Devon & Cornwall
POLICE

Directed Patrol Trial
CIOS BCU 2021

Summary of Trial

- 'Hot Spot' Policing established as meaningful way to direct resources and reduce serious violent crime;

- Supported by empirical evidence in studies conducted across UK, Europe, US, Asia and Australia;

- Involves the patrolling of crime 'Hot Spots' derived from statistical crime data for certain periods of time;

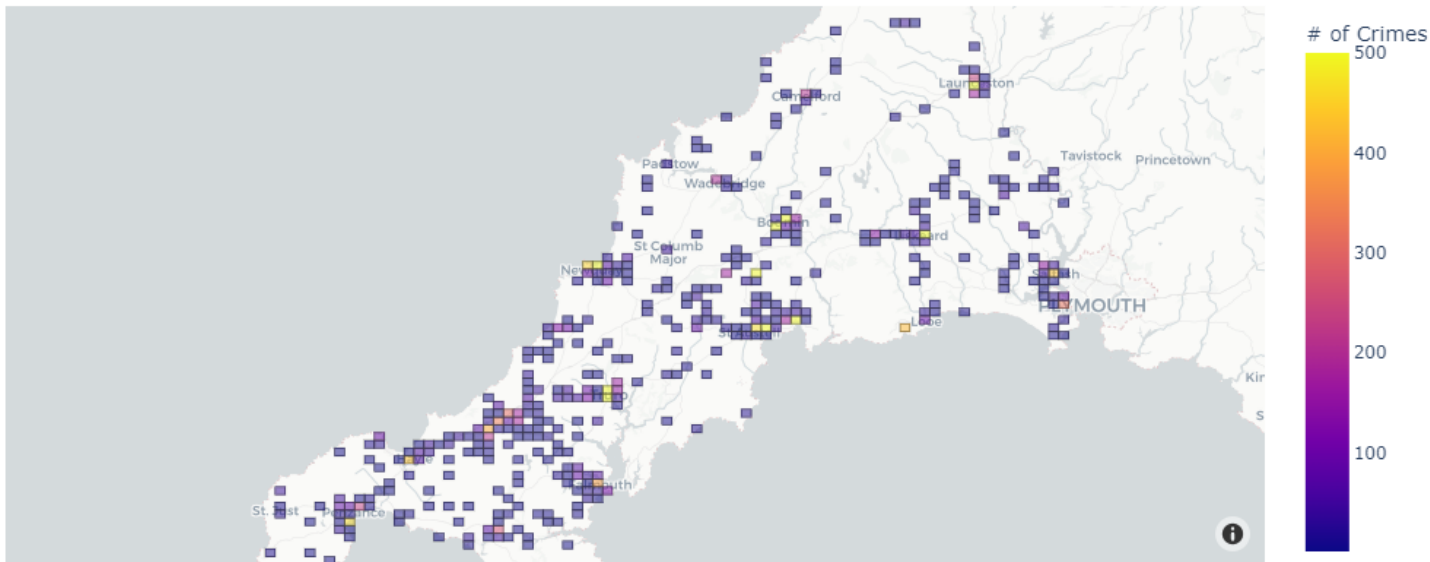- Findings demonstrate a tangible reduction in patrolled 'Hot Spots' compared to control areas.

Initial Data Capture in D&C

- Crime over the past 3 years mapped and divided into 2.5km squares and further down to 1km squares;
- Certain crime types removed e.g. DA/homicide.

CCHI applied

- Cambridge Crime-Harm Index applied to 1km squares;
- Score applied to each offence – custodial starting point (days);
- Patrol and Control areas established in Truro (Urban) and Liskeard (Rural) based on these datasets;
- Patrol areas chosen based on CCHI scores in each area and times based on crime occurrences per hour in each location;

Patrol areas identified

The crime data identified measurable similarities in crime profiles for Falmouth and Truro, with accompanying patrol and control zones in each town.

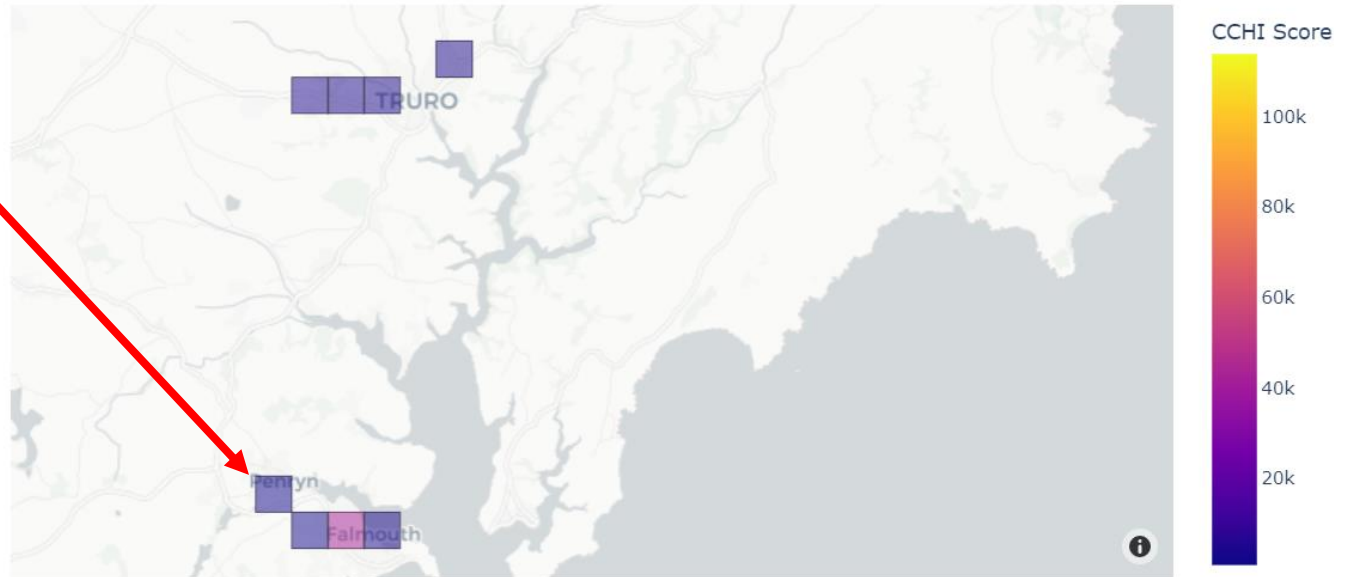Truro was selected as the preferred patrol/control zone upon application of the CCHI Scores to each town.

In addition to several large retail environments, the University of Exeter Campus crime data influenced CCHI scores.

Furthermore VAWG project work is taking place in the area. To maintain the integrity of the data used in this Trial, Truro was chosen to be the Urban Patrol/Control area.

Lastly, in the following map, we display the intersection between the crime and CCHI based clusters (i.e. all grid cells that appears in the crime and CCHI clusters map visualisation).

```
fig, crime_harm_clusters = get_intersection_crime_harm(fix_cluster_crime, fix_cluster_harm, df_grid)
fig.write_html("plots/intersect_clusters_crime_harm.html")
fig.show()
```
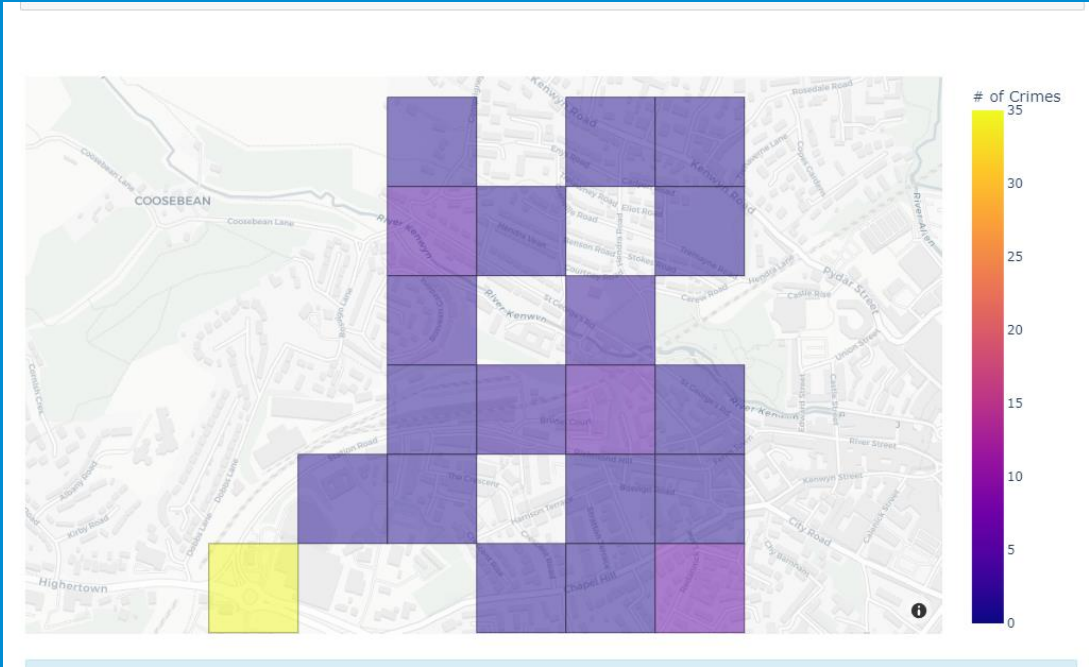
- Areas with similar crime levels were identified based on CCHI scores being applied;
- This enabled patrol and corresponding control areas of 150m x 150m to be generated based on statistical data and areas in Truro (Urban) and Liskeard (Rural), which has been selected as a rural comparison.
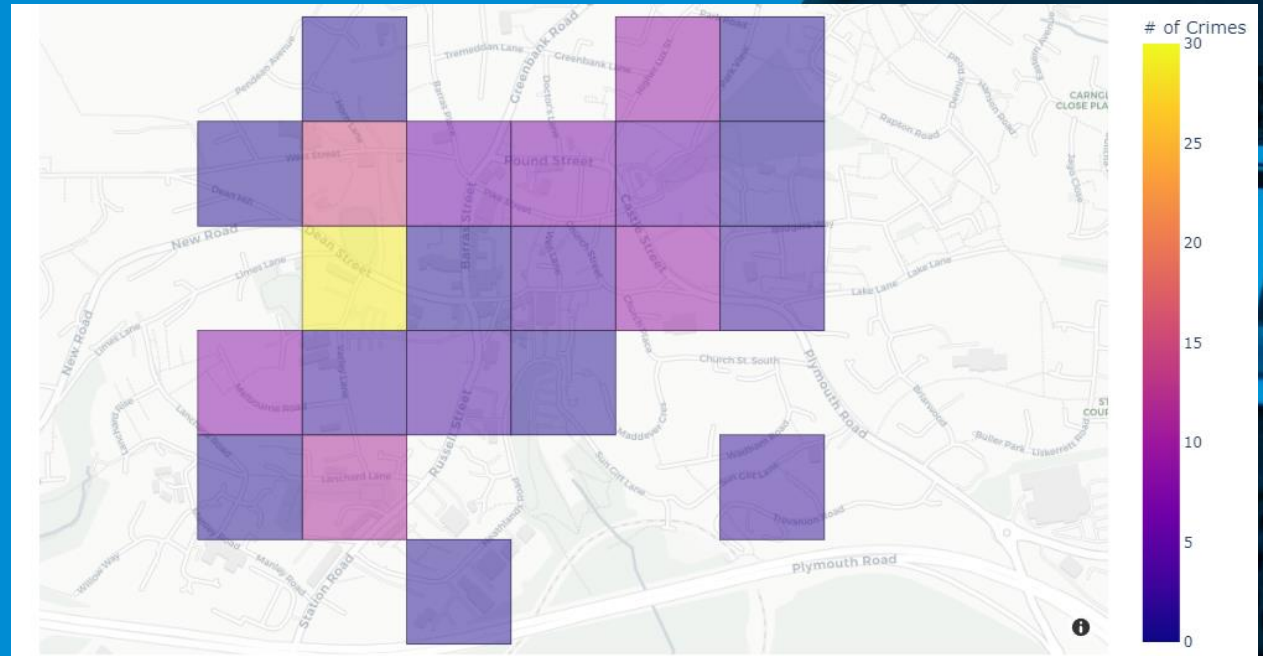
Patrol areas – what do they look like?

Liskeard - rural

Truro - urban

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- Patrol zones are identified and will be patrolled on foot by officers over two shifts each day for one month;
- Officers will be carry a GPS Tracker to monitor their patrol activity in the patrol zones;
- Data will be collated and analysed by the University of Exeter to support or refute the application of the 'Hot Spots' Model in Devon and Cornwall;
- Results from all UK trials could inform future policing models.

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