# Human Mobility Analysis and Mapping of the Refugees' Needs by use of alternative data

## Leveraging the private sector and data to respond to the Ukraine crisis

UNDP Country Office Moldova

13.07.2022

# Refugees Mobility Dashboard

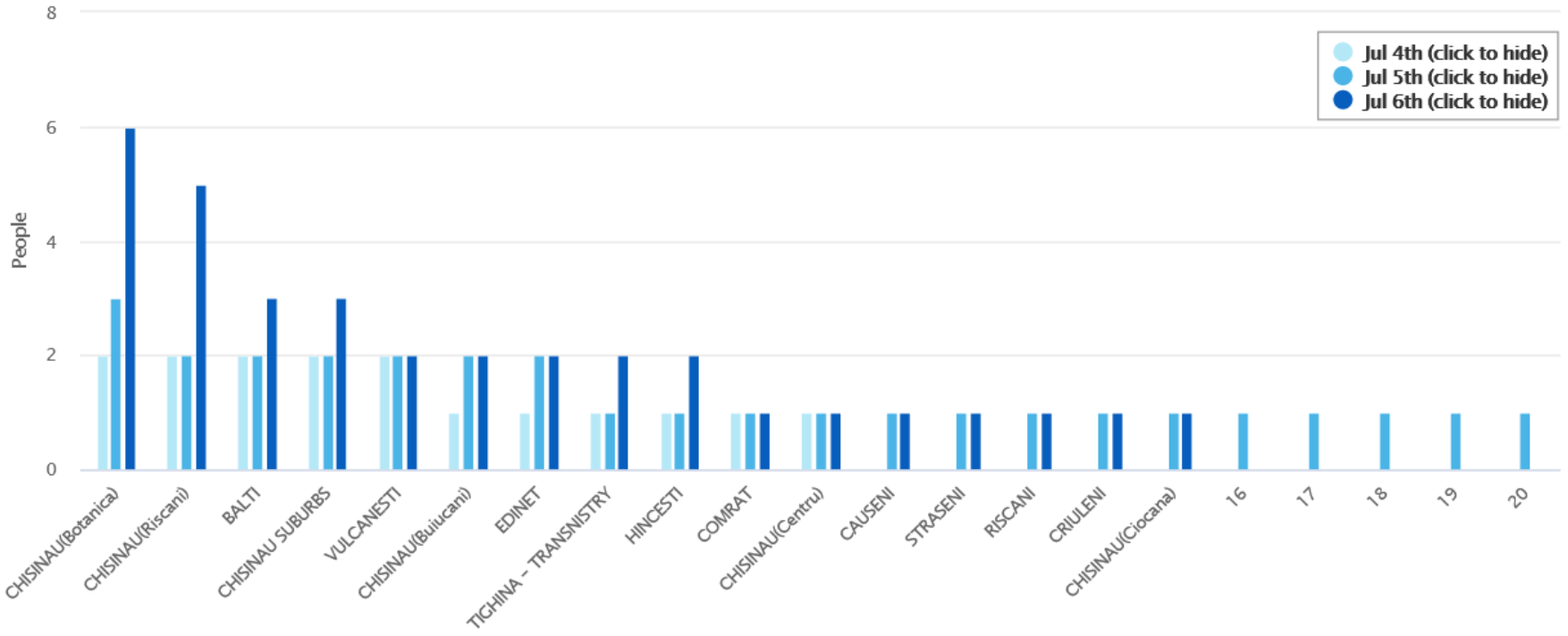
- Dashboard represents the deliverable of Orange Moldova, within the Annex1 to the Memorandum of Understanding between UNDP Moldova and Orange Moldova.
- Since the Ukraine crisis, Orange Moldova has distributed (for free) special PrePaycommunication kits, which included: 29 MDL credit, free Data Services bundle and 10 minutes per day free international calls towards Ukraine. KITs were distributed :
  - by OMD employees volunteers  at customs' points
  - bulk KITs allocation to MAI, for distribution in refugees camps
  - free distribution in Orange Moldova shops.
- The dashboard is a Demo version (**one time**) **situational analysis of the mobility data -dashboard and analytical report** on refugees mobility in Moldova, on the request. Coverage of 60-70% of Moldova
- The dashboard was produced based on technical records related to **unknown/ impersonalized customers** *(data the information that cannot be linked to an identified or identifiable  person)* **PrePaid services** users and **in-bound Roamers** located in Orange Moldova network. Such type of customers are never registered or personalized within Orange Moldova systems.
- 3 datasets:
  - 1) PrePay users first call location
  - 2) PrePAy Active users location
  - 3) Active Roamers location.

# Refugee Mobility Dashboard (4-6th July)

Zoom on

## PrePay users first call location

Geographical mapping at “raion” level of the location where the Prepay KIT was used to make the first call.
Date range: **Jul 4th - Jul 6th 2022**




**Tab view**

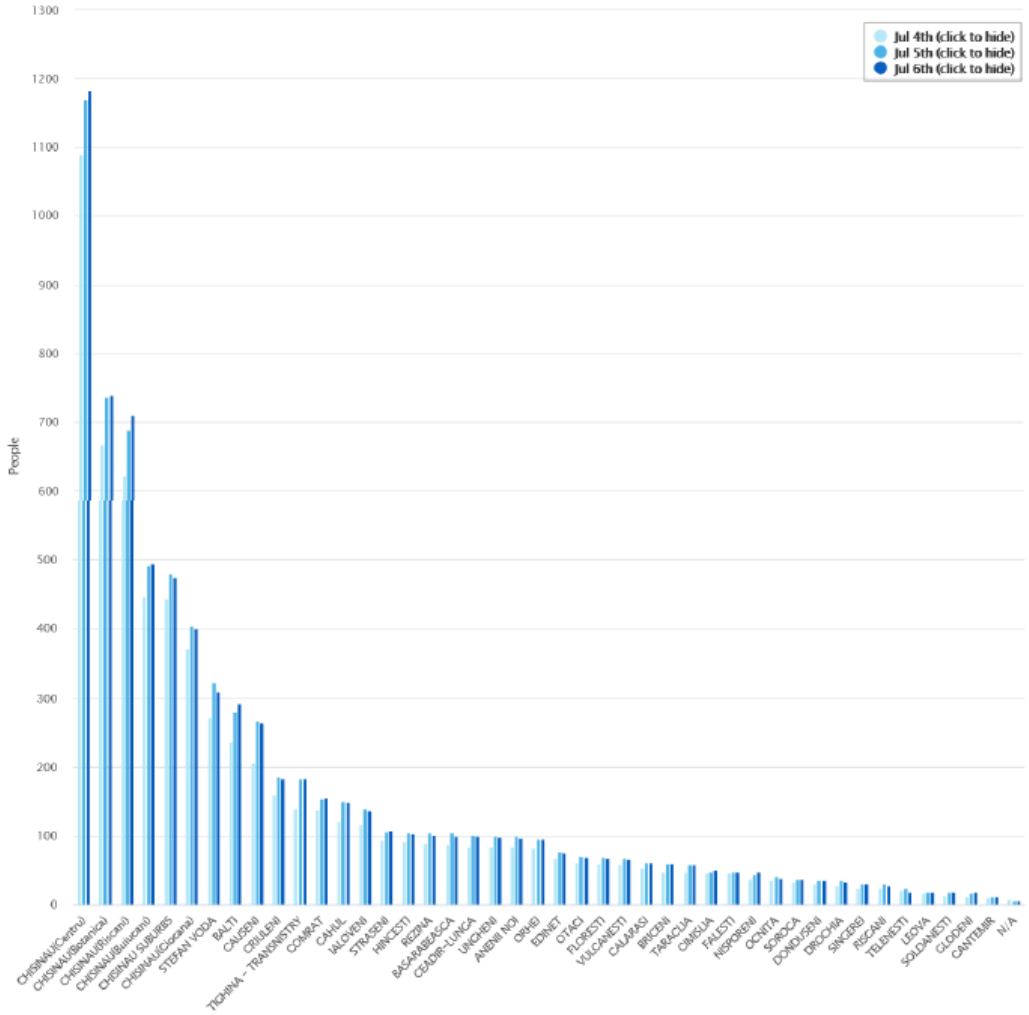
| City | Jul 4th | Jul 5th | Jul 6th |
|---|---|---|---|
| CHISINAU(Botanica) | 2 | 3 | 6 |
| CHISINAU(Riscani) | 2 | 2 | 5 |
| BALTI | 2 | 2 | 3 |
| CHISINAU SUBURBS | 2 | 2 | 3 |
| VULCANESTI | 2 | 2 | 2 |
| CHISINAU(Buiucani) | 1 | 2 | 2 |
| EDINET | 1 | 2 | 2 |
| TIGHINA - TRANSNISTRY | 1 | 1 | 2 |
| HINCESTI | 1 | 1 | 2 |
| COMRAT | 1 | 1 | 1 |
| CHISINAU(Centru) | 1 | 1 | 1 |
| CAUSENI | 0 | 1 | 1 |
| STRASENI | 0 | 1 | 1 |
| RISCANI | 0 | 1 | 1 |
| CRIULENI | 0 | 1 | 1 |
| CHISINAU(Ciocana) | 0 | 1 | 1 |

# Refugee Mobility Dashboard (4-6th July)

Zoom on

## PrePay active users location

Geographical mapping at "raion" level of the location where a Prepay KIT is used to-date
Date range: **Jul 4th - Jul 6th 2022**



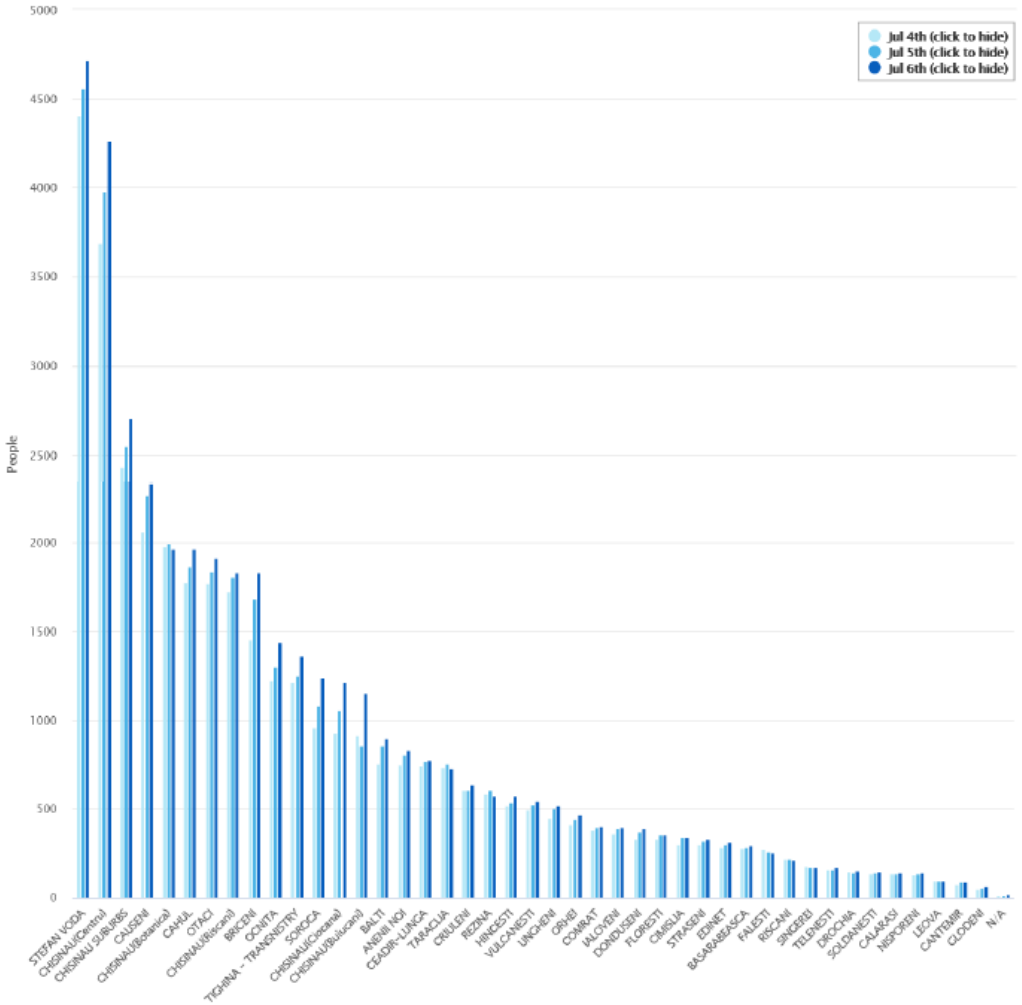

**Tab view**

| City | Jul 4th | Jul 5th | Jul 6th |
|---|---|---|---|
| CHISINAU(Centru) | 1089 | 1169 | 1183 |
| CHISINAU(Botanica) | 667 | 737 | 740 |
| CHISINAU(Riscani) | 622 | 689 | 710 |
| CHISINAU(Buiucani) | 447 | 491 | 494 |
| CHISINAU SUBURBS | 443 | 480 | 475 |
| CHISINAU(Ciocana) | 371 | 403 | 400 |
| STEFAN VODA | 272 | 323 | 309 |
| BALTI | 236 | 279 | 292 |
| CAUSENI | 205 | 257 | 264 |
| CRIULENI | 160 | 186 | 183 |
| TIGHINA - TRANSNISTRY | 140 | 182 | 182 |
| COMRAT | 138 | 153 | 155 |
| CAHUL | 121 | 151 | 149 |
| IALOVENI | 116 | 140 | 139 |
| STRASENI | 93 | 108 | 108 |
| HINCESTI | 92 | 105 | 103 |
| REZINA | 89 | 105 | 102 |
| BASARABEASCA | 88 | 104 | 100 |
| CEADIR-LUNGA | 85 | 102 | 100 |
| UNGHENI | 85 | 100 | 98 |
| ANENII NOI | 84 | 100 | 97 |
| ORHEI | 83 | 95 | 95 |
| EDINET | 67 | 76 | 75 |
| OTACI | 61 | 71 | 69 |
| FLORESTI | 60 | 69 | 68 |
| VULCANESTI | 59 | 67 | 66 |
| CALARASI | 53 | 62 | 61 |
| BRICENI | 48 | 60 | 60 |
| TARACLIA | 47 | 59 | 59 |
| CIMISLIA | 46 | 48 | 50 |
| FALESTI | 46 | 48 | 47 |
| NISPORENI | 37 | 44 | 47 |
| OCNITA | 35 | 41 | 39 |
| SOROCA | 34 | 37 | 37 |
| DONDUSENI | 30 | 36 | 35 |
| DROCHIA | 27 | 35 | 34 |
| SINGEREI | 26 | 31 | 31 |
| RISCANI | 24 | 31 | 28 |
| TELENESTI | 22 | 24 | 19 |
| LEOVA | 17 | 19 | 19 |
| SOLDANESTI | 14 | 18 | 18 |
| GLODENI | 12 | 17 | 18 |
| CANTEMIR | 11 | 13 | 13 |
| N/A | 8 | 8 | 8 |

# Refugee Mobility Dashboard (4-6th July)

Zoom on
**Active Roamers location**

Geographical mapping at "raion" level of the location where a Roamer SIM card is used to-date.
Date range: **Jul 4th - Jul 6th 2022**




Tab view

| City | Jul 4th | Jul 5th | Jul 6th |
|---|---|---|---|
| STEFAN VODA | 4401 | 4557 | 4717 |
| CHISINAU(Centru) | 3691 | 3976 | 4262 |
| CHISINAU SUBURBS | 2431 | 2549 | 2705 |
| CAUSENI | 2061 | 2284 | 2332 |
| CHISINAU(Botanica) | 1978 | 1993 | 1968 |
| CAHUL | 1779 | 1867 | 1966 |
| OTACI | 1772 | 1836 | 1914 |
| CHISINAU(Riscani) | 1726 | 1806 | 1830 |
| BRICENI | 1455 | 1683 | 1828 |
| OCNITA | 1222 | 1298 | 1439 |
| TIGHINA - TRANSNISTRY | 1216 | 1253 | 1386 |
| SOROCA | 954 | 1082 | 1240 |
| CHISINAU(Ciocana) | 925 | 1059 | 1214 |
| CHISINAU(Buiucani) | 914 | 958 | 1149 |
| BALTI | 758 | 858 | 900 |
| ANENII NOI | 749 | 802 | 831 |
| CEADIR-LUNGA | 742 | 769 | 776 |
| TARACLIA | 730 | 753 | 725 |
| CRIULENI | 607 | 610 | 637 |
| REZINA | 588 | 610 | 575 |
| HINCESTI | 522 | 538 | 575 |
| VULCANESTI | 498 | 528 | 544 |
| UNGHENI | 446 | 501 | 522 |
| ORHEI | 411 | 445 | 484 |
| COMRAT | 381 | 396 | 399 |
| IALOVENI | 358 | 387 | 387 |
| DONDUSENI | 332 | 370 | 392 |
| FLORESTI | 331 | 356 | 354 |
| CIMISLIA | 301 | 342 | 340 |
| STRASENI | 299 | 319 | 328 |
| EDINET | 285 | 302 | 314 |
| BASARABEASCA | 275 | 285 | 298 |
| FALESTI | 272 | 261 | 254 |
| RISCANI | 218 | 216 | 212 |
| SINGEREI | 176 | 170 | 173 |
| TELENESTI | 158 | 157 | 169 |
| DROCHIA | 150 | 142 | 153 |
| SOLDANESTI | 135 | 140 | 146 |
| CALARASI | 133 | 137 | 143 |
| NISPORENI | 127 | 137 | 142 |
| LEOVA | 93 | 93 | 97 |
| CANTEMIR | 77 | 87 | 89 |
| GLODENI | 47 | 55 | 65 |
| N/A | 10 | 10 | 15 |

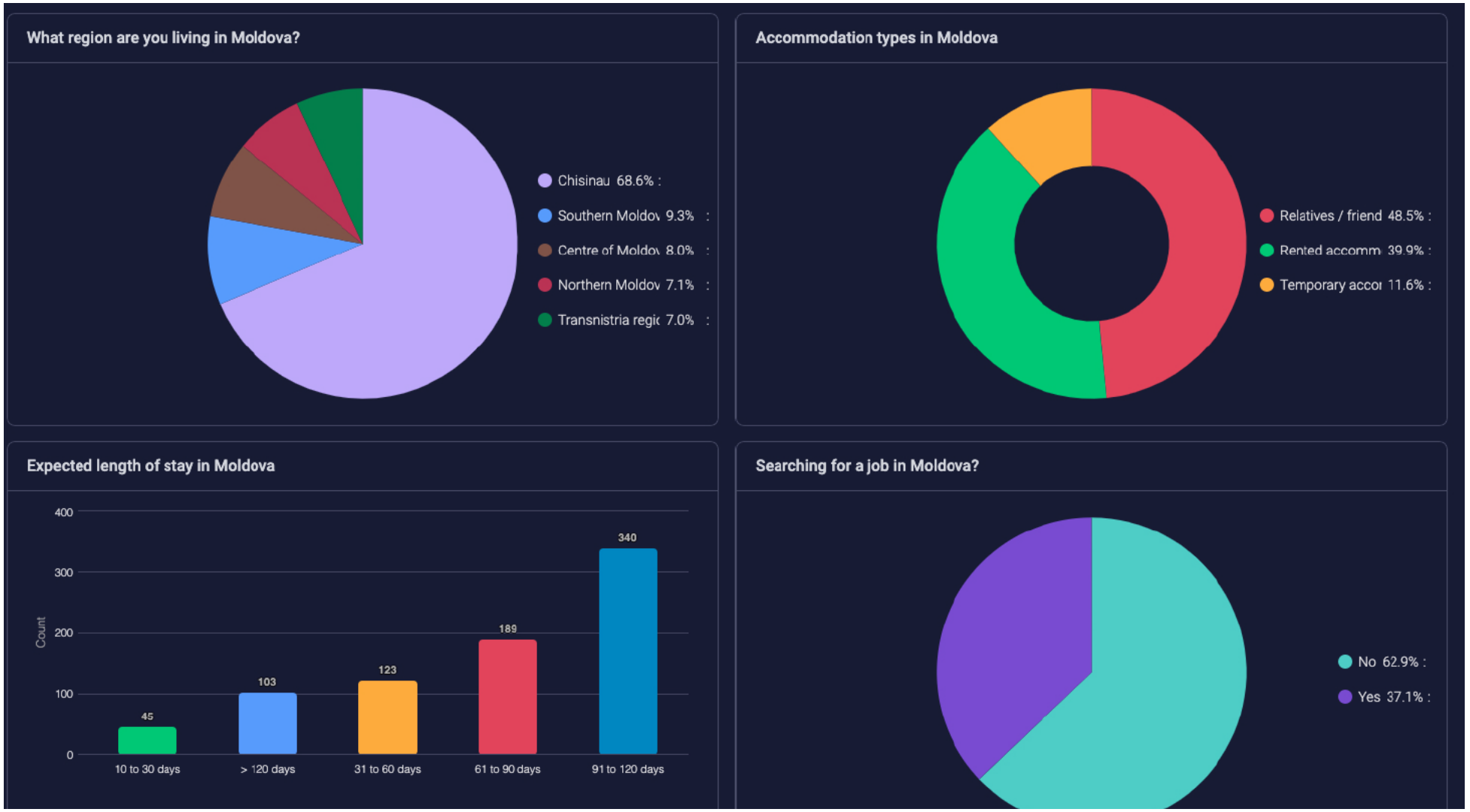
Possibility (upon request) to require trend analysis over time, or other support from Orange MD.

Link to the Mobility Dashboard: https://cdn.orange.md/daas/

# Needs assessment (SMS survey)

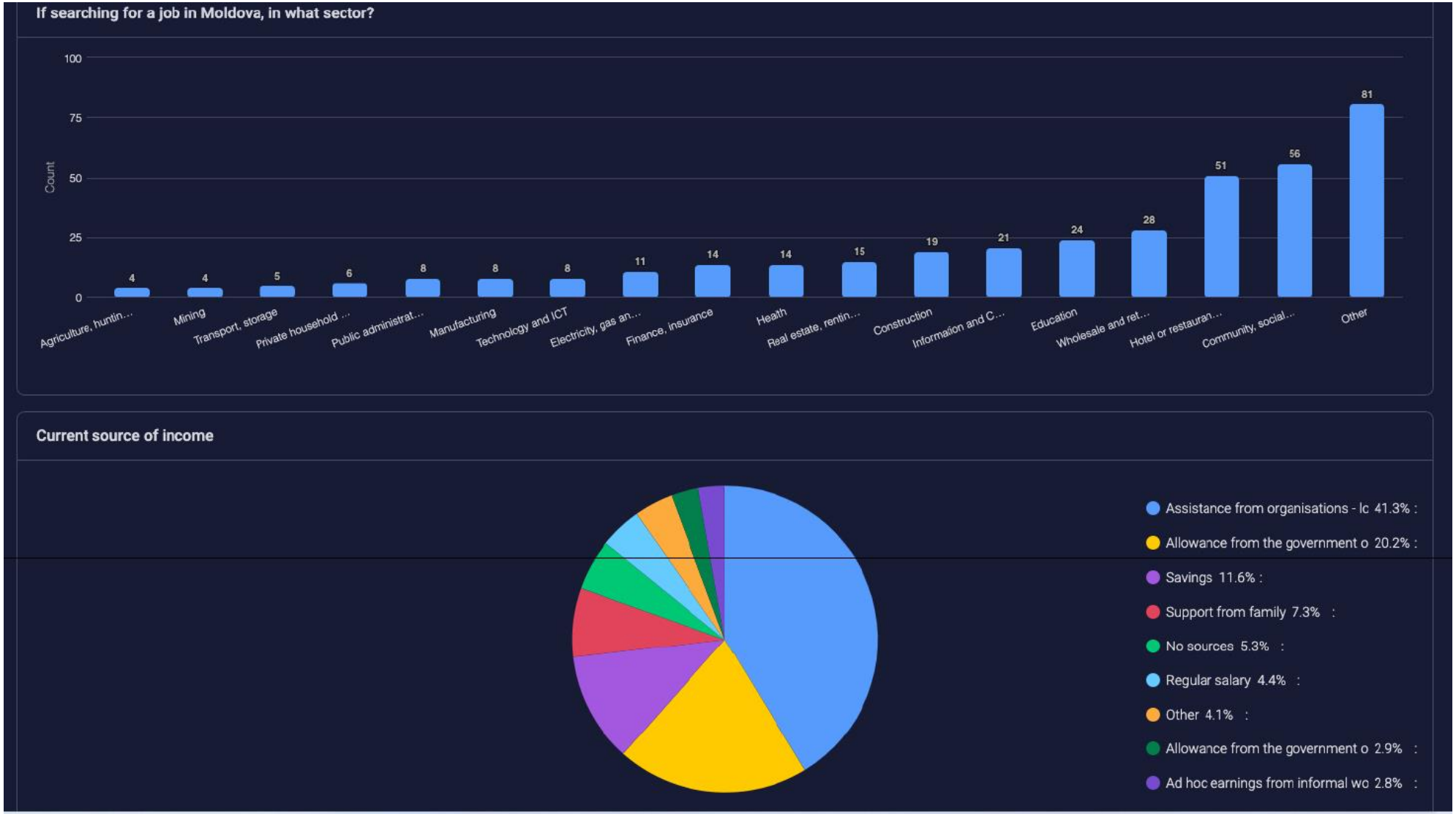
- MoU between UNDP Moldova and Monday.com, an IT company providing a cloud-based management platform.
- Upon request from the government, the survey assessed needs of refugees, length of stay and employability, using the list of Prepay numbers distributed by Orange MD (~49'000 numbers)
- To improve turnout, respondents received a bonus of 60 free minutes (1st SMS), and 1 GB free internet (2nd SMS).
- The questionnaire was sent twice:
  - 1st time on 21.06 (bonus: 60 free minutes). 49,000 SMS sent, 2269 clicked on the link, 403 respondants
  - 2nd time on 5.07 (bonus: 1 GB free). 49,000 SMS sent, 1518 clicked on the link, 429 respondents.
- Stats:
  - 830 answers in 19 days
  - The survey and analysis is directly generated on Monday.com analysis directly and available to the government.
  - Total cost (no profit for Orange): EUR 1650 development, 200 EUR (cost of SMS), 320 EUR (1st SMS bonus), 900 EUR (2nd SMS bonus) = 3070 EUR

# Needs assessment



# Needs assessment

# Needs assessment



# Needs assessment (SMS Survey) demographics

Demographics:

- 56.5% of respondents are from Odessa, 17.4% from Mikolaiv Oblast.
- 58% are age 25-44, 60% married

Location and Mobility

- 69% are living in Chisinau, with friends or relatives (48%) or in rented accommodation (40%).
- They mostly plan to stay 90-120 days (42.4%), or 61-90 days (23%). 56% plan on staying for the next 90 days as a temporary stay.

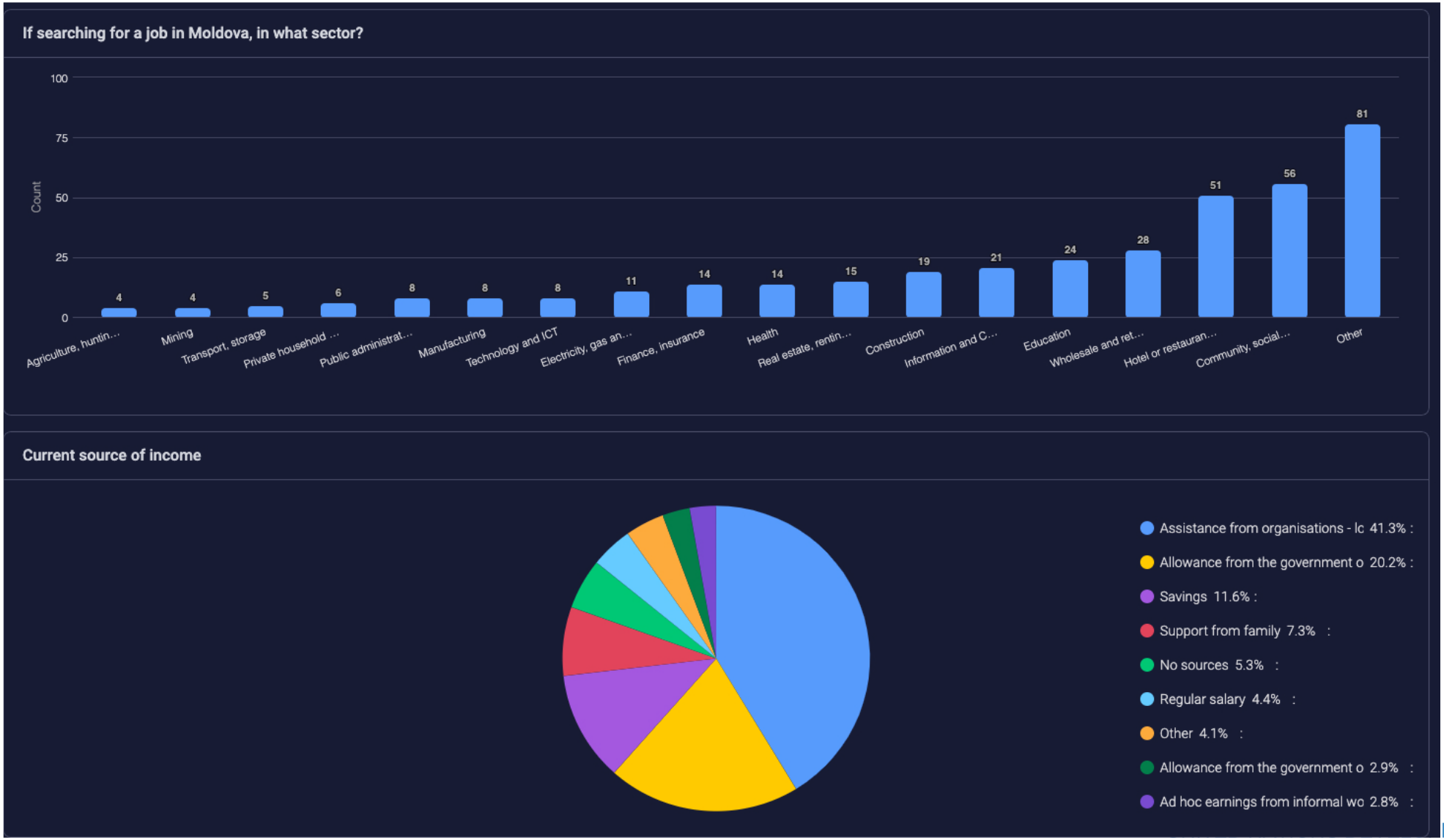
Needs:

- Internet connexion (22.1%), healthcare and reproductive services (13%), accommodation (12%), banking (12%), childcare or care services (10%).

Employment:

- Most are **not** looking for a job (64%: no, 37%: yes).
- Their current source of income are assistance from organisations (41.3%), followed by allowance from the government of Moldova (20.2%) and savings (11.6%).
- From those who wish to find employment, top sectors are community and social services (15.6%), hotel & restaurants (13.4%), and retail (7%).

# Needs assessment: employment



# Next services for the government

- **Integrated analysis** of the collected datasets (linked by the geolocation and other variables) and development of integrated situational report for the Government
- Development of **new services**, to include overlaying of 112 data on accidents, incidents, EO data and other datasets to generate additional insights
- **Expand SMS service** to keep refugee population informed on various legal and other aspects related to their stay in Moldova (periodical sending of SMS notifications, other)
- More targeted SMS service, based on their needs, location, expressed interests.

U N
D P