changed	The version information provided is different from the version of the feature used to create the correlation.

4. Road_TOID_TopographicArea_TOID_3

4.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



4.2 Relationship Extraction

This relationship is between the Topographic Identifier (TOID) of the Road features in *OS MasterMap Highways Network* and the TOID of the TopographicArea of the corresponding road surface area in *OS MasterMap Topography Layer*.

A Road feature is a link set which represents a collection of RoadLink features that share the same name (e.g. Bilston Road) or classification number (e.g. A41). The relationship is extracted from the relatedRoadArea attribute on the RoadLink feature(s) of which each Road feature is composed within the *OS MasterMap Highways Network – Roads* product following its release.

4.3 Correlation Method

The relationship is determined by a line in a polygon intersection between the centre line geometry of the referenced RoadLinks of each Road feature and the TopographicArea polygon(s). The relationship is performed by Ordnance Survey while creating the *OS MasterMap Highways Network – Roads* product.

The two source products for these identifiers are on different refresh cycles. *OS MasterMap Highways Network - Roads* is updated monthly, whereas *OS MasterMap Topography Layer* is updated every six weeks. As this product utilises published source products, the current data available for each identifier might have changed and therefore the relationship may not still be valid.

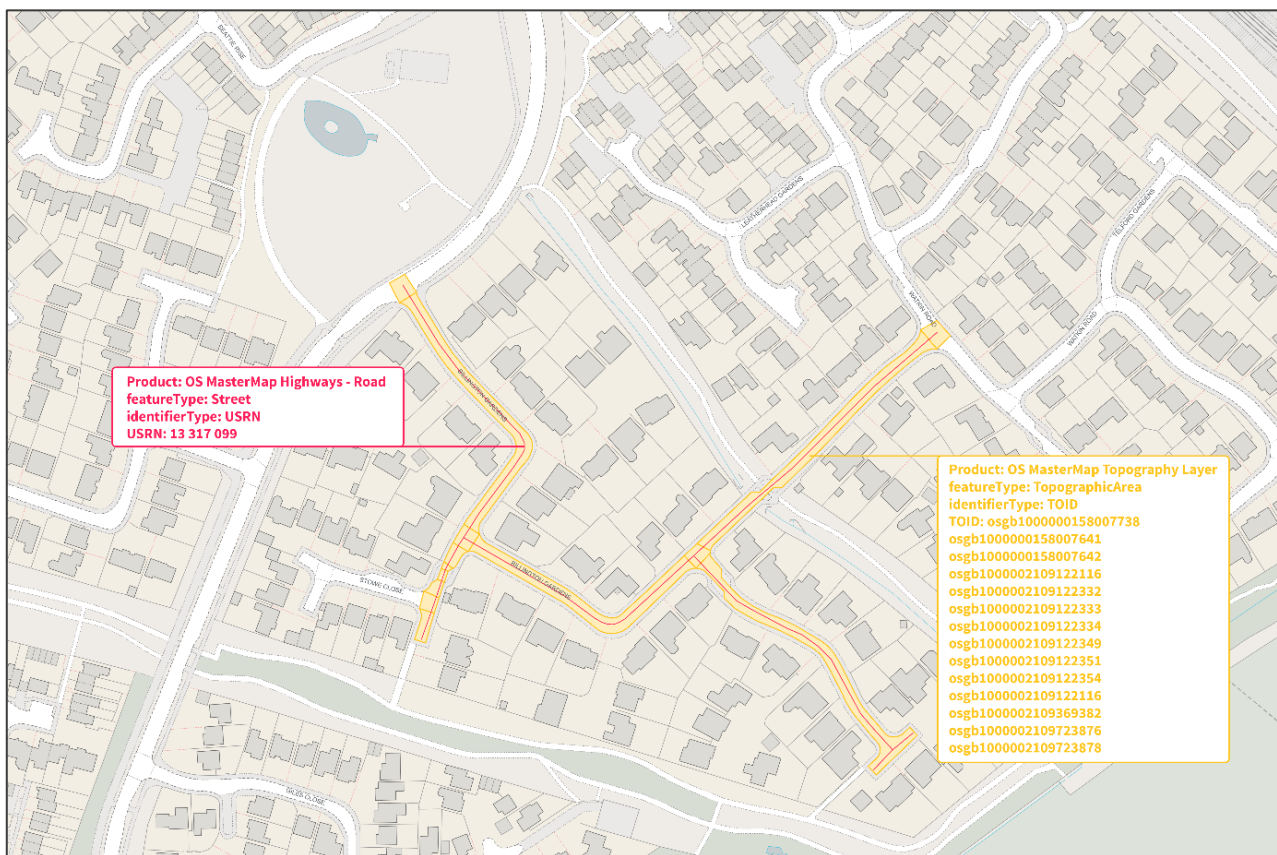
To provide an indication of the reliability of the version information provided in this product in relation to that of the version of the features used to form the correlation in the original product, a Confidence Value is given for each relationship, which is defined as follows:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.
Version information has potentially changed	The version information could be different from the version of the feature that was used to create the correlation.
Version information has changed	The version information provided is different from the version of the feature used to create the correlation.

5. Street_USRN_TopographicArea_TOID_4

5.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



5.2 Relationship Extraction

This relationship is between the Unique Street Reference Number (USRN) of the Street features in *OS MasterMap Highways Network* and the TOID of the TopographicArea of the corresponding road surface area in *OS MasterMap Topography Layer*.

A USRN is a unique, persistent identifier for every street, assigned in the National Street Gazetteer (NSG) to any road, footway, path, cycle track, track or passageway that forms a highway. Where possible, the geometry of streets provided in the National Street Gazetteer is spatially matched to the geometry of OS RoadLinks to provide the additional attribution captured in the NSG against detailed OS geometry.

This relationship is extracted from the `relatedRoadArea` attribute on the matched `RoadLink(s)` within *OS MasterMap Highways Network – Roads* product following its release. This means that this relationship will not include all USRNs in *OS MasterMap Highways Network*, as Street features that have not been matched to an OS `RoadLink` will be omitted.

5.3 Correlation Method

Where Street features have been successfully matched to OS `RoadLinks`, the Street features in *OS MasterMap Highways Network* are aggregate features composed of one or more `RoadLinks`. The relationship is determined by a line in a polygon intersection between the centre line geometry of matched `RoadLink(s)` and the topographic area polygon. The relationship is performed by Ordnance Survey.

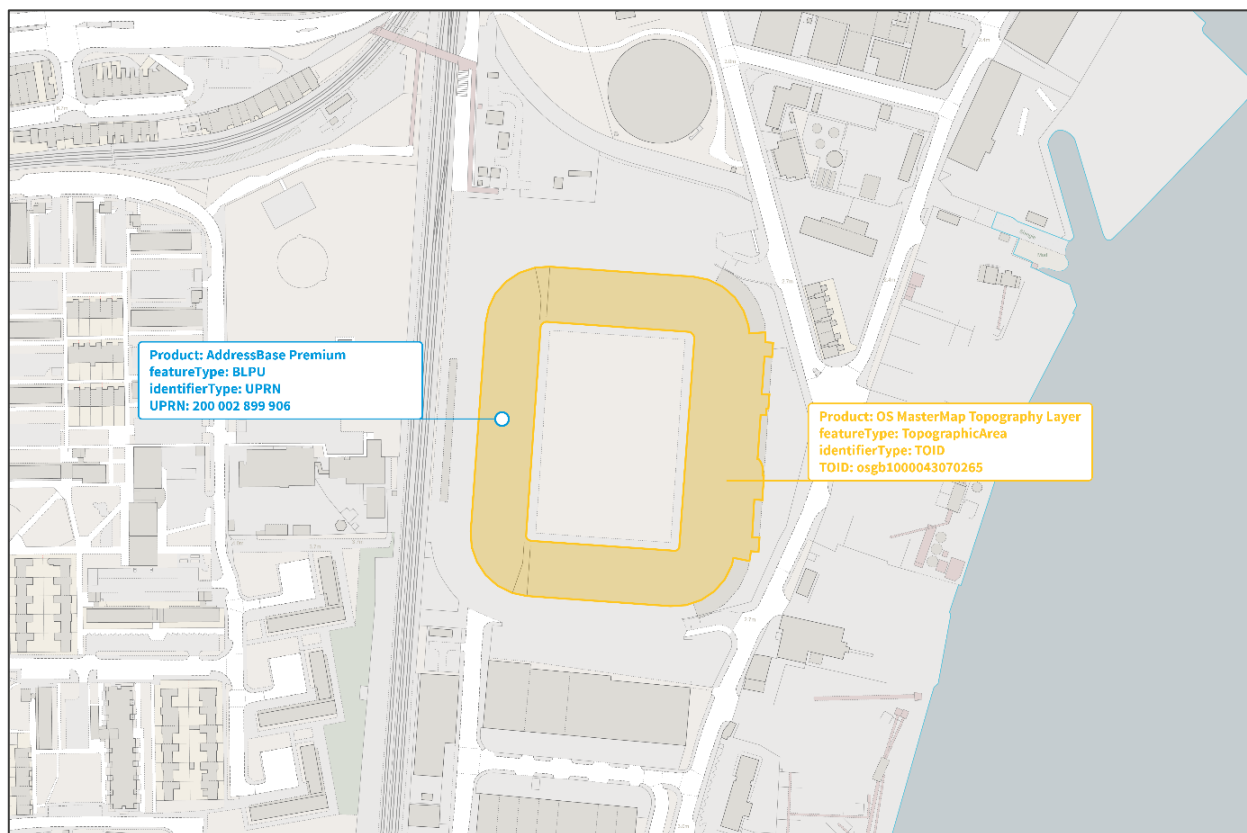
The two source products used to extract this relationship are on different refresh cycles. *OS MasterMap Highways Network* is updated monthly, whereas *OS MasterMap Topography Layer* is updated every six weeks. Therefore, some of the version information in the product may have changed and mean that the relationship is out of sync. A Confidence Value is assigned to indicate the reliability of the version information provided in this product in relation to the version of the features used to form the correlation in the original product. The Confidence Value is given for each relationship, which is defined in this relationship as:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.
Version information has potentially changed	The version information could be different from the version of the feature that was used to create the correlation.
Version information has changed	The version information provided is different from the version of the feature used to create the correlation.

6. BLPU_UPRN_TopographicArea_TOID_5

6.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



6.2 Relationship Extraction

The relationship between the Unique Property Reference Number (UPRN) of *AddressBase Premium* and the Topographic Identifier (TOID) of the *TopographicArea* feature in the *OS MasterMap Topography Layer* product is extracted for all live, provisional and historic BLPU records in *AddressBase Premium*.

Data from the *OS MasterMap Topography Layer* *TopographicArea* feature and *AddressBase Premium* *BLPU* table are joined where the TOID equals the CROSS_REFERENCE of the *AddressBase Premium* Cross-Reference table and the source is equal to '7666MT'.

The relationship is extracted from *AddressBase Premium* after the release of each six weekly Epoch. Further information on the relationship extraction, including the date of extraction and product version information, are provided in the Product Version Information File.

6.3 Correlation Method

The relationship is determined by a point in a polygon intersection between the Address seed location and the TopographicArea polygon. The relationship is performed by [GeoPlace](#), a joint venture between Ordnance Survey and Local Government Association (LGA) who produce *AddressBase*.

AddressBase Premium and *OS MasterMap Topography Layer* are updated every six weeks but on different release cycles. Therefore, some of the version information in the product may have changed and mean that the relationship is out of sync.

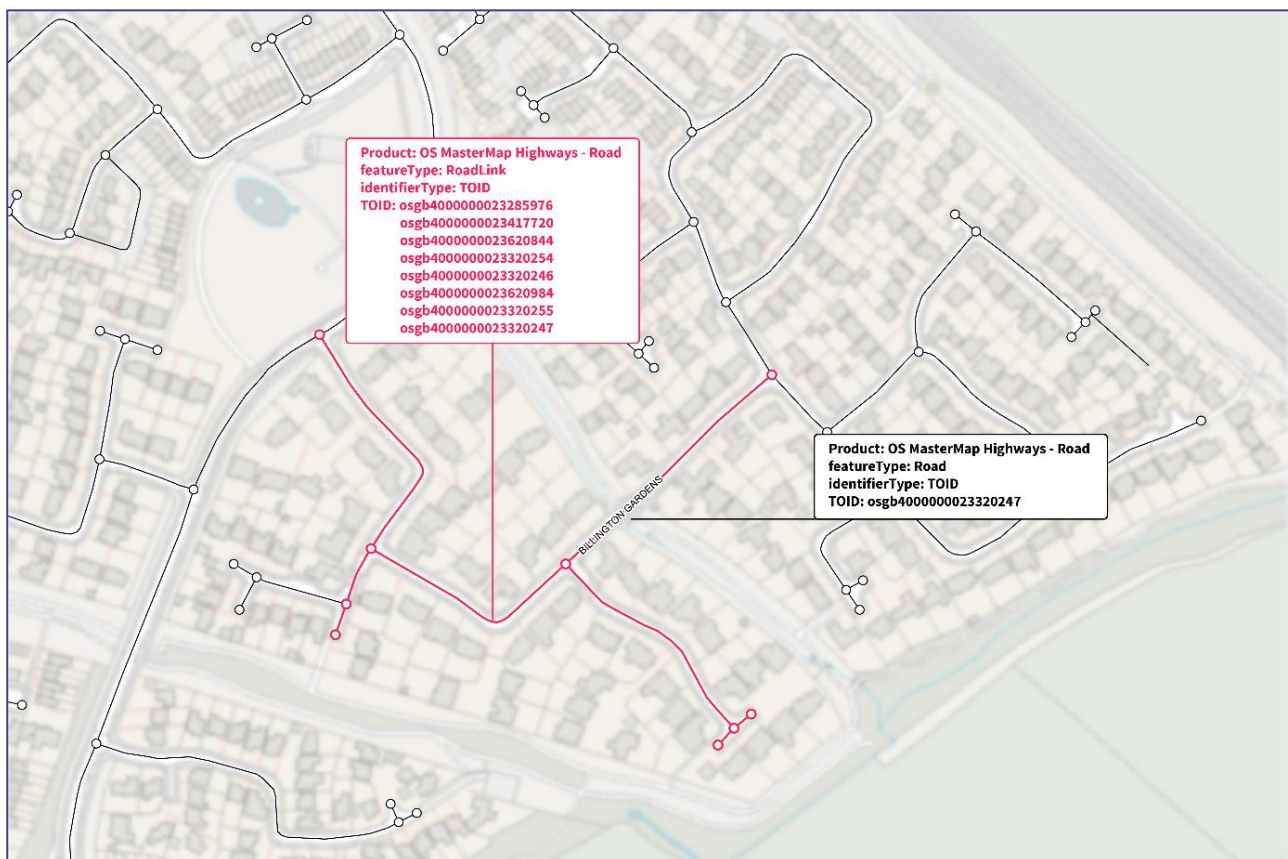
A Confidence Value is assigned to indicate the reliability of the version information provided in this product in relation to the version of the features used to form the correlation in the original product. The Confidence Value is given for each relationship, which is defined in this relationship as:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.
Version information has potentially changed	The version information could be different from the version of the feature that was used to create the correlation.
Version information has changed	The version information provided is different from the version of the feature used to create the correlation.

7. RoadLink_TOID_Road_TOID_7

7.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



7.2 Relationship Extraction

This relationship is between the Topographic Identifier (TOID) of the RoadLink features and the TOID of Road features in *OS MasterMap Highways Network*.

A Road feature is a link set which represents a collection of RoadLink features that share the same name (e.g. Bilston Road) or classification number (e.g. A41). The relationship is extracted using the reference to the RoadLinks which make up each Road feature in the 'link' attribute within *OS MasterMap Highways Network – Roads* product following its release.

7.3 Correlation Method

The relationship is determined by the link reference within *OS MasterMap Highways Network - Roads*, demonstrating the RoadLinks of which the Road features are composed.

As this relationship is determined using a single source product the version information provided will always be the same as the version of the feature used to create the correlation.

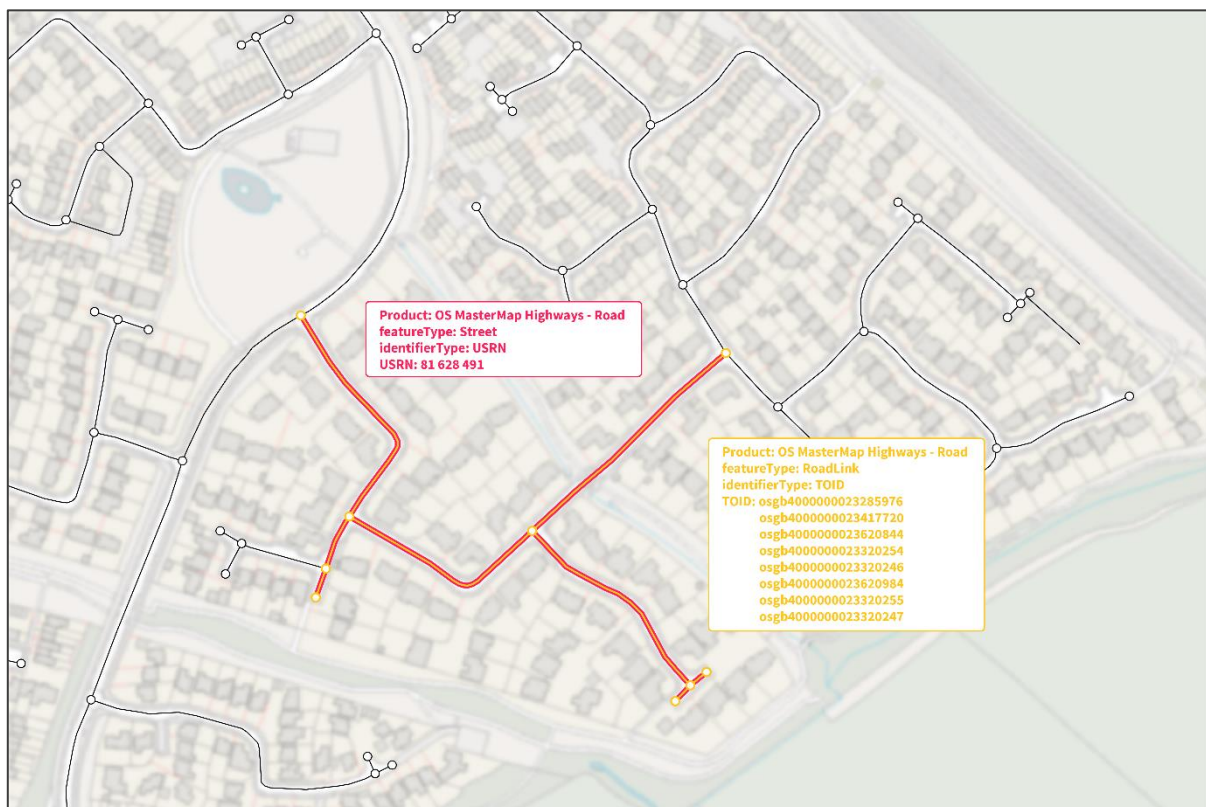
A Confidence Value is assigned to indicate the reliability of the version information provided in this product in relation to the version of the features used to form the correlation in the original product. The Confidence Value is given for each relationship, which will always be defined in this relationship as:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.

8. RoadLink_TOID_Street_USRN_8

8.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



8.2 Relationship Extraction

This relationship is between the Topographic Identifier (TOID) of the RoadLink features and the Unique Street Reference Number (USRN) of Street features in *OS MasterMap Highways Network*.

A USRN is an 8-digit unique and persistent identifier for a street assigned by a Roads Authority or Highway Authority. Where possible, the geometry of Streets provided by the Roads or Highway Authorities is spatially matched to the geometry of OS RoadLink(s) and an aggregated geometry of the RoadLink(s) will be provided in the *OS MasterMap Highways Network*.

This relationship is extracted using the reference to the RoadLink(s) which have been matched to the Street feature in the 'link' attribute within the *OS MasterMap Highways Network – Roads* product following its

release. This means that this relationship will not include all USRN in *OS MasterMap Highways*, as Street features that have not been matched to an OS RoadLink will be omitted.

8.3 Correlation Method

The relationship is determined by the link reference within *OS MasterMap Highways Network*, demonstrating the RoadLink feature(s) of which the matched Street features are composed. Where possible, the geometry of Streets provided by the Roads or Highway Authorities is spatially matched to the geometry of OS RoadLink(s) and an aggregated geometry of the RoadLink(s) will be provided in the *OS MasterMap Highways Network*.

As this relationship is determined using a single source product, the version information provided will always be the same as the version of the feature used to create the correlation.

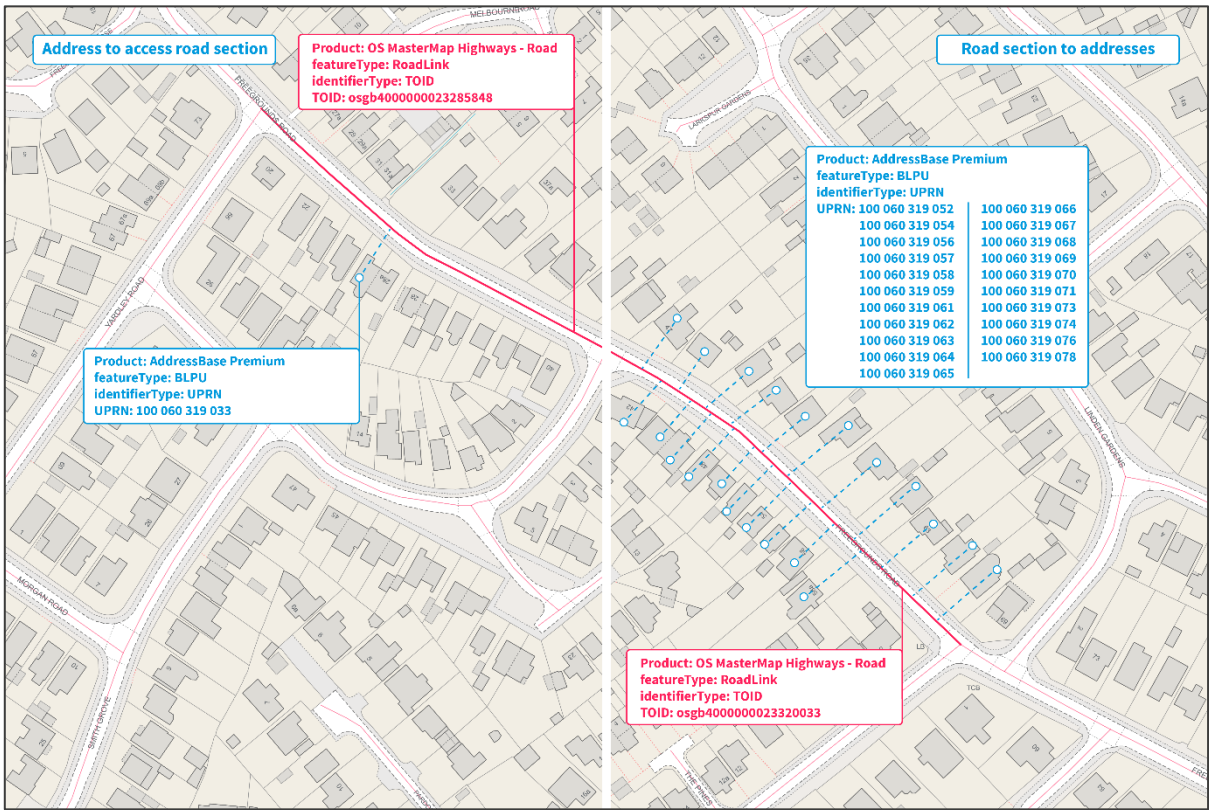
A Confidence Value is assigned to indicate the reliability of the version information provided in this product in relation to the version of the features used to form the correlation in the original product. The Confidence Value is given for each relationship, which will always be defined in this relationship as:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.

9. BLPU_UPRN_RoadLink_TOID_9

9.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



9.2 Relationship Extraction

The relationship between the Unique Property Reference Number (UPRN) and the Topographic Identifier (TOID) of *OS MasterMap Highways Network - Roads* is extracted for all live, provisional and historic BLPU records in *AddressBase Premium*. Data from the *OS MasterMap Highways Network - Roads* and *AddressBase Premium BLPU* table are joined where the TOID equals the CROSS_REFERENCE of the AddressBase Premium Cross-Reference table and the source is equal to '7666MI'.

The relationship is extracted from *AddressBase Premium* after the release of each six weekly Epoch. Further information on the relationship extraction, including the date of extraction and product version information, are provided in the Product Version Information File.

9.3 Correlation Method

The relationship is determined by finding the closest RoadLink TOID from *OS MasterMap Highways Network – Roads*, to every BLPU of *AddressBase Premium* that references a USRN. The relationship is performed by [GeoPlace](#), a joint venture between Ordnance Survey and Local Government Association (LGA) who produce *AddressBase*.

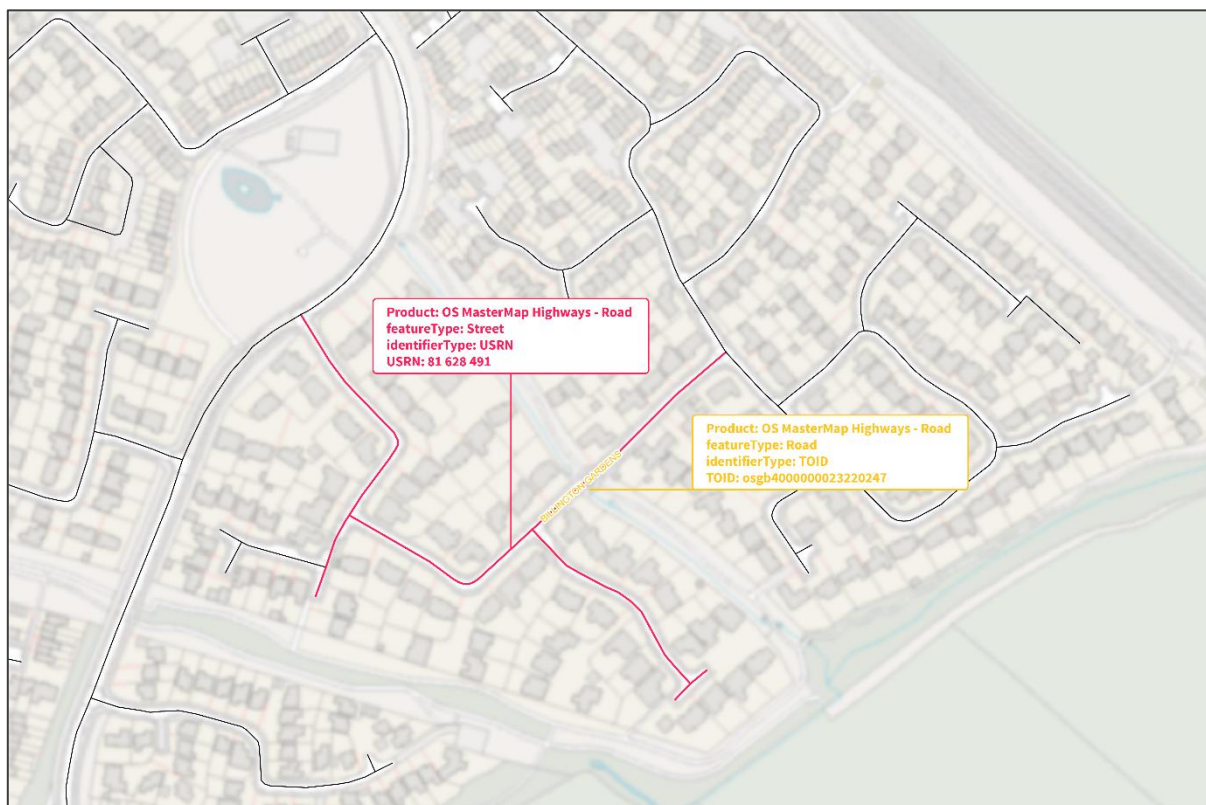
AddressBase Premium is updated every six weeks and *OS MasterMap Highways – Roads* is updated every four weeks. Therefore, some of the version information in the product may have changed and mean that the relationship is out of sync. To provide an indication of the reliability of the version information provided in this product in relation to that of the version of the features used to form the correlation in the original product, a Confidence Value is given for each relationship, which is defined as follows:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.
Version information has potentially changed	The version information could be different from the version of the feature that was used to create the correlation.
Version information has changed	The version information provided is different from the version of the feature used to create the correlation.

10. Road_TOID_Street_USRN_10

10.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



10.2 Relationship Extraction

This relationship is between the Topographic Identifier (TOID) of the Road features and the Unique Street Reference Number (USRN) of Street features in *OS MasterMap Highways Network*.

A Road feature is a link set which represents a collection of RoadLink features that share the same name (e.g. Bilston Road) or classification number (e.g. A41). A USRN is an 8-digit unique and persistent identifier for a street assigned by a Roads Authority or Highway Authority. Where possible, the geometry of Streets provided by the Roads or Highway Authorities is spatially matched to the geometry of OS RoadLink(s) and an aggregated geometry of the RoadLink(s) will be provided in the *OS MasterMap Highways Network*.

The relationship is extracted using the following:

- The reference to the RoadLinks which make up each Road feature in the 'link' attribute of the Road feature table.
- The reference to the RoadLink(s) which have been matched to each Street feature in the 'link' attribute in the Street feature table within the *OS MasterMap Highways Network – Roads* product following its release.

Where the Road and Street features reference common RoadLink(s), the relationship is extracted.

10.3 Correlation Method

The relationship is determined by two link references within *OS MasterMap Highways Network - Roads*, demonstrating where Road and Street features reference common RoadLink(s).

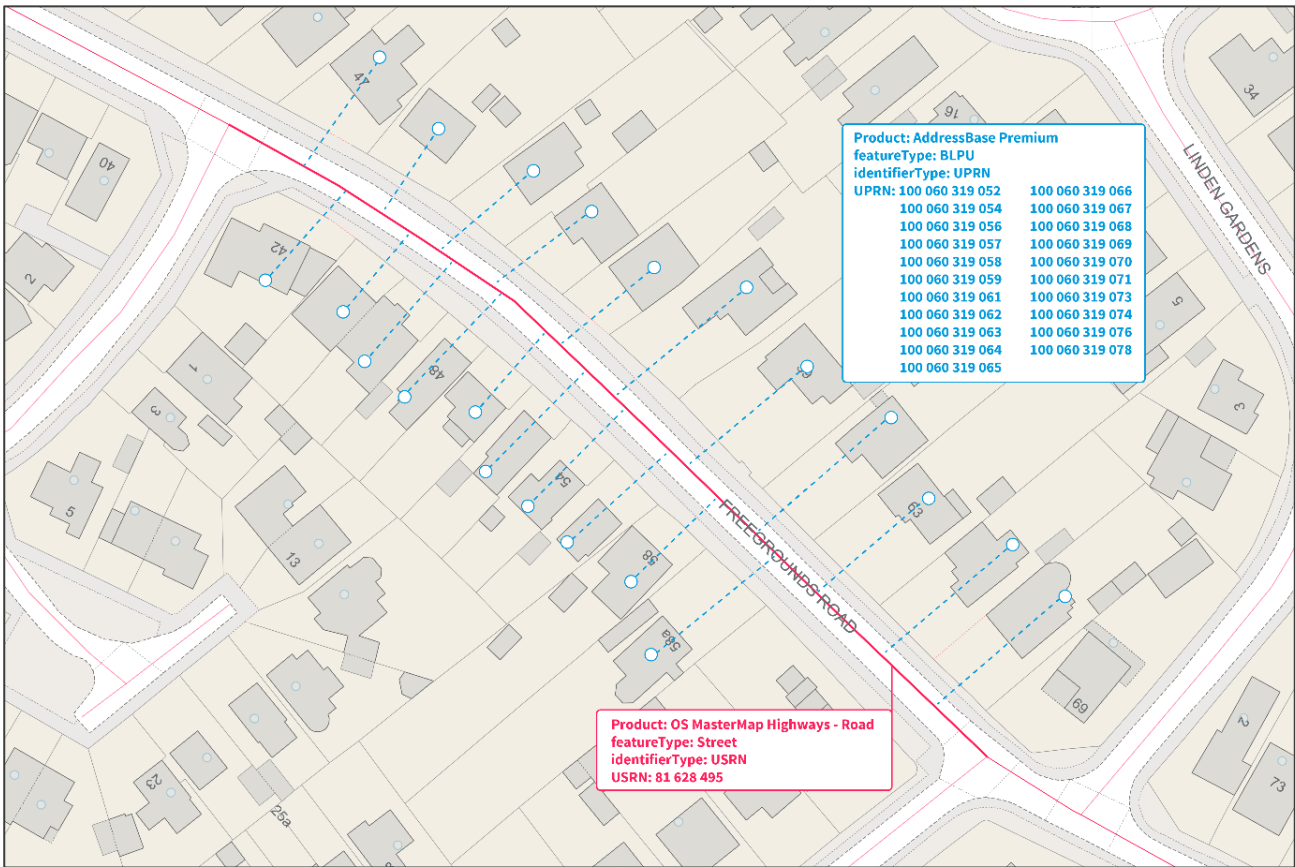
As this relationship is determined using a single source product the version information provided will always be the same as the version of the feature used to create the correlation. A Confidence Value is assigned to indicate the reliability of the version information provided in this product in relation to the version of the features used to form the correlation in the original product. The Confidence Value is given for each relationship, which will always be defined in this relationship as:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.

11. BLPU_UPRN_Street_USRN_11

11.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



11.2 Relationship Extraction

The relationship between the Unique Property Reference Number (UPRN) and the Unique Street Reference Number (USRN) is extracted for all live, provisional and historic BLPU records and all open roads in *AddressBase Premium*. All information for the associated relationship is extracted from *AddressBase Premium* by joining the Street table to the LPI table based on USRN, and the LPI table to the BLPU table based on UPRN. Further information on the relationship extraction, including the date of extraction and product version information, are provided in the Product Version Information File.

11.3 Correlation Method

The relationship is determined by the Local Authorities who are responsible for Addressing and Street Name and Numbering. The Local Authorities supply this information to [GeoPlace](#), a joint venture between Ordnance Survey and Local Government Association (LGA) who produce *AddressBase*.

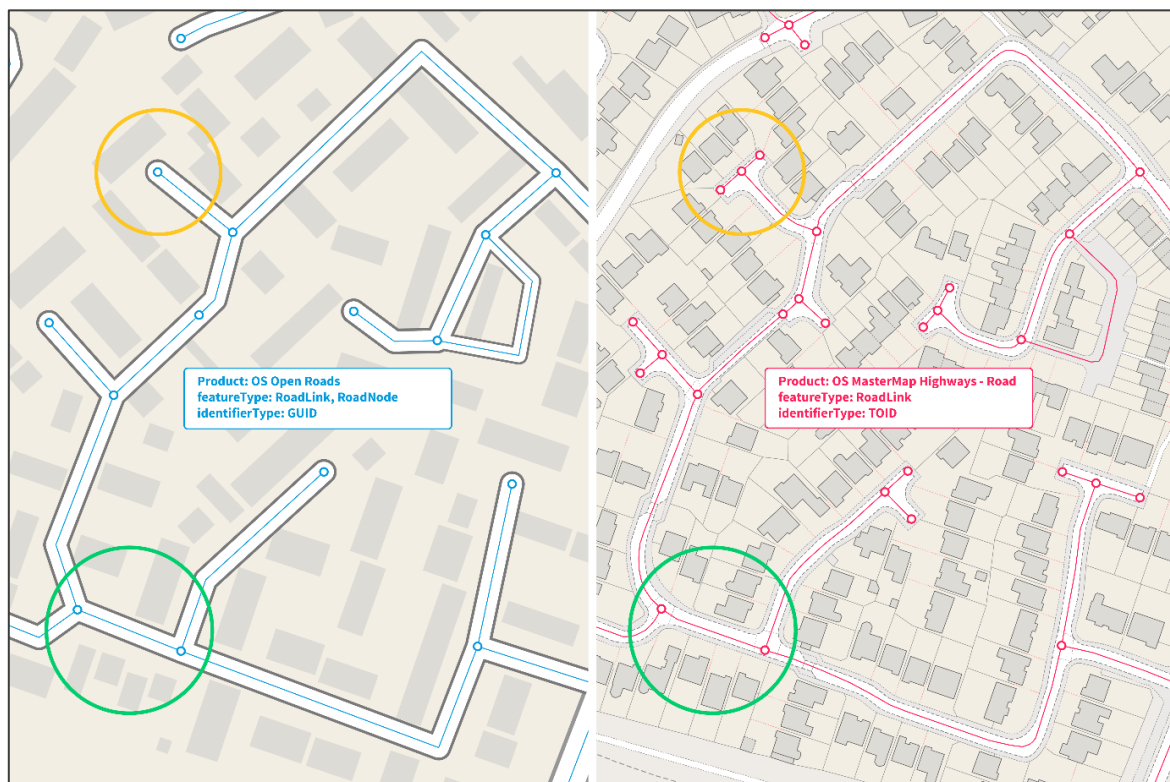
A Confidence Value is assigned to indicate the reliability of the version information provided in this product in relation to the version of the features used to form the correlation in the original product. The Confidence Value is given for each relationship, which will always be defined in this relationship as:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.

12. ORRoadLink_GUID_RoadLink_TOID_12

12.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



12.2 Relationship Extraction

This relationship is between the unique identifier (GUID) of the RoadLink features in *OS Open Roads* and the Topographic Identifier (TOID) of RoadLink features in *OS MasterMap Highways Network* which represent the same feature.

The relationship is extracted from the OS Open Roads Lookup table which is supplied with the *OS MasterMap Highways Network – Roads*. This table provides the TOID of the RoadLink feature in the *OS MasterMap Highways Network* and the GUID of the ORRoadLink feature in *OS Open Roads* which represent the same feature in *OS Open Roads*.

12.3 Correlation Method

This relationship is determined using the OS Open Roads Lookup table which is supplied with the *OS MasterMap Highways Network – Roads*. This table provides the TOID of the RoadLink feature in the *OS MasterMap Highways Network* and the GUID of the ORRoadLink feature in *OS Open Roads* which represent the same feature in *OS Open Roads*. This relationship is created by Ordnance Survey using a spatial match between systematically sampled points along the two line feature datasets.

The two source products for these identifiers are on different refresh cycles. *OS MasterMap Highways Network - Roads* is updated monthly, whereas *OS Open Roads* is updated every six months. As this product utilises published source products, the current data available for each identifier might have changed and therefore the relationship may not still be valid.

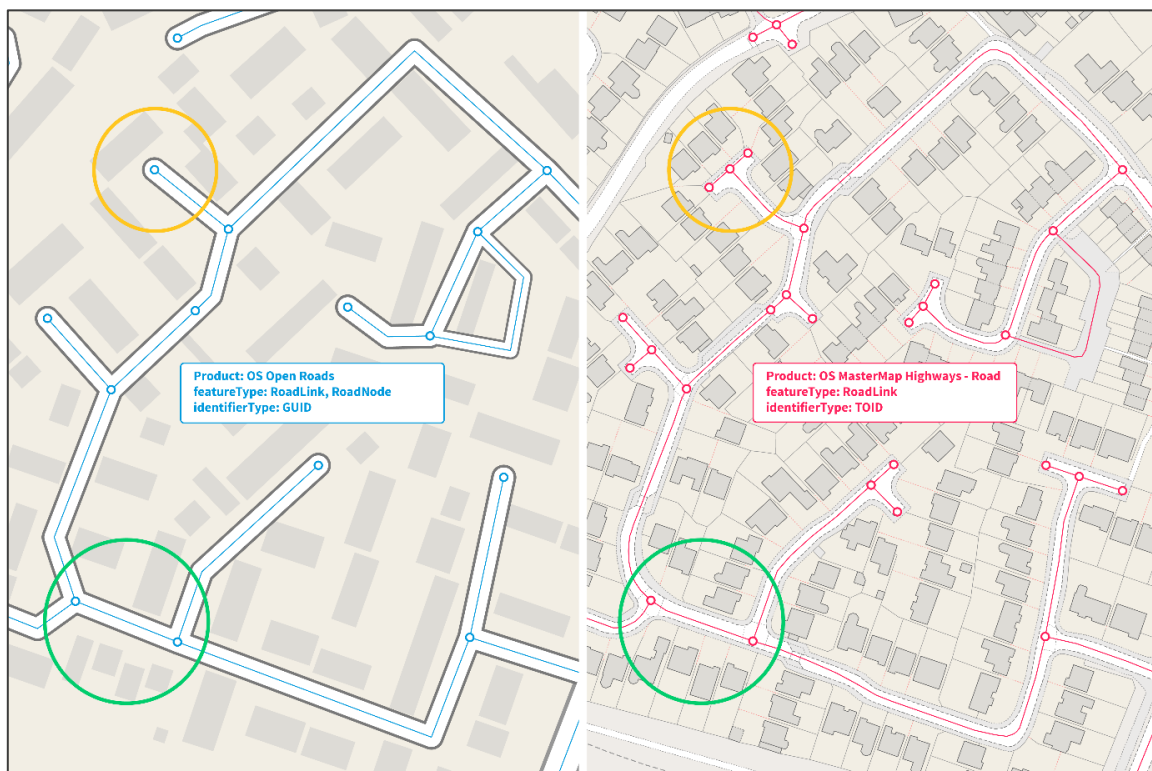
A Confidence Value is assigned to indicate the reliability of the version information provided in this product in relation to the version of the features used to form the correlation in the original product. The Confidence Value is given for each relationship, which is defined as follows:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.
Version information has potentially changed	The version information could be different from the version of the feature that was used to create the correlation.
Version information has changed	The version information provided is different from the version of the feature used to create the correlation.

13. ORRoadNode_GUID_RoadLink_TOID_13

13.1 Outline

This document aims to provide all the information to evaluate if the method of associating the respective identifiers is suitable for your needs. These identifier relationships have been extracted from existing premium products and are presented in a standalone table for easy and open access to the information. It describes which product the information was extracted from, what information was extracted and how the source product derived the original association between the identifiers.



13.2 Relationship Extraction

This relationship is between the non-persistent unique identifier (GUID) of the RoadNode features in *OS Open Roads* and the Topographic Identifier (TOID) of RoadLink features in *OS MasterMap Highways Network*, which represent the same feature.

The relationship is extracted from the OS Open Roads Lookup table which is supplied with the *OS MasterMap Highways Network – Roads*. This table provides the TOID of the RoadLink feature in the *OS MasterMap Highways Network* and the GUID of the ORRoadNode feature in *OS Open Roads* which represent the same feature in *OS Open Roads*. This will be used where a RoadLink in *OS MasterMap Highways* has been simplified in the *OS Open Roads* product to an ORRoadNode (for example, a collapsed roundabout).

13.3 Correlation Method

This relationship is determined using the OS Open Roads Lookup table which is supplied with the *OS MasterMap Highways Network – Roads*. This table provides the TOID of the RoadLink feature in the *OS MasterMap Highways Network* and the GUID of the ORRoadNode feature in *OS Open Roads* which represent the same feature in *OS Open Roads*. This relationship is created by Ordnance Survey using a spatial match between the point and line features.

The two source products for these identifiers are on different refresh cycles. *OS MasterMap Highways Network - Roads* is updated monthly, whereas *OS Open Roads* is updated every six months. Therefore, some of the version information in the product may have changed and mean that the relationship is out of sync.

A Confidence Value is assigned to indicate the reliability of the version information provided in this product in relation to the version of the features used to form the correlation in the original product. The Confidence Value is given for each relationship, which is defined in this relationship as:

Confidence Value	Definition
Version information is correct	The version information provided is the same as the version of the feature used to create the correlation.
Version information has changed	The version information provided is different from the version of the feature used to create the correlation.

