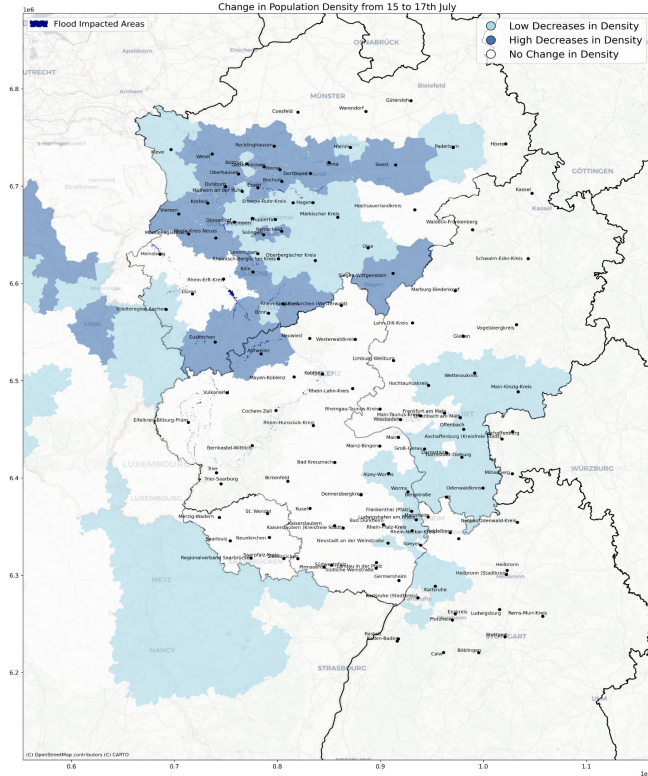


# Disaster Mobility Situation Report

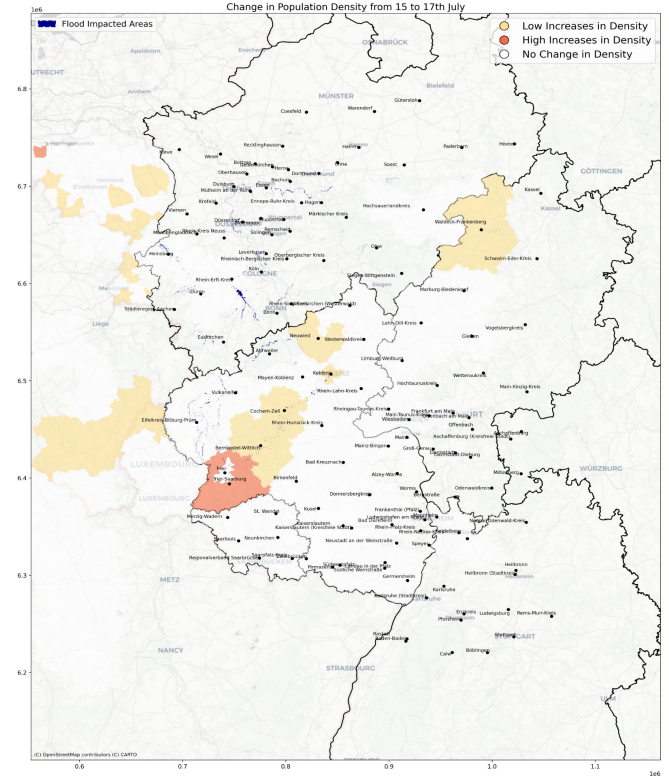
## Flooding in Western Germany

15 - 17th July, 2021

### Areas of Population Density Decrease



### Areas of Population Density Increase



## AREAS WITH GREATEST DECREASES IN POPULATION DENSITY (%)



- Ahrweiler (-11%)
- Duisburg (-11%)
- Euskirchen (-31%)
- Gelsenkirchen (-11%)
- Hasselt (-8%)

## OUTFLOWS FROM AREAS WITH LARGEST DECREASES IN POPULATION DENSITY

From	To	Avg. Distance Travelled	Z-Score
Ahrweiler	Bernkastel-Wittlich	66.39	4.0
Ahrweiler	Rhein-Erft-Kreis	68.16	4.0
Ahrweiler	Rhein-Lahn-Kreis	70.17	4.0
Ahrweiler	Westerwaldkreis	27.15	4.0
Ahrweiler	Rhein-Sieg-Kreis	6.81	3.26
Duisburg	Bottrop	25.3	4.0
Duisburg	Mönchengladbach	45.17	4.0
Duisburg	Rhein-Kreis Neuss	22.91	4.0
Duisburg	Viersen	20.45	3.28
Duisburg	Dortmund	59.69	2.89
Euskirchen	Bonn	26.44	4.0
Euskirchen	Städteregion Aachen	19.32	4.0
Euskirchen	Rhein-Erft-Kreis	6.24	1.1
Gelsenkirchen	Düsseldorf	34.5	4.0
Gelsenkirchen	Kleve	64.13	4.0
Gelsenkirchen	Köln	64.23	4.0
Gelsenkirchen	Mettmann	24.81	4.0
Gelsenkirchen	Dortmund	24.68	3.26
Hasselt	Neufchâteau	135.81	4.0
Hasselt	Wareme	5.54	4.0

## AREAS WITH GREATEST INCREASES IN POPULATION DENSITY (%)

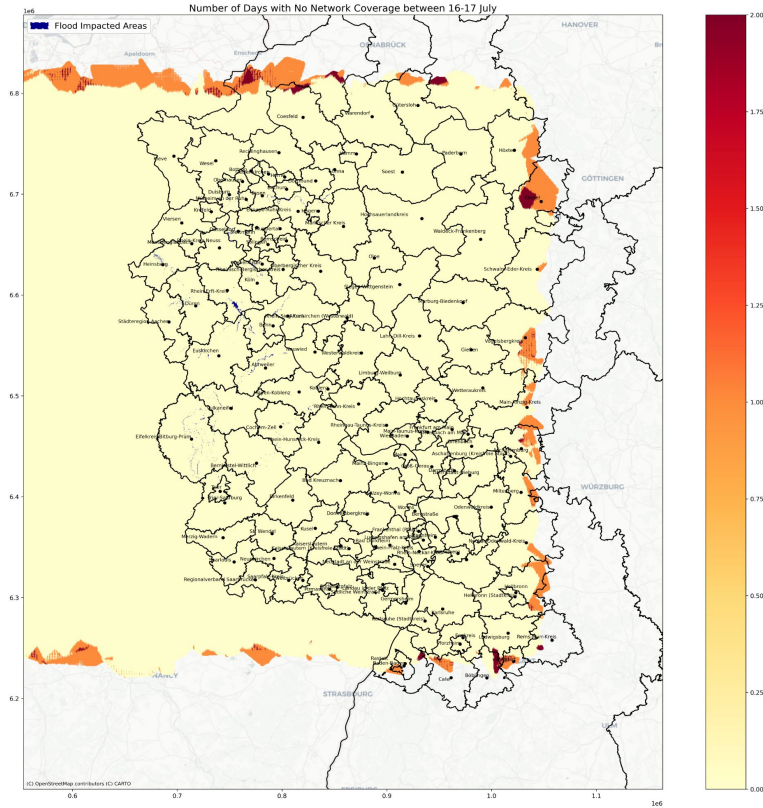


- Bergeijk (+7%)
- Horst aan de Maas (+6%)
- Loon op Zand (+27%)
- Maasgouw (+5%)
- Trier-Saarburg (+5%)

## INFLOWS TO AREAS WITH LARGEST INCREASES IN POPULATION DENSITY

To	From	Avg. Distance Travelled	Z-Score
Bergeijk	Veldhoven	9.83	2.34
Bergeijk	Eindhoven	12.77	2.29
Bergeijk	Bergeijk	0.02	2.15
Horst aan de Maas	Beesel	13.04	4.0
Horst aan de Maas	Bergen	27.54	4.0
Horst aan de Maas	Bladel	52.22	4.0
Horst aan de Maas	Heerlen	62.87	4.0
Horst aan de Maas	Helmond	21.38	4.0
Loon op Zand	Eersel	39.46	4.0
Loon op Zand	Heerlen	101.46	4.0
Loon op Zand	Landgraaf	108.41	4.0
Loon op Zand	Loon op Zand	0.04	4.0
Loon op Zand	Roermond	83.79	4.0
Maasgouw	Brunssum	26.24	4.0
Maasgouw	Leudal	9.6	4.0
Maasgouw	Nederweert	17.45	4.0
Maasgouw	Oirschot	49.67	4.0
Maasgouw	Weert	16.8	3.61
Trier-Saarburg	Sankt Wendel	7.08	4.0
Trier-Saarburg	Stadtverband Saarbrücken	67.32	4.0
Trier-Saarburg	Trier-Saarburg	0.01	2.8
Trier-Saarburg	Merzig-Wadern	18.56	1.79
Trier-Saarburg	Trier	3.31	1.35

## NETWORK COVERAGE MAP



### LOCATIONS WITH HIGHEST PROPORTIONS OF NETWORK OUTAGES (%)

All impacted locations had coverage during the flood period

### LOCATIONS WITH HIGHEST PROPORTIONS OF NETWORK OUTAGES AND HIGH POPULATION DENSITY (COUNT)

All impacted locations had coverage during the flood period

## On the Data:

This report is produced using data from Facebook Data for Good. All metrics are calculated based on the aggregated locations of Facebook app users who have opted in to location services.

- Change in **population density** is calculated according to the change in the proportion of Facebook users relative to a baseline measure from 90 days prior to the onset of the crisis.
- Change in **movement between administrative units** is calculated according to the modal movement between units relative to a baseline measure from 90 days prior to the onset of the crisis.
- Change in **network coverage** is calculated according to the probability that Facebook users were able to connect to cellular data antennas located in the area of interest.