Mobility Trends Report

socialmediaobservatory.org.uk

Released: Saturday 23rd May 2020

incorporating
Facebook Mobility Data to 21st May 2020
Google Mobility Data to 16th May 2020

Don't wait for this report. Get the data when we get it at:
**https://mobilityarchive.socialmediaobservatory.org.uk**

Key Insights

- Since the last report (15th May) there has been:

    o   a further increase to longer distance journeys, where d>0.5km, see Figure 1.

    o   a sustained appearance of long mobility vectors between North-West of Northern Ireland, compared to pre-crisis levels, see Figure 2 & Figure 7

    o   there has been a small increase in mobility to transport stations, parks and workplaces, see Figure 4 (since Google delay their data their data, the dip in mobility corresponding to the VE-day holiday weekend is only now starting to appear)
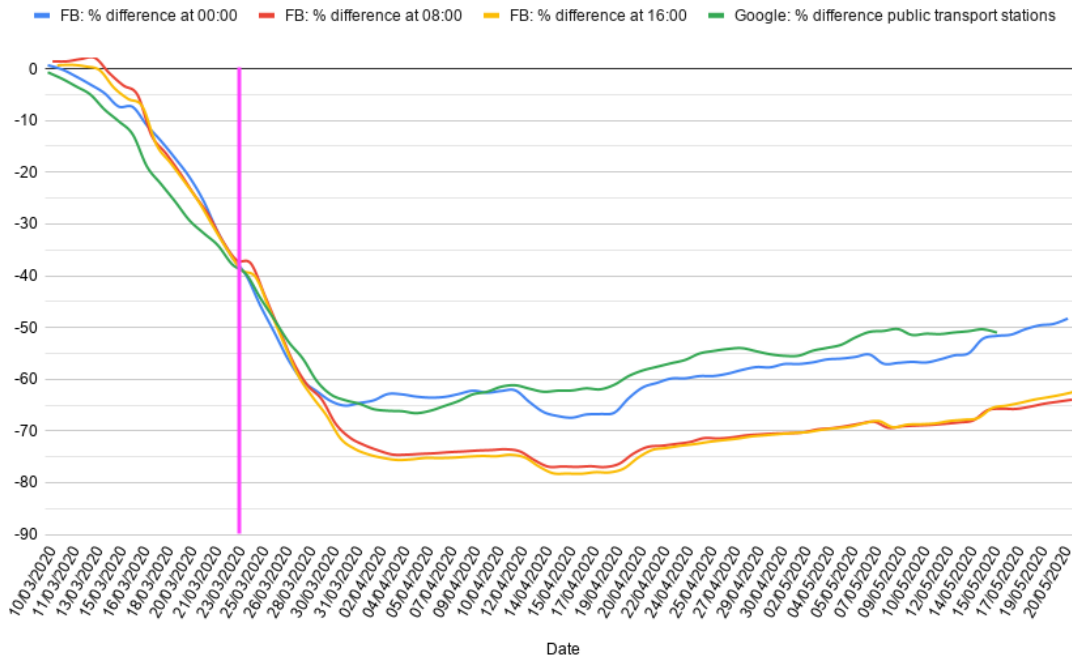
Figure 1: Facebook & Google Mobility Data - % differences for Northern Ireland as rolling averages. UK lockdown marked in purple. See notes A & B.

[A] Facebook Data: % difference in longer mobility vectors, where d > 0.5km. Google Data: % difference in mobility to transit hubs.

**[B]** Each presented as a simple moving average over previous 7 days.
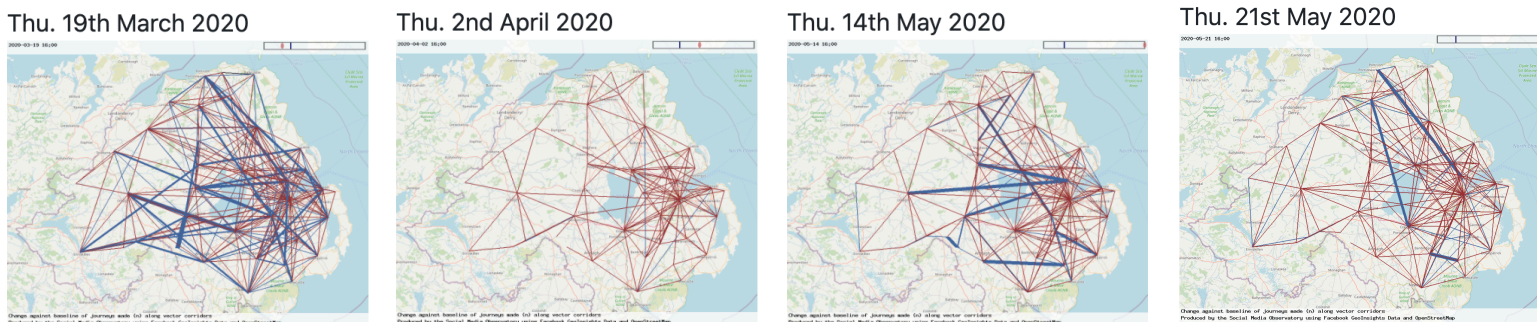
Figure 2: A comparison of four Thursdays showing mobility before and after lockdown. The leftmost is last Thursday before lockdown, followed by the Thursday during lockdown with the lowest mobility (2nd April), and then the two most recent Thursdays. Blue vectors indicate a positive mobility difference against a 'pre-Covid crisis' baseline in February.

Google Mobility Trends
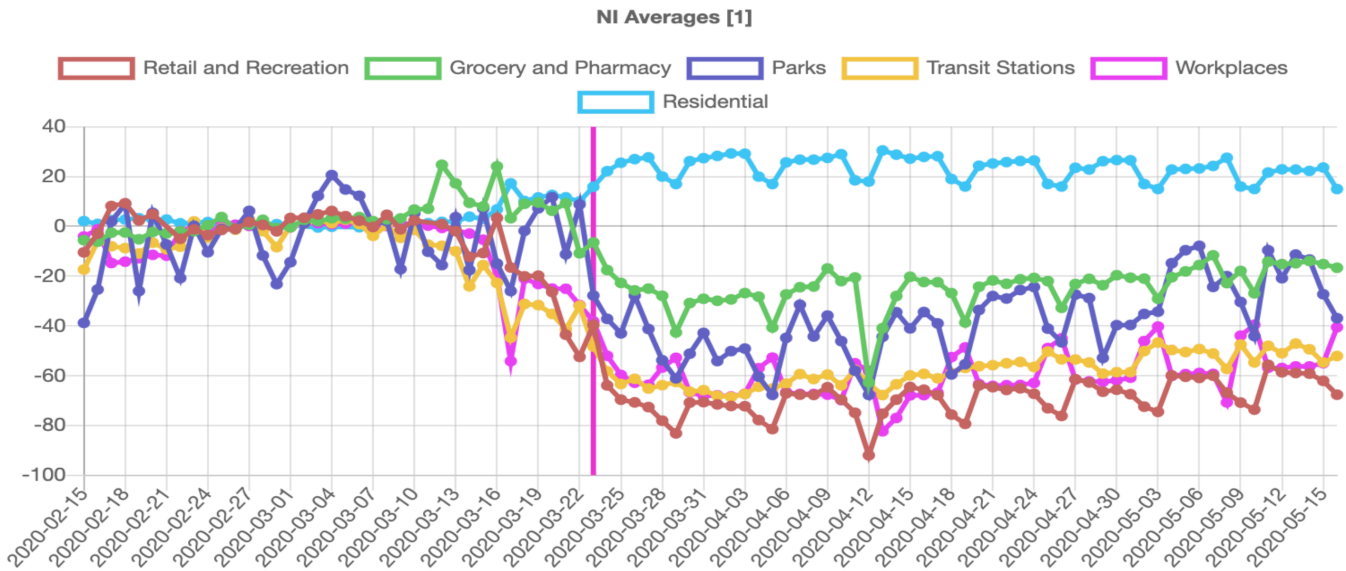
Figure 3: Google Mobility Data - Northern Ireland averages for all sectors until 16th May 2020. UK lockdown marked in purple.
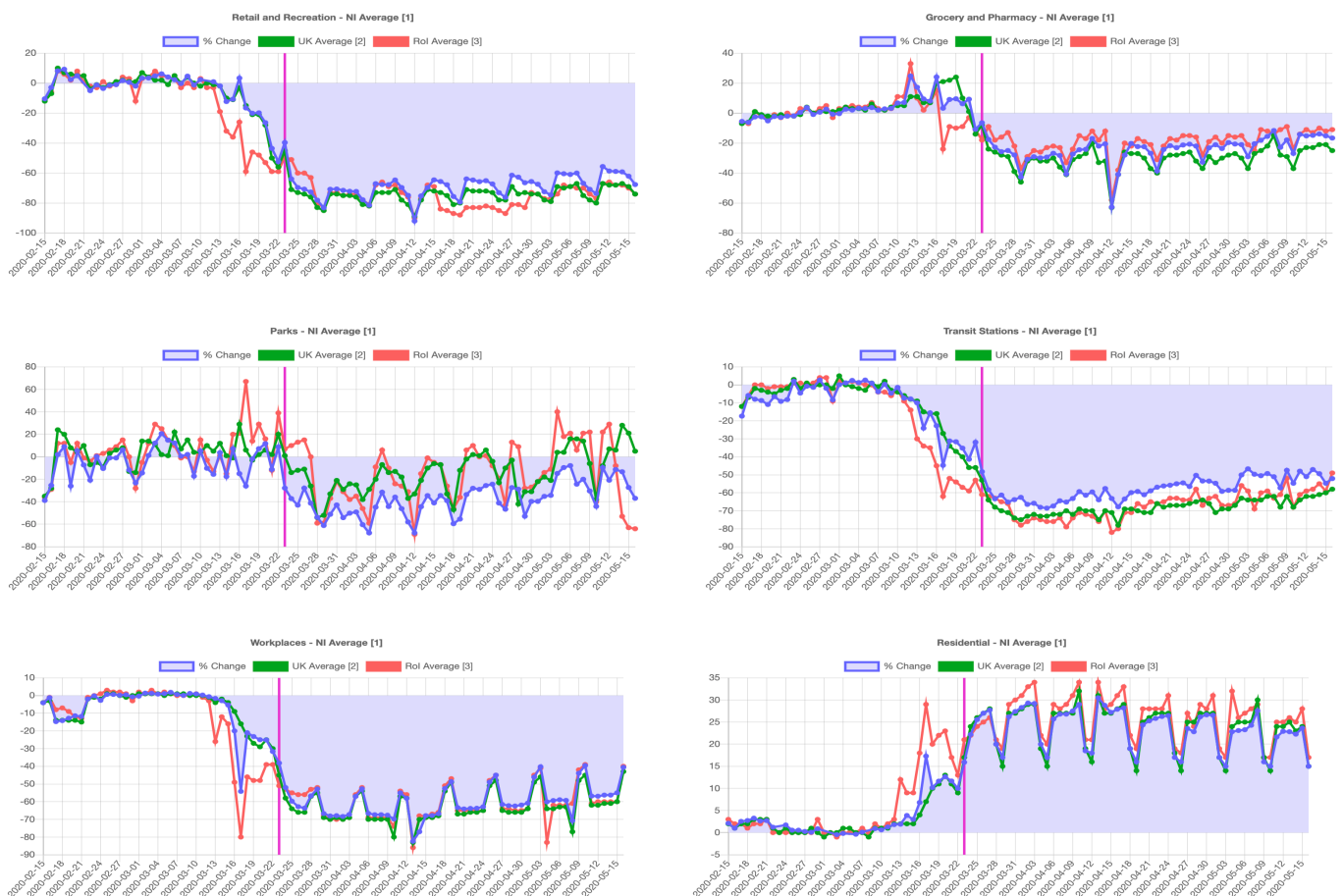
Figure 4: Google Mobility Data - Northern Ireland averages for each sector until 9th May 2020. UK lockdown marked in purple.

Baseline:

The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020.

Definitions:

- **Retail and Recreation**: Mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters.
- **Grocery and Pharmacy**: Mobility trends for places like grocery markets, food warehouses, farmers markets, specialty food shops, drug stores, and pharmacies.
- **Parks**: Mobility trends for places like national parks, public beaches, marinas, dog parks, plazas, and public gardens.
- **Transit Stations**: Mobility trends for places like public transport hubs such as subway, bus, and train stations.
- **Workplaces**: Mobility trends for places of work.
- **Residential**: Mobility trends for places of residence.

Notes:

[2] Northern Ireland average is calculated as the mean of change (%) over all NI council areas for which data is recorded. It is not weighted for population or any other adjustment.

[3] UK average is the "headline" overall UK figures from the Google Mobility Trends data for the UK and is not calculated by SMO.

[4] RoI average is the "headline"' overall Republic of Ireland figures from the Google Mobility Trends data for the Republic of Ireland and is not calculated by SMO.
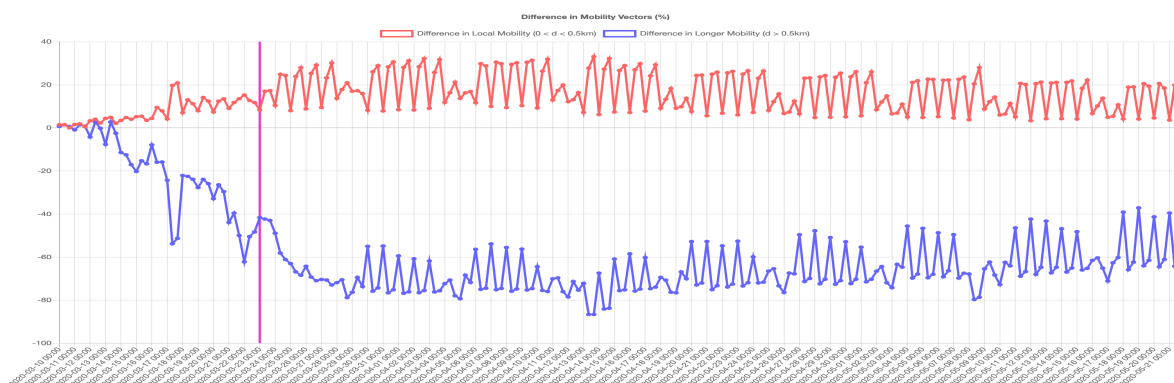Content Reuse and Attribution

Authorised users may use content and data from this service for any purposes including reproduction but must attribute the data to: *The Social Media Observatory at Queen's University Belfast using data provided by the Google Community Mobility Reports.*
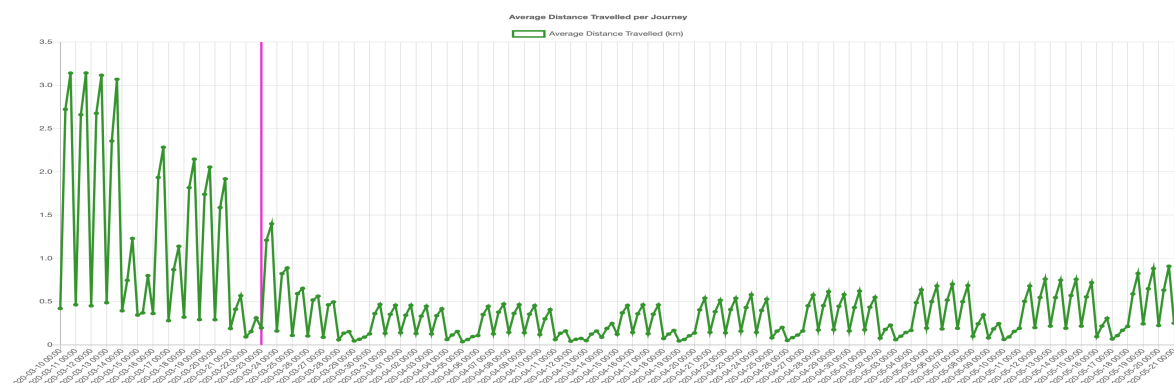
If suitable in the context links to *socialmediaobservatory.org.uk* and *www.google.com/covid19/mobility/* should be included.

If required a contact of David Cutting d.cutting@qub.ac.uk should be given relating to the SMO.

Facebook Mobility Trends

Figure 5: Facebook Mobility Data - Difference in mobility (%) until 21st May 2020. UK lockdown marked in purple.


Figure 6: Facebook Mobility Data - Average Distance Travelled (km) until 21st May 2020. UK lockdown marked in purple.

Authorised users may use content and data from this service for any purposes including reproduction but must attribute the data to: *The Social Media Observatory at Queen's University Belfast using data provided by the Facebook Geo Insights Platform (Data For Good).*

If suitable in the context links to *socialmediaobservatory.org.uk* and *www.facebook.com/* should be included.

If required a contact of David Cutting d.cutting@qub.ac.uk should be given relating to the SMO.
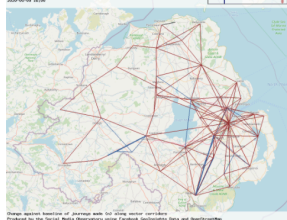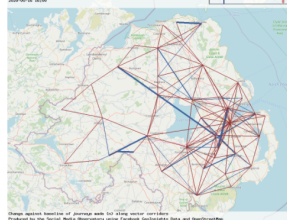
Fri. 1th May 2020
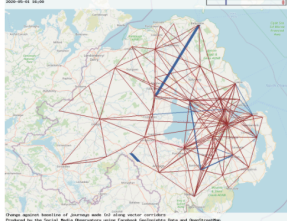
Fri. 8th May 2020
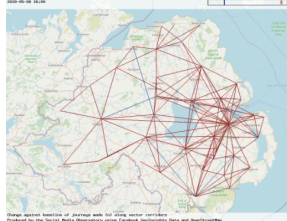
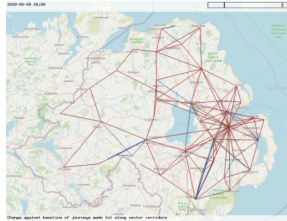**Fri. 15th May 2020**
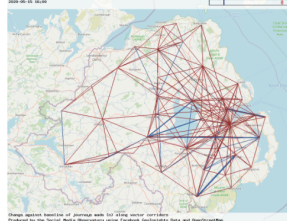
Sat. 2nd May 2020
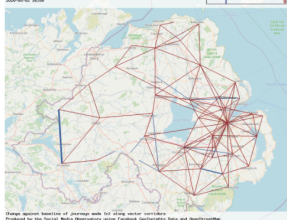
Sat. 9th May 2020
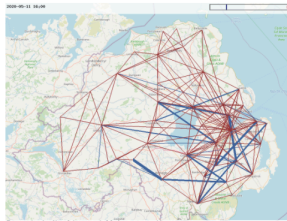
Sat. 16th May 2020

Sun. 3rd May 2020

Sun. 10th May 2020

Sun. 17th May 2020
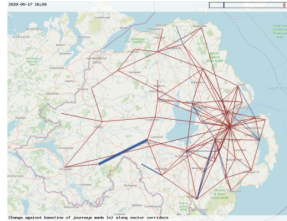
Mon. 4th May 2020
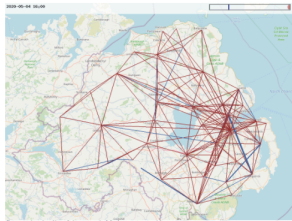
Mon. 11th May 2020

Mon. 18th May 2020

Tue. 5th May 2020
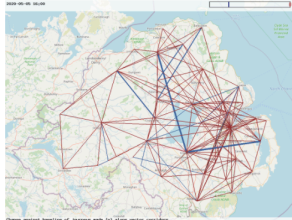
Tue. 12th May 2020
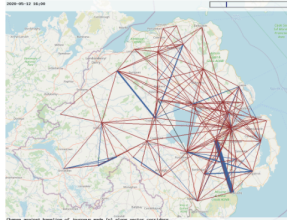
Tue. 19th May 2020
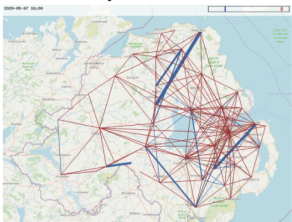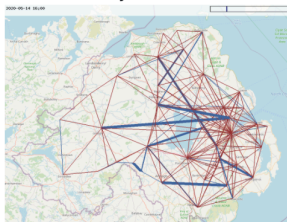
Wed. 6th May 2020
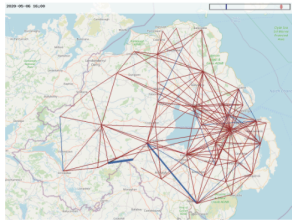
Wed. 13th May 2020
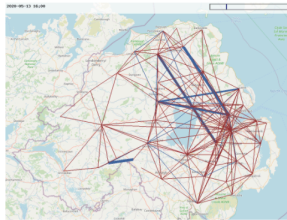
Wed. 20th May 2020

Thu. 7th May 2020
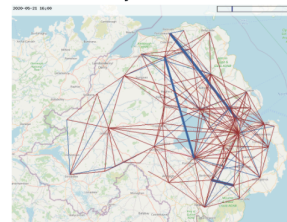
Thu. 14th May 2020

Thu. 21st May 2020

Figure 7: A comparison of mobility vectors in Northern Ireland for the three most recent weeks.

Each column represents a week-long period, starting on a Friday.

Red vectors indicate a negative mobility difference against a 'pre-Covid crisis' baseline.

Blue vectors indicate a positive mobility difference against a 'pre-Covid crisis' baseline.

The width of vector illustrates the size of the change. A wider vector indicates a larger change.

QUEEN'S UNIVERSITY BELFAST

CENTRE FOR PUBLIC HEALTH

SCHOOL OF
ELECTRONICS, ELECTRICAL ENGINEERING AND COMPUTER SCIENCE