

Dashboards

+ Create dashboard

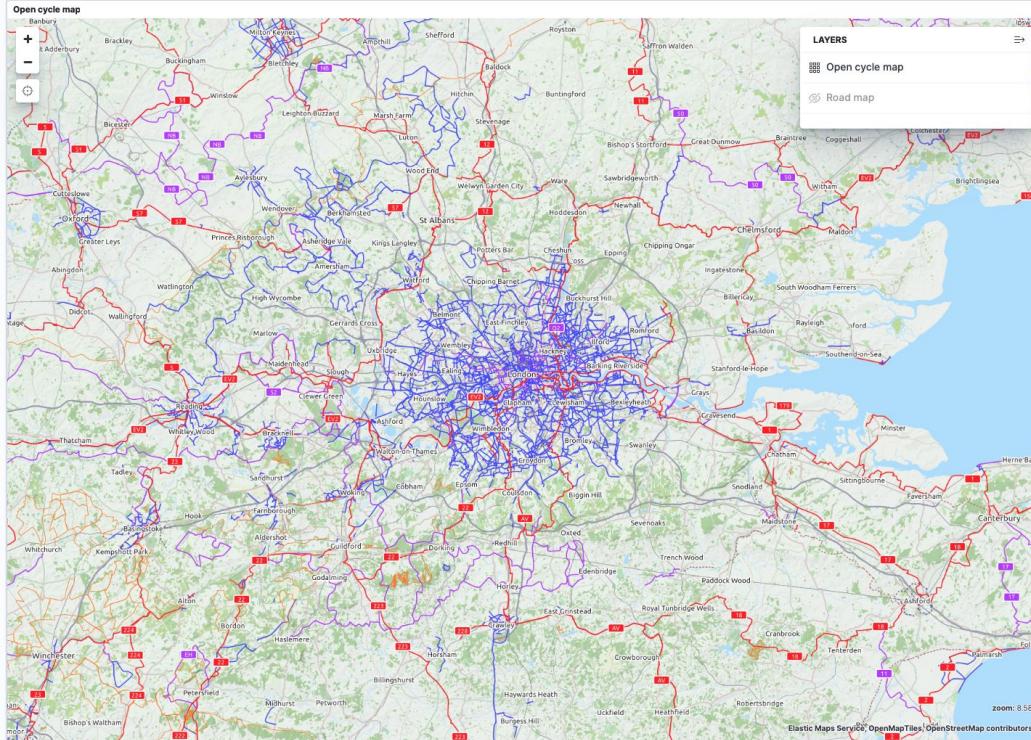
Search...

<input type="checkbox"/>	Title	Description	Actions
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<input type="checkbox"/>	1.1 Existing coverage- London		
<input type="checkbox"/>	1.2 Infra Coverage West Midlands vs London		
<input type="checkbox"/>	10.0 Fenland Area		
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<input type="checkbox"/>	2.1 Cost and benefit (Proposed infrastructure)		
<input type="checkbox"/>	2.2 Proposed infra and costs (Regional details)		
<input type="checkbox"/>	4.0 Collision Statistics		
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1.0 Open cycle map



Description - open cycle map

This is a map directly ingested from Open Street Map/ Open cycle map visualisation service.

It shows all the existing cycling infrastructure/ cycle route in the world.

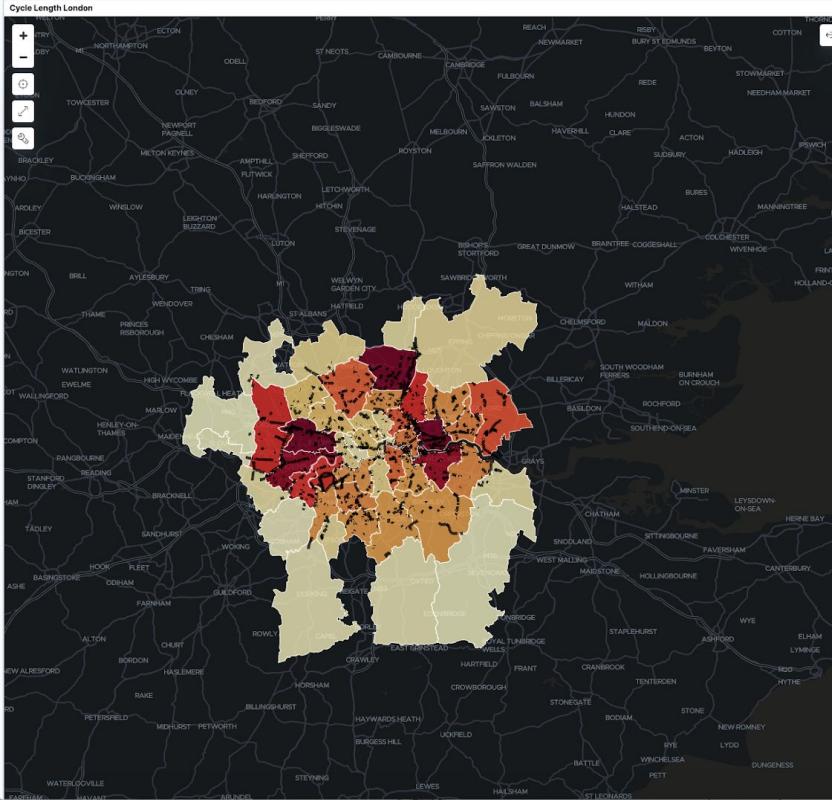
The map will automatically update with OSM.

The key for the map can be found [here](#):

Key

- National Cycle Route
- Regional Cycle Route
- National Cycle Route
- Local Cycle Route
- National Node Network
- Regional Node Network
- Local Node Network
- Cyclepath
- Footpath (no cycling)

1.1 Existing coverage- London

**Description:**London cycleway

Summary statistics about existing cycling infrastructure in London Local Authorities.

The data is ingested from the [CyclPT/Rapid] tool, then pre-processed with Local Authority boundary data from ONS to produce the metrics.

The data is static.

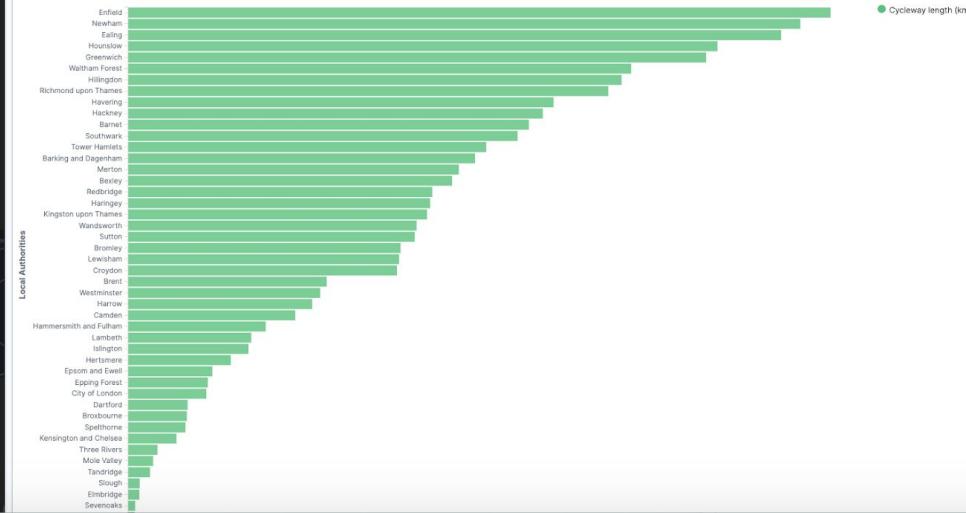
of LA

46
LAs

Total cycleway length in London

1,266,042.1
km

Cycle length by LA



1.2 Infra Coverage West Midlands vs London



Description: london vs west midlands

In this dashboard, we show the cycling infrastructure coverage and compare them against Greater London and Birmingham.

The data is downloaded from the CylPT/Rapid dataset.

The interesting insights here is perhaps in west midlands, the length of cycling infrastructure decreases very quickly outside of Birmingham city centre. While in London, cycle infrastructure density is high even outside of the centre. It would be interesting to look at cycle length density (length/ area) to take into account the different size of the LA boundary.

West midlands

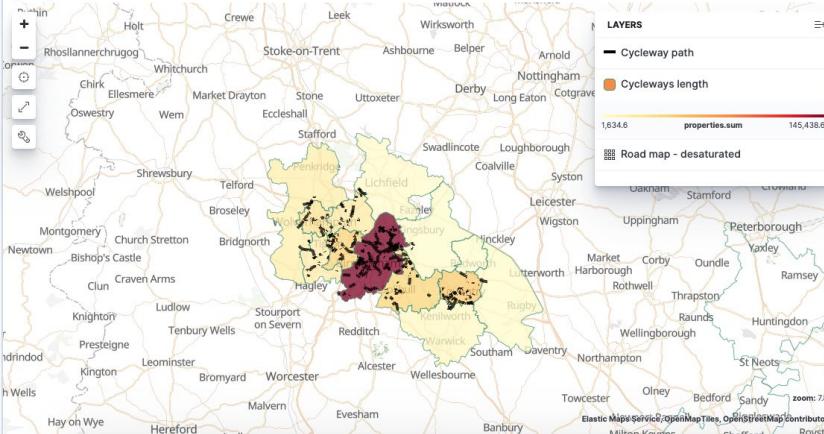
West midlands

15
LAs

Length of cycleway - West midlands

363,305.5
km

Cycleway distribution - West midlands



London

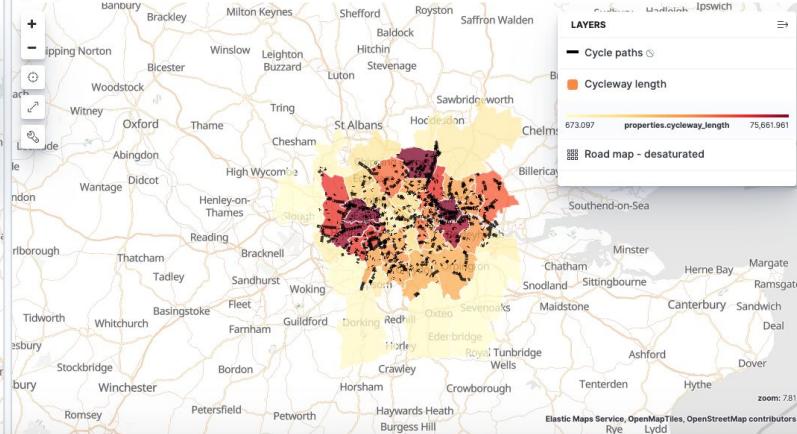
London

46
LAs

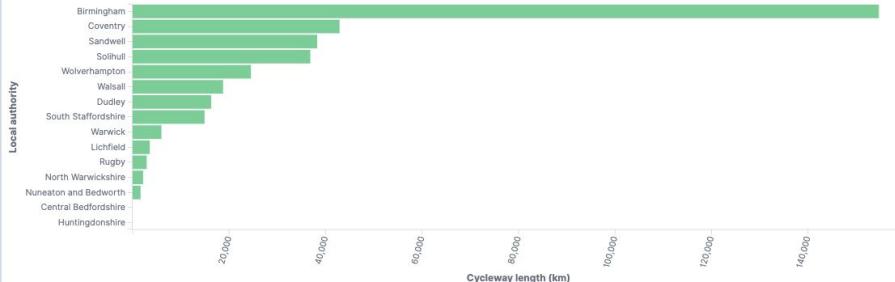
Length of cycleway - London

1,266,042.1
km

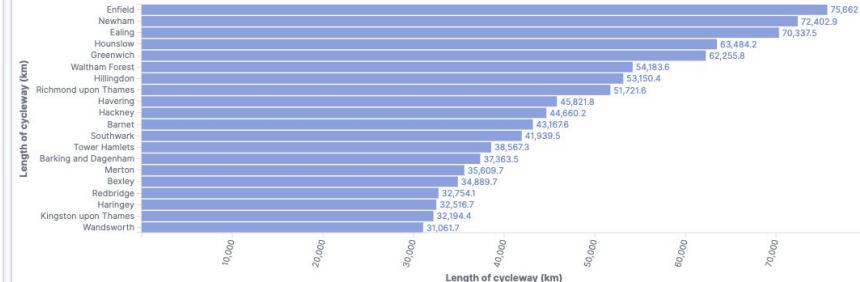
Cycleway distribution - London



Length of cycleway by LA - West midlands (all)



Length of cycleway by LA - London (Top 20)



Deprivation maps and data

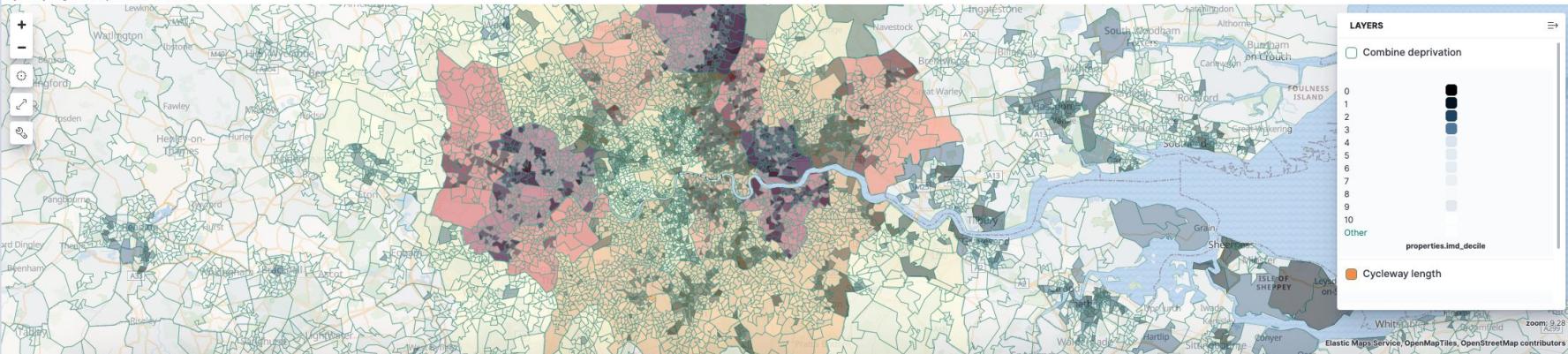
These maps are generated with [English indices of deprivation 2019 "Decile"](#), with LSOA boundaries.

The deciles are calculated by ranking the 32,844 LSOAs in England from most deprived to least deprived and dividing them into 10 equal groups. LSOAs in decile 1 falls within the most deprived 10% of LSOAs nationally and LSOAs in decile 10 fall within the least deprived 10% of LSOAs nationally.

The darker colour indicates the most deprived.

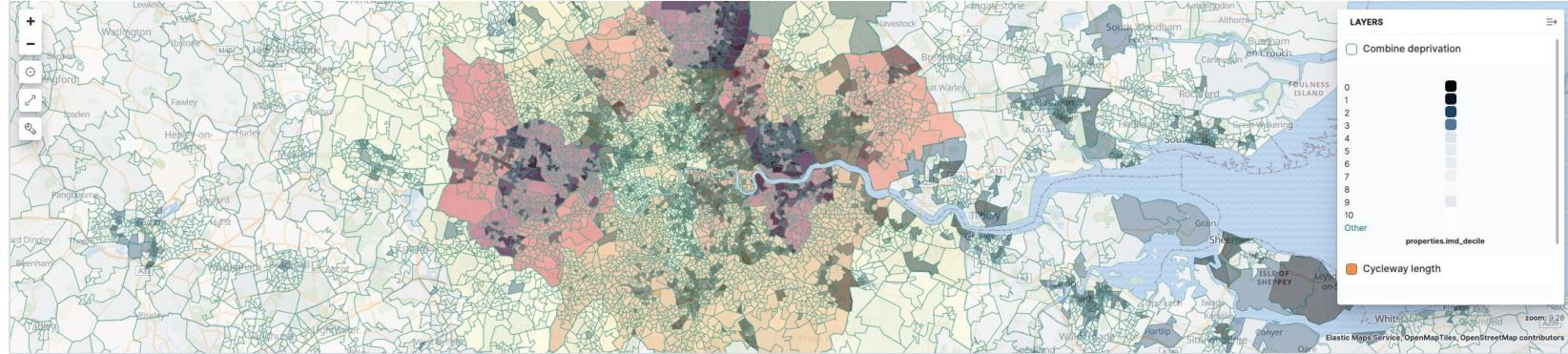
Overlaid is the coverage map of London and West Midlands, which you can enable and disable.

Cycleway length and deprivation index - London

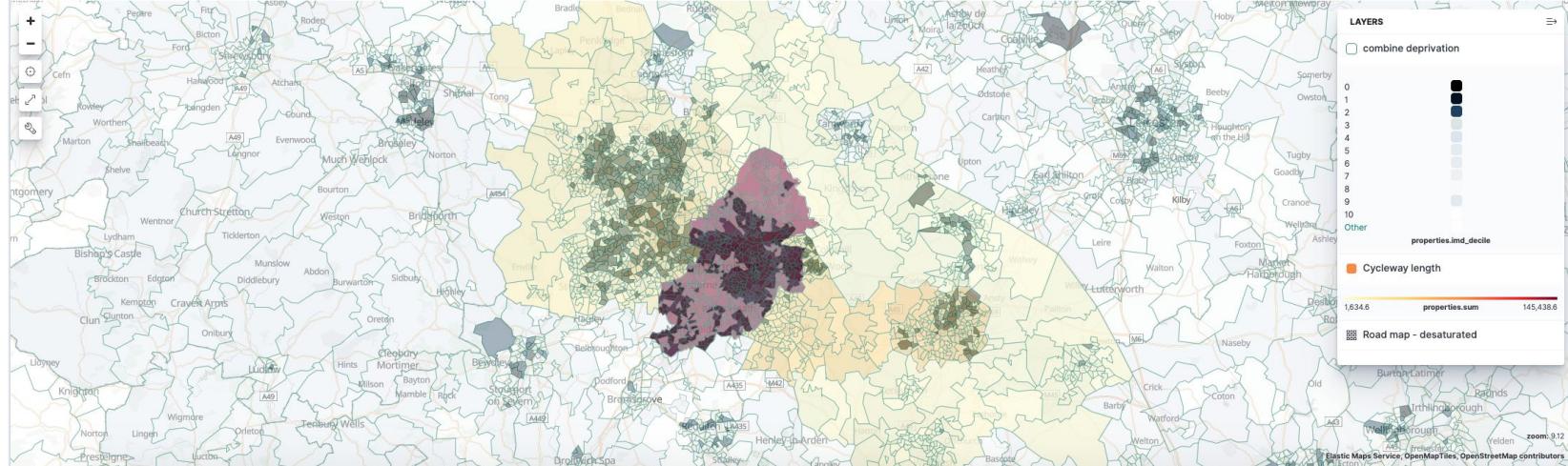




Cycleway length and deprivation index - London



Cycleway length vs deprivation - West midlands



10.0 Fenland Area



BCR by infra table

Regions :	Cost (€)	Length (km) :	Average BCR :	Type of infra	Cost (€)	Length (km) :	Average BCR :
Ashford	606,222	2,604.8	2.8	Cycle Lane on Path	250,084	1,838.8	4.5
Ashford	606,222	2,604.8	2.8	Cycle Lanes	247,091	537.2	1.4
Ashford	606,222	2,604.8	2.8	Stepped Cycle Tracks	109,047	230.7	1.2
Barnsley	146,875	318.9	1.4	Cycle Lanes	146,875	318.9	1.4
Barnstaple	1,114,869	2,039.5	1.5	Cycle Lanes	453,541	990.7	1.5
Barnstaple	1,114,869	2,039.5	1.5	Stepped Cycle Tracks	661,328	1,048.8	1.4
Barrow-in-Furness	811,829	1,858.6	2.2	Cycle Lanes	603,353	1,291.3	1
Barrow-in-Furness	811,829	1,858.6	2.2	Cycle Street	8,476	565.3	4.6
Basingstoke	1,252,516	3,421.8	71	Cycle Lanes	1,080,903	2,666.4	1.4
Basingstoke	1,252,516	3,421.8	71	Cycle Street	171,613	755.3	24.2

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2.0 UK Cost and benefit (Local authority view)

Start typing the name of LA to filter

LA name

Select...

Cost range of schemes

3506 109267080

Number of LAs

379
LAs

Average deprivation

21
score

Avg costs of cycle schemes

10,073
thousands £

Total costs of cycle schemes

2,306,727.8
thousand £

Cost and benefit table by LA

Local authority ^	Total benefits ^	Total costs ^	BCR ^	Proposed length (thousand km) ^	# cycle schemes ^	Average deprivation ^
Adur	720,355	619.5	1.2	1.347	3	18
Amber Valley	196,863	126.1	1.6	0.274	1	18
Arun	4,680,439	3,321.9	1.4	6.042	7	19
Ashfield	1,014,346	708.8	1.4	1.937	6	26
Ashford	1,395,773	606.2	2.3	2.605	5	19
Aylesbury Vale	246,818	144.5	1.7	0.424	1	11
Barking and Dagenham	3,620,094	2,102.7	1.7	3.157	6	33
Barnet	44,297,696	24,443.7	1.8	37.29	12	16
Barnsley	209,358	146.7	1.4	0.319	1	30
Barrow-in-Furness	669,216	611.8	1.1	1.857	3	31

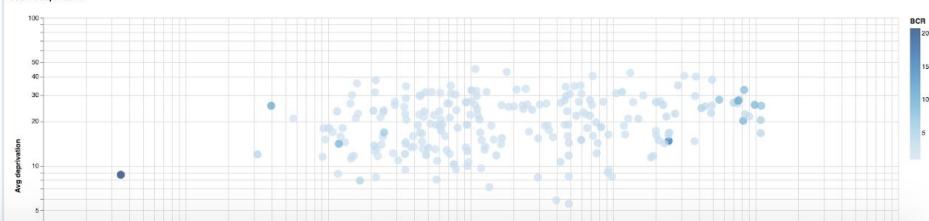
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BCR vs # cycle schemes (UK)

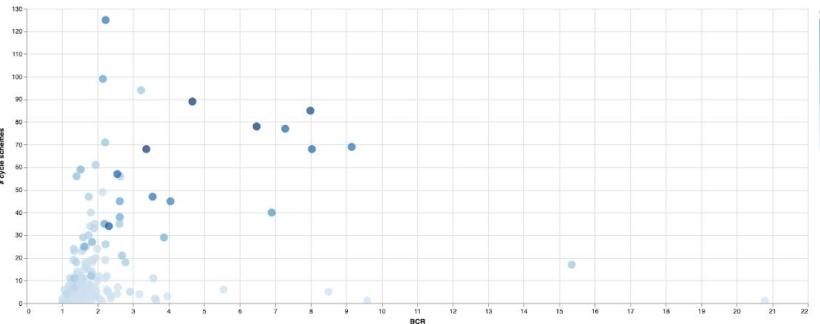


Cost vs deprivation

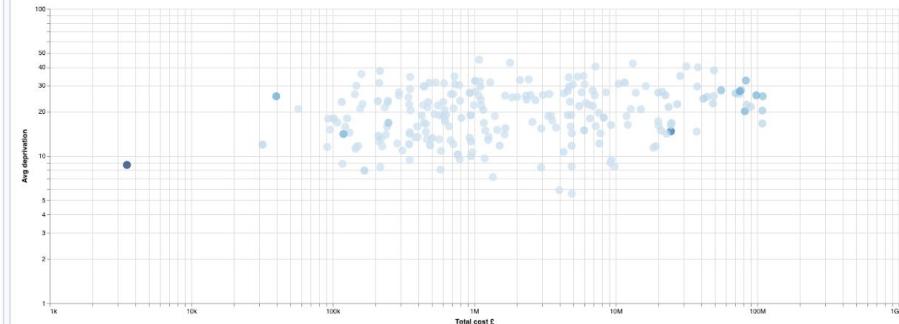




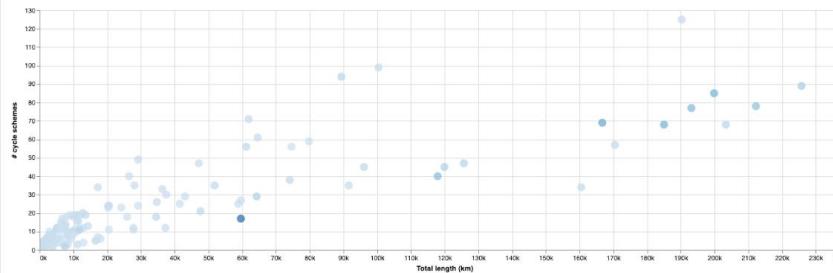
BCR vs # cycle schemes (UK)



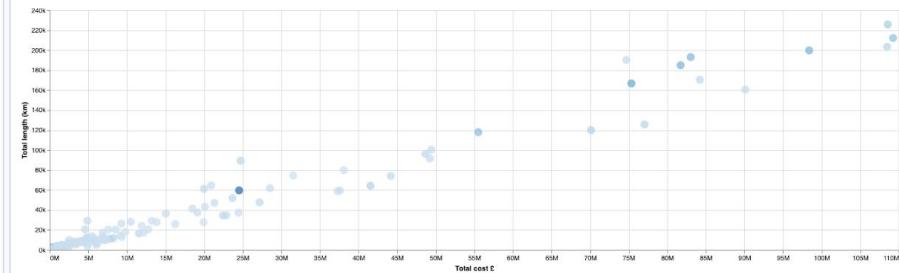
Cost vs deprivation



Total proposed length vs # cycle schemes



Costs vs infrastructure length (UK)



Description - BCR

About

This dashboard captures the length of cycling infrastructure, costs and benefits proposed by the [CycliT tool](#) developed by University of Leeds and funded by DfT.

About

This dashboard captures the length of cycling infrastructure, costs and benefits proposed by the [CylPT tool](#) developed by University of Leeds and funded by DfT.

Notes on using "filtering"

The filter control does not show all the LA available in the datasets. To filter on the LA, start typing the name of the LA and select the ones you would like to display.

Benefit categories

- Health benefits from increase exercise
- Benefits from reduced absenteeism due to improved health
- Benefits from improved journey quality – Not yet implemented
- Benefits from reduced road accidents – Simple implementation
- Benefits from reduced noise – Not yet implemented
- Benefits from improved air quality - Not yet implemented
- Benefits from reduced greenhouse gas emissions
- Benefits from reduced road traffic congestion - Simple implementation
- Benefits from indirect taxation - Not yet implemented
- Benefits from time savings - Not yet implemented

The factors estimating the increase in cycling due to the new infrastructure

For more information, please check [CylPT website](#)

Fields:

Field	Name	Descriptions	Units
total_benefits	Total Benefits	Sum of estimated benefits across all schemes recommended by CylPT for the Local Authority.	GBP
total_cost	Total Cost	Sum of estimated costs across all schemes recommended by CylPT for the Local Authority.	GBP
total_length	Total Length of Recommended Infrastructure	CylPT algorithm is the basis of this recommendation, and is widely used by planners, although on an ad hoc basis. The CylPT tool allows for filtering of recommendations by Benefit-Cost Ratio and max cost. However, this metric assumes all recommendations are desired.	km
bcr	Benefit-Cost Ratio	The ratio of the sum of estimated benefits across all recommended schemes for the Local Authority to the sum of all estimate costs for schemes for that Local Authority.	--
deprivation	Deprivation score	Average Score - Index of Multiple Deprivation. Population weighted average of the combined scores for the LSOAs in a larger area. The average score summary measure is calculated by averaging the LSOA scores in each larger area after they have been population weighted.	

2.1 Cost and benefit (Proposed infrastructure)

Full screen Share Clone Edit

Search

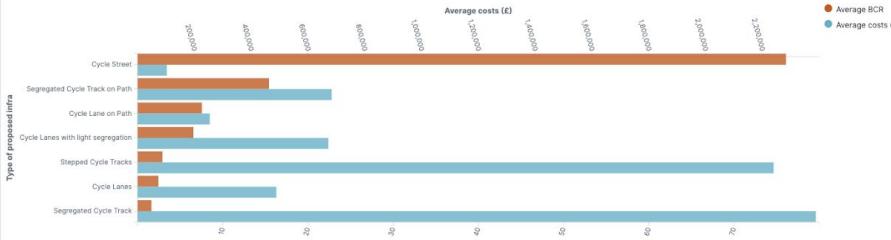
+ Add filter

Start typing the name of region to filter on

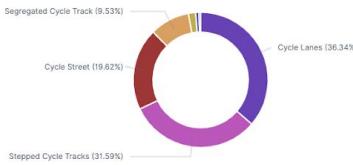
Region (Start typing and select)

Type of proposed infrastructure

Cost & BCR vs cycle infra type



Proposed cycle infra by length


● Cycle Lanes
 ● Stepped Cycle Trac...
 ● Cycle Street
 ● Segregated Cycle T...
 ● Cycle Lane on Path
 ● Cycle Lanes with lig...
 ● Segregated Cycle T...

Proposed cycle infra by costs



Number of regions

110
Regions

Number of proposed infra type

7
types

Number of proposed schemes

3,258
schemes
 Description: BCR

A region is an entity defined in CyIPT tool to combine several LAs into a similar to a city. One of the reasons is to understand "cohesion" of the region, where a bicycle network connects up with origins, and destinations - with all points of departure and of arrival.

The data from this dashboard is downloaded from CyIPT "scheme" dataset.

The data is currently static. CyIPT is not updating their datasets anymore. Going forward we should look at CyIPT/Rapid instead.

We can get some insights available:

- The costs of cycle street are the highest with small BCR return
- The costs of stepped cycle tracks are high with large BCR return

The most recommended cycle infrastructure in terms of length is cycle lanes (37.6%) and the least recommended infrastructure is segregated track on path (0.53%).

The recommended infrastructure layer presents CyIPT's recommendation for the type of cycle infrastructure required on each road segment. Roads and paths where no cycle infrastructure is required are not shown. The recommendations do not take account of any existing infrastructure; therefore, the recommendations may suggest that existing cycle infrastructure remain, be upgraded, or in limited cases be downgraded.

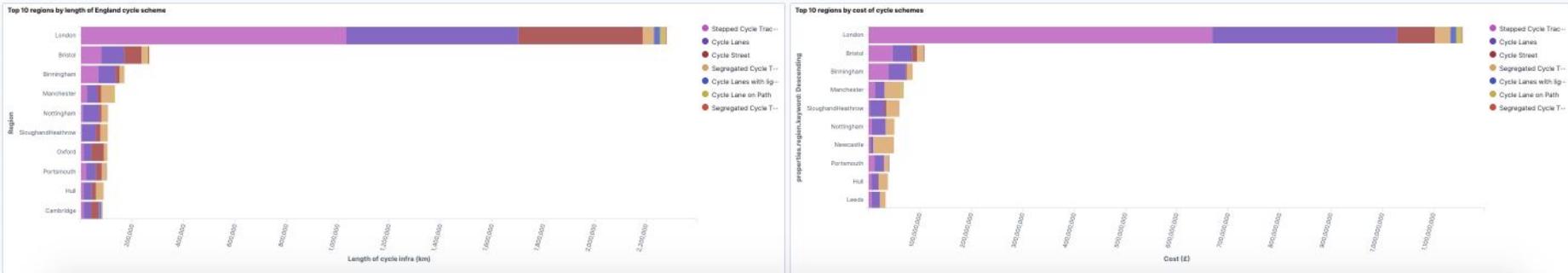
Type of infrastructure	Descriptions
Cycle Lanes	A painted line on the roadway divides bicycles from other traffic
Cycle Lanes with light segregation	Similar to cycle lanes but batons or armadillos are added along the line to reinforce the separation between cyclists and motor traffic
Stepped Cycle Tracks	Cyclists travel on a slightly elevated lane, above the road traffic but below the pavement
Segregated Cycle Track	Cyclists travel in a separate lane physically separated from motor traffic by a hard barrier
Cycle Streets	These very quiet roads are primarily designed for cycling and walking while still allowing low speed motor traffic
Cycle Lane on Path	(Off Road Only) cyclists are separated from pedestrians by a painted line.
Segregated Cycle Track on Path	(Off Road Only) cyclists are separated from pedestrians by a hard barrier.

For more information on CyIPT and the datasets, please see [CyIPT manual](#)

BCR by infra table							
Region	Cost (£)	Length (km)	Average BCR	Type of Infra	Cost (£)	Length (km)	Average BCR
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Barnstaple	1,114,869	2,039.5	1.5	Stepped Cycle Tracks	661,328	1,048.8	1.4
Barrow/Furness	811,329	1,858.6	2.2	Cycle Lanes	803,353	1,291.3	1
Barrow/Furness	811,329	1,858.6	2.2	Cycle Street	8,476	565.3	4.6
Basingstoke	1,252,516	3,421.8	21	Cycle Lanes	1,080,903	2,686.4	1.4
Basingstoke	1,252,516	3,421.8	21	Cycle Street	171,813	755.3	24.2

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1 2 3 4 5 ... 30 *



2.2 Proposed infra and costs (Regional details)

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Search

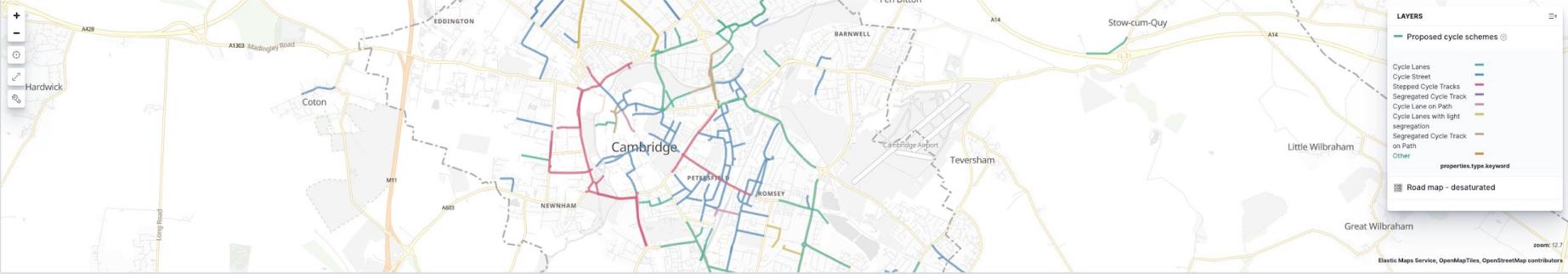
properties.region.keyword: Cambridge + Add filter

Start typing the name of the region to filter on

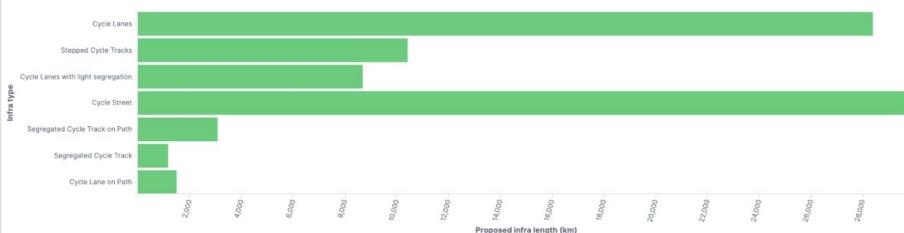
Filter by Region

Cambridge

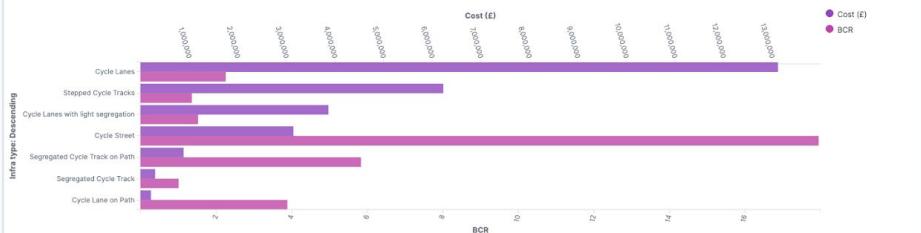
Proposed cycle schemes - Cambridge



Proposed infra length (km) by type



BCR and cost



Details of proposed cycle infrastructure

Infra type: Descending	Length of infra (km)	Cost (€)	BCR	Increase in cycle trips	Decrease in car distance (km)
Cycle Street	29,775.6	3148156	664.2	1,797	2,042,813
Cycle Lanes	28,382.5	13,124,143	76.7	1,730	2,870,866
Stepped Cycle Tracks	10,413.3	6,232,138	6.8	971	1,433,078
Cycle Lanes with light segregation	8,680.8	3,869,030	7.6	458	810,090
Segregated Cycle Track on Path	3,077.6	887,000	17.5	337	515,328
Cycle Lane on Path	1,492.1	215,463	11.7	103	125,981
Segregated Cycle Track	1,162.9	301,933	1	11	52,744

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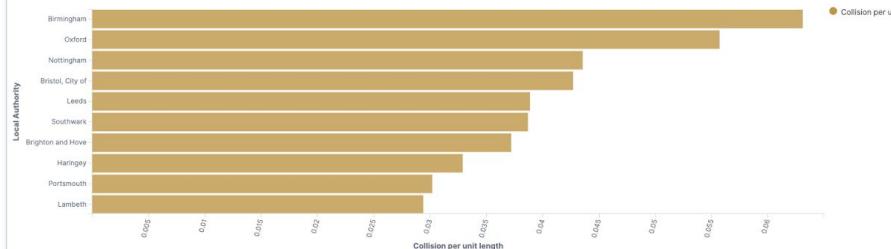
4.0 Collision Statistics

Full screen Share Clone Edit

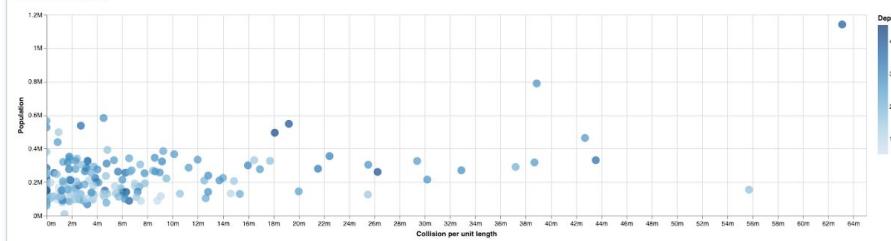
Search

+ Add filter

Top 10 number of collisions by LA



Population vs # collisions



Description: collision

For the infrastructure recommended by CyIPT, this divides the length of it by the number of collisions (fatal, severe, and slight) that occurred in 2015 along the road on which the infrastructure is proposed. Introducing infra in with large numbers of collisions, can make those areas safer, but only if dangerous junctions and roundabouts are correctly managed.

Metrics:

Metric	Name	Descriptions
Population	Population in the Local Authority District	The 2018 figure for population is taken from the BEIS UK local authority and regional carbon dioxide emissions national statistics
Collision	Number of collisions per unit length of recommended cycle scheme	For the infrastructure recommended by CyIPT, this divides the length of it by the number of collisions (fatal, severe, and slight) that occurred in 2015 along the road on which the infrastructure is proposed. Introducing infra in with large numbers of collisions, can make those areas safer, but only if dangerous junctions and roundabouts are correctly managed.
Avg deprivation	Aggregate (average) Score for the Local Authority on the Index for Multiple Deprivation	Average deprivation level using the ONS 2019 Index of Multiple Deprivation Average Score for a Local Authority. The score is an average as IMD is actually calculated at a higher level of granularity than this. For Cycling work, it may be valuable to use these more granular stats.

Collision statistics by LA

Local Authority	Avg collision	Avg deprivation	Populations
Birmingham	0.063	38	1,141,374
Oxford	0.056	17	154,327
Nottingham	0.044	35	331,069
Bristol, City of	0.043	26	463,405
Leeds	0.039	27	789,193
Southwark	0.039	26	317,256
Brighton and Hove	0.037	21	290,395
Haringey	0.033	28	270,823
Portsmouth	0.03	27	215,132
Lambeth	0.000	n/a	225,274

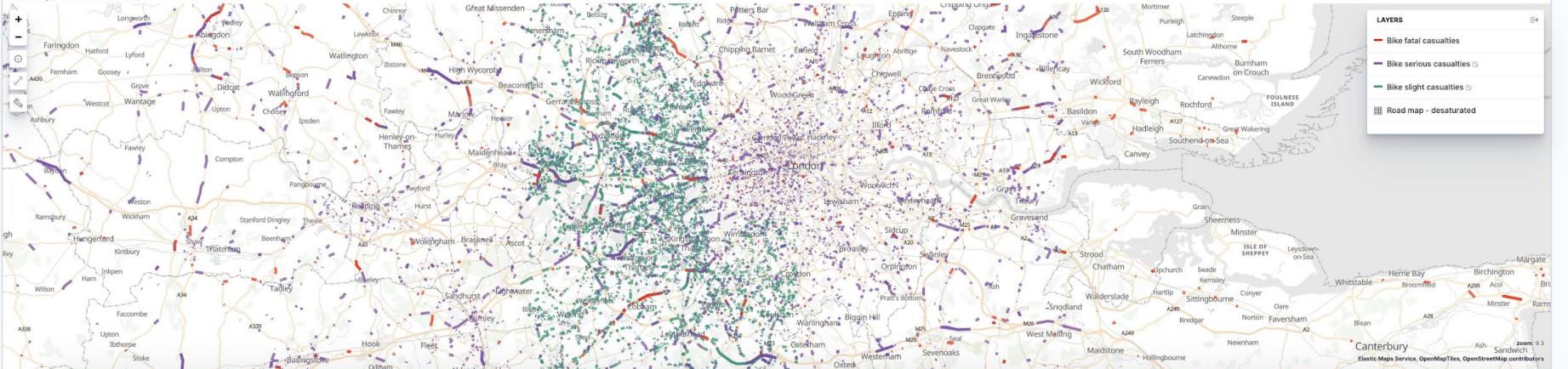
Collision statistics by LA

Local Authority	Avg collision =	Avg deprivation =	Populations
Birmingham	0.063	38	1,141,374
Oxford	0.056	17	154,327
Nottingham	0.044	35	331,069
Bristol, City of	0.043	28	463,405
Leeds	0.039	27	789,933
Southwark	0.039	26	317,256
Brighton and Hove	0.037	21	290,395
Haringey	0.033	28	270,623
Portsmouth	0.03	27	215,132
Lambeth	0.029	25	325,917
Kingston upon Hull, City of	0.026	41	280,645
Lewisham	0.026	27	303,536
Cambridge	0.025	15	125,757
Leicester	0.022	31	355,218
Hackney	0.022	33	279,865

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1 2 3 4 5 ... 16 *

Collision map (zoom in to see all the data)

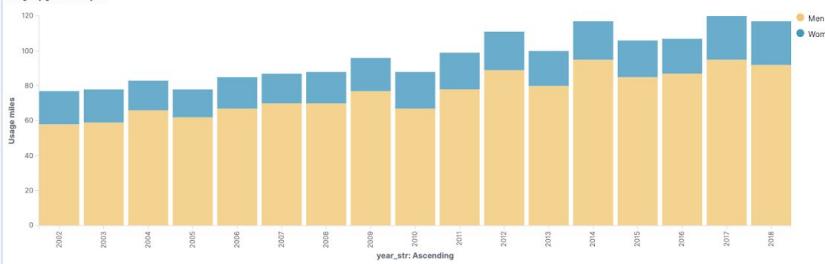


5.0 Cycling usage

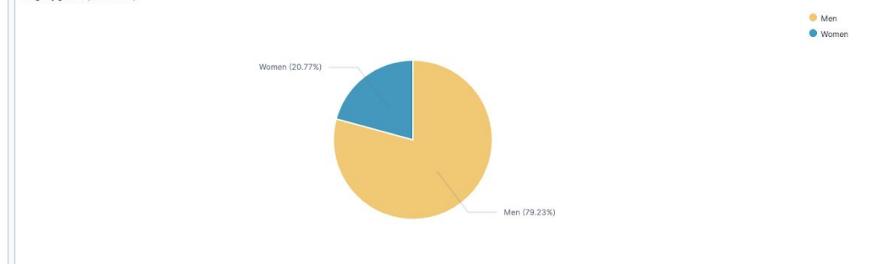
Description - cycle usage

Data from National Transport Survey and Active Life Survey 2002-2018 (static).

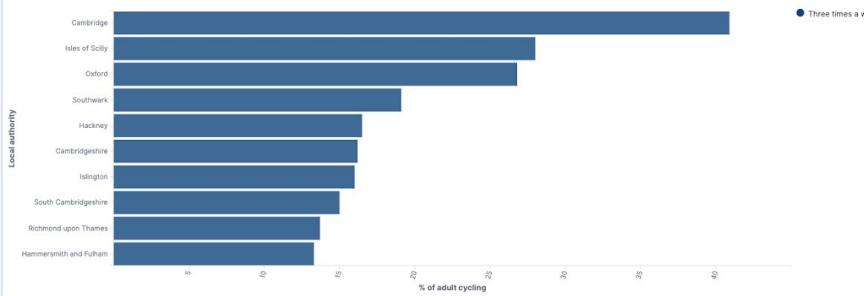
Usage by gender and year



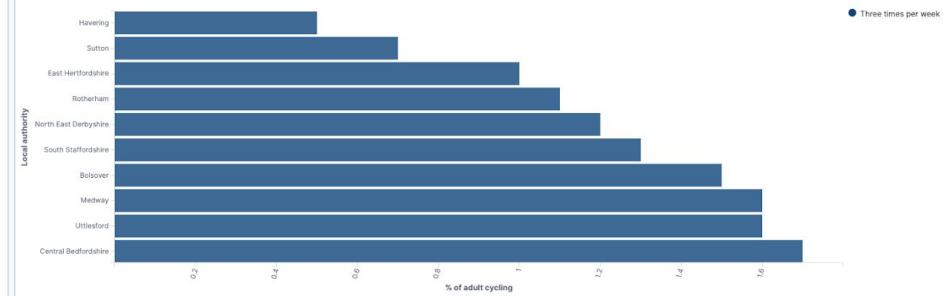
Usage by gender (2002-2018)



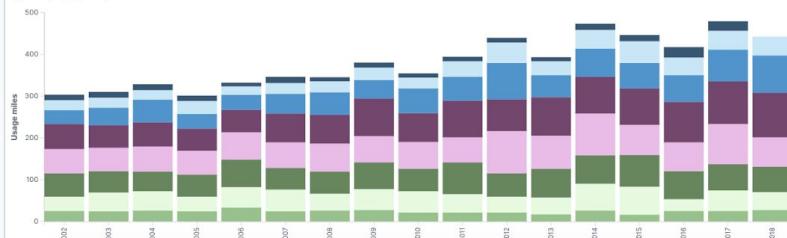
Top 10 usage by LA (3 times a week)



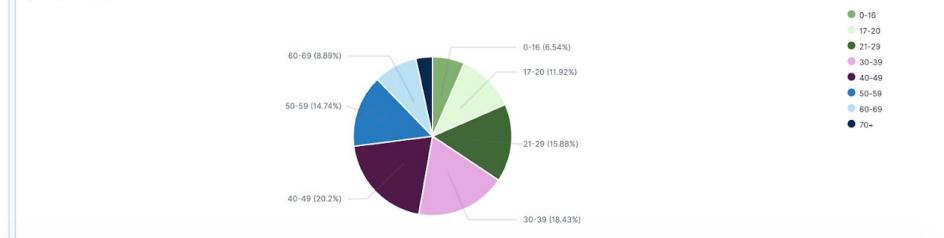
Bottom 10 cycle usage by LA (3 times a week)



Cycle usage by age and year



Cycle usage miles by age 2002-2018



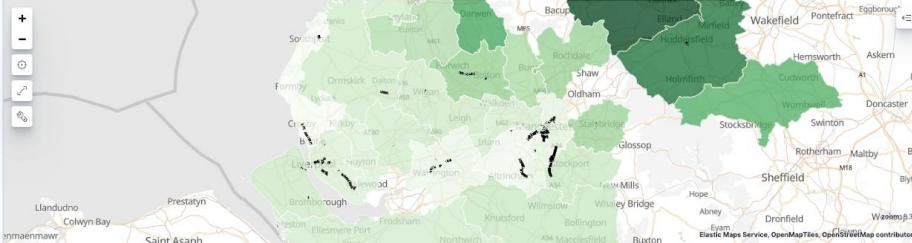
9.0 Manchester Area insights

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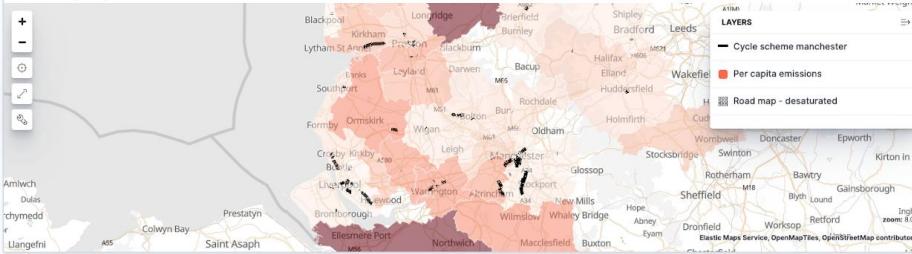
Search

+ Add filter

Manchester cycle length and hilliness



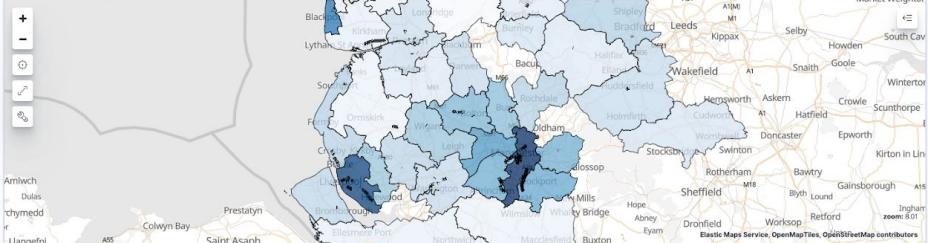
Manchester - Proposed cycle schemes and emission



Manchester proposed length vs number of schemes



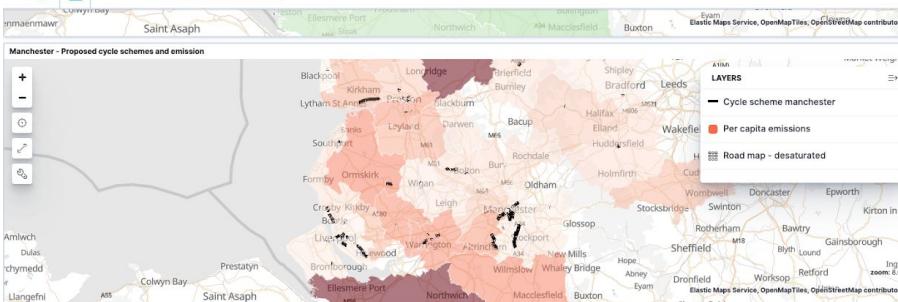
Manchester - Proposed cycle schemes and population density



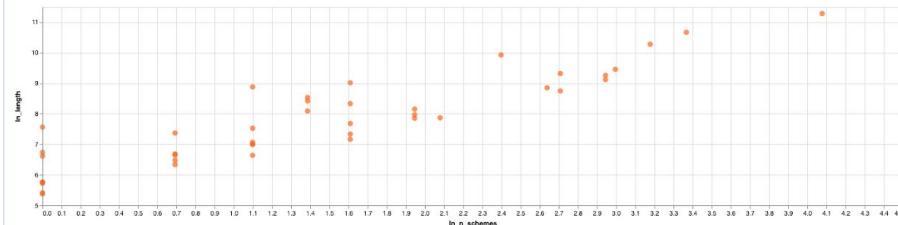
Description - manchester

Terms

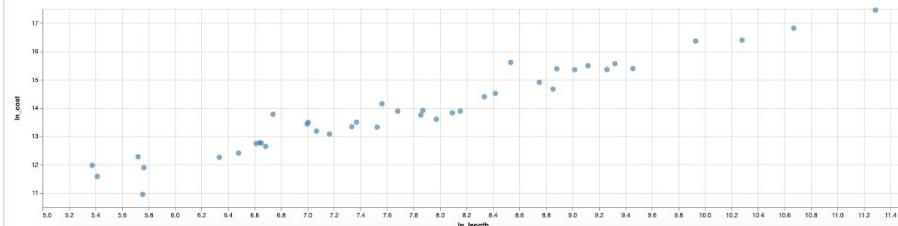
Variable	name	description	units
per_capita_emissions	Tons of CO2 emitted per capita	The 2018 figure is taken from the BEIS UK local authority and regional carbon dioxide emissions national statistics	Tons per Person
pop_density	People per km ² in Local Authority District	Inferred from the 2018 data in population and area_km2 columns per km ²	
avg_gradient_pct/Hilliness	Average gradient (%) of the cycle network	The average gradient (%) of the cycle network inferred by the Cambridge Propensity to Cycle Tool (PCT) using 2011 data. This variable should be used as a rough indication of the hilliness of the potential area for a cycle network, which is known to negatively affect Propensity to Cycle.	percent



Manchester proposed length vs number of schemes



Manchester area and cost per length



Terms

Variable	name	description	units
per_capita_emissions	Tons of CO2 emitted per capita	The 2018 figure is taken from the BEIS UK local authority and regional carbon dioxide emissions national statistics	Tons per Person
pop_density	People per km ² in Local Authority District	Inferred from the 2018 data in population and area_km ² columns per km ²	
avg_gradient_pct/Hilliness	Average gradient (%) of the cycle network inferred by the Cambridge Propensity to Cycle Tool (PCT) using 2011 data. This variable should be used as a rough indication of the hilliness of the potential area for a cycle network, which is known to negatively affect Propensity to Cycle.	percent	

Benefit Cost Ratio (BCR) vs average deprivation

