

Key observations (13 - 25 November 2023)

According to IOM DTM ([Emergency tracking #28](#)), armed attacks in Cité Soleil have led to the displacements of over 1,000 **people** over 13 - 16 November. Our estimates based on anonymous aggregated mobile phone data up to 25 November shows that at least 1,070 **subscribers** residing in neighbourhoods located to the North of Cité Soleil (Sarthe, Terre-Noire-Blanchard, Bas Fontaine, Duviviers, Village des Rapatriés, Menetas) have been displaced while an additional 730 subscribers are likely displaced. Out of this grand total of 1,800 displaced subscribers, 650 have stayed within Sarthe and Terre-Noire-Blanchard, 420 have been displaced to the communes of Croix-des-Bouquets, Delmas, Petion-Ville and Tabarre (as per DTM observations) and the 730 remaining cannot be located because of method limitations. Few displacements are observed outside of the ZMPP: toward the west of Carrefour (communal section Morne a Bateau) and the south of Petion-Ville (communal section Montagne Noire), these are not shown on the maps. Longer displacements may have occurred, e.g. to Les Cayes, as in DTM's report, but were not observed. A few displacements have also been observed in the South of Cité Soleil (Boston, Brouklyn and Bélécou neighbourhoods) in line with DTM estimates (not reported here because of their too low numbers). Resident numbers in North Cité Soleil appear to sharply drop, then quickly recover from 22 November onward; however, further monitoring is needed to understand whether this indicates that displaced subscribers are returning to the affected area or whether this may be due to an artefact of the data.

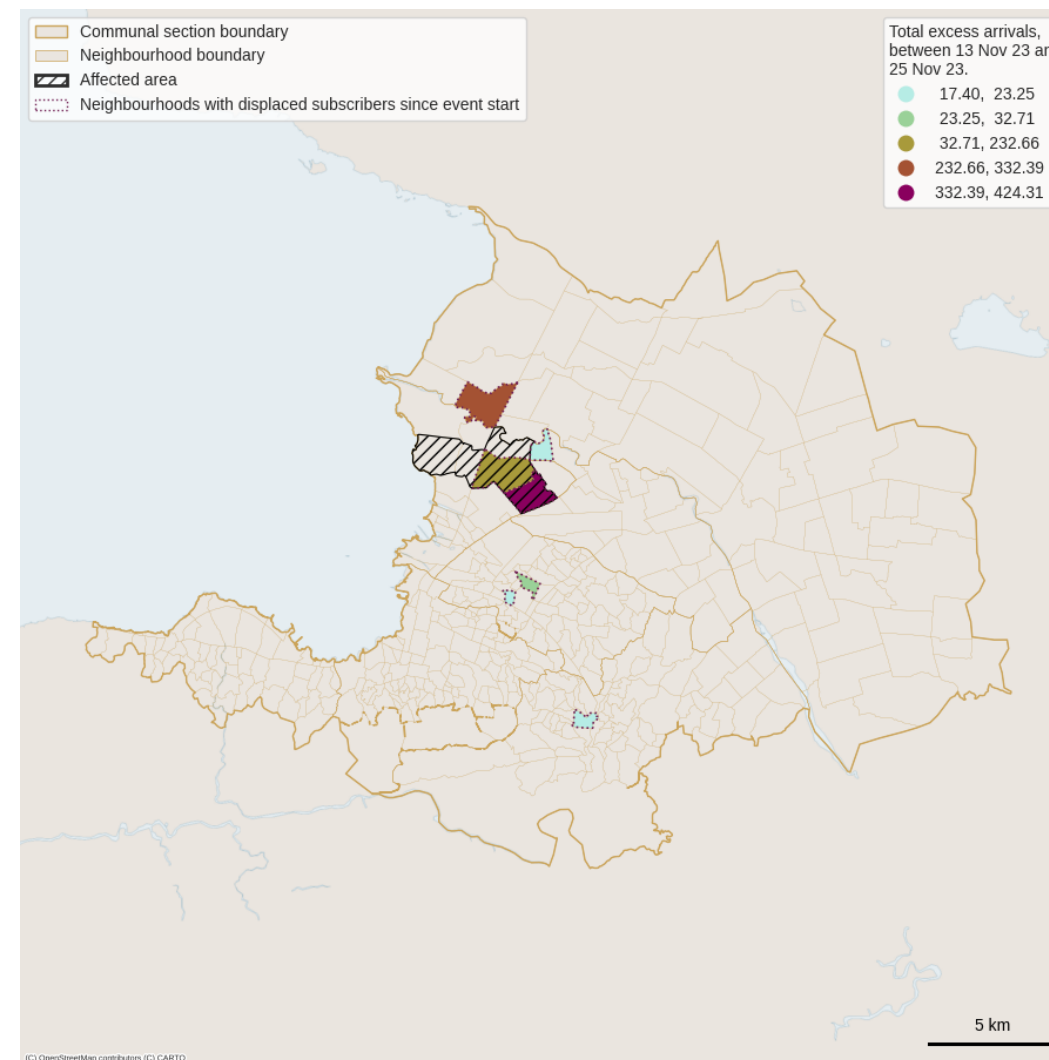
Total number of displaced subscribers from (or within) each affected area

Rank	Affected area	Departures since 13 November	Total resident loss since 13 November
1	North Cité Soleil (Sarthe, Terre-Noire-Blanchard, Bas Fontaine, Duviviers, Village des Rapatriés - Menetas)	1,070	1,800

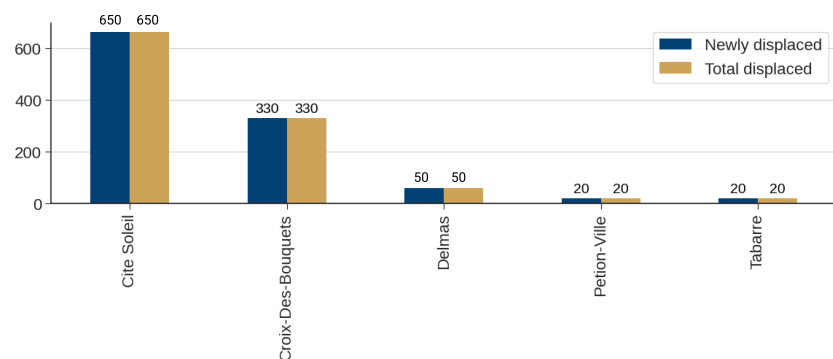
Locations with the largest numbers of newly displaced subscribers during the reporting period (13 - 25 November 2023)

Rank	Neighbourhood	Arrivals (13-25 November 2023)	Total displaced (13-25 November 2023)
1	Sarthe (117-02-2)	420	420
2	Jammeau - Fourgy - Dorigol (131-01-3)	330	330
3	Terre-Noire - Blanchard (117-02-3)	230	230
4	Valmé (112-01-79)	30	30
5	Barbancourt (118-03-15)	20	20

Locations and numbers of newly displaced subscribers from all affected areas, and locations of subscribers remaining displaced



Number of newly displaced subscribers and subscriber remaining displaced in each commune



Total displaced subscribers (high estimate)*

1,800

* Also known as 'stock'

Total displaced subscribers in known neighbourhoods*

1,070

* Also known as 'stock'

Newly displaced subscribers to known neighbourhoods* (Same as total displaced in reporting period 1)

1,070

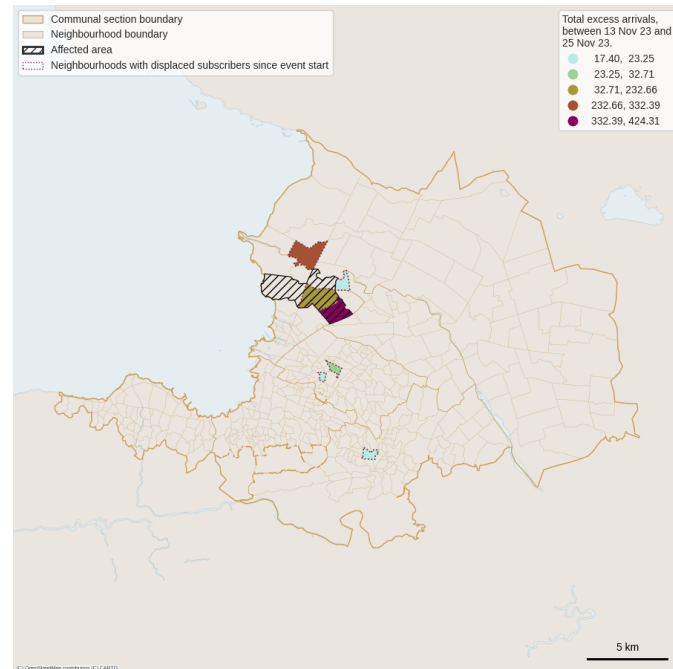
* Also known as 'flows'

These displacement and mobility estimates come from anonymous mobile phone data. These are not key informant estimates or field observations. If you are unfamiliar with this data source, please read our documentation which can be found at www.flowgeek.org

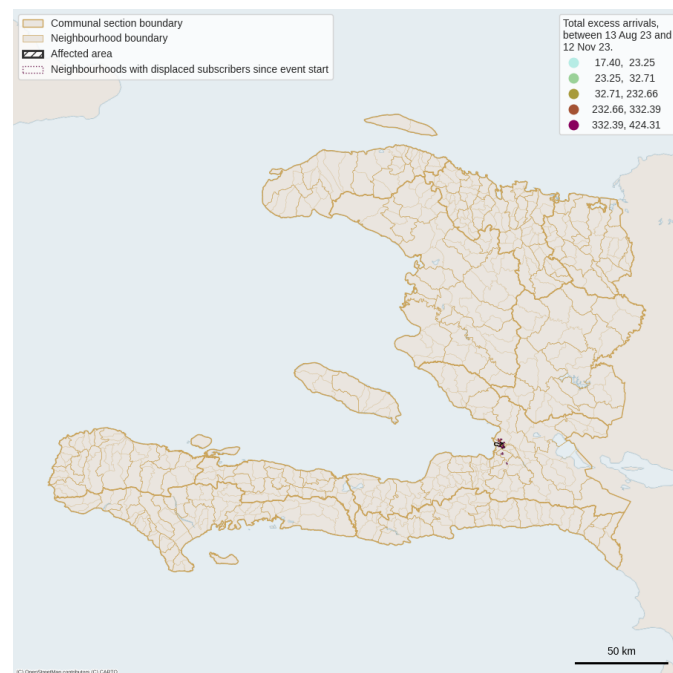
Neighbourhoods that received the largest numbers of displaced subscribers during the reporting period (top 15)

Rank	Neighbourhood	Arrivals 13-25 November 2023	Total displaced 13-25 November 2023
1	Sarthe (117-02-2)	420	420
2	Jammeau - Fourgy - Dorigol (131-01-3)	330	330
3	Terre-Noire - Blanchard (117-02-3)	230	230
4	Valmé (112-01-79)	30	30
5	Barbancourt (118-03-15)	20	20
6	Centre Ville (Ouest) (114-05-14)	20	20
7	Delmas 17 (112-01-26)	20	20

Locations and numbers of newly displaced subscribers from North Cité Soleil to neighbouring areas for the period 13-25 November



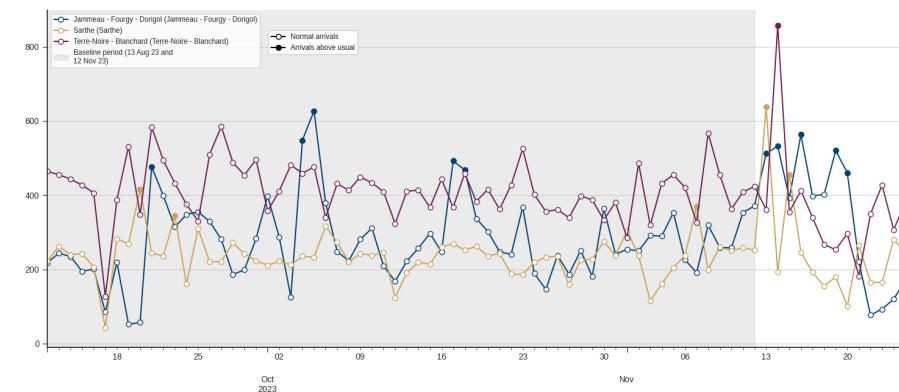
Locations and numbers of newly displaced subscribers from North Cité Soleil to anywhere in the country - for the period 13-25 November 2023



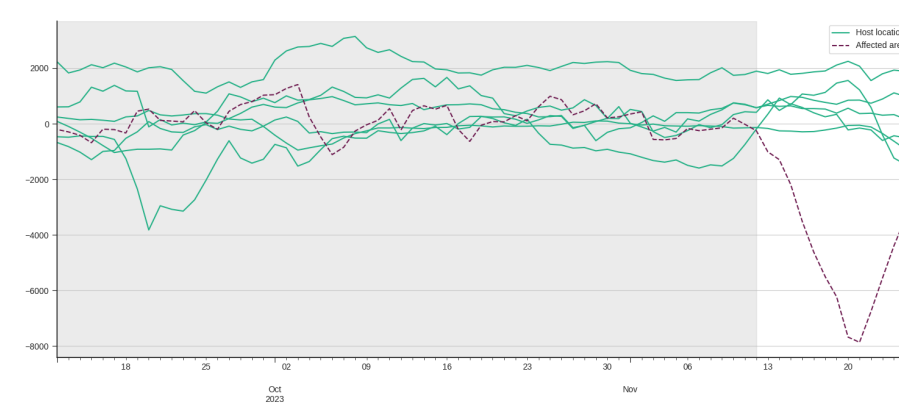
Estimated number of subscribers displaced from North Cité Soleil

1,800

Evolution of the number of abnormal arrivals (likely newly displaced subscribers) to known host locations (top 3)



Evolution of the changes in residents in North Cité Soleil (affected area) and in host locations where subscribers are displaced



These displacement and mobility estimates come from anonymous mobile phone data. These are not key informant estimates or field observations. If you are unfamiliar with this data source, please read our documentation which can be found at www.flowgeek.org

Authors & funders

This report was authored by the Flowminder Foundation.

This work has also been possible thanks to funding by the Agence Française de Développement, the William and Flora Hewlett Foundation and the Swiss Federal Department of Foreign Affairs (FDFA) that support current Flowminder's activities in Haiti, where Flowminder focuses on enabling the increased access to and use of mobile operator data in ways that are ethically sound, financially viable, and sustainable.

Acknowledgements

This study was made possible thanks to the anonymised (aggregated) mobile phone usage data provided by a mobile network operator in Haiti.

This work is made possible by the generous support of the American People through the United States Agency for International Development (USAID) who supported, among other things, the development of this information product template.

We welcome feedback to help us improve future reports and requests for specific types of analysis

Please email info@flowminder.org with any feedback and suggestions, or if you have any specific analytical requirements we can support

This report and its contents may only be shared with attribution to the Flowminder Foundation. Adaptation is permitted as long as the changes are indicated and the Flowminder Foundation is cited. Use of the report and its contents is limited to humanitarian and development purposes.

Disclaimer of Warranties and Limitation of Liability: To the extent possible, Flowminder offers this report and its contents as-is and as-available, and make no representations or warranties of any kind concerning this report and its contents, whether express, implied, statutory, or other. This includes, without limitation, warranties of title, merchantability, fitness for a particular purpose, non-infringement, absence of latent or other defects, accuracy, or the presence or absence of errors, whether or not known or discoverable.

To the extent possible, in no event will Flowminder be liable on any legal theory (including, without limitation, negligence) or otherwise for any direct, special, indirect, incidental, consequential, punitive, exemplary, or other losses, costs, expenses, or damages arising out of the use of the report or its contents, even if Flowminder has been advised of the possibility of such losses, costs, expenses, or damages. The disclaimer of warranties and limitation of liability provided above shall be interpreted in a manner that, to the extent possible, most closely approximates an absolute disclaimer and waiver of all liability.

Data privacy & governance

No personal data, such as an individual's identity, demographics, location, contacts or movements, is made available to the government or any other third party at any time. All results produced by Flowminder are aggregated results (for example, subscriber density in a given municipality), which means that they do not contain any information about individual subscribers.

This data is fully anonymised. This approach complies with the European Union's General Data Protection Regulation (EU GDPR2016/679). Data is processed on a server installed behind the mobile network operator's firewall in Haiti, and no personal data leaves the operator's premises.

Data considerations

The estimates shown are our best current assessment of movements. However, there are a number of uncertainties. The information should be interpreted together with other available evidence.

For more information about our methods, please read our *Haiti Mobility Data Indicators* documentation on residents and relocation [here](#).

Data sources

- Pseudonymised mobile phone usage data from a mobile network operator in Haiti
- Data products: Flowminder

Previous reports

Our most recent previous report on displacements in Haiti was published on 02 October 2023: Displaced subscribers from gang violence-affected towns, Mirebalais and Saut d'Eau : Situation as of 30 September 2023 <https://www.flowminder.org/resources/publications-reports/haiti-september-2023-gang-violence-mirebalais-and-saut-d-eau-report-1-eng>

The following citation is required when using the data and information included in this report:

Flowminder Foundation, November 2023, Haiti Gang violence, North Cité Soleil | Mobility situation report. Report #1