



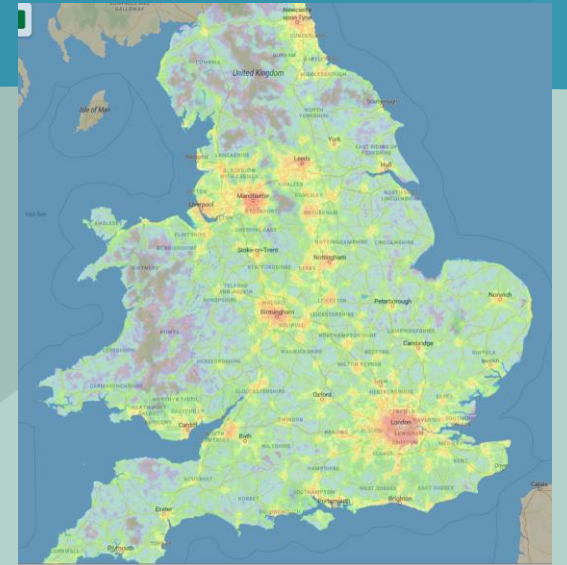
Department
for Transport

The DfT Connectivity Tool

National Rural Conference

Fergus O'Dowd - DfT

OFFICIAL



The Strategic Planning Team @ DfT

We are a Centre of Excellence

- *We are a team of experienced chartered spatial planners providing a professional and credible expert planning service.*
- *DfT policy teams are our clients, we provide solution focussed advice across all modal streams*
- *We act as the principal conduit and negotiating team to DLUHC to ensure our asks of the planning system are credible.*

We save DfT time and money. We secure the right outcomes.

We will deliver a network of planning professionals

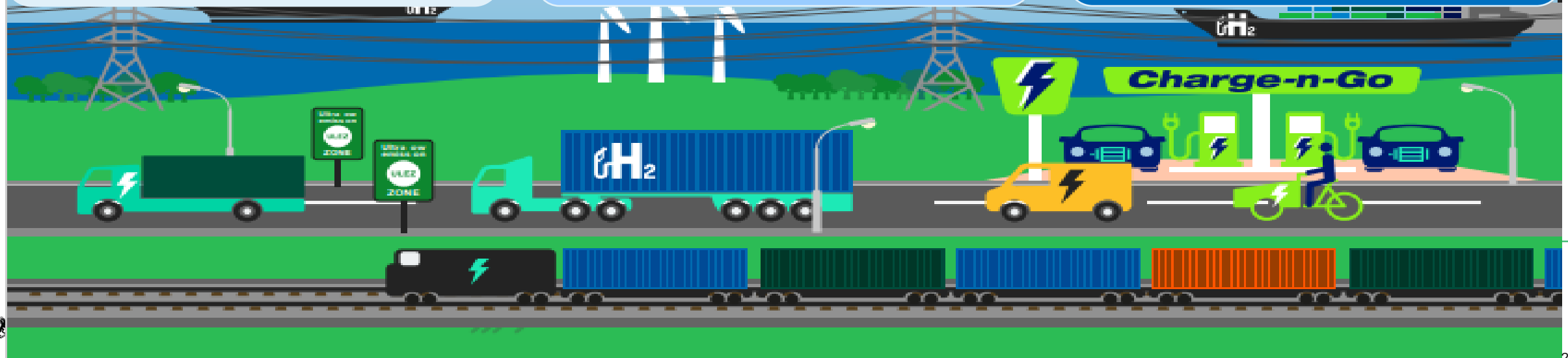
- *Our network will offer credible L&D, career progression, support and advice for all Spatial, Transport and Environmental Planning professionals across DfT and the wider DfT family*

We are a strong and credible voice for the profession raising our profile across DfT and Whitehall

We will deliver sustainable patterns of development that are infrastructure led

- *Our mission is to better align the spatial and transport planning systems to locate development in the areas that are the most sustainable or can be made sustainable by timely delivery of transport infrastructure*

We are the drivers of change. Starting the conversation and joining the dots



The current picture

- New government = greater focus on increasing housebuilding
- But what are we currently building?
 - Often, greenfield sites isolated from public transport and the services needed to support communities
 - Relatively low densities
 - Designs, layouts and locations can build in car dependency
- Need to avoid these sub-optimal outcomes when raising the bar on the amount of new development



Good intentions, variable outcomes

Integrated planning indicator	No. of local plans	% of local plans
Sustainable locations discussed in local plan vision	11	79%
Sustainable transport discussed in strategic objectives	11	79%
Transport policy with sustainable transport considerations	11	79%
Sustainable transport improvements proposed for site allocations	14	100%
Reference to local transport plan	10	71%
Evidence requirement for sustainable location	0	0%

Source: Picardi et al. 2023, *Connected places: Where does growth in England go?*, European Transport Conference Online: <https://aetransport.org/private/downloads/gruzuoA5uQAvs3LnbpKmf9BLxEg/ETC%20paper%20Connectivity%20Tool.pdf>

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An agreed measure

- As there is **no agreed measure through which to understand how 'connected' a place is...**
- This means it's often not possible to easily understand the connectivity impacts of new or removed transport services and new development.
- Hence, we're developing a UK model of connectivity. Its effectiveness in the spatial and transport planning systems will depend on the policy framework that supports it.
- We hope to empower plan makers and decision takers with a consistent and easily understandable metric to do things differently.



What is 'Connectivity'?

- The metric measures someone's ability to **get to** where they **want to go**.
- It accounts for different destinations, modes of travel, and travel time.
- It's an index measure – showing *relative* Connectivity.

Where people want to go:



Shopping



Visit people



Work



Education



Entertainment



Health



By sustainable modes:



Public transport



Cycling



Walking

Connectivity score:

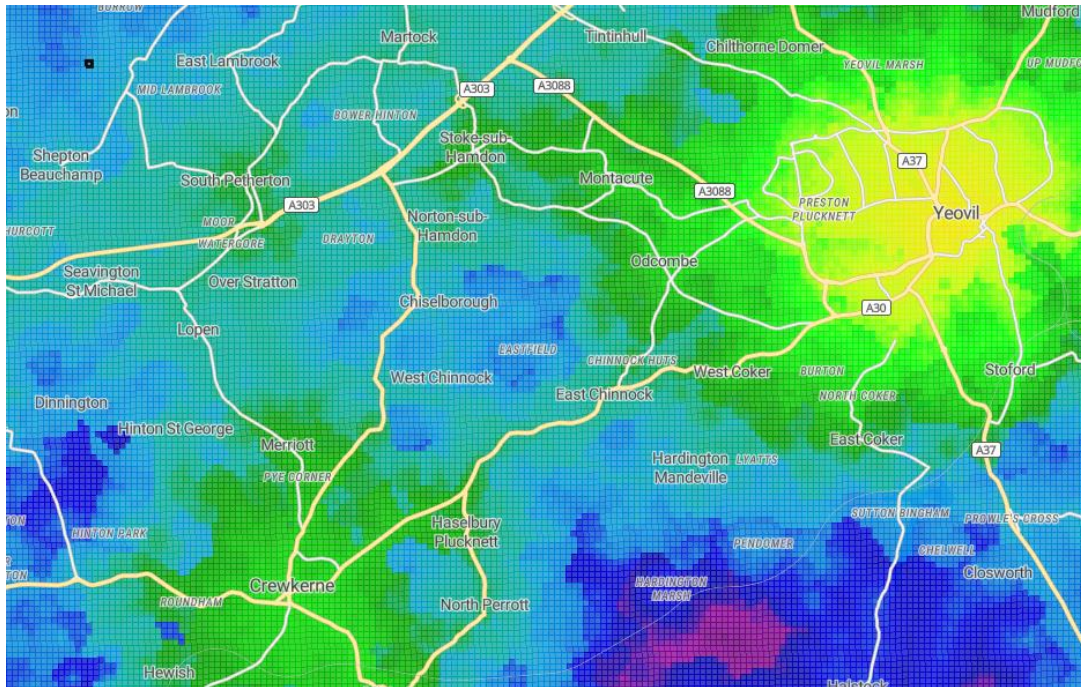
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Connectivity Tool: two functions

‘Analytical’

Allows users to view the overall connectivity score, as well as break this down by mode and destination.

Allows users to view the routes which contribute most to the connectivity score



‘Propositional’

Allows users to plot new routes and gauge their effect on an area’s connectivity score

Explore Scores **New Scheme**

Upload scheme from GeoJSON Download scheme as GeoJSON

1 interventions [Clear interventions](#)

Doncline ^

Route name:

Number of services on route per day:

Time between each of these services (minutes):

First service timetable:

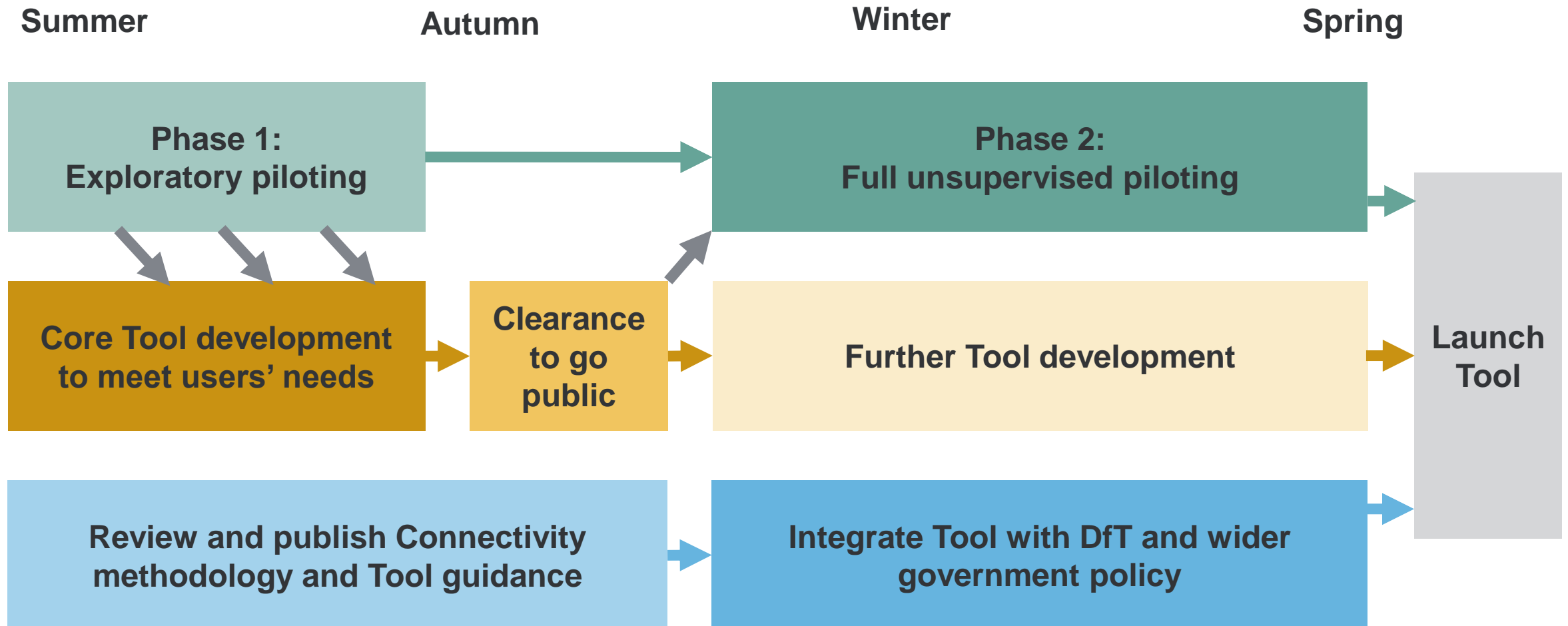
Stop	ATCO	Arrival time	Departure time

Outcomes for rural areas

- Highlight both those areas able to support development and those in need of improved connectivity to essential services.
- Allow often under-resourced local authorities to understand how to effectively improve their areas' connectivity.
- Provide an agreed evidence base for discussions between developers, local authorities and the public about the location, scale, layout, density and design of new development.
- Inform planning for new developments and existing settlements so precious opportunities to improve connectivity by walking, cycling and public transport are not missed.



A look ahead



Next steps: pilot phase

- When?** **October 2024 onwards** (provisional dates dependent on Tool development)
- What?** All local authorities can use the Tool in pilot state, to inform plans, policies, and consultation responses – over an extended period on a **complete version** of the Tool. We're particularly looking for interesting **real-world use cases** in town planning, transport planning and other fields.
- Given the Tool will still be in pilot phase, it would not initially be able to be used in quasi-judicial parts of the planning system without caveats.
- Why?** Our aim is to understand how the Tool can support a wide range of use cases and to provide assurance before the Tool is launched into the planning system.
- How?** You'd be using the Tool to support your new and existing workstreams (in parallel with existing processes where assurance is required). You'd receive a full introduction to the Tool and ad-hoc support from DfT, as well as workshops with other local authorities.
- During full piloting, we anticipate you would be able to use all the core features of the Tool.** However, some advanced functionalities will still be in development.

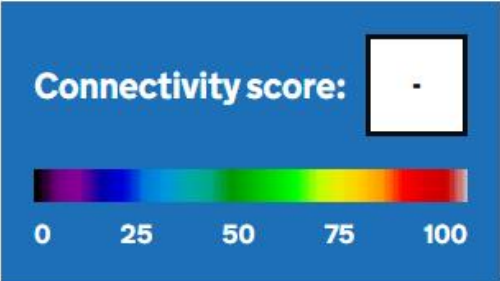


Demo of the Tool

Search by coordinates, street name and postcode

Back

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Score Routes Settings

! Zoom further to select

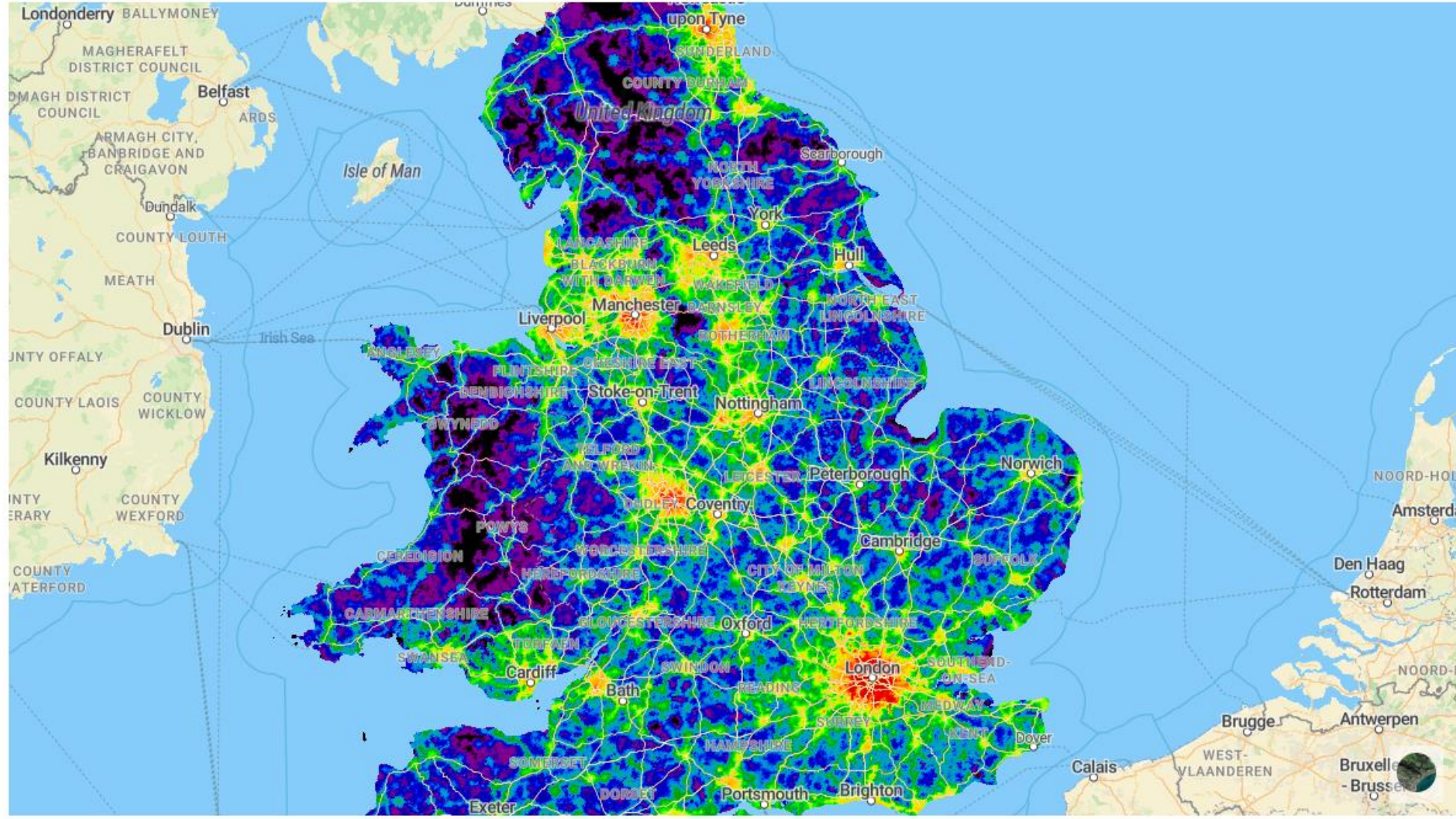
Filter map

Filter data shown in the map

Show local authority band

Score by destination

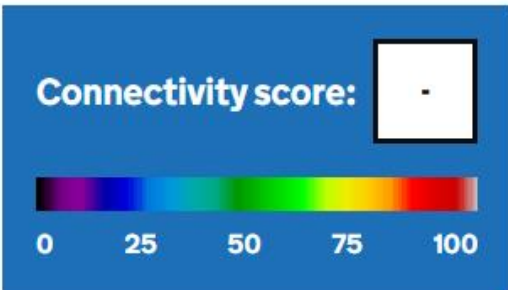
Overall



Search by coordinates, street name and postcode

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Score

Routes

Settings



Click on the map to select

Filter map

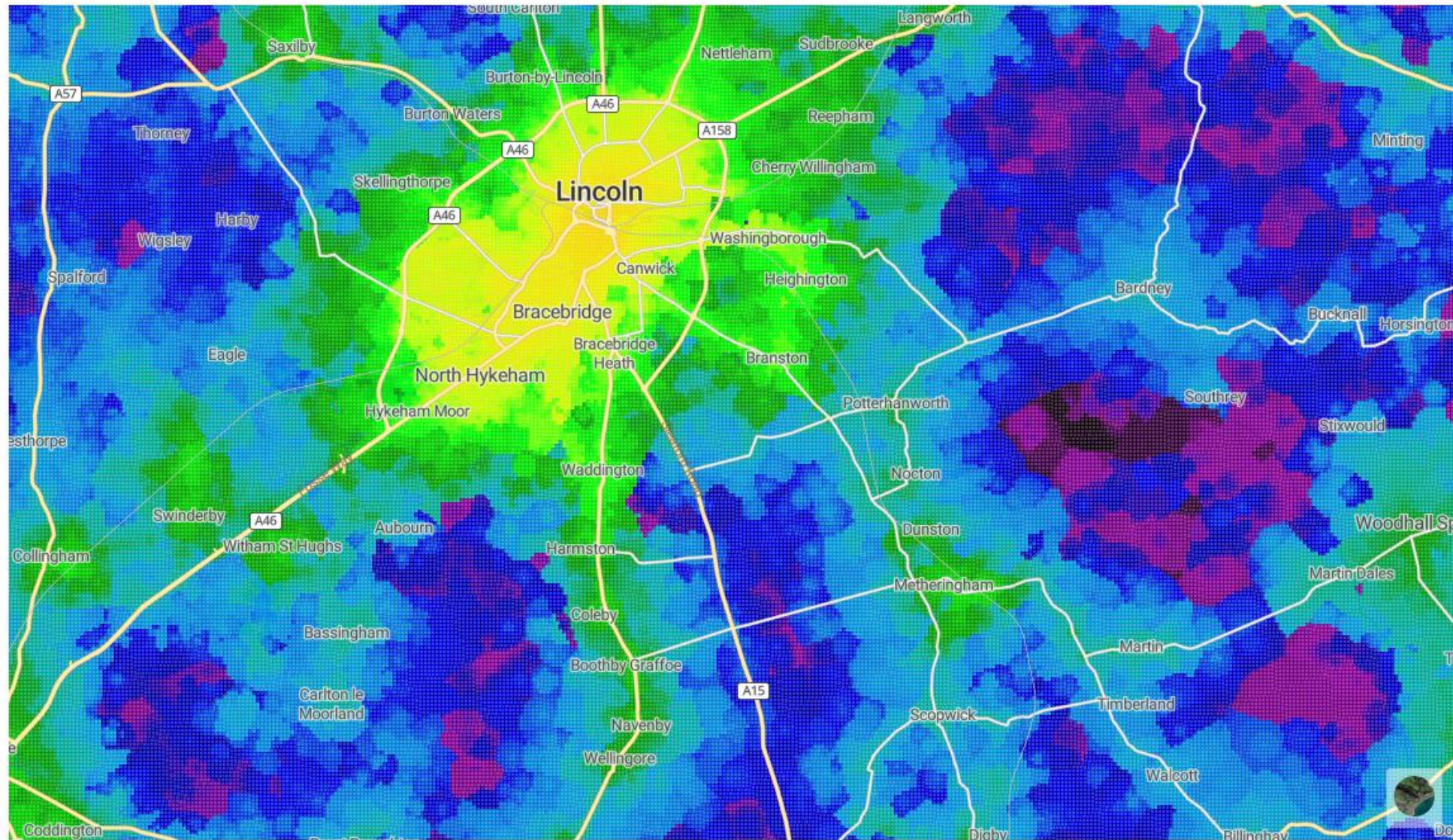
Filter data shown in the map



Show local authority band

Score by destination

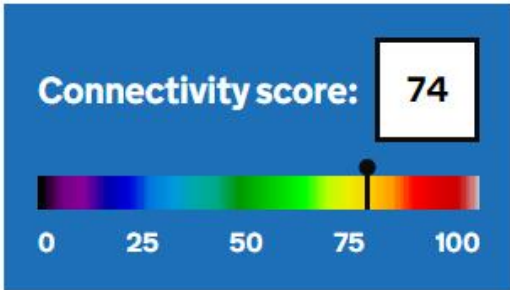
Overall



Search by coordinates, street name and postcode

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Score [Routes](#) [Settings](#)

Current selection

Square ID 497450_371050

Latitude 53.227563

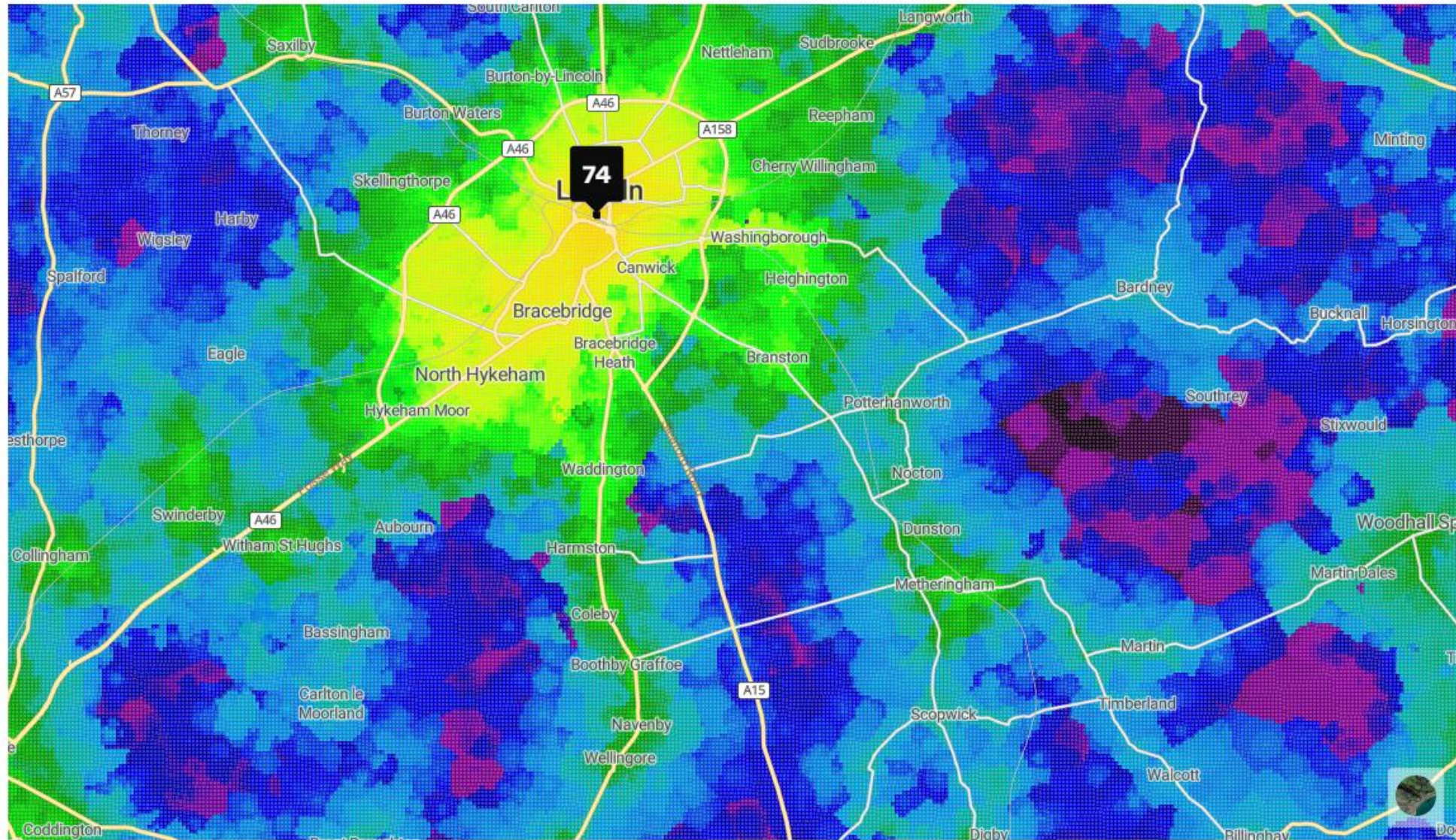
Longitude -0.541684

[View score breakdown](#)

[Cancel location selection](#)

[Save location](#)

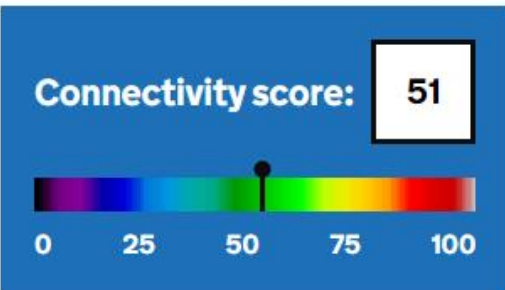
Filter map



Search by coordinates, street name and postcode

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Score

[Routes](#)

[Settings](#)

Current selection

Square ID 498850_357650

Latitude 53.106894

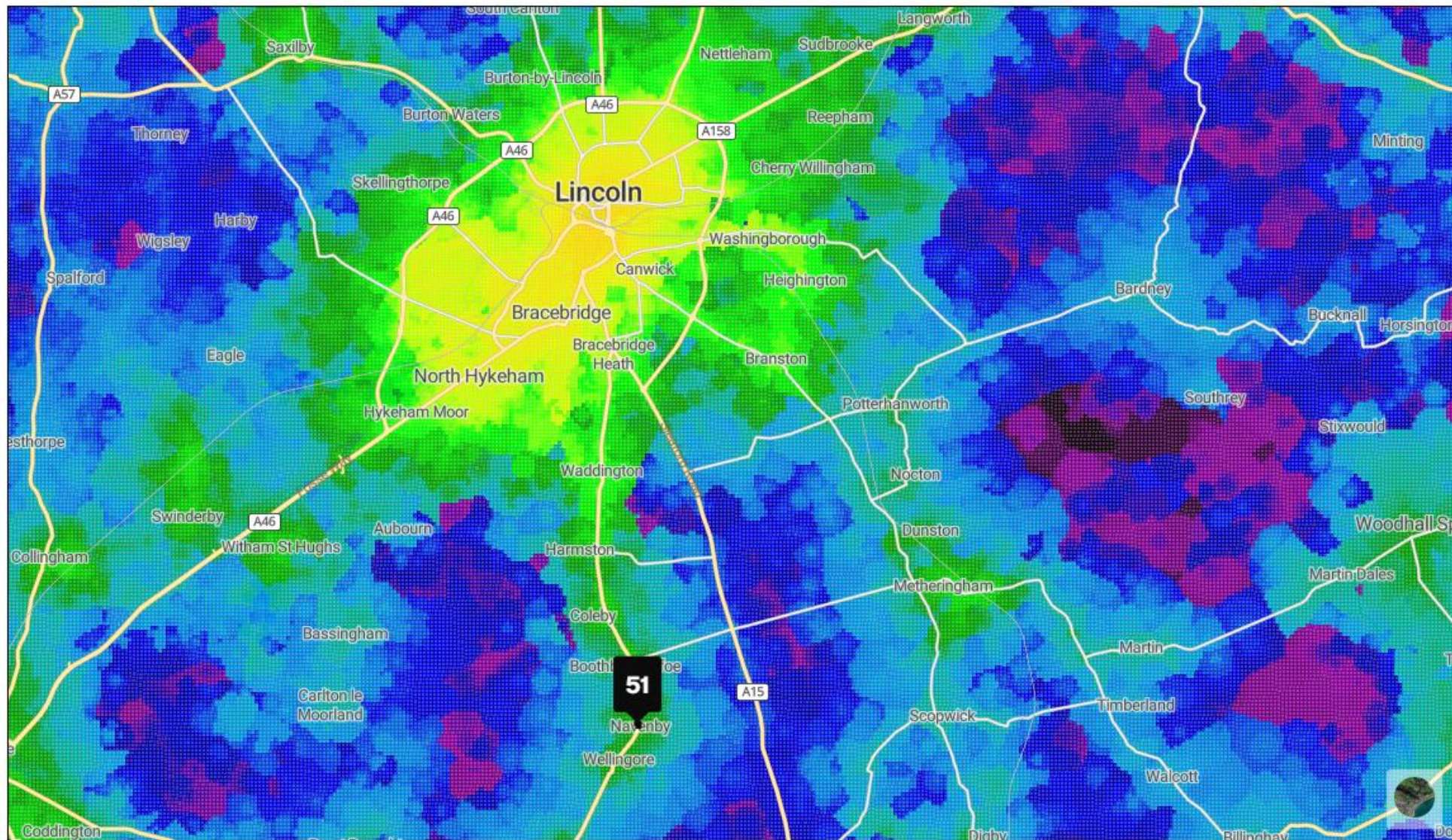
Longitude -0.524855

[View score breakdown](#)

[Cancel location selection](#)

[Save location](#)

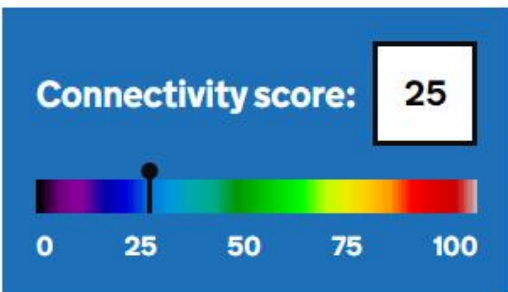
Filter map



Search by coordinates, street name and postcode

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Score

Routes

Settings

Current selection

Square ID 506550_357650

Latitude 53.105413

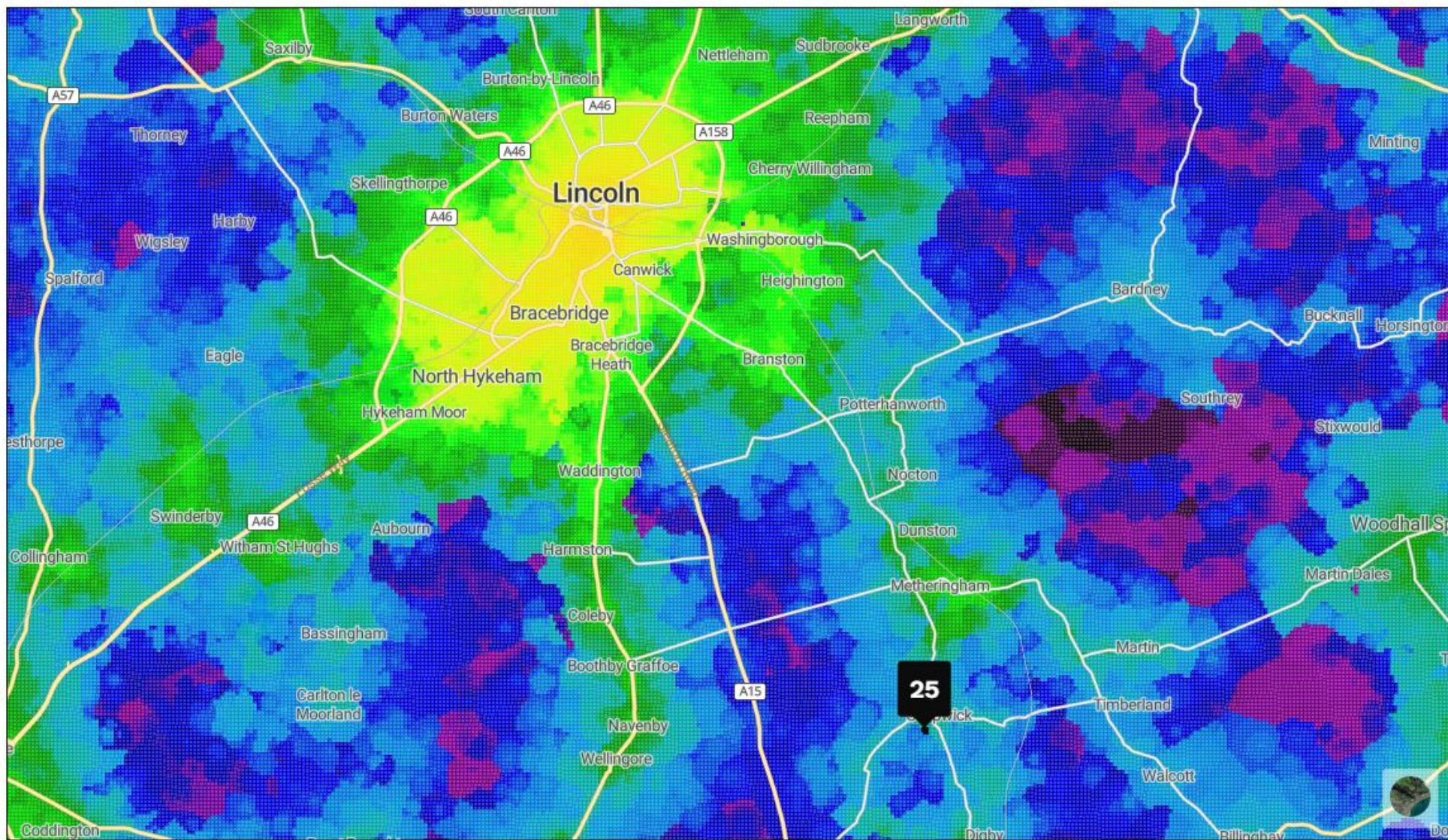
Longitude -0.409881

[View score breakdown](#)

[Cancel location selection](#)

Save location

Filter map



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Search by coordinates, street name and postcode

Click on the map to select

Filter map

Filter data shown in the map

Input box for filter data

Show local authority band

Score by destination

Overall (dropdown menu)

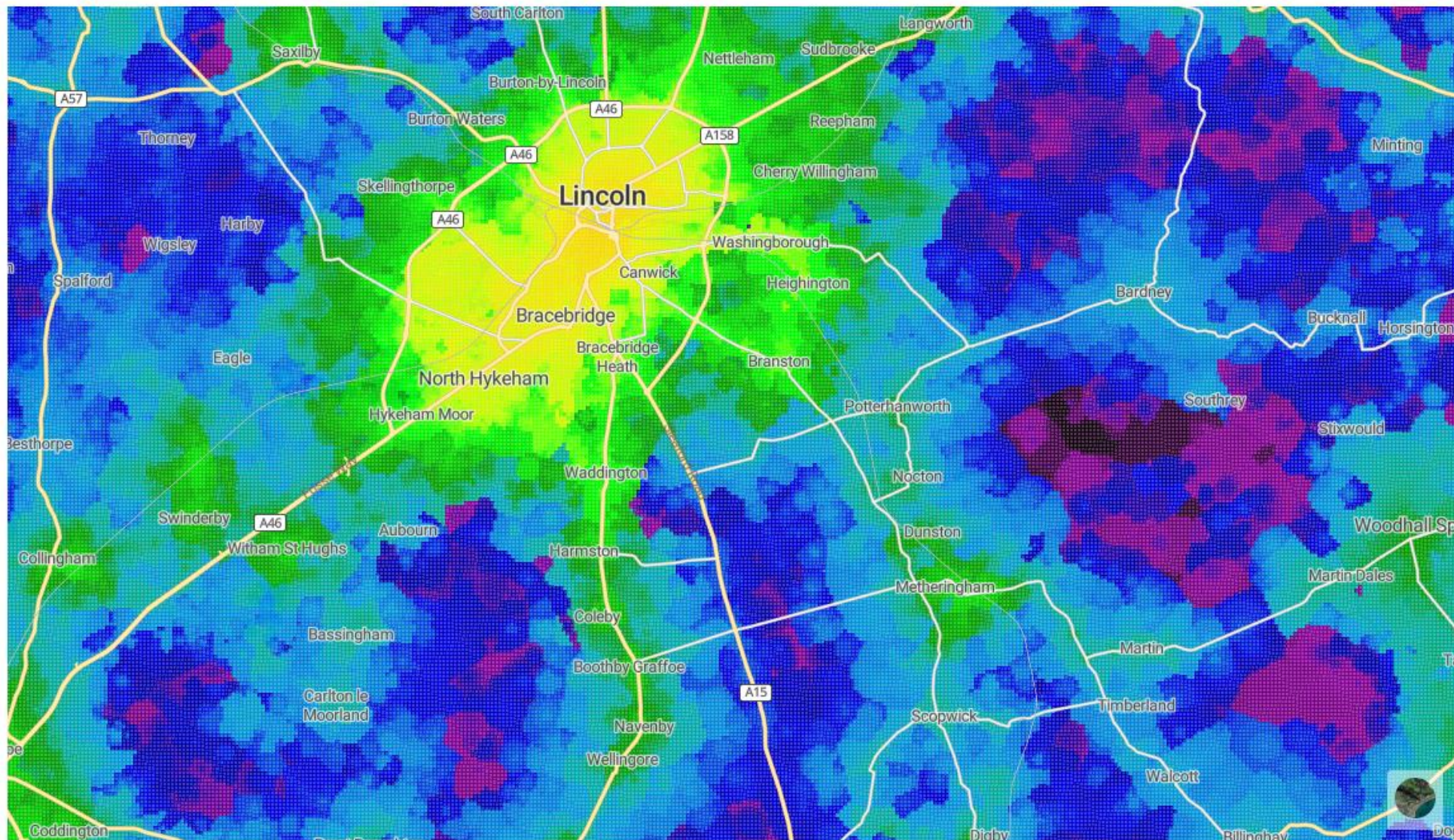
Score by mode of transport

Public transport (dropdown menu)

Public transport stops

Show options

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Search by coordinates, street name and postcode

Click on the map to select

Filter map

Filter data shown in the map

Show local authority band

Score by destination

Overall

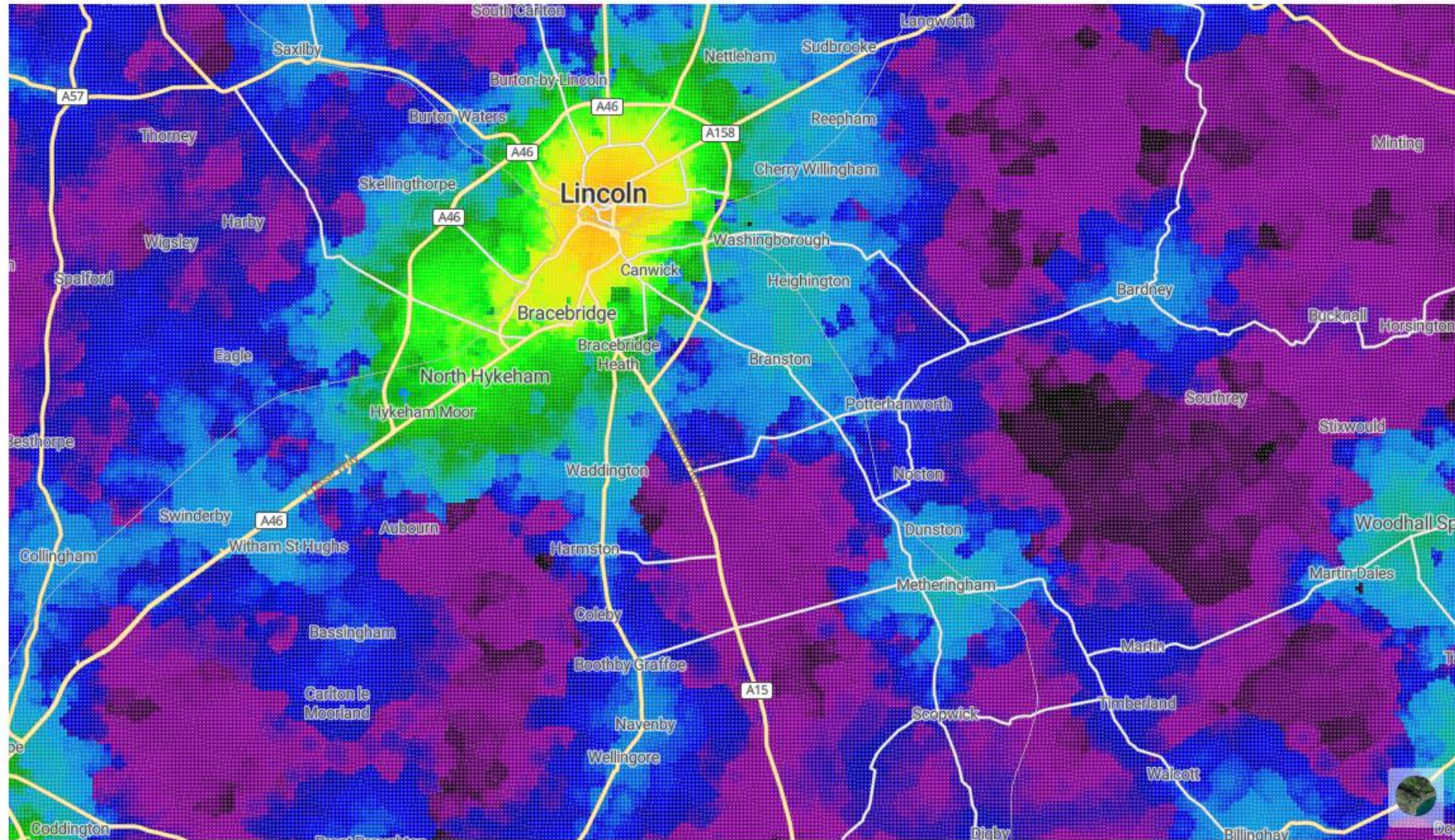
Score by mode of transport

Walking

Public transport stops

Show options

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Search by coordinates, street name and postcode

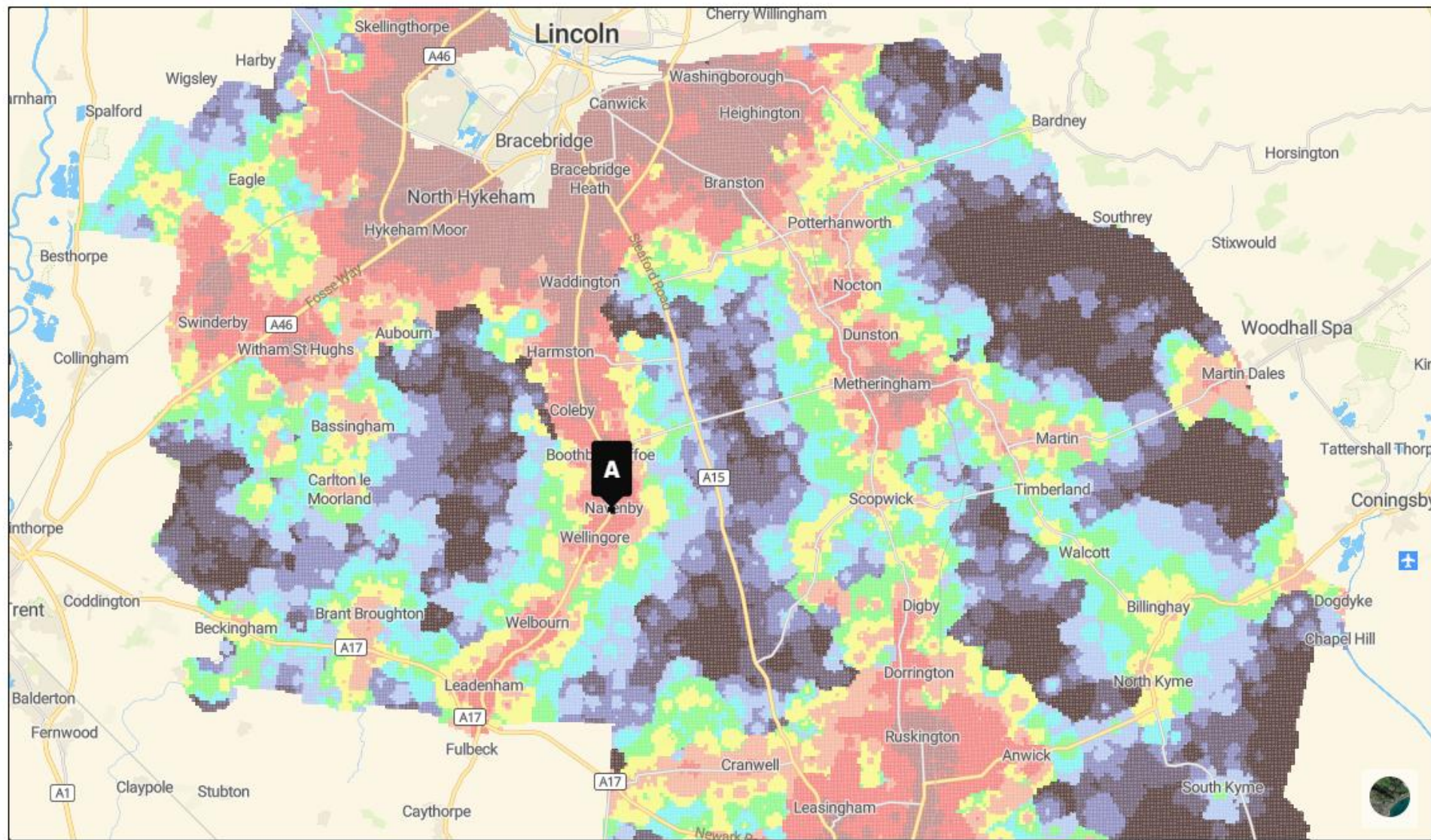
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Connectivity score: 51

Local authority band: A

J I H G F E D C B A



Score

Routes

Settings

Current selection

Square ID 498850_357550

Latitude 53.105995

Longitude -0.524886

[View score breakdown](#)

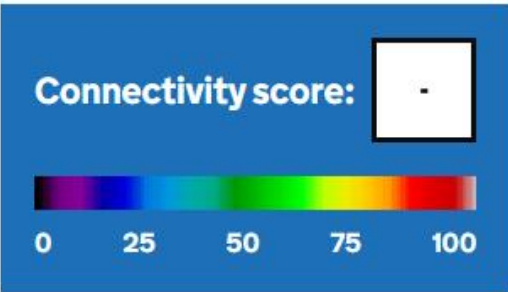
[Cancel location selection](#)

Save location

Search by coordinates, street name and postcode

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- Score
- Routes
- Settings

Create routes and measure impacts

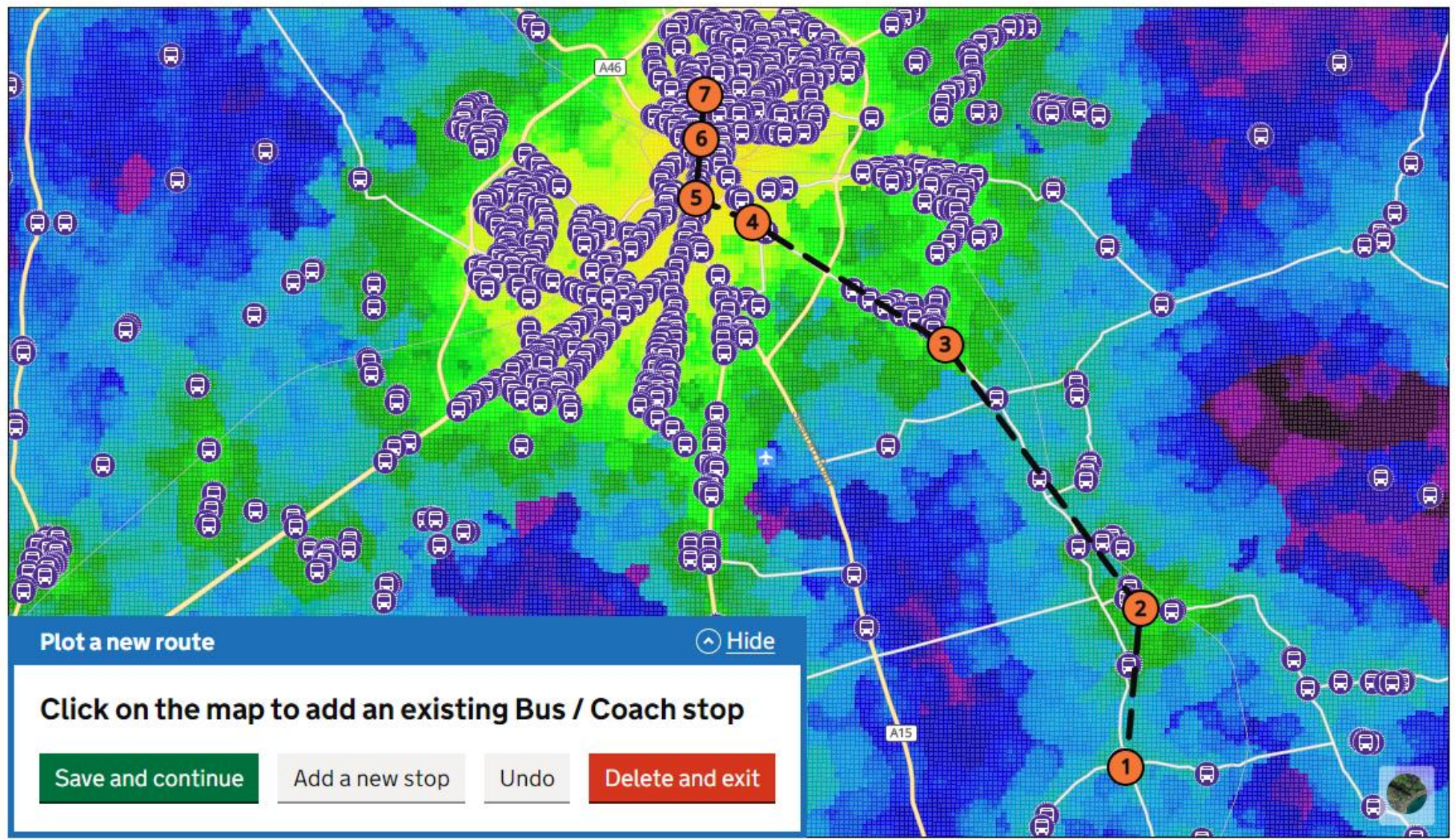
[See existing schemes](#)

Plot a public transport route

Plot a new route

Add an impact area to understand the impact of your new route(s) on that area's connectivity score

Draw impact area



Search by coordinates, street name and postcode

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Connectivity score: **40**



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Saved schemes

[Lincoln](#)

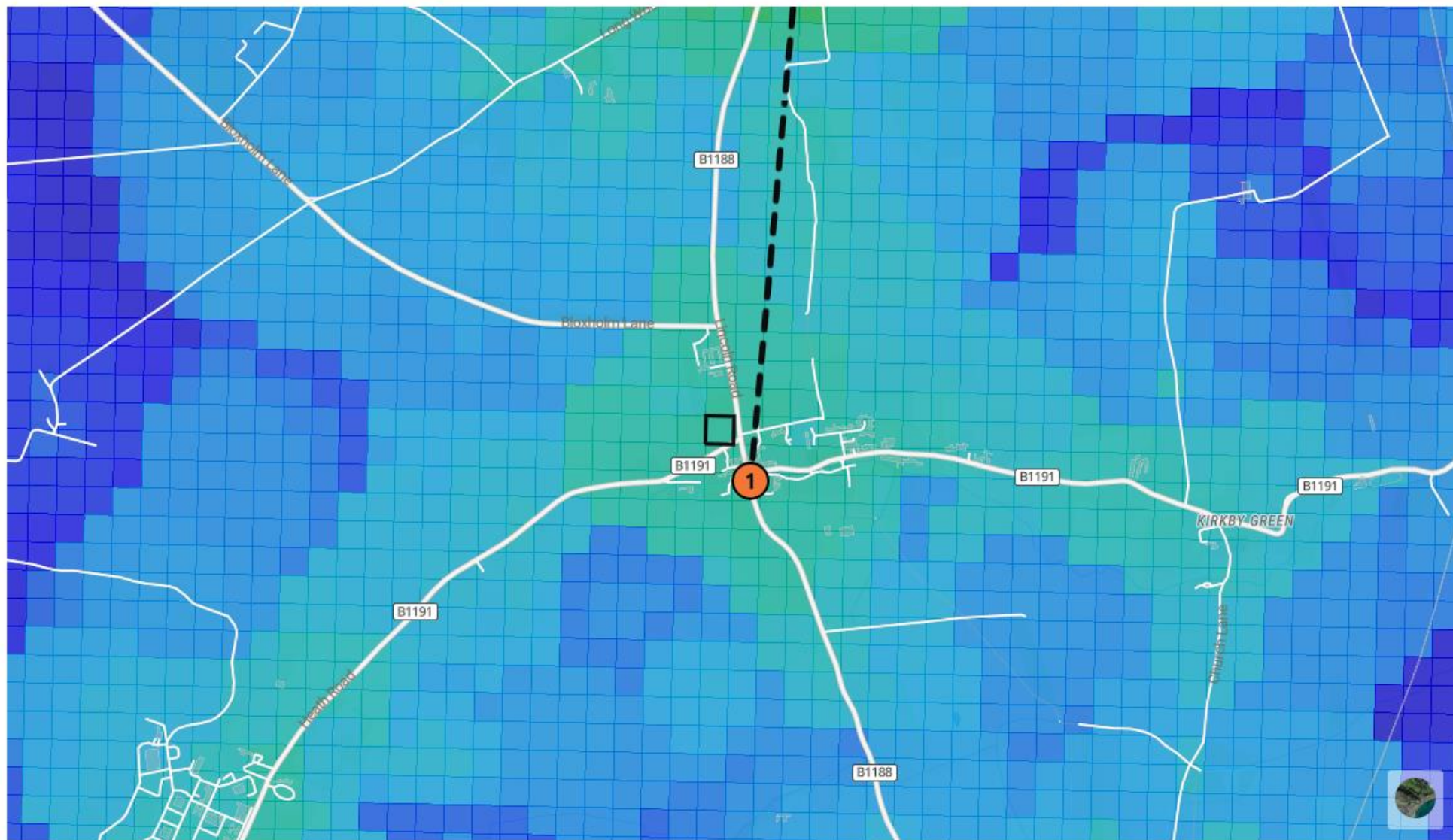
Routes

Lincoln

Impact areas

Scopwick

a



Search by coordinates, street name and postcode

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Connectivity score:

40

Impact area score:

45



Score

Routes

Settings

Filter map

Filter data shown in the map

Show local authority band

Score by destination

Overall

