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Rail Network Crime and Passenger Travel in the Pandemic

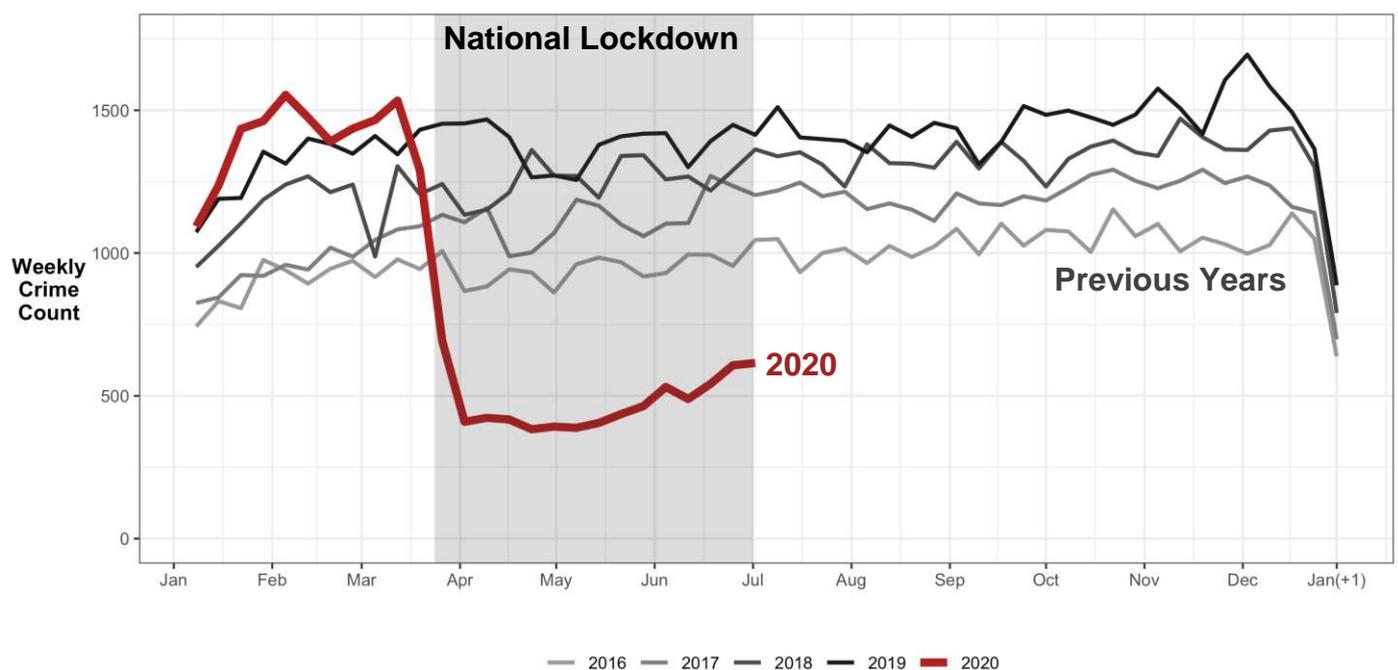
Anthony Dixon, University of Leeds
Lara Adamson, British Transport Police
Nick Tilley, University College London

British Transport Police (BTP) is responsible for policing passengers, staff, trains, lines, stations and properties (including car parks and bike stands) associated with the stations in England, Scotland and Wales.

Key Findings:

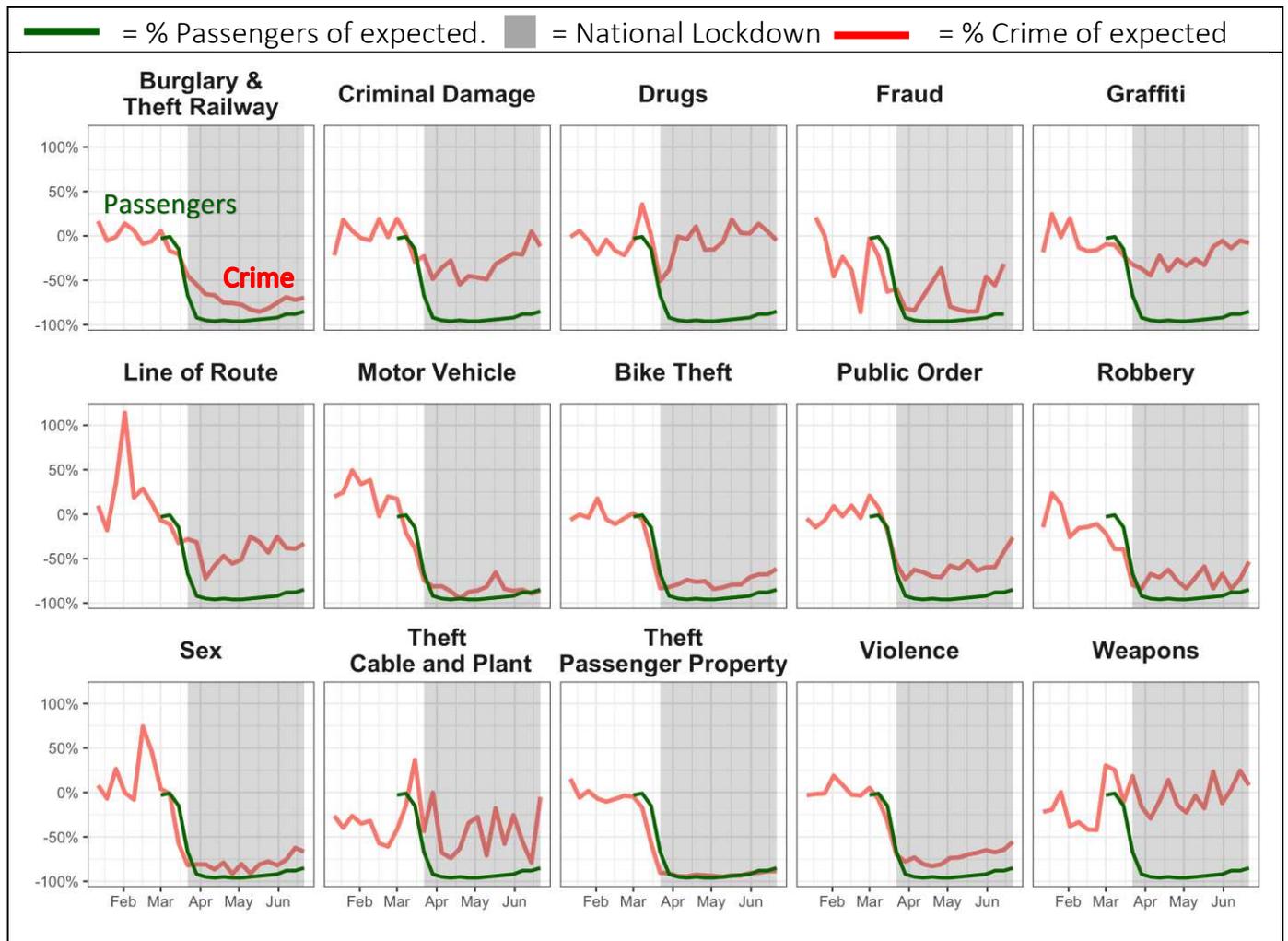
- Network rail crime fell by more than two-thirds by April 2020, the decline beginning slightly before the national lockdown on 23 March.
- Declines in motor vehicle theft, bike theft, sex crimes and, theft of passenger property, largely tracked declines in passenger numbers.

Figure 1: Overall patterns of BTP recorded crime, by week, January 2016-June 2020



- BTP recorded year on year increases in crime from January 2016 to March 2020.
- Each year there were marked falls in numbers of recorded crimes from the latter part of December to early January.
- The drop in recorded crime associated with the pandemic was unprecedented: crime fell substantially below the level experienced at any period from January 2016 to March 2020.
- The drop in crime began before the start of the national lockdown.

Figure 2: Network Rail Crime and Number of Passengers: Percent Change from Expected Rates in Pandemic



- Drops in most crime types (for example motor vehicle theft, bike theft, sex crimes, theft of passenger property) closely tracked the fall in passenger numbers.
- Trends in crimes reflecting BTP Police and staff vigilance (for example drugs, criminal damage, weapons, graffiti) did not track the fall in passenger numbers in the same way.

Note: 0% indicates no change from numbers of crimes that would be expected from previous years. More than 0% indicates an increase in what would be expected. Less than 0% indicates a decrease in what would be expected. Expected numbers of offences are calculated from the previous four years using Prophet model.

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