LifeCycle Data Trust: Case Study

LifeCycle

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The Pilot Trial

- LifeCycle data trust was set up as a pilot trial to test whether data could be collated, stored, analysed and shared using a Jersey law governed data trust.
- LifeCycle was established on 1st March 2023 and ran till 13th December 2024.
- LifeCycle trustee (adminstered by ICECAP) recruited Jersey cyclists, loaned them a See.Sense bike light and gave them access to the mobile app.
- This smart equipment allowed the cyclists to log journey data into LifeCycle at their discretion.

*ICECAP is an independent provider of corporate and private client administration services with offices in Jersey and Mauritius.

LifeCycle Purposes

LifeCycle was established with purposes including:

- To enable the Trustee to create a database on local cycling in Jersey, focusing on cycling as transport, for aggregation, analysis, and potential sharing with third parties under the data request procedure.

- To publish, report, broadcast or otherwise communicate to the public any data insights or data analysis that the Trustee deems fit (from time to time) including to advocate to encourage cycling as a mode of transport or to make cycling easier, safer or better in Jersey.

LifeCycle Case Study

- This case study is intended to report on LifeCycle and contains data insights which the trustee has decided to publish.

- With thanks to See.Sense for conducting the geo-spatial data analysis and the map insights published here.

Top level data insights

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296 cyclists

Over 140,000km pedalled

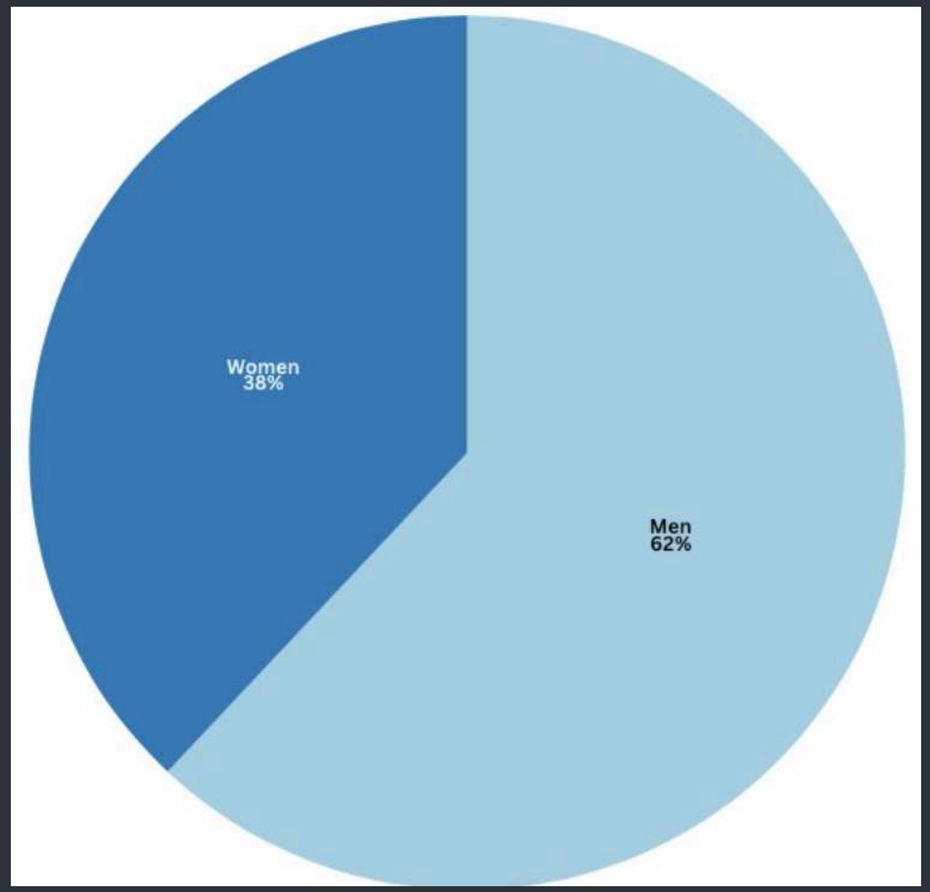
21 tonnes of CO2 saved

Over 1000 ride reports lodged

2 collisions with cars reported

53 potholes identified

296 cyclists



Parish League Table: LifeCyclists as a % of parish population

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Over 75% of cyclists participating reported using their bikes multiple times per week

60% pedal vs 40% electric

Only 15% report regularly cycling with kids

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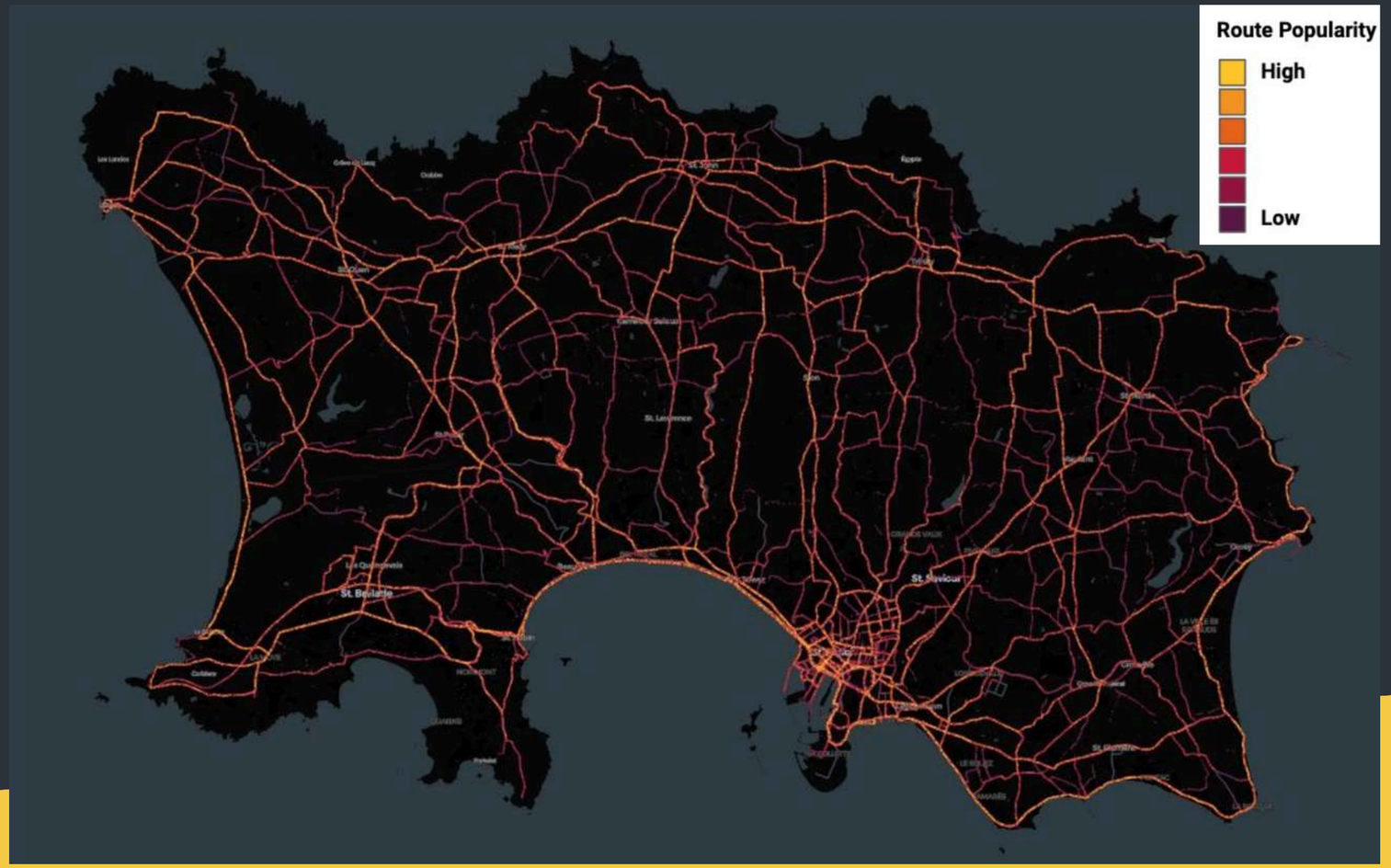
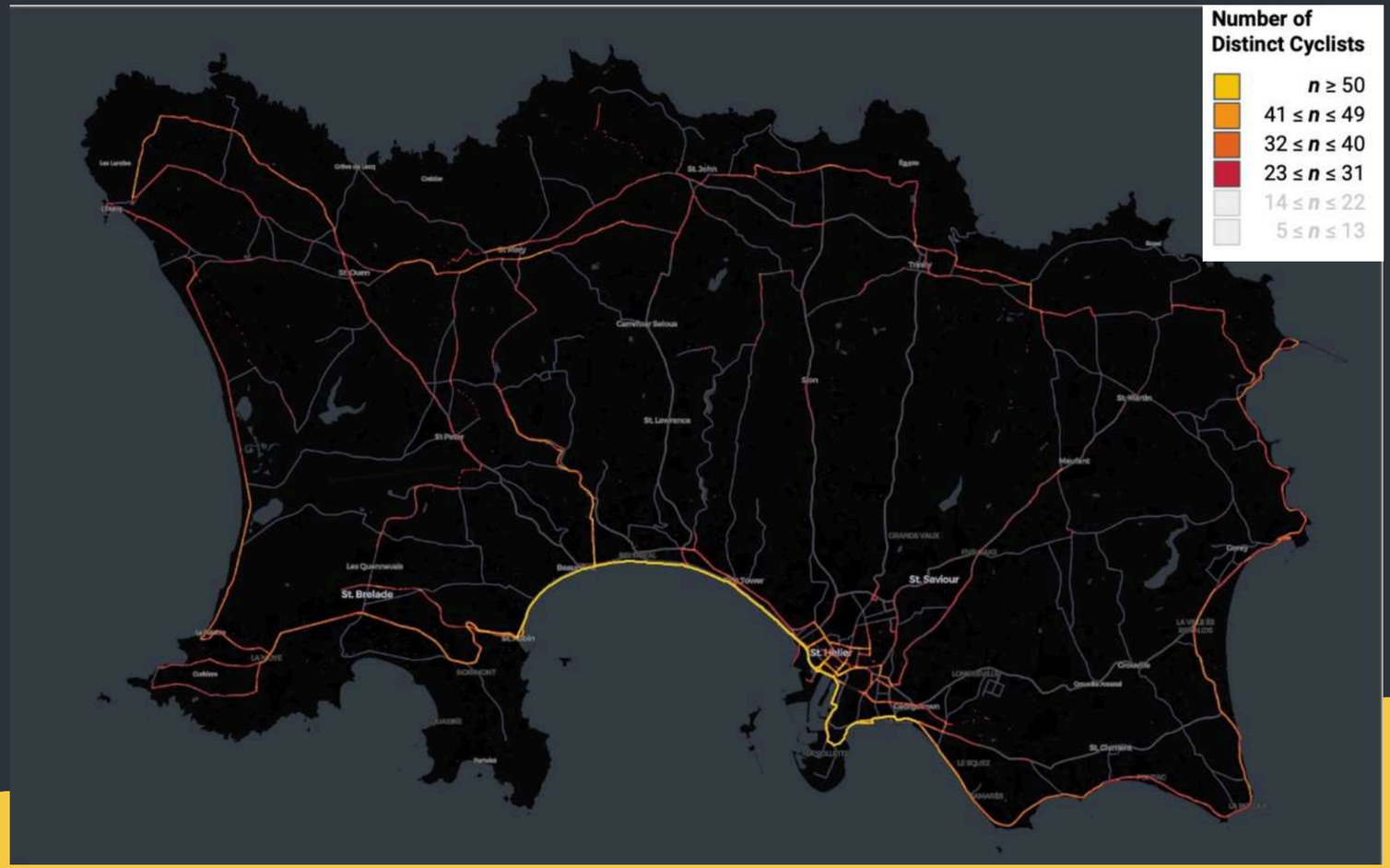
LifeCycle cyclists get around!

This heatmap clearly shows cyclists covering routes across the whole island. The spectrum of popularity runs from a minimum of 5 individual cyclists up to over 50.



Most popular routes

Filtering routes with over 23 cyclists highlights popular paths, showing the dominance of flat southern routes to St Helier, the appeal of dedicated cycling tracks, and the likely round-island leisure circuit.



Cycle for travel dominates in the south of the island

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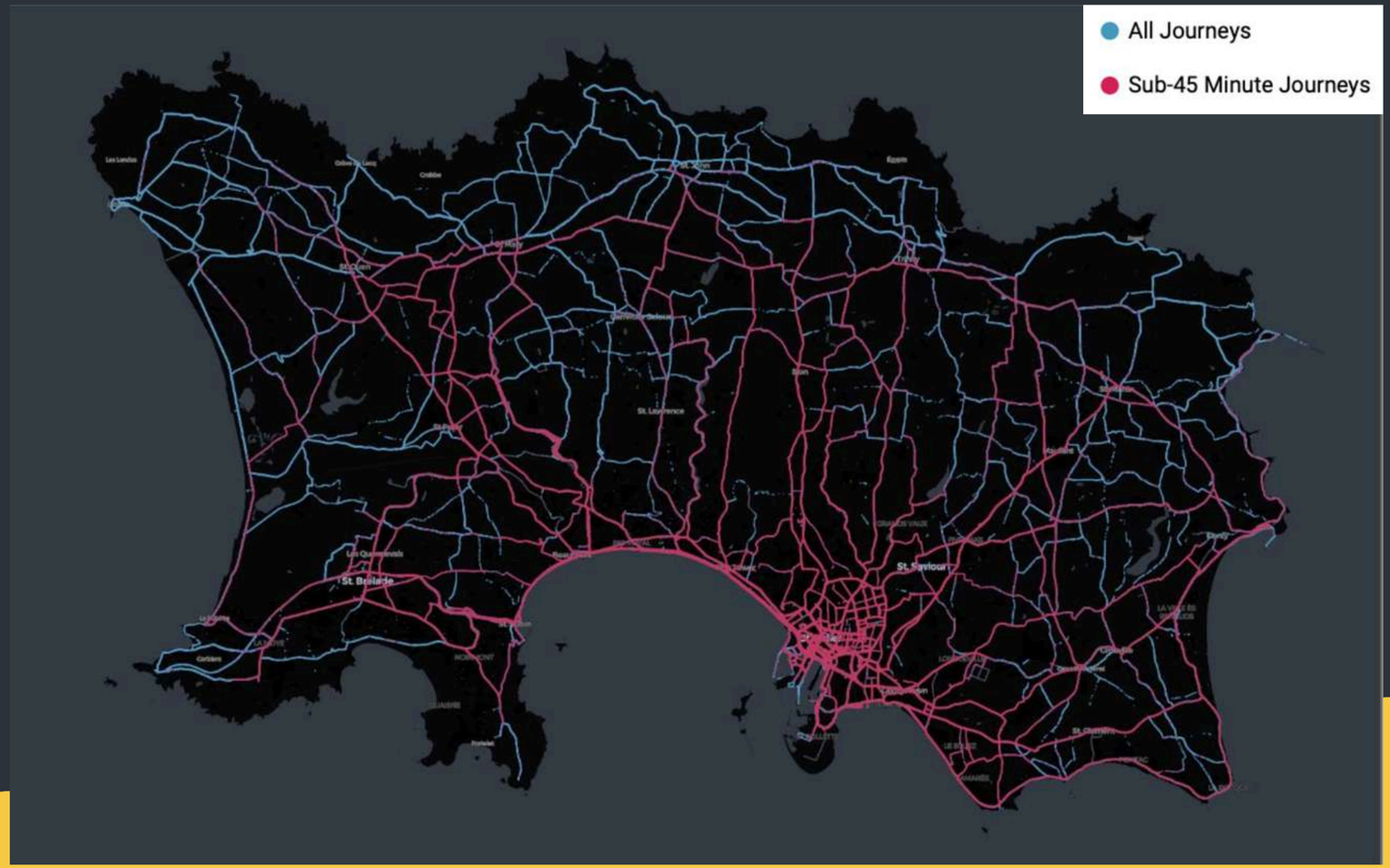
To distinguish leisure from travel cycling, we used sub-45-minute journeys as a proxy for travel. The map contrasts these (pink) with longer leisure trips (blue), showing travel cycling dominates the south, main routes, and St Helier.



Most cycle journeys begin or end in St Helier

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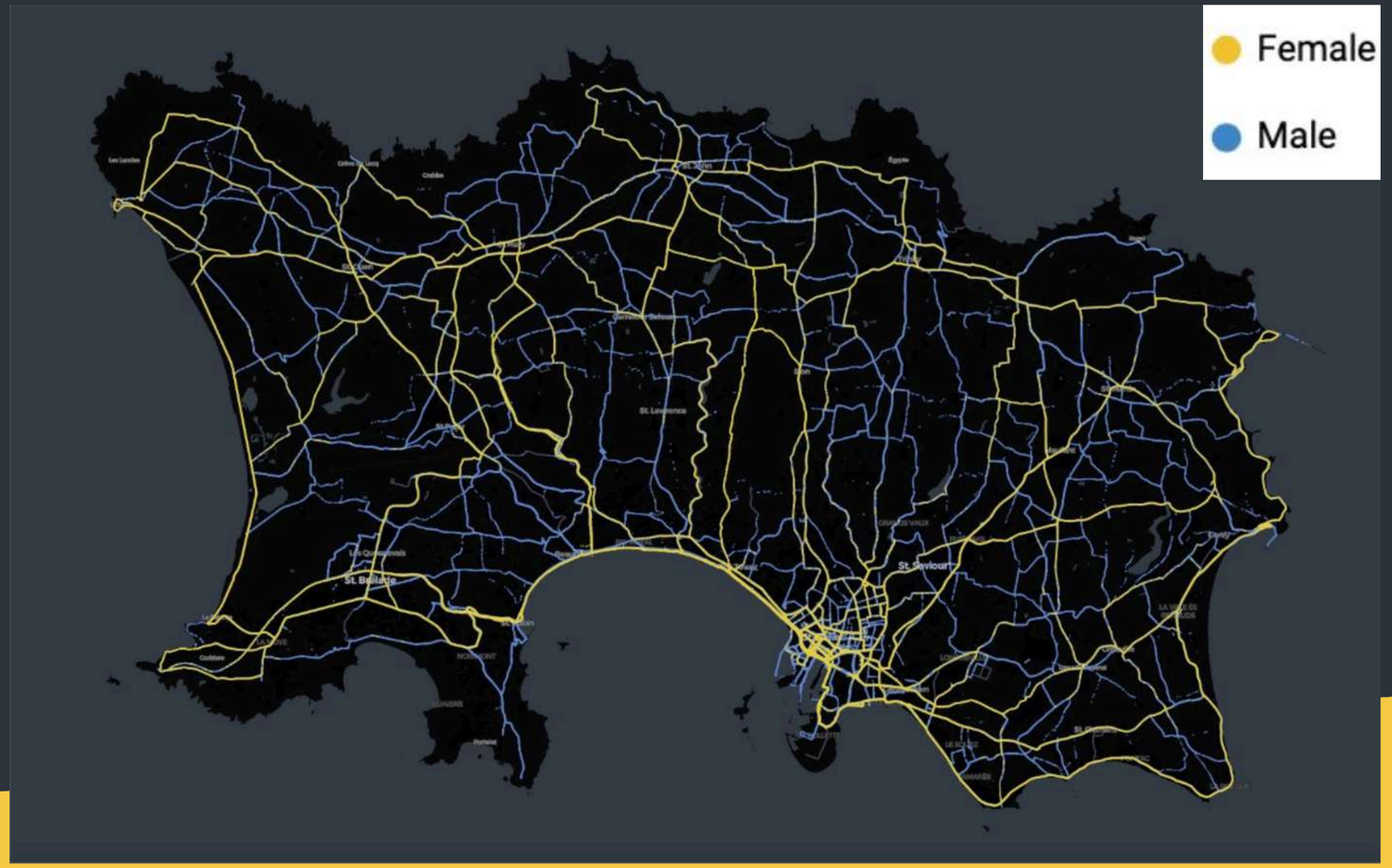
Each line shows at least 10 unique journeys (not straight lines).
Most start or end in St Helier, and many lack dedicated cycle routes.
The eastern parishes lack such routes despite high cycling activity.

There are contrasting male vs female route patterns

There are differences in the route patterns recorded by male and female cyclists.



Female LifeCyclist routes

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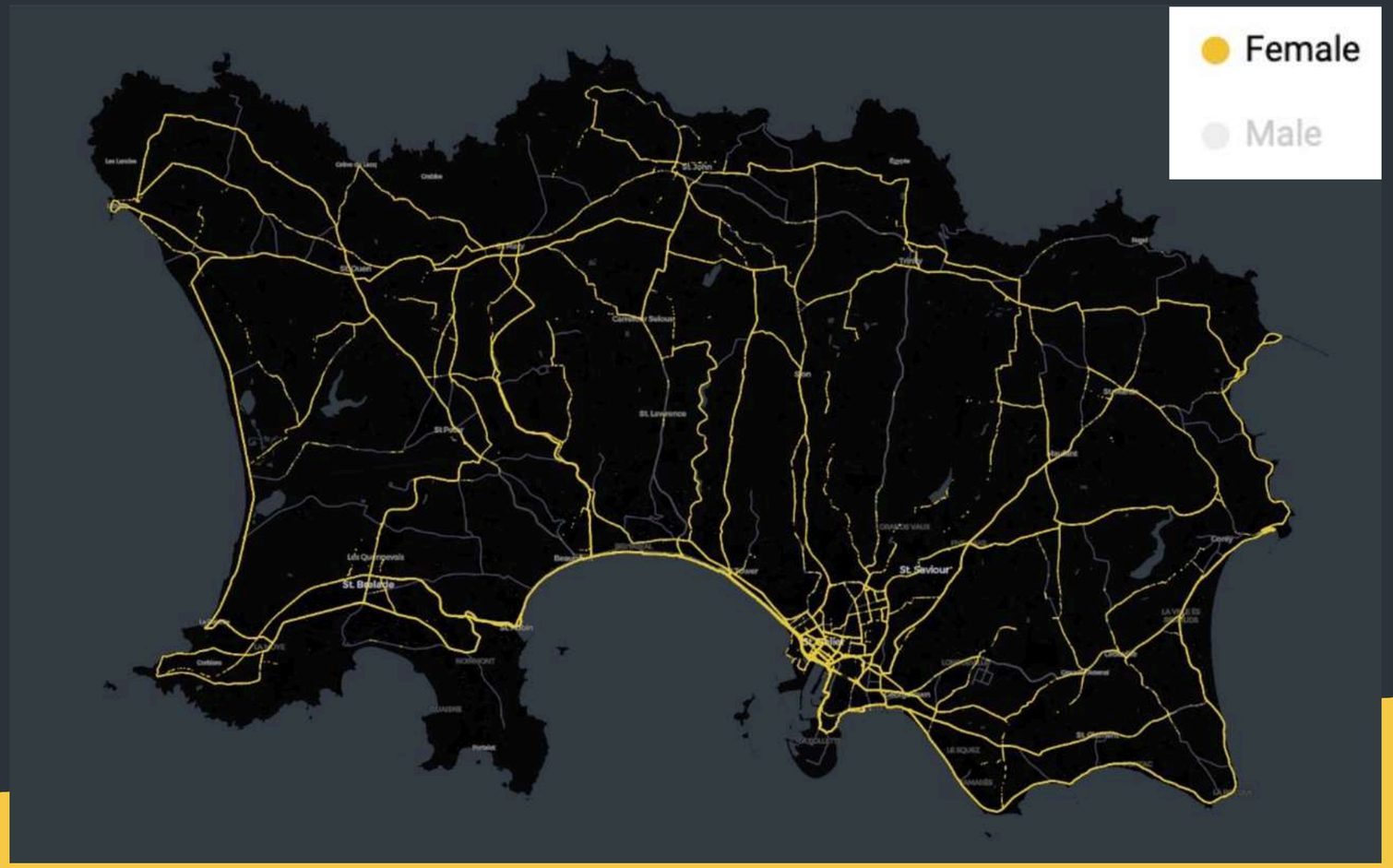
The most popular routes for the female LifeCyclists were main routes.



Male LifeCyclist routes

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The male LifeCyclists appeared to cover routes more widely.

Male/Female route patterns need further investigation

Limitations in the LifeCycle dataset prevent conclusions about male vs. female route patterns. Differences might reflect varying route preferences or fewer journeys recorded by women, who make up 38% of the group. Routes on the map require at least five individual cyclists, so the disparity could simply result from fewer female-recorded journeys.

Further evidence might be sought to explore:

- Are there fewer women cycling than men? If so, why?
- Do women make fewer cycling journeys in Jersey than men? If so, why?
- Do female cyclists prefer certain routes to others? If so, why?

Safety & Infrastructure Hotspots

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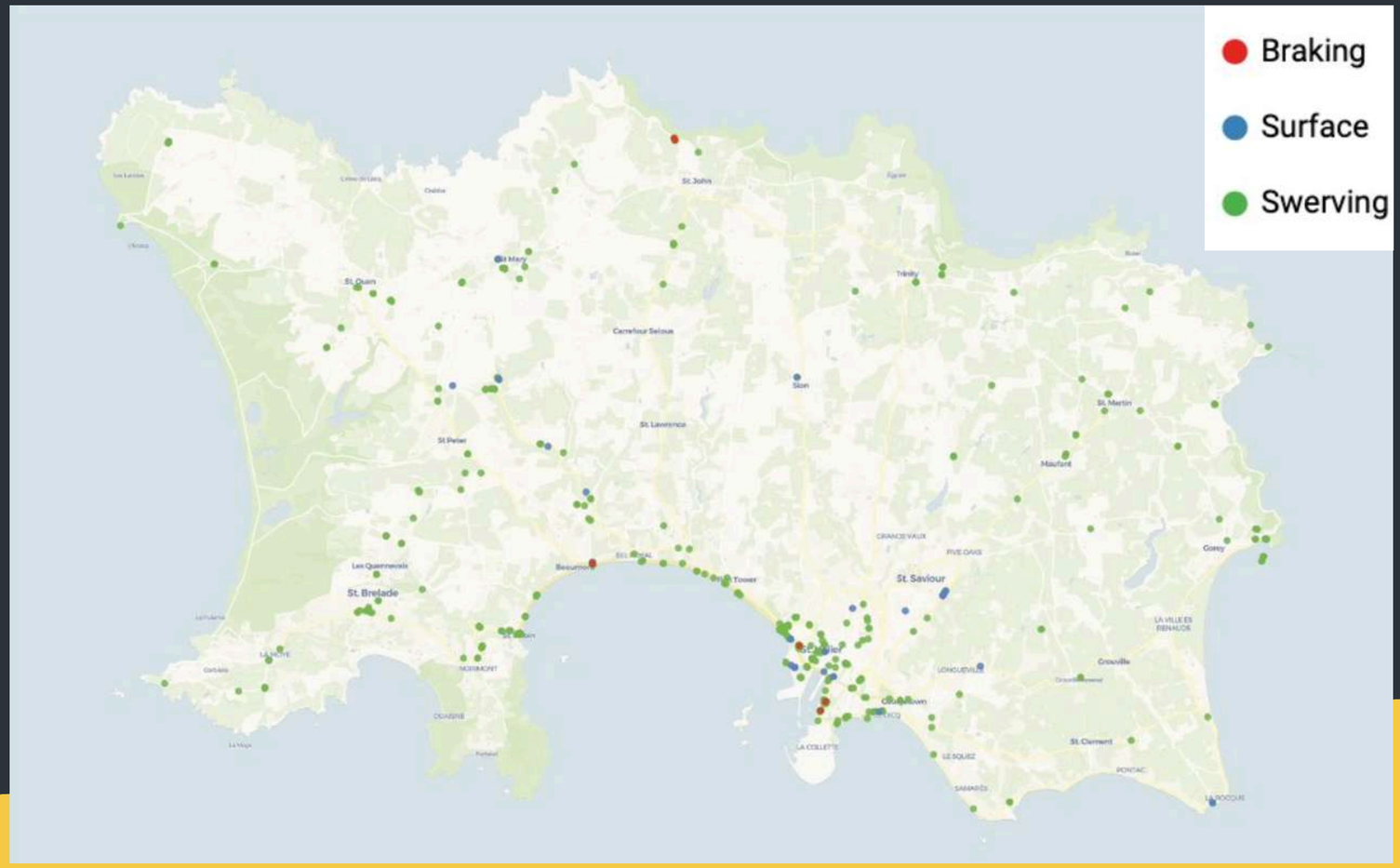
The hotspot map reveals a relatively small number of surface issues but highlights swerving and braking hotspots that may indicate conflicts between cyclists, pedestrians, and vehicles.
Further investigation is needed to understand these patterns.

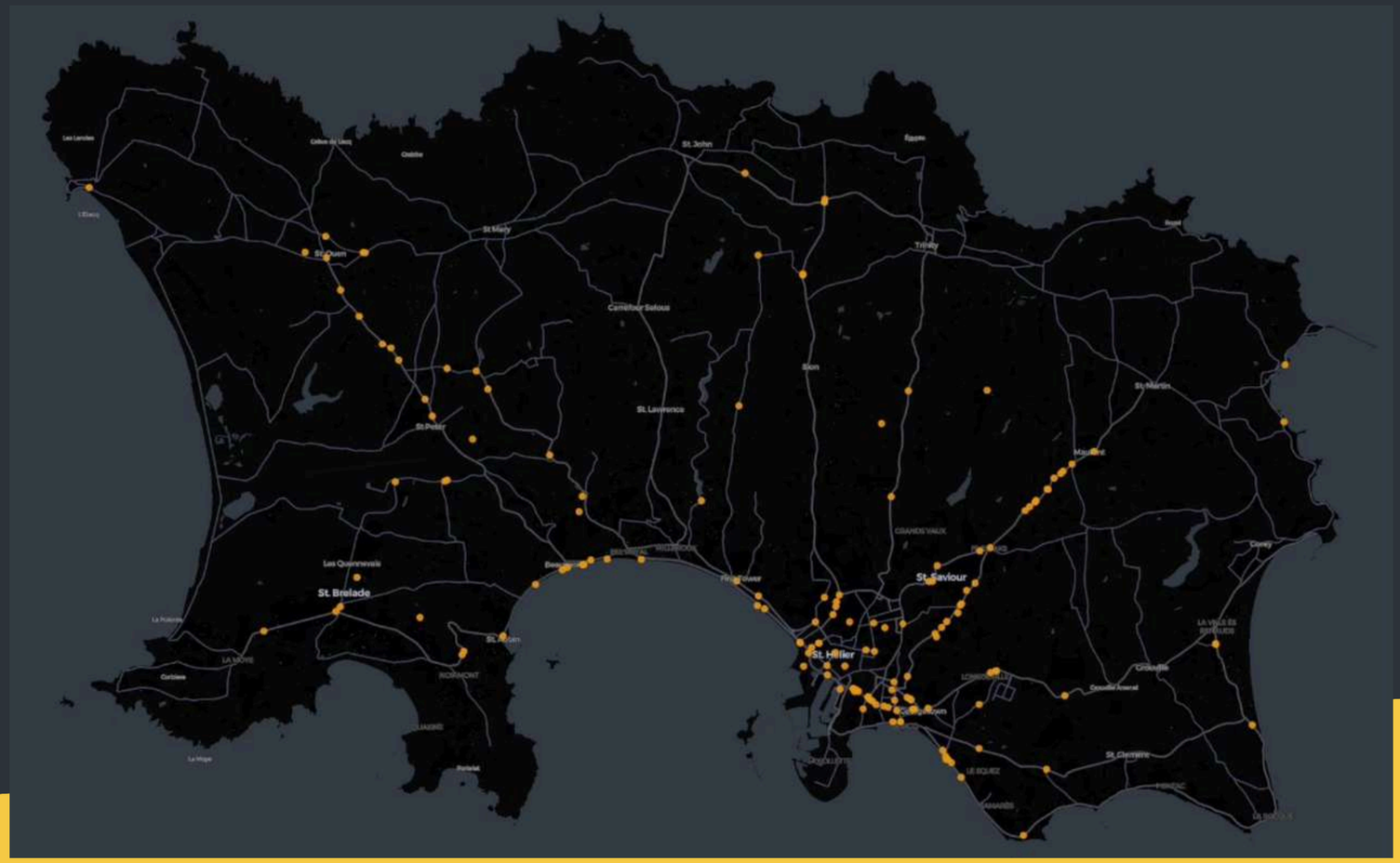


LifeCyclists recorded numerous close passes

Each orange spot marks a close pass reported by a LifeCyclist.

The number and density of reports suggests many Jersey drivers may not be cycling-safe, particularly on routes A3, A6, and A12.

Further action is needed.



LifeCyclists made many suggestions for improvements

Common themes from the ride reports:

- Insufficient cycle parking around St Helier (particularly secure & covered)
- Cycle lanes are frequently blocked by parked vehicles or other obstructions
- Cycle network needs to allow access for Cargo & Adaptive bikes
- Several route locations deemed ‘unsafe’ for cyclists, with suggested changes.

Existing Jersey cyclists’ experience and knowledge of cycling around the island is a valuable source of information to direct further investigation and improvements.

Data Sharing

The trustee commissioned See.Sense to analyse the journey data collected from March 2023 to April 2024. This resulted in 5 insight reports:

1. Ride reports
2. Route popularity & speed mapping
3. Safety & infrastructure quality
4. Dwell time & junction analysis
5. Aggregate origin/destination mapping

Eligible organisations were invited to request access to these reports.
As a result the Trustee processed data requests from Government of Jersey's Infrastructure & Environment department and the Parish of St Helier.

Results of Data Sharing

Government of Jersey Infrastructure & Environment department used the information gleaned from the LifeCycle data insights to inform:

- Transport & infrastructure planning and as evidence to support interventions
- Road safety analysis

A transport planner and road safety technical officer were allowed to combine the map data with internal data-sets as part of this process.

Parish of St Helier accessed the information to inform infrastructure planning.

What's next?

The LifeCycle data trust was created during the pilot trial to demonstrate the feasibility of a data trust structured under Jersey trust law.

As planned, LifeCycle concluded on 13th December 2024, with trustees distributing the residual data and bike lights to the beneficiaries.

All raw personal and journey data from individual cyclists was securely deleted during the process.

Digital Jersey will publish a report on the lessons learned from the pilot trial in 2025.

Project Partners

LifeCycle pilot project was a collaboration between 14 Jersey organisations led by Digital Jersey and the Jersey Office of Information Commissioner. The collaborating organisations are as follows:

LifeCycle Trustee Ltd - the Trustee administered by ICECAP*

Enforcer - JTC Group

Legal Advisers - Appleby & JTC Law

Data hosting & analytics - Calligo

Cyber security advisers - Defence Logic

Project contributors - Ink Blot Creative, TSG, Monoceros Innovation

Bikelight technology - See.Sense (N.Ireland)

Advisers - Open Data Institute (UK)

Data protection advisers - PropelFwd

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