#DATA4COVID19

Data Collaboratives in Response to COVID-19

Living Repository

GOVLAB

This document has been archived. For the current version of the #Data4COVID19 repository, please visit https://list.data4covid19.org/index.html.

*This Living Repository is part of a **call for action** to build a responsible infrastructure for data-driven pandemic response (JOIN US AND SIGN HERE) .*

- *It serves as a repository for data collaboratives seeking to address the spread of COVID-19 and its secondary effects.*
  - *You can find ongoing data collaborative projects **here***
  - *Data competitions, challenges, and calls for proposals can be found **here**.*
  - *Requests for data and expertise can be found **here**.*
- *The repository invites individuals to share projects that show a commitment to privacy protection, data responsibility, and overall user well-being. A project's inclusion in this living repository does not indicate endorsement by The GovLab or confirmation of its success in meeting these goals.*

HELP US MAKE THIS REPOSITORY BETTER: Individuals are encouraged to edit the below and/or suggest additions to this document if a project is not currently listed.

CHECK OUT ALSO: OUR CALL FOR EVIDENCE (with the OECD) on Use of Open Government Data in response to the coronavirus (COVID-19) outbreak

CONTACT: *Stefaan Verhulst via stefaan [at] thegovlab [dot] org*
STAY UP-TO-DATE*: Sign up to our newsletter to get a selection of new additions to the repository each week and updates on our #Data4COVID19 work.*

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ONGOING PROJECTS:

East Asia and Pacific

"Self-Quarantine Safety Protection" app

- **Start Date**: 2020
- **Regional Focus:** East Asia and Pacific
- **Description**: The Self-Quarantine Safety Protection App is a smartphone application that allows individuals ordered to quarantine to remain in contact with case workers and report their health. The application also tracks the user's location to ensure the individual has not broken quarantine.
- **Participants**: Korean Ministry of the Interior and Safety; various telecommunications companies
- **Contact**: N/A

Beat Covid-19 Now Symptom Tracker

- **Start Date**: 27 March 2020
- **Regional Focus:** East Asia and Pacific
- **Description**: Beat Covid-19 Now is an initiative developed by researchers at Swinburne University in Australia. The website asks Australians to answer a few questions each day about any COVID-19 symptoms they might be experiencing. The data will allow researchers to understand how and where the disease spreads, improving interventions.
- **Participants**: Government of Australia; Swinburne University
- **Contact**: Richard H Osborne, Swinburne University of Technology

TraceTogether

- **Start Date**: 2020
- **Regional Focus:** East Asia and Pacific
- **Description**: TraceTogether is an app from the government of Singapore that tries to track potential coronavirus carriers and spread. Using short-distance bluetooth, the app checks and records if the user comes in contact with any other TraceTogether user. If either party is diagnosed or suspected of having COVID-19, records of contact can be traced from the individual's phone, pending their permission.
- **Participants**: Singapore Government Digital Services; Singapore Ministry of Health; SG United; Singapore GovTech
- **Contact**: Form

Using data-driven, citizen science, spatial-based approaches to develop an open-source COVID19 Pandemic Response Tool

- **Start Date**: 23 March 2020
- **Regional focus**: Australia
- **Description**: A group of academics are working to create an open-source mapping platform to aggregate real-time data about COVID-19. The project intends to use spatial analysis techniques to help decision-makers identify vulnerable communities, map fatality hotspots, map quarantine and isolation monitoring, better manage work forces, and assess social distancing. The project is still in the planning phase and has not yet formally been launched.
- **Participants**: University of New South Wales; United Nations Association of Australia
- **Contact**: Dr Ori Gudes, University of New South Wales; Ana Ouriques, United Nations Association of Australia

Seer and Financial Vulnerability Map

- **Start Date**: 27 March 2020
- **Regional Focus:** Australia
- **Description**: The Australian company Seer, which provides a platform for data analysis and visualization, is providing access to some of its assets for the remainder of 2020. The company intends these resources to help communities and businesses deal with the consequences of COVID-19. These resources include its financial vulnerability map, which provides information on vulnerable industries, employment, and rental stress; and similar communities model, which helps communities identify other vulnerable communities like them.
- **Participants**: Seer Data & Analytics
- **Contact**: Kristi Mansfield, Seer Data & Analytics

COVID-19 Korea Dataset with patient routes and visualizer Korea

- **Start Date:** 12 March 2020
- **Regional Focus:** South Korea
- **Description:** This project is currently in the process of officially partnering up with the KCDC (Korea Centers for Disease Control & Prevention) to bring more accurate and up-to-date data on COVID-19 patient routes, age, gender, and diagnosed rate. The datasets will be provided via Github and Kaggle, to developers who are interested in applying data mining or visualization techniques on COVID-19 data.
- **Participants:** BIG, MINDS Lab, SK Telecom

- **Contact:** JoongKun Lee, isaaclee@isaaclee.work

Open Development Cambodia Health Facility Map

- **Start Date**: February 18, 2020
- **Regional Focus:** Cambodia
- **Description**: Open Development Cambodia (ODC) provides a map and downloadable map layers for health facilities in the country. The map layers provide information on the facilities' location and services and are derived from information made accessible by the country's National Social Security Fund (NSSF).
- **Participants**: Open Development Cambodia, National Social Security Fund (NSSF) Cambodia
- **Contact**: contact@opendevcam.net

COVID-19 Cases in New Zealand

- **Start Date**: 2020
- **Regional Focus:** New Zealand
- **Description**: The company Ping Insights has created several charts to visualize the current state of the COVID-19 pandemic in New Zealand from Johns Hopkins University and other public health authorities. It includes information on testing and transmission, prevalence, and other statistics.
- **Participants**: Ping Insights
- **Contact**: N/A

Sick Sense

- **Start Date**:
- **Regional Focus:** Thailand
- **Description**: SickSense is an initiative by the Skoll Global Threats Fund, Thailand Health Promotion Foundation, and Open Dream to identify early-warning signs of COVID-19 in Thailand. The project collects anonymous health reports from users about whether they are suffering any symptoms. This information is represented on a map.
- **Participants**: Skoll Global Threats Fund; Thailand Health Promotion Foundation; Open Dream; digital volunteers
- **Contact**: N/A

South Korea Health Insurance Review and Assessment Open Datasets

- **Start Date**: 8 March 2020
- **Regional Focus:** South Korea

- **Description**: The South Korean Health Insurance Review and Assessment Service and the Korean Information Technology Agency compiled a dataset containing information on the country's current mask stock held by each vendor. This information includes name, type, address, date of receipt, and inventory period. Another dataset provides information on the operations status of hospitals, inspection agencies, and screening clinics.
- **Participants**: South Korean Health Insurance Review and Assessment Service, Korean Information Technology Agency
- **Contact**: opendata_help@nia.or.kr

FluTracking: Tracking COVID-19

- **Start Date**: 2006
- **Regional Focus:** Australia and New Zealand
- **Description**: FluTracking is an online surveillance system run by the Hunter New England Local Health District in New South Wales, Australia in collaboration with the Australian and New Zealand governments. The initiative monitors influenza-like illness in Australia and New Zealand through a 15-second survey that receives responses from 100,000 people each week. The project has turned its focus to COVID-19 tracking during the pandemic.
- **Participants**: Australia Department of Health; New Zealand Government; Hunter New England Local Health District; Hunter Medical Research Institute; University of Newcastle, Australia; New Zealand Ministry of Health
- **Contact**: hnelhd-flutracking@health.nsw.gov.au; nzmoh_flutracking@health.govt.nz

Sebaran Covid19

- **Start Date:** 1 April 2020
- **Regional Focus:** Yogyakarta, Indonesia
- **Description**: Sebaran Covid19 is a tool developed by volunteers in the Yogyakarta Special Region to refine government statistics and show citizens how many cases are estimated to be near them. Using Indonesia's Ministry of Health's statistics on high-risk, suspected, and confirmed cases across the country, individuals can receive estimates of the number of cases within a 3 kilometer, 5 kilometer, and 7 kilometer radius of their current location or postal code. Data is updated daily.
- **Participants:** Indonesia's Ministry of Health; Local volunteers
- **Contact:** N/A

Indonesia Bergerak: Laporan Warga (Indonesia Moves: Citizen Report) Dashboard

- **Start Date:** 3 March 2020
- **Regional Focus:** Indonesia

- **Description**: Qlue, a Jakarta-based startup focused on smart city technology, worked in collaboration with Telekom Indonesia's MDI Ventures and Indonesia's National Disaster Management Agency to create a citizen reporting platform for COVID-19. Using Qlue's platform, individuals can report on suspected cases of COVID-19, crowds, and full hospitals. These reports are visualized in open maps, which people can use to find issues in their community. The platform also provides statistics on reports and a Whatsapp-facilitated chatbot that can answer basic questions.
- **Participants:** Qlue; Telekom Idonesia's MDI Ventures; National Disaster Management Agency
- **Contact:** N/A

Citibeats–NTT Data Japan Dashboard

- **Start Date:** May 2020
- **Regional Focus:** Japan
- **Description**: Citibeats, an artificial intelligence company, and NTT Data, a Japanese information technology company known for its language analysis technology, collaborated to create a dashboard representing topics of conversation in Japan amid the COVID-19 pandemic. The system works by collecting tweets made in Japan over a 30-day period and applying a semantic analysis algorithm to the collection to identify what issue the tweet is talking about, such as health care, sanitary supplies, food security, and the economy. The result of the analysis is then represented in a map, demonstrating which topics are of greatest concern for different prefectures.
- **Participants:** Citibeats; NTT Data
- **Contact:** nazuki-support@am.nttdata.co.jp

Data Ventures COVID-19 Response Efforts

- **Start Date:** 15 April 2020
- **Regional Focus:** New Zealand
- **Description:** Data Ventures, a data broker and the commercial arm of New Zealand's statistical agency, is supporting the work of New Zealand's National Crisis Management Centre. This work includes supplying the centre with datasets and insights to support rapid decision-making as it seeks to limit the spread of COVID-19 in the country. It also includes the production of COVID-19 Population Reports, which seeks to measure the mobility of the population in six sectors: recreation; residential; retail; tourism; transit; and the workplace. These reports are created weekly and available for public consumption. The information provides residents an understanding of how the country is responding to the crisis.
- **Participants**: Data Ventures; New Zealand National Crisis Management Centre

- **Contact:** dataventures@stats.govt.nz

Mobile Industry Response to COVID-19 in China

- **Release Date:** 9 April 2020
- **Regional Focus:** China
- **Description:** GSMA, in collaboration with the China Academy of Information and Communications Technology, released a report summarizing the mobile industry's response to the COVID-19 pandemic in China. The document details various use cases of telecommunications to support emergency communications, support medical response, enhance city containment and disease control, support the resumption of work, and support industry and city management.
- **Participants:** GSMA; China Academy of Information and Communications Technology
- **Contact:** intdept@caict.ac.cn; chinamarketing@gsma.com

Pintig Lab

- **Release Date:** July 2020
- **Regional Focus:** The Philippines
- **Description:** Pintig Lab is a multi-stakeholder network of data scientists, epidemiologists, economists, and other experts convened by UNDP Philippines. Participants collect and analyze data from public and private sources to inform the government's response to COVID-19. At launch, the lab had created a visual dashboard to capture trends of cases, deaths, recoveries, and hospital and laboratory capacities. The lab is also working on a project that seeks to determine the impact of quarantine on the spread of the disease and on economic activity.
- **Participants:** UNDP Philippines; Government of The Phillipines
- **Contact:** Shumin Liu, UNDP Bangkok Regional Hub; Francis Capistrano, , UNDP Accelerator Lab Philippines; Jonathan Hodder, UNDP Philippines

FASSSTER COVID-19 Philippines LGU Monitoring Platform

- **Release Date:** 2019
- **Regional Focus:** The Philippines
- **Description:** The Feasibility Analysis of Syndromic Surveillance using Spatio Temporal Epidemiological Modeler for Early Detection of Diseases (FASSSTER) system is a hub for different data sources to improve understanding of disease. During the COVID-19 pandemic, the platform launched a dashboard allowing individuals to better understand the spread of the COVID-19 pandemic in the Phillippines. The site provides summaries of total cases, doubling time, and other relevant public health statistics.

- **Participants:** Philippine Council for Health Research and Development; Ateneo de Manila University
- **Contact**: Contact form

Keio University International Surveys on COVID-19

- **Release Date:** 2020
- **Regional Focus:** Japan
- **Description:** Japan's Keio University, supported by Google.org, is conducting surveys on public attitudes and behavior amid the COVID-19 pandemic. The first of these surveys focuses on the work, lifestyle, and attitudes of workers in Japan during the pandemic. The study, conducted in July, found an 11 percent increase in teleworking, lower than many other countries. The second survey, conducted in May and released in August, examines the Japanese public's attitudes and values during the pandemic. It finds high anxiety among people with COVID-19 related experiences and those prone to anxiety, low trust in institutions and other people among those most anxious, and great uncertainty about the direction of the economy and the national welfare system.
- **Participants:** Keio University; Google.org
- **Contact:** Dr. Plamen Akaliyski, Keio University Graduate School of System Design and Management

Europe and Central Asia

Data Against Corona Taskforce

- **Start Date**: 20 March 2020
- **Regional Focus:** Belgium (Europe and Central Asia)
- **Description**: The Data Against Corona Taskforce is an initiative set up by the Belgian Ministers of Health and Digital Agenda to analyze the spread of Covid19 through telecommunications and health data. The task force, which includes data scientists, data privacy experts, epidemiologists, bioethicists, a medical lawyer and others, will analyze data from the telecommunications providers Proximus, Telenet and Orange. This analysis will inform government actions to control spread and communications efforts through BE-Alert, the Belgian federal government's emergency alarm system. All work is compliant with GDPR and overseen by an ethical council.
- **Participants**: Belgian Ministers of Digital Agenda and Privacy; Sciensano; Data Protection Authority; Proximus; Telenet; Orange; Dalberg Data Insights
- **Contact**: Office of Ministers Maggie De Block (Health) and Philippe De Backer (Digital Agenda), (DataAgainstCorona@debacker.fed.be)

Influenzanet

- **Start Date**: 2011
- **Regional Focus:** Europe and Central Asia
- **Description**: Influenzanet is a monitoring system for influenza-like illness (ILI) in voluntary cohorts of Internet users. The system is based on online survey technology to conduct syndromic surveillance through self-reported symptoms volunteered by participants resident in the Influenzanet countries. The system is active in the UK (flusurvey.net), Ireland (flusurvey.ie), Portugal (gripenet.pt), Spain (gripenet.es), France (grippenet.fr), Italy (influweb.it), Switzerland (fr.grippenet.ch, de.grippenet.ch), the Netherlands (infectieradar.nl), Denmark (influmeter.dk), Germany (grippeweb.rki.de), Sweden (www.halsorapport.se/sv/).
- **Participants**: ISI Foundation (Italy), Public Health England (UK), INSERM (France), Staten Serum Institut (Denmark), Global Health Institute (Switzerland), University of Zaragoza (Spain), Instituto National de Saúde (Portugal), Swedish Institute for Infectious Disease Control (Sweden), National University of Ireland Galway (Ireland), National Institute for Public Health and the Environment (The Netherlands), German Center for Artificial Intelligence DFKI (Germany), Robert Koch Institute (Germany)
- **Contact**: Dr. Daniela Paolotti, ISI Foundation

COVID-19 outbreak response: first assessment of mobility changes in Italy following lockdown

- **Start Date**: 13 March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: Researchers provided preliminary results of non-pharmaceutical interventions, such as mobility restrictions, on the spread of COVID-19 in Italy. Using mobility data provided by the location intelligence company Cuebiq, researchers could “assess in near real-time the effects of public health policies on the mobility patterns and social mixing in Italy.” They found significant declines in movement between provinces and in individual mobility as restrictions took effect.
- **Participants**: Cuebiq; ISI Foundation; University of Turin
- **Contact**: Emanuele Pepe, ISI Foundation; Paolo Bajardi, ISI Foundation; Laetitia Gauvin, ISI Foundation; Filippo Privitera, Cuebiq; Ciro Cattuto, ISI Foundation and the University of Turin; Michele Tizzoni, ISI Foundation

AI for Corona

- **Start Date**: March 2020
- **Regional Focus:** Europe and Central Asia

- **Description**: This project aims to combine telecommunications and health data to identify "super-propagators" of COVID-19 (e.g. taxi drivers). Once identified, authorities plan to send targeted text messages to them with public health advice and information on topics such as social distancing.
- **Participants**: Rosa; Dalberg Advisors; Belgian Data Protection Authority; Belgium Ministry of Health; Belgium Ministry of Administrative Simplification, Digital Agenda, Postal Services and Telecom
- **Contact**: Sébastien Deletaille, Rosa; Frederic Pivetta, Dalberg Advisors

European Data Portal Coronavirus and COVID-19 Datasets

- **Start Date**: December 2012
- **Regional Focus:** Europe and Central Asia
- **Description**: The European Open Data Portal acts as a single access point to datasets posted by national health ministries and national open data portals about COVID-19. There are currently 64 datasets referencing "covid" or "corona," which can be used by researchers and skilled members of the public to better understand the ongoing pandemic.
- **Participants**: European Data Portal; various European Union member-states; European Union residents
- **Contact**: N/A

CoronaMadrid

- **Start Date**: 18 March 2020
- **Regional Focus:** Region of Madrid, Spain
- **Description**: A self diagnosis app where people with symptoms can check whether they need to do a test, and if so, allows for making an appointment in a certain location to avoid collapsing the emergency areas of hospitals. Hundreds of thousands of self diagnoses have been done within less than a week.
- **Participants**: Carto, ForceManager y Mendesaltaren, Telefónica, Goggo Network, Google, Ferrovial.
- **Contact**: richard.benjamins@telefonica.com

Telco mobility insights for Government

- **Start Date**: March 10, 2020. Live March 23, 2020
- **Regional Focus:** Spain
- **Description**: Mobility insights for monitoring restrictions, detecting infection hotspots, prediction of virus propagation

- **Participants**: Telefonica, Spanish Government
- **Contact**: richard.benjamins@telefonica.com

Koronamonitor

- **Start Date**: 13 March 2020
- **Regional Focus:** Hungary
- **Description**: The project focuses on Hungary using mostly official data provided by the Hungarian government, but also shows SIR-model calculation and a map of confirmed cases after fact-check (since the government does not disclose data on locations) The project's aim is to track coronavirus in Hungary.
- **Participants**: atlatszo.hu, atlo.team
- **Contact**: batorfy.attila@atlo.team

Corona prediction

- **Start Date**: 18 March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: Deutsche Telekom, the German telecommunications company and the largest telecommunications provider in Europe, has provided 5 GB of anonymized consumer data to the Robert Koch Institute, the German federal government's disease control and prevention body. While protecting individual privacy, the information will be used to help scientists understand mobility and predict the spread of COVID-19 to inform disease prevention strategies.
- **Participants**: Deutsche Telekom; Robert Koch Institute
- **Contact**: Stephan Broszio, Deutsche Telekom

Vodafone Heat Map for the Lombardy region of Italy

- **Start Date**: March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: As part of its five-point COVID-19 response plan, the Vodafone Group, the telecommunications company, announced it was using its data assets to produce an aggregated and anonymous heat map for authorities in the Lombardy region of Italy. The information will help authorities to understand mass population movements to control the disease's spread.
- **Participants**: Vodafone; Lombardy regional authorities
- **Contact**: N/A

A1 Telekom Austria Group–Government of Austria Data Sharing

- **Start Date**: March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: Press reports indicate the Al Telekom Austria Group, Austria's largest telecommunications provider, is sharing anonymized data assets and analyses of mobility with the Austrian government. The information allows officials to assess the effectiveness of social distancing measures.
- **Participants**: Austrian government; Al Telekom Austria Group
- **Contact**: N/A

Positive Deviance goes Viral

- **Start Date**: 22 Match 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: A team of over 30 data practitioners are studying reported COVID-19 testing data and publicly available data to determine whether there was a relationship between the rate of spread of COVID-19 in individual German districts and certain structural factors (e.g. the number of doctors, academic workers, unemployment rate). The researchers hope to identify regions which outperform their peers thanks to creative or adaptable problem solving.
- **Participants**: Online Volunteers
- **Contact**: Various

COVID Symptom Tracker

- **Start Date**: 24 March 2020
- **Regional Focus:** Europe and Central Asia (United Kingdom)
- **Description**: Researchers from King's College London and St. Thomas' Hospitals, with support from the health science company ZOE, created an app that allows UK users to self-report their health. Through a one-minute survey, individuals can indicate whether they feel a range of COVID-19 symptoms, including coughs, fever, and fatigue. This data, protected by the European Union's GDPR, is then sent to King's College London and the NHS. This information can help identify high-risk areas in the United Kingdom, better understand COVID-19 symptoms, and improve disease spread.
- **Participants**: King's College London; St Thomas' Hospitals; ZOE Global Ltd
- **Contact**: research@joinzoe.com

COVID-19 Multidimensional Monitoring

- **Start Date**: 24 February 2020
- **Regional Focus:** Municipality of Turin (Piedmont Region, Italy)
- **Description**: Compagnia di San Paolo is collecting open data daily about the epidemic in the municipality of Turin linking it to socio-economic and environmental data (i.e. stock values of companies in Turin, tweets about coronavirus in the city, PM10) and trying to add further sources of data over time. The main aim of the research is to understand the evolution of the epidemic, analyzing possible negative and positive correlations with other phenomena that are currently happening in Turin.
- **Participants**: Compagnia di San Paolo Foundation; Links Foundation
- **Contact**: filippo.candela@compagniadisanpaolo.it

Ghost Data–LogoGrab Social Media Scraping

- **Start Date**: March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: Public reporting suggests the research group Ghost Data, in collaboration with the image-recognition company LogoGrab, has used public Instagram posts to assess whether people are complying with Italy's quarantine orders. The study, which is not yet publicly available, has been offered to the Italian government in response to the government's call for resources.
- **Participants**: Ghost Data
- **Contact**: N/A

Imaging COVID-19 AI Initiative

- **Start Date**: 20 March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: The Imaging COVID-19 AI initiative is an effort coordinated by the Netherlands Cancer Institute to train an AI algorithm to diagnose COVID-19 based on CT scans and quantify the severity of the infection in the patient. The project makes use of anonymized imaging data from institutions and hospitals across Europe. Once developed, the AI model will be made freely accessible to all participating organizations.
- **Participants**: European Society of Medical Imaging Informatics; Netherlands Cancer Institute; Robovision; Quibim
- **Contact**: PARTICIPATE@IMAGINGCOVID19AI.EU

Liverpool Malawi COVID-19 and CIPHA (Combined Intelligence for Public Health Action)

- **Start Date:** 18 March 2020
- **Regional Focus**: Liverpool and Global
- **Description**: A research programme involving over 500 staff, covering: 1. Biobanking and Clinical Characterisation Protocol; 2. Diagnostics; 3. Drug Discovery; 4. Viral Dynamics and Protective Immunity; 5. Pathogen Biology; 6. Epidemiology and Public Health Informatics; 7. Therapeutics, Early Phase Clinical Trials and Pharmacokinetics-Pharmacodynamics; 8. Vaccines; 9. Knowledge Mobilisation, Public and Community Involvement.
- **Participants**: University of Liverpool, Liverpool School of Tropical Medicine, Malawi, Liverpool Wellcome Trust clinical programme, NIHR Health Protection Research Unit in Emerging Zoonotic Infections, Centre of Excellence in Infectious Diseases Research
- **Contact**: Jan Nugara, William Hope

Scot_covid19

- **Start Date**: 15 March 2020
- **Regional Focus:** Scotland, UKhug
- **Description**: A repository of daily data of Covid-19 testing in Scotland, created and maintained in the absence of any official open data for Scotland. Multiple individuals are creating analysis and visualisations of the data to fill official gaps. E.g
  https://theferret.scot/coronavirus-cases-in-scotland/
  https://smazeri.shinyapps.io/Covid19_Scotland/
  https://scotland-covid19-data.herokuapp.com
- **Participants**: Ian Watt
- **Contact**: ian@codethecity.org

NHS Pandemic Data Platform

- **Start Date**: 28 March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: To improve its capacity to combat COVID-19, the United Kingdom has commissioned NHS England and Improvement and NHSX to create a data platform that can allow different health organizations to coordinate their response efforts. The data will be stored in a single location and try to protect the privacy of citizens. Microsoft will support the effort with its technical teams while Palantir Technologies UK will provide software components. The London-based AI group Faculty will support development and execution while Google will provide use of its G-Suite tools to allow the NHS to better collect real-time information.

- **Contact**: N/A

Statistics Denmark's Location Data Work

- **Start Date**: March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: Reporting indicates that Statistics Denmark, the Danish governmental organization responsible for creating statistics about society, is serving as a middleman between telecommunication companies and local health authorities. The telecommunications companies provide location data to Statistics Denmark, which aggregates and analyzes the information, and provides safe information about patterns to health officials.
- **Participants**: Statistics Denmark; Danish telecommunications companies, Danish health authorities
- **Contact**: Jørgen Elmeskov, Director General of Statistics Denmark

FAQ App "Stopp Corona"

- **Start Date**: March 2020
- **Regional Focus:** Austria
- **Description**: The Austrian Red Cross developed the Stopp Corona app in an effort to conduct "contact tracing" for COVID-19. App users can record their encounters with other people using the app and if a person reports to be ill, the people who are in contact with the ill person will be notified.
- **Participants**: The Austrian Red Cross
- **Contact**: N/A

L'algorithme D'orientation COVID19

- **Start Date**:
- **Regional Focus:** Europe and Central Asia (France)
- **Description**: The French Ministry of Social Affairs and Health (Ministère des Solidarités et de la Santé) is administering a referral tool to support residents to determine whether they are experiencing symptoms of COVID-19. The tool asks users to respond to a series of questions about their symptoms and provides relevant information and recommendations. The algorithm underlying the tool was developed by the Ministry in collaboration with CovidTélé, a consortium of doctors and scientists led by the APHP (Assistance Publique – Hôpitaux de Paris) and the Pasteur Institute.
- **Participants**: French Ministry of Social Affairs and Health; CovidTélé, Assistance Publique – Hôpitaux de Paris, Pasteur Institute

- **Contact**: French Ministry of Social Affairs and Health, mobilisation-covid@sante.gouv.fr

Exscalate4CoV

- **Start Date**: N/A
- **Regional Focus:** Europe
- **Description**: Dompé, an Italian biopharmaceutical company, is collaborating with 18 research institutions across seven EU countries to leverage supercomputing capacity toward uncovering new insights around COVID-19 and future pandemics. Dompé's Exscalate supercomputing platform draws on a "chemical library of 500 billion molecules" and is capable of processing 3 million molecules per second. The researchers are using the platform to test and identify promising treatments.
- **Participants**: Dompé; E4C Consortium

ASSOCC – Agent-based Social Simulation of the Coronavirus Crisis

- **Start Date**: 16 March 2020
- **Regional focus**: Europe and Central Asia
- **Description**: A group of researchers based at European universities are collaborating on a project to better understand the effects of the coronavirus pandemic through the use of modeling and social simulation. The team will use their backgrounds in computer science, artificial intelligence, and mathematics to develop a simulation of different social interactions that can help decisionmakers assess potential interventions. Individuals (based in Sweden) can contribute to the project by reporting their movements via an app.
- **Participants**: Independent European researchers. See full list.
- **Contact**: Frank Dignum, Umeå University

Pan-European Privacy-Preserving Proximity Tracing

- **Start Date**: 31 March 2020
- **Regional focus**: Europe and Central Asia
- **Description**: The Pan-European Privacy-Preserving Proximity Tracing (PEPP-PT) initiative is a project bringing together 130 researchers from eight European countries to develop an application (for smartphones and other devices) that can facilitate contact tracing of individuals with COVID-19. Seeking to build on the example set by other proximity measurement apps while adhering to privacy and security standards, the participants will seek to use bluetooth to log proximity history without allowing the tracking of individuals.
- **Participants**: Various. See full list here.

- **Contact**: info@pepp-pt.org

European Open Science Cloud: Fast Track Process for Covid-19 Co-Creation Request

- **Start Date**: 27 March 2020
- **Regional focus**: Europe and Central Asia
- **Description**: The European Open Science Cloud, The European Commission initiative to promote open science, is providing funding for projects that use open science research and EOSC communities to address the COVID-19 pandemic. Any individual or entity residing in a European Union member-state can apply, so long as they are not receiving support from other resources for identical activities. Proposals will be evaluated weekly and the maximum amount will be EUR 45,000.
- **Participants**: European Open Science Cloud
- **Contact**: Visit EOSCsecretariat.eu

ANPAS Dashboard

- **Start Date**: 2020
- **Regional Focus:** Italy
- **Description**: Italy's Associazione Nazionale Pubbliche Assistenz (National Association of Public Assistance) has created a dashboard on ushahidi.com to share information about services their association and partners are providing to people quarantined due to COVID-19. The project aims to reduce the number of cases by providing people with ways to spend their time and avoid hazardous behavior.
- **Participants**: Associazione Nazionale Pubbliche Assistenz
- **Contact**: Melania Caccavo and Alessandro Benini, Melania Caccavo and Alessandro Benini

COVID-19 epidemic in the Netherlands, an open observatory for quantitative analysis

- **Start Date**: February 2020
- **Regional Focus:** Netherlands, Europe
- **Description**: The Crowdflow research group at Eindhoven university of Technology has created a Google collab notebook that updates itself daily with the latest data from the Netherlands and from all other countries in the world. This page, setup by physicists, provides an example on how to perform some very basic fit to the data. The notebook can be run and modified fully online, enabling anybody interested in trying to make sense of the data and, particularly, helping assessing the effect of past and future policies.

- **Participants**: Eindhoven University of Technology
- **Contact**: Alessandro Corbetta, Federico Toschi

Vienna COVID-19 Diagnostics Initiative

- **Start Date**: 3 April 2020
- **Regional Focus:** Austria
- **Description**: The Vienna COVID-19 Diagnostics Initiative is an effort by 20 research institutions, coordinated by Alwin Köhler of the Max Perutz Labs, to expedite the COVID-19 virus detection process. It is also facilitating the exchange of information and developing in-house reagents to help communities and governments better respond to COVID-19. The effort received emergency funding from the Vienna Science and Technology Fund.
- **Participants**: Various. See ful list here.
- **Contact**: Alwin Köhler, Scientific Director of the Max Perutz Labs

Resilience Observatory

- **Start Date**: March 2020
- **Regional Focus:** Spain
- **Description**: Several researchers are implementing an observatory to measure the multidimensional impact of the COVID-19. We use this information to promote and connect actions and projects. Thus, we monitor and build up resilience leveraging Collective Intelligence.
- **Participants**: Universidad Politécnica de Madrid, itdUPM, LifeD Lab
- **Contact**: David Pastor-Escuredo, Lead Data Scientist itdUPM (david.pastor@upm.es)

New York Times COVID-19 Reporting (Italy)

- **Start Date**: April 2020
- **Regional Focus:** Italy
- **Description**: Using data of COVID-19 cases from the Italian Department of Civil Protection, The New York Times reported an analysis of the outbreak in Italy in relations to the timing of national lockdown.
- **Participants**: The New York Times, Italian Department of Civil Protection
- **Contact**: Allison McCann, Reporter, New York Times

Semantic Visions

- **Start Date**: 2020
- **Regional Focus:** Czech Republic

- **Description**: Semantic Visions, a Prague-based data analytics and risk assessment firm, used its proprietary natural language processing tool to analyze the spread of disinformation about Coronavirus in the news media in the Czech Republic.
- **Participants**: Semantic Visions
- **Contact**: Contact Form

Map of Pharmacies in Île-de-France

- **Start Date**: 27 March 2020
- **Regional Focus:** France
- **Description**: The Île-de-France region of France created an interactable map that allows residents to determine whether pharmacies near them are open. The resource allows individuals to seek appropriate medical care.
- **Participants**: Île-de-France region; independent pharmacies
- **Contact**: N/A

Issy-les-Moulineaux Open Data Platform

- **Start Date**:
- **Regional Focus:** France
- **Description**: The city of Issy-les-Moulineaux in France provides a map visualization of local businesses that provide home delivery services during the COVID-19 outbreak through its open data platform.
- **Participants**: Issy-les-Moulineaux
- **Contact**: Contact Form

Dunkerque Agricultural Producers Map

- **Start Date**: 2020
- **Regional Focus:** Dunkerque, France
- **Description**: The Dunkerque region in France created a map visualization of agricultural producers that are doing direct sales to consumers during the pandemic.
- **Participants**: Dunkerque Urban Community
- **Contact**: Contact Form

Santé publique France COVID-19 Dashboard

- **Start Date**:
- **Regional Focus:** France
- **Description**: Santé publique France, the French public health agency responsible for monitoring health security and implementing appropriate responses, has compiled official information on the COVID-19 outbreak from regional health agencies, prefectures, and other authorities and represented this information graphically in a

dashboard. This content, updated daily, includes information on confirmed cases, hospitalizations, deaths, and recoveries.
- **Participants**: Santé publique France
- **Contact**: N/A

Corona Datenspende (Data Data Donation) App

- **Regional Focus:** Germany
- **Description:** The Robert Koch Institute (federal health institution) and data research company Thryve (mHealth Pioneers GmbH) have developed a smartphone app that collects pseudonymized data from fitness-wristbands or smartwatches on physical activity and pulse. This data is linked to geodata on postal code level and analyzed with AI for possible Covid-19 symptoms, in order to get a better picture of mild and yet undetected cases and to improve epidemiological models.
- **Participants:** Robert-Koch-Institute (www.rki.de) and Thryve (https://thryve.health/)
- **Contact:** N/A General Information: https://corona-datenspende.de/

Koroonakaart

- **Start Date**: March 2020
- **Regional Focus:** Estonia
- **Description**: Koroonakaart is a visualization of coronavirus-related information in Estonia. Through a dashboard that displays confirmed cases, hospitalizations, deaths, hospital discharges, and tests administered, visitors can see how the COVID-19 pandemic is affecting Estonia. The system uses information from the government's TEHIK (Health and Welfare Information Systems Centre) and is updated daily.
- **Participants**: Open Knowledge Estonia
- **Contact**: Keegan McBride (keegan.mcbride@taltech.ee); Maarja-Leena Saar (maarjaleena@okee.ee)

Statistics Estonia COVID-19 Mobility Analysis

- **Start Date:** 19 March 2020
- **Regional Focus:** Estonia
- **Description:** The COVID-19 Mobility Analysis of Statistics Estonia is an effort to track the effectiveness of and compliance to government-mandated mobility restrictions in Estonia. Mobile network operators provide mobile phone data updates daily with a feed to the Government of Estonia's crisis management dashboard.
- **Participants:** Statistics Estonia, Government Office of Estonia, Positium, Telia, Elisa, Tele2
- **Contact:** Mart Mägi, Statistics Estonia

Covid-19 UK Mobility Project

- **Start Date**: 8 April 2020
- **Regional Focus:** United Kingdom
- **Description**: The Covid-19 UK Mobility Project is an effort to track the effectiveness of and compliance to government-mandated mobility restrictions in the united Kingdom, building off similar work in Italy. The project relies on data provided by the mobility-data company Cuebiq and is conducted by the University of Exeter. The project aims to release regular reports.
- **Participants**: Cuebiq; University of Exeter
- **Contact**: Riccardo Di Clemente, Exeter University; Brennan Lake, Cuebiq Inc.

İhtiyaç Haritası / NeedsMap.coop

- **Start Date**: 2013
- **Regional Focus:** Turkey
- **Description**: İhtiyaç Haritası (NeedsMap.coop) is a non-profit patform coop where people in need of support can meet people willing to provide it. Users interact with a map to indicate where they are or to find people who might need their support. The platform has been used by people during the ongoing COVID19 pandemic to both seek and provide aid.
- **Participants**: İhtiyaç Haritası; online volunteers
- **Contact**: Contact form

COVID-19 Cases communicated by Swiss Cantons and Principality of Liechtenstein

- **Start Date**: March 2020
- **Regional Focus:** Switzerland and Liechtenstein
- **Description**: The Statistical Office of the Canton of Zurich, supported by regional statistical offices, created a GitHub repository to collect all cases of COVID-19 in Switzerland and Liechtenstein in a single location in a machine-readable format. The information comes from official sources and is updated regularly.
- **Participants**: Statistical Office of the Canton of Zurich, Switzerland; regional Swiss statistical offices; Open Data Community
- **Contact**: Direct message the organization at https://twitter.com/OpenDataZH or email at datashop@statistik.zh.ch

The Demographics of COVID-19 Deaths

- **Start Date**: April 2020
- **Regional Focus:** Europe

- **Description**: The Institut National D'Études Demographiques, the French research institute specializing in studies of populations, has created a website with content in English and French to improve research into the people most vulnerable to COVID-19. The site, the Demographics of COVID-19 Deaths, centralizes, standardizes, and analyzes data from Germany, Spain, France, and Italy. Researchers hope the site can be used to qualify data sources, monitor the pattern of reported deaths, and address disparities by age, gender, and other conditions.
- **Participants**: Institut National D'Études Demographiques
- **Contact**: dc-covid@ined.fr

Moscow Districts Preparedness for COVID-19 Self-Distancing Index and Interactive Map

- **Start Date:** 26 March 2020
- **Regional Focus:** Moscow, Russia
- **Description:** This resource by the real-estate consultant RRG and the data research organization Habidatum Lab provides a rating and visualizes Moscow districts according to how feasible it is for people in those areas to safely abide by social distancing practices in the event of a quarantine. The site uses open data on the number of infection cases by location as well as open data on pharmacies, shops and healthcare facilities available by location. As the study suggests the districts outside the Moscow Ring Road - Kosino-Ukhtomskoye, Scherbinka, Yuzhnoye Butovo, Sosenskoye, Vnukovo, Savely, Vnukovskoye, and Zelenograd get the highest scores.
- **Participants:** RRG and Habidatum Lab
- **Contact**: info@rrg.ru, ask@habidatum.com

Monitoring social and business environment in Moscow (Russia) by location during the course of COVID-19 quarantine (interactive map)

- **Start Date:** 30 March 2020
- **Regional Focus:** Moscow, Russia
- **Description:** This resource from the real-estate consultant RRG and the data research organization Habidatum Lab monitors social and business activity in Moscow areas during quarantine. The site examines the differences between locations in the built environment (insolation, number of floors), green spaces (yard sizes, accessibility of green areas), commercial infrastructure (density and diversity of open venues) to attempt to understand risks of infection, the emotional state of people, and other conditions. Social activity is monitored through social network platforms (starting April) and telecom data (starting May).
- **Participants:** Moscow Urban Center and Habidatum Lab
- **Contact:** info@moscowurbancenter.ru; ask@habidatum.com

Fighting Covid-19 Challenge

- **Start Date:** 30 March 2020
- **Regional Focus:** Europe
- **Description:** The Fighting Covid-19 challenge is a public health initiative that challenges researchers to find new uses for medical imaging and AI as they relate to COVID-19. Organizations who can contribute data will explore how these assets can be used to tackle clinical problems in an open, participatory manner.
- **Participants**: M3i GmbH
- **Contact:** Registration form

NHS–Palantir–Microsoft–Amazon–Faculty AI Collaboration

- **Start Date:** 26 March 2020
- **Regional Focus:** United Kingdom
- **Description:** Reporting indicates that data collected from the National Health Service's 111 service will be combined with other sources to help the United Kingdom predict where it needs necessary supplies. Amazon, Microsoft, Palantir and the start-up Faculty AI will support the initiative by providing their data expertise.
- **Participants**: National health Service; Palantir; Microsoft; Amazon; Faculty AI
- **Contact:** N/A

COVID-19 Data Portal

- **Start Date:** 20 April 2020
- **Regional Focus:** European Union
- **Description:** The COVID-19 Data Portal is a European initiative to better facilitate the sharing and analysis of data on novel coronavirus. Through a centralized repository, researchers can share DNA sequences, protein structures, pre-clinical research data, and epidemiological data. The site already includes COVID-19 datasets submitted to public databases.
- **Participants**: European Commission; European Bioinformatics Institute; EU member-states; Elixir Europe; Erasmus Medical Centre; EOSC-Life; The Netherlands National Institute for Public Health and the Environment; Eötvös Lorand University; Technical University of Denmark; Universitätsklinikum Heidelberg
- **Contact:** ecovid19@ebi.ac.uk

Stopp Corona

- **Start Date:** March 2020
- **Regional Focus:** Austria

- **Description:** The Stopp Corona App is a collaboration between the Austrian Red Cross and Accenture Austria, with support from the UNIQA Foundation, that allows users to notify contacts if they believe they have become infected with COVID-19. Users save their encounters with friends, families, and colleagues to the app along with a short message. All individuals contacted within the last 48 hours will be notified anonymously that someone they know has been infected.
- **Participants:** Austrian Red Cross; UNIQA Foundation; Accenture Austria
- **Contact:** COVID19.APP@osakidetza.eus

App COVID-19.EUS

- **Start Date:** March 2020
- **Regional Focus:** Basque Country, Spain
- **Description:** The Basque Government and the Basque telecommunications company EricTil developed a smartphone application to help control the spread of COVID-19. Individuals in the Basque country who download the app are asked to provide information on their health status as well as any close connections they have with family, friends, and co-workers. The app then regularly contacts individuals and asks them if they have any symptoms consistent with COVID-19. If a person contracts or is deemed likely to have contracted COVID-19, an alert is sent to people in that person's immediate contacts along with recommendations on prevention techniques and contact information for health professionals. The information is also anonymized and provided to relevant health researchers, who can use the information to detect transmission.
- **Participants:** Department of Health of the Basque Government; EricTel
- **Contact:** COVID19.APP@osakidetza.eus

COVID-19 Vulnerability Index for neighbourhoods in the UK

- **Start Date:** 13 April 2020
- **Regional Focus:** United Kingdom
- **Description:** This map posted on the ArcGIS site the British Red Cross, visualizes the organization's COVID-19 Vulnerability Index for neighbourhoods, wards and local authorities in the United KIngdom (https://github.com/britishredcrosssociety/covid-19-vulnerability). The display aims to show where the most vulnerable people are and where needs are not being met. It looks specifically at clinical vulnerability, health and well-being needs, economic vulnerability, and social vulnerability.
- **Participants:** ARCGIS community; British Red Cross
- **Contact:** Matt Thomas, British Red Cross

Maladie Coronavirus

- **Start Date:** 20 March 2020
- **Regional Focus:** France
- **Description:** The Pasteur Institute, Greater Paris University Hospitals, and the chatbot start-up Clevy created a questionnaire that individuals can use to assess their risk of COVID-19 infection. The form has 23 questions on possible symptoms, medical history, age, and other physical attributes. If a user is deemed a high risk from their responses, they are redirected to emergency services while a suspect case is redirected to telemedicine services. The algorithm behind the service is open source and available on GitHub.
- **Participants:** Pasteur Institute, Greater Paris University Hospitals; Clevy; Lille University Hospital; Angers University Hospital
- **Contact:** https://twitter.com/maladiecovid19

Zostaň Zdravý App

- **Start Date:** 2020
- **Regional Focus:** Slovak Republic
- **Description**: The Zostaň Zdravý (Stay Healthy) app is an initiative in the Slovak Republic led by researchers at Comenius University in Bratislava to create a network that can warn people if a contact has tested positive for COVID-19. Individuals who download the app can indicate if they have tested positive for COVID-19 and learn if they have come within 1–10 meters of another app user who has tested positive for COVID-19. The user is then given information on how they can protect themselves and others.
- **Participants:** Comenius University in Bratislava; Sygic; WebSupport; GDPR-Pass.sk; Kinsellar; OpenStreetMap;Translata; Citad Lo
- **Contact:** kontakt@zostanzdravy.sk

France Covid-19 orientation algorithm

- **Start Date:** 29 April 2020
- **Regional Focus:** France
- **Description**: The French Ministry of Solidarity and Health published an open-access algorithm that can allow people to assess whether they are likely to be infected with novel coronavirus. Organizations are encouraged to reuse the algorithm and to share any data they collect using it with the ministry and its partners.
- **Participants:** Ministry of Solidarity and Health; Assistance Publique – Hôpitaux de Paris; Pasteur Institute
- **Contact:** mobil-covid@sante.gouv.fr

CZ Data Against Covid

- **Start Date:** 5 April 2020
- **Regional Focus:** Czechia
- **Description**: Data Against COVID (also known as COVID19.CZ) is an initiative spearheaded by several Czechian technology companies to help the government respond to the COVID-19 pandemic. These organizations are providing data analysis and communication, technology, and volunteers for government-led efforts. The initiative is facilitated through pro bono agreements.
- **Participants:** Seznam.cz; Alza.cz; Keboola; Pale Fire Capital; O2; speaking; Clevermaps; Czech Republic.Digital; Liftago, Stories.bi; DataSentics; Dateio; Expertkom; Actum; WMC / Gray; Rockaway; Invia.cz; Daktela; Prusa Research a Reservio
- **Contact:** info@covid19cz.cz

Sharing data on Italy's mid-pandemic internet outage

- **Start Date:** 18 May 2020
- **Regional Focus:** Italy
- **Description**: Mozilla, the free software community, studied the internet outage that affected Italy for several hours after the 11 March COVID-19 lockdown through telemetry upload failures. The data provides a snapshot of the extent of the disruption and the duration for which it occurred. The related dataset is available to the public.
- **Participants:** Mozilla
- **Contact:** Alessio Placitelli, Mozilla; publicdata@mozilla.com

EuroMOMO

- **Start Date:** 2008
- **Regional Focus:** Europe (see full list)
- **Description**: EuroMOMO is a network of 28 organizations across 24 European countries that collect data on mortality. The association monitors mortality, seeking to detect and measure excess deaths that might be related to some public health threat such as COVID-19. Throughout the pandemic, EuroMOMO has provided weekly estimates on deaths as well as grpahs and maps representing data from participating countries.
- **Participants:** European Centre for Disease Prevention and Control; World Health Organization; various mortality statistics organizations (See full list)
- **Contact:** euromomo@ssi.dk (General); Kåre Mølbak, Director of Infections Disease Preparedness at Statens Serum Institut (krm@ssi.dk)

Enel X City Analytics – Mobility Map

- **Start Date:** 14 April 2020

- **Regional Focus:** Italy
- **Description**: Enel X City Analytics, a company that provides technology and energy products, and HERE Technologies, a geographical data and mapping company, created a mobility dashboard for Italy, "City Analytics – Mobility Map." Using anonymized and aggregated data from connected vehicles and navigation systems along with open data from open government agencies, the dashboard seeks to estimate changes in the public's movements from 13 January onward. The information is intended to support decisionmaking by Italian national and local governing bodies as they seek to recover from the COVID-19 pandemic. The information will remain available until 31 May, after which the organizers will assess whether to extend use of the dashboard.
- **Participants:** Enel X City Analytics; HERE
- **Contact:** Contact form

Romania COVID-19 Economic Impact

- **Start Date:** March 2020
- **Regional Focus:** Romania
- **Description**: Romania's Institute of National Statistics is conducting and releasing ad hoc surveys on the impact of COVID-19 on Romania's economy. These studies include an estimate on the economic costs of the pandemic, an attempt to evaluate the reduction in economic activity, and an estimate in the reduction of foreign trade activity.
- **Participants:** Institute of National Statistics of Romania
- **Contact:** Tudorel Andrei, President of National Institute of Statistics

Coronavirus (COVID-19) related deaths by ethnic group, England and Wales

- **Start Date:** 7 May 2020
- **Regional Focus:** England and Wales
- **Description**: United Kingdom Office of National Statistics conducted a study of how COVID-19 impacted different ethnic groups differently in England and Wales. The analysis uses census data and mortality figures from between 2 March and 10 April. The preliminary analysis suggests some non-white ethnic groups are significantly more likely to die of COVID-19 than those who identify as ethnically white.
- **Participants:** The United Kingdom's Office of National Statistics
- **Contact:** Chris White and Vahé Nafilyan (health.data@ons.gov.uk)

UK Major Ports Group Coastal Powerhouse

- **Start Date:** 17 June 2002
- **Regional Focus:** United Kingdom
- **Description**: The UK Major Ports Group, the United Kingdom's association for port operators, is working with ODI Leeds, a nonprofit node of the Open Data Institute, launching an open data platform to host data on coastal communities across the

United Kingdom. The information is intended to demonstrate the needs and potential of coastal areas, illustrating the social and economic challenges they face amid the COVID-19 pandemic.
- **Participants**: UK Major Ports Group
- **Contact:** Amy Evans, ODI Leeds

OpenSAFELY: factors associated with COVID-19 death in 17 million patients
- **Release Date:** 1 July 2020
- **Regional Focus:** England
- **Description:** Researchers worked on behalf of NHS England to create OpenSAFELY, a secure health analytics platform to assess the risk factors associated with COVID-19 related death in England. The platform covers 40 percent of all patients in England, holding data within an existing data center and can be used to assess which groups are most at risk of severe outcomes.
- **Participants:** Various researchers affiliated with The DataLab, London School of Hygiene and tropical Medicine, TPP, Intensive Care National Audit And Research Centre, and NIHR Health Protection Research Unit; NHS England
- **Contact:** Ben Goldacre (ben.goldacre@phc.ox.ac.uk)

Mapping Mobility Functional Areas (MFA) by using Mobile Positioning Data to Inform COVID-19 Policies
- **Release Date:** April 2020
- **Regional Focus:** European Commission
- **Description:** This report from the European Commission's Joint Research Centre introduces the concept of Mobility Functional Areas, areas where a significant amount of intra-regional mobility takes place. The analysis is informed by data collected by telecommunications companies and is intended to inform policy responses to COVID-19, ensuring countries can institute mobility restrictions on specific geographic regions instead of nationwide.
- **Participants:** European Commission's Joint Research Centre; A1 Telekom Austria Group; Altice Portugal; Deutsche Telekom; Orange; Proximus; TIM Telecom Italia; Telefonica; Telenor; Telia Company; and Vodafone
- **Contact:** Stefano Maria Iacus, Joint Research Centre (stefano.iacus@ec.europa.eu)

Transport use during the coronavirus (COVID-19) pandemic
- **Release Date:** 3 June 2020
- **Regional Focus:** United Kingdom
- **Description:** The United Kingdom's Department for Transport published a dataset tracking the use of the national transportation system during the COVID-19 pandemic.

This dataset provides statistics by mode (e.g. road, rail, subway, bus, or bicycle) and is updated each Wednesday.
- **Participants:** United Kingdom's Ministry for Transport
- **Contact:** N/A

Providing early indication of regional anomalies in COVID19 case counts in England using search engine queries

- **Release Date:** 23 July 2020
- **Regional Focus:** England
- **Description:** Researchers with Microsoft Research, University College London, and Public Health England analyzed searches on Bing in England to identify possible cases of influenza-like illnesses like COVID-19. The researchers looked at the number of searches for "fever," "cough," and similar terms and found that areas with the highest rates of searches correlated with future cases of COVID-19. The researchers argue this information could be used to strategize and better plan responses to COVID-19.
- **Participants:** Microsoft Research; University College London; Public Health England
- **Contact:** eladyt@microsoft.com

COVID-19 Coronavirus data

- **Release Date:** 27 February 2020
- **Regional Focus:** European Union and United Kingdom
- **Description:** The European Centre for Disease Prevention and Control maintains a dataset on the EU Open Dat Portal tracking the daily spread of COVID-19 in the European Union, European Economic Area, United Kingdom, and worldwide. The resource is updated every day by a team of epidemiologists screening up to 500 relevant sources.
- **Participants:** European Centre for Disease Prevention and Control
- **Contact**: Contact form

Decentralized Privacy-Preserving Proximity Tracing

- **Release Date:** 4 April 2020
- **Regional Focus:** Europe
- **Description:** The Decentralized Privacy-Preserving Proximity Tracing project is an open protocol contact tracing app under development. Like the Decentralized Privacy-Preserving Proximity Tracing, the tool uses bluetooth to log proximity history without allowing the tracking of individuals.

- **Participants:** École Polytechnique Fédérale de Lausanne; ETH Zurich; Delft University of Technology; University College London; Helmholtz Centre for Information Security; University of Torino; ISI Foundation
- **Contact**: africacdc@africa-union.org

Trust in Science and Experts During the COVID-19 Outbreak in Italy

- **Start Date:** 8 May 2020
- **Regional Focus:** Italy
- **Description:** Researchers at the University of Parma and University of Oxford used data collected from Twitter and survey data collected from Telegram and Facebook to assess the relationship between the Italian public's trust in science and experts and adherence to public health policies. The study found that, as the disease spread, people sought more information from scientists and health authorities, with slowdowns in this behavior as the pandemic persisted. They also found that trust in institutions (whether they be scientific or governmental) serves as a predictor of knowledge of public health measures and positive containment outcomes.
- **Participants:** University of Parma; University of Oxford
- **Contact:** mc@pictrobattiston.it

Latin America and the Caribbean

Online Citizen Perceptions: COVID-19 Pandemic

- **Start Date**: March 2020
- **Regional Focus:** Latin America and the Caribbean
- **Description**: The Inter-American Development Bank and Citibeats are operating a citizen observatory to understand how people across Latin America and the Caribbean are responding to the current COVID-19 crisis. Researchers analyze and process tweets made by people mentioning COVID-19 who have also indicated their location on Twitter. Individuals can also anonymously leave comments via a survey. Researchers then use an artificial intelligence system to group collected comments into one of thirteen categories based on the concerns raised—including food security, economic security, education, and mental health—to determine what percent of respondents reported those concerns on a country-by-country basis. The information mapped and visualized in real time.
- **Participants**: Inter-American Development Bank; Citibeats
- **Contact**: Harry Wilson, Citibeats hwilson@citibeats.net

Testeate

- **Start Date**: 24 March 2020
- **Regional Focus:** Latin America and the Caribbean
- **Description**: Testeate is a free mobile app developed by the technology company Andrómeda together with the Association of Information and Communication Technologies of Mar del Plata and Chamber of Software and Computer Services Companies of Argentina to help Argentinian residents respond to COVID-19. The application provides information on prevention, check their symptoms, and receive important information from national, city, and neighborhood authorities. Individuals under quarantine can also use the app to track their status.
- **Participants**: Andrómeda; Association of Information and Communication Technologies of Mar del Plata; Chamber of Software and Computer Services Companies of Argentina
- **Contact**: director@aticma.org.ar

Confirmed cases and deaths in Brazil per city per day

- **Start Date**: 18 March 2020
- **Regional Focus:** Brazil
- **Description**: The Brazilian Federal Government does not make data available per city per day and state health agencies have non-structured data. This project involves 40+ volunteers who are manually collecting and checking COVID19 related data (across all 27 states) and use several programs to check, enrich and make it available through a simple Web interface and API.
- **Participants**: Álvaro Justen and many collaborators
- **Contact**: turicas@brasil.io

Observatory of Global Responses to tackle Covid-19

- **Start date:** April 01, 2020
- **Regional focus:** Global, selected countries
- **Description:** Our goal is to trace the police responses to Covid-19 implemented by the international community and selected countries in the following policy agendas: (i) international cooperation for Covid-19; (i) public administration; (ii) health; (iii) culture; (iv) Education, science and technology; (v) economic development; (vi) employment and social welfare. Our ultimate goal is to understand the institutional changes that are going on and how they will affect policy making in the near future.
- **Participants:** Group of researchers and graduate students from Universidade Federal de Minas Gerais, Brazil.

- **Participants:** Our group is opened for external collaboration of researchers and practitioners.
- **Contact:** Fernanda Cimini, fcimini@cedeplar.ufmg.br

Measuring Levels of Activity in a Changing City

- **Start Date**: 2020
- **Regional Focus:** Chile
- **Description**: Researchers with UDD, the University of Turin, University of Greenwich, and Telefónica Investigación y Desarrollo analyzed call detail records in Chile, focusing on the Region Metropolitana, to assess mobility as the country responded to COVID-19. Researchers found that patterns of movement changed as restrictions went into effect, spending more time in residential areas. Trips also became shorter and more localized.
- **Participants**: Instituto de Data Science of the Universidad del Desarrollo; University of Turin; University of Greenwich; Telefónica Investigación y Desarrollo
- **Contact**: Leo Ferres, Instituto de Data Science of the Universidad del Desarrollo; ISI Foundation; and Telefónica Investigación y Desarrollo (lferres@udd.cl)

#MOVID19 Hackathon

- **Start Date**: 24 March 2020
- **Regional Focus:**
- **Description:** The #MOVID19 Hackathon was a competition hosted by the companies Numo and Datasketch, the City of Bogata, and several local civic organizations to develop innovative analyses of the COVID-19 pandemic and Bogota's quarantine. Participants used mobility data from the sponsor organizations hosted on Github. 44 people contributed, with three projects awarded small cash prizes. These projects included a digital tool to reroute transit and an effort to identify which clinics needed more mobility options.
- **Participants**: NUMO; Datasketch; City of Bogota
- **Contact**: GitHub

InLoco COVID-19 Tracking

- **Start Date**: March 2020
- **Regional Focus:** Brazil
- **Description**: The Brazilian geolocation start-up InLoco is using anonymized location data from 60 million devices to assess adherence to social distancing and lockdown policies. The organization provides a "social distancing index" which claims to represent what percent of the population is respecting shelter-in-place recommendations.
- **Participants**: InLoco; Brazilian regional and local authorities

- **Contact**: Contact Form

Alerta Guate

- **Start Date:** 24 March 2020
- **Regional Focus:** Guatemala
- **Description:** Alerta Guate is Guatemala's COVID-19 information app, developed in coordination with the Government of Israel and Google. Users who download it can view official information about the disease, the number of people infected, and those in quarantine as well as general guidance on how to limit exposure.
- **Participants:** Government of Guatemala; Government of Israel; Google
- **Contact:** info@thrive.health

Covid-19 transparency index

- **Start Date:** April 2020
- **Regional Focus:** Brazil
- **Description:** Open Knowledge Brazil, a chapter of the global open-knowledge and open-access nonprofit, created a dashboard to display the quality of COVID-19 information released by the Brazilian states. Through a table and an interactive map, visitors can view Open Knowledge Brazil's assessments of the quality of COVID-19 statistics released, as assessed by availability of information on age or age groups, gender, status of care, and pre-existing conditions of patients. It also looks for public information on equipment such as hospital beds and tess. Scores are updated weekly.
- **Participants:** Open Knowledge Brazil
- **Contact:** transparenciacovid19@ok.org.br

+Lugar Covid-19: gamified, geo-collaborative platform for coping of the new Coronavirus

- **Start Date:** April 2020
- **Regional Focus:** Brazil
- **Description:** This project aims to promote public engagement through the design of a gamified, geo-collaborative platform to face the new Coronavirus, especially by vulnerable groups. The proposed platform, composed of a mobile app and a dashboard for visual information mining, will be used for monitoring, guidance and cooperation between society, academia and government to identify possible outbreaks during the social isolation and post-outbreak phases of the pandemic, as well as for the survey and monitoring of demands and actions with the government.
- **Participants:** Federal University of Bahia (UFBA), Oswaldo Cruz Foundation (FIOCRUZ), and the University of Liverpool (UK)
- **Contact:** Dr. Marcos Barreto (marcosb@ufba.br)

Jamaica Emergency Response Platform

- **Start Date:** 15 May 2020
- **Regional Focus:** Jamaica
- **Description:** The Jamaica Emergency Response platform is being developed to more efficiently and effectively coordinate the requesting and pledging of funding, items, and technical assistance during the COVID-19 pandemic. The platform leverages DFA Monitoring, a tool to help with the monitoring of progress during the implementation of strategic plans.
- **Participants:** Community Systems Foundation
- **Contact:** jkapp@communitysystemfoundation.org

Inter-American Development Bank Coronavirus Impact Dashboard

- **Start Date:** March 2020
- **Regional Focus:** Latin America and the Caribbean
- **Description**: The Inter-American Development Bank and its financing arm IDB Invest, created a dashboard that tracks variables relevant to understanding COVID-19's impact on Latin America and the Caribbean. Data sources come from John Hopkins University (for cases and deaths); Waze for Cities Program (for traffic congestion); various public transit systems (for public transport data); Veraset (for measures of human mobility); and the European Space Agency's Copernicus Sentinel (for air quality data). The team collects and interprets these datasets and then visualizes it through graphs and maps.
- **Participants:** Inter-American Development Bank; IDB Invest
- **Contact:** spd@iadb.org

Brazil MonitorCovid-19

- **Start Date:** April 2020
- **Regional Focus:** Brazil
- **Description**: The Oswaldo Cruz Foundation and Instituto de Comunicação e Informação Científica e Tecnológica em Saúde created a website that seeks to compile information on the COVID-19 pandemic's impact on Brazil from multiple data sources. The intent is for this information to assist in predictive models and to help decision-makers in Brazil understand the state's capacity on a local, regional, and national basis. The site provides estimates on the current situation using the reported number of cases and the disease's behavior in other countries. It also provides visitors with information on how many people report symptoms, the at-risk population, and the disease control measures taken by the Brazilian states and municipalities.

- **Participants**: Oswaldo Cruz Foundation; Instituto de Comunicação e Informação Científica e Tecnológica em Saúde; Plataforma de Ciencia de Dados aplicada a Saude; Moovit; Brazilian Institute of Geography and Statistics; SantoDigital
- **Contact:** bigdata.covid19@icict.fiocruz.br

Middle East and North Africa

Track Virus

- **Start Date:** 5 March 2020
- **Regional Focus:** Israel
- **Description:** Track Virus is an app created by a team of independent developers with support of the Israeli Rescue Union. The application, once downloaded, maps the users movements and notifies them if they have come into contact with anyone else who has downloaded the app and indicated they have tested positive for COVID-19. It also uses official health information from Israel's Ministry of Health to provide official updates on the pandemic and suggest ways for the user to protect themselves and others. The application has user identification associated with it and attempts to store all data locally to preserve individual privacy.
- **Participants:** Israeli Rescue Union; Track Virus
- **Contact:** Contact form

North America

US Department of Energy–IBM COVID-19 Collaboration

- **Start Date**: March 2020
- **Regional Focus:** North America
- **Description**: The technology company IBM provided its Summit supercomputer to the US Department of Energy to increase the speed at which the department could analyze drug compounds that could be used to address coronavirus.
- **Participants**: US Department of Energy; IBM
- **Contact**: Dave Turek, IBM Cognitive Systems

Tracking Citizen's Concerns during COVID-19 Pandemic

- **Start Date**: 2011, March 2020
- **Regional Focus:** North America
- **Description**: A prototype system for EOSDS provides visualization methods for spreading epidemics for tracking public health threats. We also explore the use of clues and Machine Learning methods to classify sentiments of Twitter users regarding

diseases. The tweets are used to measure the Degree of Concern (DOC) that is visualized in a map, which helps public health specialists to identify the progression and peaks of concern for a disease in space and time, so that preventive actions can be focused appropriately.
Update: The CONCERN map component using Degree of Concerns by citizens is currently being developed with COVID-19.

- **Participants**: City University of New York, New Jersey Institute of Technology
- **Contact**: Soon Ae Chun, City University of New York

COVID-19 Open Research Dataset

- **Start Date**: 16 March 2020
- **Regional Focus:** North America
- **Description**: At the Request of the White House Office of Science and Technology Policy, researchers with the Allen Institute for AI, Chan Zuckerberg Initiative, Georgetown University's Center for Security and Emerging Technology, Microsoft, and the National Library of Medicine created a machine-readable Coronavirus literature collection containing more than 29,000 articles. The dataset, which is now publicly available on SemanticsScholar.org, will support research into coronavirus and the COVID-19 pandemic.
- **Participants**: Allen Institute for AI; Chan Zuckerberg Initiative; Georgetown University's Center for Security and Emerging Technology; Microsoft; National Library of Medicine, National Institutes of Health
- **Contact**: N/A

The COVID Tracking Project

- **Start Date**: March 2020
- **Regional Focus:** North America
- **Description**: The COVID Tracking Project is an effort to compile up-to-date information on testing for novel coronavirus in the 50 US states, the District of Columbia, and five US territories. The project consolidates current reporting on positive, negative, pending, and total tests given to fill in gaps in official data sources and to improve understanding of the pandemic. (The API was used to create a map on TheGovLab URL: http://corona.thegovlab.com/)
- **Participants**: Various researchers. See full list here.
- **Contact**: Alexis Madrigal, The Atlantic

U.S. Digital Response for COVID-19

- **Start Date**: March 2020
- **Regional Focus:** North America
- **Description**: The US Digital Response Team is an initiative led by former US Deputy Chief Technology Officers to provide essential technical expertise to local, state, and federal governments on COVID-19 response. Individuals trained in technology, data, design, and operations can volunteer their time and skills to improve data collection on testing; help maintain websites; create digital products; distribute laptops; model infection data; and assist with general operational management.
- **Participants**: Online volunteers; US local, state, and federal government
- **Contact**: info@usdigitalresponse.org

COVID-19 Social Distancing Scoreboard

- **Start Date**: March 2020
- **Regional Focus:** North America
- **Description**: The company Unacast, which collects and analyzes location data to understand human activity, launched a COVID-19 Social Distancing Scorecard to help organizations measure and understand the efficacy of US public health initiatives to limit mobility. The resource uses aggregated mobility data collected from smart devices as a proxy for whether people are remaining home and analyzes it on a state and county level, assigning letter grades based on changes in movement compared to what is typical for that area. States and counties with large decreases in movement are considered to be successful in their interventions. The maps are searchable and updated daily. It cannot identify whether people are staying more than six feet apart.
- **Participants**: Unacast
- **Contact**: Contact form here

Elucd US Coronavirus Attitudes Tracker

- **Start Date**: 11 March 2020
- **Regional Focus:** North America
- **Description**: Elucd, a company which tracks public opinion of US police departments, is using its system to track national public sentiment around COVID-19 and response efforts. The organization surveys individuals (based on a national representative sample) on a daily basis on what sources of information they use, whether they are isolating themselves, and measures they think the government should take.
- **Participants**: Elucd
- **Contact**:N/A

Apple COVID-19 Screening Tool

- **Start Date**: 27 March 2020
- **Regional Focus:** North America
- **Description**: Working with the CDC, FEMA, and White House Coronavirus Task Force, Apple released an app on its store that provides information and screening on COVID-19. Users answer questions about their risk factors, possible exposure, and symptoms. The user then receives CDC recommendations based on the information provided. A supplementary website, https://www.apple.com/covid19/, provides additional information.
- **Participants**: Apple; CDC; White House Coronavirus Task Force; FEMA
- **Contact**: apple.com/covid19

COVID Care Map

- **Start Date**: 11 March 2020
- **Regional Focus:** United States
- **Description**: Open geospatial work to support health systems' capacity (providers, ventilators, beds, meds, etc.) to effectively care for the rapidly growing number of active COVID19 patients in need of hospitalization and intensive (ICU) care. Includes open source data collection, geospatial analysis, visualiations, and scenario-planning tools aimed at informing resource planning and deployment decisions. The project is initially US-centric for the moment, but it is intended to be applicable globally.
    - Project web site: https://www.covidcaremap.org/
    - Github: https://github.com/covidcaremap/covid19-healthsystemcapacity
    - Interactive maps: https://www.covidcaremap.org/maps/us-healthcare-system-capacity/
- **Participants**: David Luo, Rob Emanuele and many collaborators
- **Contact**: David Luo (dave@covidcaremap.org) Rob Emanuele (rob@covidcaremap.org) Community: https://gitter.im/covid19-healthsystemcapacity/community

COVIDConvo

- **Start Date**: March, 2020
- **Regional Focus:** United States
- **Description**: Extracting arguments, claims, and evidence from COVID-19 coverage across television, news, and social media platforms to "map the conversation" about COVID-19. This brings clarity to complex debates and questions about COVID-19, its impact, and ideas as to where we may go from here.
- **Participants**: The Society Library, a 501(c)non-profit library, Great American Debate

- **Contact**: Jamie Joyce - Contact@SocietyLibrary.com

Texas Pandemic Flu Toolkit

- **Start Date**: 2013
- **Regional Focus:** North America
- **Description**: In 2013, the Texas Department of State Health Services funded the University of Texas at Austin and Texas Advanced Computing Center to develop resources for a potential influenza outbreak. These resources include a pandemic flu simulator, an interactive application for conducting preparedness exercises, and information on Texas ventilator stockpiling, all of which may have some relevance to the ongoing COVID-19 pandemic.
- **Participants**: University of Texas at Austin; Texas Advanced Computing Center; Texas Department of State Health Services
- **Contact**: Lauren Ancel Meyers, University of Texas at Austin

Social Distancing in a Pandemic

- **Start Date**: March 29, 2020
- **Regional Focus:** United States
- **Description**: Researchers at MIT Media Lab and MIT IDSS analyzed location data provided by Cuebiq to study the effects of social distancing policies in New York City and other areas in the US. Project website: http://curveflattening.media.mit.edu
- **Participants**: MIT Media Lab / IDSS Researchers, Cuebiq
- **Contact**: Esteban Moro, emoro@mit.edu, Alex “Sandy” Pentland

New York Times: We’re Sharing Coronavirus Case Data for Every U.S. County

- **Start Date**: 28 March 2020
- **Regional focus**: United States
- **Description**: In absence of accurate, nationwide, and up-to-date reporting on the spread of COVID-19 in the United States, the New York Times is managing a project to count every known coronavirus case in the United States. This information is collected from state and local health agencies across the country, news conferences, and press releases. It is updated regularly by New York Times staff and is freely available to the public on GitHub.
- **Participants**: New York Times; local and state public health officials
- **Contact**: covid-data@nytimes.com

HealthWeather.US

- **Start Date**: March 2020
- **Regional focus**: United States

- **Description**: The US Health Weather Map is an effort launched by the health company Kinsa Health. Using readings from a million internet-connected thermometers, the organization attempts to depict where there is unusually high or growing levels of fever in the United States. Through a map, the organization depicts the cumulative amount of atypical disease, trends, and observed cases. Project managers hope the system can turn up new cases of COVID-19. Individuals and organizations can apply for access to more detailed access here.
- **Participants**: KinsaHealth; Oregon State University
- **Contact**: Benjamin Dalziel, Oregon State University

Centers for Disease Control–Flu Forecasting Center Collaboration

- **Start Date**: March 2020
- **Regional focus**: North America
- **Description**: Reporting suggests the Centers for Disease Control are working with a research team at Carnegie Mellon University's Flu Forecasting Center, designated a National Center of Excellence for Influenza Forecasting, on the design of a community-wide coronavirus forecasting model. The center's approach will incorporate statistical machine learning and a crowdsourcing approach based on volunteer estimates.

OurStreets Supplies

- **Start Date**: 20 March 2020
- **Regional focus**: United States
- **Description**: OurStreetsApp is an app that was intended to allow users to report dangerous driving behavior in their communities. Following the spread of COVID-19, the company used its platform to create OurStreet Supplies, a crowdsourced platform for consumers, retailers, and policymakers to report and track the inventory of essential supplies. The platform is attempting to quickly scale its work and is searching for contacts in state, regional, and local governments; nonprofits; retailers; and software engineers. It is currently working with Data Society, a data science education company, and Union Kitchen, a food accelerator.
- **Participants**: OurStreetsApp; Data Society; Union Kitchen
- **Contact**: Mark Sussman, OurStreetsApp

CoronavirusAPI Public Health Initiative

- **Start Date**: February 2020
- **Regional focus**: North America
- **Description**: This project attempts to provide a compilation of all official data on the COVID-19 epidemic from websites of the 50 US states and DC. The interface scrapes

test numbers, positive counts, and deaths. It does not attempt to represent new reports or crowdsourced data.
- **Participants**: Independent volunteers
- **Contact**: Danny Yang; Susan Joseph

COVID Near You

- **Start Date**: 25 March 2020
- **Regional Focus:** United States
- **Description**: COVID Near You is a website created by epidemiologists and software developers at Harvard Medical School, Boston Children's Hospital, and volunteers to try and track the spread of COVID-19 via crowdsourcing. Individuals who visit the site can indicate how they are feeling, what symptoms they might be experiencing, what area they are from, and other information. Researchers then use these submissions to create maps that can allow citizens and public health officials to determine where hotspots of COVID-19 might be. The project is a sister site of Flu Near You, a similar attempt to track flu-like diseases via crowdsourcing.
- **Participants**: Harvard University Medical School; Boston Children's Hospital; various US health departments
- **Contact**: covidnearyou@healthmap.org

COVID Watch

- **Start Date**: 20 March 2020
- **Regional Focus:** United States
- **Description**: COVID Watch is an effort undertaken by a group of volunteer researchers, software engineers, and privacy and public-health experts in collaboration with Stanford to create an open source, privacy-sensitive mobile application that can be used for contact tracing. Taking example from efforts in South Korea and China, the participants aim to create a mobile app that uses bluetooth for proximity sensing, generates heat maps and warns users when they are about to enter high-risk areas; and provides suggestions on when to get tested based on local health guidance. The tracing system will be decentralized and anonymized in an attempt to protect individual privacy. Researchers intend to launch a pilot in the immediate future and are accepting volunteers to help with the work.
- **Participants**: Volunteer researchers, software engineers, privacy and public health experts; Stanford University
- **Contact**: contact@covid-watch.org

COVID-19 Healthcare Coalition

- **Start Date**: 23 March 2020
- **Regional Focus:** United States
- **Description**: Private-sector companies such as Amazon Web Services, Microsoft, Buoy Health, Tableau, and Zocdoc, formed a coalition to share assets around COVID-19. The partners will combine their expertise, capabilities, data, and insights to improve US capacity to fight the pandemic. This work will include connecting PPE suppliers with healthcare organizations, supporting governments, collecting best practices, combining their capabilities on issues such as telehealth, and collecting disparate sources of information. Organizations can request to join the coalition.
- **Participants**: Various. See full list
- **Contact**: Dr. John Halamka, President of Mayo Clinic Platform and Dr. Jay Schnitzer, Chief Medical and Technology Officer at MITRE; C19hcc@mitre.org

CovidSafe

- **Start Date**: March 2020
- **Regional Focus**: United States
- **Description**: Doctors and researchers at the University of Washington with Microsoft volunteers have built an app that promises to alert users automatically about highly relevant public health announcements, potential exposure to COVID-19, and to assist public health officials and contact tracing teams without compromising personal privacy. Interested individuals can try the Android Demo app (with an iOS app coming soon) or join Github community. The app is open source and does not require that a third party manage and control the information. Paper: "PACT: Privacy Sensitive Protocols and Mechanisms for Mobile Contact Tracing"
- **Participants**: Doctors and researchers at the University of Washington; Volunteers from Microsoft
- **Contact**: covidsafe@uw.edu

Covid19Canada

- **Start Date**: April 2020
- **Regional Focus:** Canada
- **Description**: Researchers at the University of Toronto, responding to the critical need for timely, accurate, and accessible data on COVID-19 cases, developed an individual-level dataset of Canadian COVID-19 cases. These figures, which include mortalities, recoveries, and testing, are collected from news reports and government health authorities and then manually entered by the research team. Information is available on GitHub and visualized here.

- **Participants**: Canadian Medical Association Journal; various researchers
- **Contact**: Isha Berry, PhD Candidate in Epidemiology, University of Toronto

Flatten Website

- **Start Date**: 2020
- **Regional Focus:** North America
- **Description**: Flatten is a website by a volunteer group of scientists, engineers, and clinicians that tries to provide real-time information about the spread of COVID-19 in Canada through an online questionnaire for members of the public. The questions are based on the best available guidance from Canadian public health agencies and will be updated regularly. Answers are shared in an aggregated manner, such as through a heat map, to provide individuals understanding of the spread of COVID-19 in their community and across Canada.
- **Participants**: Canadian scientists, engineers and clinicians
- **Contact**: flattenofficial[at]gmail.com

US Covid-19 Risk Index

- **Start Date**: April 2020
- **Regional Focus:** United States
- **Description**: An international nonprofit organization based in Washington D.C., The Social Progress Imperative created a map of COVID-19 vulnerability for the United States. The organization used three factors: population demographics; underlying health issues; and health infrastructure to generate the COVID-19 Vulnerability Index of each census tract.
- **Participants**: The Social Progress Imperative
- **Contact**: Dustin Davis, US Senior Data Analyst, Social Progress Imperative, covid19@socialprogress.org

New York Times COVID-19 Reporting (United States)

- **Start Date**: April 2020
- **Regional Focus:** United States
- **Description**: The New York Times analyzed anonymous cellphone data provided by Cuebiq to analyze and compare the rate of travel in US counties with and without stay-at-home order.
- **Participants**: The New York Times, Cuebiq
- **Contact**: James Glanz, Reporter, New York Times

Dataminr COVID-19 U.S. Study

- **Start Date**: March 2020

- **Regional Focus:** United States
- **Description**: Dataminr analyzed social media clusters to detect potential hot spots 1-2 weeks in advance. “Clusters include public social media posts ranging from people indicating they tested positive, people indicating they are experiencing symptoms, people indicating they have been exposed but not tested, first-hand accounts of confirmed cases from relatives, friends, and colleagues as well as COVID-19 related supply shortages and closures.” The study found that increases in social media clusters correlate with exponential growth in COVID-19 cases.
- **Participants**: Dataminr
- **Contact**: info@dataminr.com

Facebook–Carnegie Mellon Collaboration

- **Start Date**: 6 April 2020
- **Regional Focus:** United States
- **Description**: Facebook announced that, as part of its Data for Good program, it would offer aggregated data to researchers and nonprofits on issues pertaining to COVID-19. Part of this work involves a collaboration with Carnegie Mellon University Delphi Research Center, in which some Facebook users in the United States will be asked to participate in a voluntary survey seeking to detect COVID-19 hotspots early. Results from the survey can be found here.
- **Participants**: Facebook; Carnegie Mellon University Delphi Research Center
- **Contact**: info@dataminr.com

How We Feel

- **Start Date**: 2 April 2020
- **Regional Focus:** United States
- **Description**: How We Feel is a COVID-19 self-reporting app. Users can provide their age, sex and ZIP code along with any health symptoms they might be experiencing. This information is shared wih scientists, doctors, and public health officials who can use the data for research and action.
- **Participants**: Harvard T.h. Chan School of Public Health; MIT’s McGovern Institute for Brain Research; MIT and Harvard’s Broad Institute; Howard Hughes Medical Institute; University of Pennyslvania; Stanford University; University of Maryland School of Medicine; Weizmann Institute of Science; Pinterest; Feeding America; Alex’s Lemonade Stand
- **Contact**: donate@howwefeel.org; collaboration@howwefeel.org; volunteer@howwefeel.org

Matr Community Health Tracker App

- **Start Date**: 2020
- **Regional Focus:** United States
- **Description**: The Matr Project, an open-source app development platform, created an open source application for smart devices that allows individuals to receive the latest information from relevant health organizations and government agencies. Individuals can track infection rates in their area. Future updates will allow for wellness groups and help people find where they need to get tested.
- **Participants**: The Matr Project
- **Contact**: Contact form

USAFacts Coronavirus Stats & Data

- **Start Date**: March 2020
- **Regional Focus:** United States
- **Description**: USAFacts, the nonprofit dedicated to making US government data more accessible and understandable, has created a resource listing metrics on the COVID-19 pandemic and visualizations of that information, including county-level cases and deaths datasets. The resource aggregatesdata from the Centers for Disease Control and state and local public health agencies. CSV available to download; API available upon request. Data updated several times per day.
- **Participants**: USAFacts
- **Contact**: info@usafacts.org

COVID-19 Compiler

- **Start Date**: April 2020
- **Regional Focus:** United States
- **Description**: The COVID-19 Compiler is an attempt to visualize the impact of the pandemic on the United States using official public health statistics. Individuals can look at the total number of cases by county, cases per capita, deaths, and other statistics. An “Insights” tab allows individuals to explore analysis conducted by Topos-AI on this information, including the impact of second homes and destination counties of the rich.
- **Participants**: Topos-AI
- **Contact**: covid19@topos.com

IHME COVID-19 Resources

- **Start Date**: April 2020
- **Regional Focus:** United States

- **Description**: The University of Washington's Institute for Health Metrics and Evaluation has created a series of regularly updated data visualizations and projections on COVID-19. These visualizations include assessments of hospital bed use, need for intensive care beds, ventilator use, and deaths across all 50 US states.
- **Participants**: IHME
- **Contact**: covid19@healthdata.org

Ontario Pandemic Threat Response

- **Start Date**: 12 April 2020
- **Regional Focus:** Ontario, Canada
- **Description**: The Ontario Government is developing a health data platform to help researchers improve detection of COVID-19, discover risk factors for vulnerable populations, predict where outbreaks might occur, evaluate measures, and determine where to allocate resources. The resource will integrate data on physician claims, medical drug claims, discharge summaries of hospital stays, claims for home care and long-term care, and other data from across the province.
- **Participants**: Ontario provincial government; Ontario Privacy Commissioner;
- **Contact**: Christine Elliott, Deputy Premier and Minister of Health

Migrants and the Impact of the Covid-19 Pandemic on Remittances

- **Start Date**: 20 March 2020
- **Regional Focus:** United States; Latin America
- **Description**: The Migration, Remittances, and Development Program at the Inter-American Dialogue (IAD) combined data from the 2017 American Community Survey, remittance company data, and data from an IAD survey to assess the impact of COVID-19 pandemic on migrants in the US. The researchers found that migrant populations were uniquely vulnerable to the effects of the pandemic.
- **Participants**: Migration, Remittances and Development Program at the Inter-American Dialogue
- **Contact**: Manuel Orozco, Inter-American Dialogue

Mobility Monitor

- **Start Date:** 9 April 2020
- **Regional Focus:** United States
- **Description:** Habitatum, the data research organization, and StateBook, a business intelligence company, created a visualization of changes in population mobility in the United States. The site uses mobility data to estimate dwell time at specific locations and the daily average number of trips into an area (500x500 meters) that last between 15 minutes and 3 hours. Data is collected weekly and updates are published

on a weekly basis. The researchers intend the resource to inform economic decision-making, help local businesses and governments understand demand for services, and help communities be more resilient.
- **Participants**: Habidatum International, Statebook International
- **Contact:** ask@habidatum.com

Chicago Health Atlas
- **Start Date:** June 2013
- **Regional Focus:** Chicago, Illinois, United States
- **Description:** The City Tech Collaborative, the Chicago-based urban accelerator, manages the Chicago Health Atlas, a compilation of health indicators across Chicago's 77 community areas. Through the resource, individuals can identify health trends in neighborhoods and look at risk factors that might exacerbate disparities in outcomes related to the COVID-19 pandemic.
- **Participants**: City Tech Collaborative
- **Contact:** Contact form

Chicagoland COVID-19 Commons
- **Start Date:** April 2020
- **Regional Focus:** Chicago, Illinois, United States
- **Description:** The Chicagoland COVID-19 Commons represents a data platform bringing together public data with de-identified clinical data from regional healthcare providers and resident-contributed health reports. The goal is to provide a sustainable and scalable collaborative resources for those developing local epidemiological and back-to-work models.
- **Participants**: Pandemic Response Commons Consortium members
- **Contact:** Contact form

Covid ActNow
- **Start Date:** March 2020
- **Regional Focus:** United States
- **Description:** COVID Act Now is an independent attempt to model the COVID-19 pandemic in the United States. Led by an ex-Google employee, an Alaska state senator, and Stanford University medical scholar, the site inputs case counts and estimates, demographic data, hospital capacity assumptions, and other datasets and projects the likely growth of US cases under different scenarios. The site is not updated daily and is intended to be a rough estimate meant to help decision makers understand how COVID-19 will affect their community and what decisions they need to take to limit its effects.

- **Participants**: Max Henderson; Alaska Representative Jonathan Kreiss-Tomkins; Igor Kofman; and Zack Rosen
- **Contact:** General: info@covidactnow.org; Healthcare: medical@covidactnow.org; Government: gov@covidactnow.org; Press: press@covidactnow.org

Where Low-Income Jobs Are Being Lost to COVID-19

- **Start Date:** 16 April 2020
- **Regional Focus:** United States
- **Description:** Using estimates generated from unemployment claims in Washington state, which publishes weekly unemployment figures by industry, the Urban Institute created a nationwide estimate of low-income job losses in the United States. Estimates are provided for various sectors—such as food services, retail trade, and healthcare—and visualized in map form. The map will be updated weekly until the end of April, after which point it will be updated monthly using national unemployment numbers from the US Bureau of Labor Statistics.
- **Participants**: Urban Institute;
- **Contact:** Graham MacDonald, Christopher Davis, Ajjit Narayanan, Vivian Sihan Zheng, and Yipeng Su, Urban Institute

The University of Texas COVID-19 Modeling Consortium

- **Start Date:** 17 April 2020
- **Regional Focus:** United States
- **Description:** The University of Texas COVID-19 Modeling Consortium is an initiative led by the University of Texas at Austin's Institute for Health Metrics and Evaluation to forecast when the US and each of its states might hit peak mortality from COVID-19. The model is unique from other projections in that it uses real-time GPS data from millions of US-based mobile phones to determine adherence to social-distancing guidelines. The model has been provided to the White Hosue Coronavirus Task Force and other decision-makers at the state, local, and federal level.
- **Participants**: University of Texas at Austin's Institute for Health Metrics and Evaluation; Meyers Lab; Statsitics Data Sciences; National Science Foundation
- **Contact:** Lauren Ancel Meeyers, University of Texas at Austin

Census Bureau initiates weekly COVID-impact Household Pulse Survey

- **Start Date:** 20 April 2020
- **Regional Focus:** United States
- **Description:** The US Census Bureau will conduct a 12-week survey of 13.8 million US residences on the US population's responses to business and school closures, stay-at-home orders, and other effects of the COVID-19 pandemic. The survey will

help the federal government gain the information it needs to respond to rapidly changing circumstances in the United States.
- **Participants**: US Census Bureau; Economic Research Service; Bureau of Labor Statistics; National Center for Health Statistics; National Center for Education Statistics; Department of Housing
- **Contact:** N/A

BC COVID-19 Support
- **Start Date:** 9 April 2020
- **Regional Focus:** British Columbia, Canada
- **Description:** COVID-19 Support is an app designed by the Government of the British Columbia Providence in partnership with Thrive Health, a Vancouver-based healthcare technology company. Like the Canada COVID-19 app, the tool asks users for their age, postal code, and device location and provides relevant guidance from the province's health officials in response. The app also features the British Columbian government's COVID-19 self-assessment tool that can help residents decide if they need to seek coronavirus testing or not.
- **Participants:** British Columbia Ministry of Health; Thrive Health
- **Contact:** info@thrive.health

Canada COVID-19
- **Start Date:** 1 April 2020
- **Regional Focus:** Canada
- **Description:** Canada COVID-19 is an app designed by Canada's Ministry of Health (Health Canada) in partnership with Thrive Heath, a Vancouver-based healthcare technology company. Using information input by the user on their age, postal code and device location, the app provides a list of recommended actions and steps they can take to minimize risk of contracting COVID-19.
- **Participants:** Health Canada; Thrive Health
- **Contact:** phac.covid19.aspc@canada.ca

Real-Time COVID Status
- **Start Date:** 23 March 2020
- **Regional Focus:** United States
- **Description:** Real-Time COVID Status is a project coordinated by the U.S. Digital Response—with support from tech, health, and civic volunteers—to create dashboards that can help decision makers. Participants aggregate disparate data sources, clean and normalize data, automate data ingestion, visualize data, and conduct modeling and analytics work.
- **Participants:** U.S. Digital Response; online volunteers

- **Contact:** info@rtcovidstatus.com

COVID - 19 Demographic and Economic Resources

- **Start Date:** 23 April 2020
- **Regional Focus:** United States
- **Description:** The US Census Bureau is providing statistics and resources to support researchers seeking to study COVID-19 and its spread. Part of this work includes the creation of an interactive impact planning report, which provides figures on employment, poverty, and the at-risk population. The site also highlights notable datasets which might be used to better understand the populations where there is demand for COVID-19 related health care.
- **Participants:** US Census Bureau
- **Contact:** Newsletter sign-up

The COVID-19 Community Vulnerability Index

- **Start Date:** April 2020
- **Regional Focus:** United States
- **Description:** The Surgo Foundation, a privately funded think tank, created a COVID-19 Community Vulnerability Index to assess how resilient different communities in the United States are to the pandemic. Using indicators on COVID-19 from the US Centers for Disease Control and Prevention related to socioeconomic status, household composition, minority status, housing type, epidemiological factors, and healthcare system factors, the site provides scores for each locality and state. This information is also visualized.
- **Participants:** Surgo Foundation
- **Contact:** Paolo Corti, Surgo Foundation

COVID Stimulus Watch

- **Start Date:** April 2020
- **Regional Focus:** United States
- **Description:** Good Jobs First, a DC-based policy resource center focused on government and corporate accountability, created a website to compile information on the recipients of the 2020 Coronavirus Aid, Relief, and Economic Security Act (CARES Act) stimulus money. The site, which emerged from controversy over publicly traded companies receiving assistance money, displays total reporter grants, total grants value, total reported loans, and total loans returned. Data comes from the US federal government, corporate SEC filings, and other information.
- **Participants:** Good Jobs First
- **Contact:** Philip Mattera, Good Jobs First (pmattera@goodjobsfirst.org)

ACRES and Veracuity Launch COVID-19 Real World Evidence Initiative

- **Start Date:** 17 April 2020
- **Regional Focus:** United States
- **Description:** The Alliance for Clincial Research Excellence and Safety, a Massachusetts-based global nonprofit, and Veracuity, a bio-pharmaceutical safety informatics company, are distributing a survey tool to healthcare providers and hospitals. The data collected from the survey will allow the alliance to better understand the COVID-19 pandemic, including how hospitals are identifying risk factors, managing treatment, and assessing the efficacy of different therapies. Resuts from the survey will be shared with the medical and scientific community. A visualization of the data will be shared publicly on the Alliance for Clincial Research Excellence and Safety site.
- **Participants:** Alliance for Clinical Research Excellence and Safety; Veracuity LLC
- **Contact:** mtobin(at)acresglobal(dot)net; jonathan.fishbein(at)veracuity(dot)com

COVID-End: COVID-19 Evidence Network to Support Decision-Making

- **Start Date:**
- **Regional Focus:** Canada
- **Description:** COVID-End is an initiative spearheaded by the McMaster Health Forum, an Ontario-based research center focused on strengthening health systems. The effort intends to better coordinate projects on COVID-19 by maintaining a guide of evidence esources, supporting working groups, and piloting a “rapid evidence service” to support decision-makers.
- **Participants:** McMaster Health Forum; Ottawa Hospital Centre for Implementation Research
- **Contact:** forum@mcmaster.ca

COVID-19 Patient Data Registry Network

- **Start Date:** 10 April 2020
- **Regional Focus:** United States
- **Description:** The Robert Wood Johnson Foundation’s Health Data for Action program, in collaboration with the Health Care Cost Institute, Care Journey, Berkeley research Group, and a network of US health care systems is creating an open COVID-19 patient registry data network. The organizers will publish the information on a standardized open data model along with a list of standardized research questions and best practices that could inform initiatives. The project intends to support researchers, clinicians, policymakers, and journalists better understand the impact of COVID-19.
- **Participants:** Robert Wood Johnson Foundation; AcademyHealth; Health Care Cost Institute; CareJourney; Berkeley Research Group; Rush University Medical Center; OCHIN; Geisinger; Prisma Health; HealthShare Exchange

- **Contact:** hd4acovid@carejourney.com

Where Americans are still staying at home the most

- **Deadline:** 7 May 2020
- **Regional Focus:** United States
- **Description:** On 7 May, the *Washington Post* published a story on the amount of US residents staying at home based on an analysis of aggregated cell phone data. The newspaper obtained the data from the company SafeGraph, which obtains GPS data by regularly pinging 18 million smartphones with certain apps each day. The analysis suggests that US residents spent about 90 percent of their time at home through April 2020. It also suggests that, while park visits have trended upward, the amount of US residents going to workplaces has remained low. Most Americans have remained at home following orders to do so and are deciding among themselves when to go back out.
- **Participants:** Washington Post; SafeGraph
- **Contact:** Kevin Schaul, Brittany Renee Mayes and Bonnie Berkowitz, Washington Post

Is It Safer to Visit a Coffee Shop or a Gym?

- **Deadline:** 7 May 2020
- **Regional Focus:** United States
- **Description:** Professors at the University of Chicago published a piece in the opinion section of the *New York Times* demonstrating relative risks of COVID-19 infection by establishment type. The researchers rely on aggregated cell phone data from the companies SafeGraph and Verasite to show the average length of a visitor to a business relative to the average square footage of the establishment. They also conducted a survey asking individuals to rate, on a scale of 1 to 10, how they interacted with people, how much they touched shared surfaces, and how much of the business's activity took place outside. The researchers suggest gyms, sit-down restaurants, and bars should take caution in opening due to increased risk of spreading the virus.
- **Participants:** University of Chicago; New York TImes; SafeGraph; Veraset
- **Contact:** Katherine Baicker, Oeindrila Dube, Sendhil Mullainathan, Devin Pope and University of Chicago; Gus Wezerek, New York Times

Civis COIVD-19 Insights Center

- **Start Date:** April 2020
- **Regional Focus:** United States
- **Description**: Civis Analytics, a data software and consultancy company, has created a COVID-19 Insights Center on behalf of the Bill & Melinda Gates Foundation. The insight center is tracking US sentiments and attitudes on the crisis; assessing the economic,

social, and educational impact of COVID-19,; and tracking consumer insights. This analysis relies largely on polling.
- **Participants:** Civis Analytics; Bill & Melinda Gates Foundation
- **Contact:** Contact form

COVIDcast Real-Time COVID-19 Indicators
- **Start Date:** 23 April 2020
- **Regional Focus:** United States
- **Description**: COVIDcast is a series of interactive maps of the United States that provides information on reported COVID-19 symptoms, doctor visits, medical tests, and browser searches by county over time. The information relies on a variety of sources, including surveys created by Carnegie Mellon for users of Google Surveys and Facebook. It also relies on Google Health Trends, which provides estimates for how many people were in a given location on a day given Google searches, Quidel Corp, which provides influenza testing estimates, and a national health system, which provides estimates on patient visits to doctors and telemedicine appointments. These resources provide a snapshot of COVID-19's spread in the United States and aims to inform the public about the risks in their area.
- **Participants:** Carnegie Mellon University; Google; Facebook; Quidel Corp; a national health system
- **Contact:** Byron Spice, Carnegie Mellon University (bspice@cs.cmu.edu)

Essentially Open North Brooklyn
- **Start Date:** May 2020
- **Regional Focus:** Brooklyn, New York, United States
- **Description**: Essentially Open North Brooklyn is an initiative from BetaNYC, a civic nonprofit that seeks to use technology to improve lives, in collaboration with various New York-based community groups. The initiative provides a mapping tool to residents to identify which businesses in the Greenpoint and Williamsburg neighborhoods of Brooklyn are still providing service during the pandemic. Individuals can search by name, type, or view an interactive map to determine which businesses are open. Businesses can also submit an addition or an update by sending in information on their hours.
- **Participants:** BetaNYC; EVGrieve; Who's Open Queens; NYC Food Policy Center at Hunter College
- **Contact:** hours@beta.nyc

Americans Keep Clicking to Buy, Minting New Online Shopping Winners
- **Start Date:** 13 May 2020

- **Regional Focus:** United States
- **Description**: The *New York Times* acquired data from Earnest Research, which collects credit and debit card transactions, to assess changes in US spending during the pandemic. The analysis finds growth in e-commerce, with specific companies benefiting more than others.
- **Participants:** New York Times; Earnest Research
- **Contact:** Nathaniel Popper, New York Times

Americans Didn't Wait For Their Governors To Tell Them To Stay Home Because Of COVID-19

- **Start Date:** 8 May 2020
- **Regional Focus:** United States
- **Description**: The news site FiveThirtyEight worked with a professor at Duke University Medical Center to analyze human mobility amid the COVID-19 pandemic. The analysis, which relied on mobility data provided by the location intelligence company Cuebiq, found that US residents did not wait for government orders to stay home but began reducing travel around 11 March. The analysis also found significant declines in social distancing regardless of a state's political affiliation.
- **Participants:** FiveThirtyEight; Duke University Medical Center; Cuebiq
- **Contact:** Clare Malone and Kyle Bourassa, FiveThirtyEight

University of Maryland COVID-19 Impact Analysis Platform

- **Start Date:** April 2020
- **Regional Focus:** United States
- **Description**: A multidisciplinary team from the Maryland Transportation Institute and Catt Laboratory, both institutions at the University of Maryland, collaborated on the creation of the COVID-19 Impact Analysis Platform. The platform represents COVID-19's impact on mobility, health, the economy, and society for all US states that update their data regularly. In its current form, the platform visualizes 38 metrics spanning four categories—public health, economic impact, mobility and social distancing, and vulnerable populations. Individuals can use the platform to better understand how the pandemic has affected different US states.
- **Participants:** Maryland Transportation Institute; Catt Laboratory
- **Contact:** data-covid@umd.edu (General)

Purdue Food and Agriculture Vulnerability Index

- **Start Date:** 20 May 2020
- **Regional Focus:** United States
- **Description**: Purdue University's Department of Agricultural Economics worked with Microsoft to create a dashboard representing COVID-19's potential risk to agriculture in

the United States. Looking at beans, cattle, vegetables, hogs, chickens, wheat, and rice, the platform seeks to understand what potential risks there are to the supply chains due to worker illness. The platform reaches this estimate by combining data on COVID cases from each county, US Department of Agriculture data on the number of farmers in each county, and data on US agricultural production.
- **Participants:** Department of Agricultural Economics at Purdue University; Microsoft
- **Contact:** Jayson Lusk (jlusk@purdue.edu)

Los Angeles COVID-19 Risk Maps
- **Start Date:** 1 May 2020
- **Regional Focus:** Los Angeles, United States
- **Description**: The Los Angeles Data Team of the City of Los Angeles government analyzed the US Centers for Disease Control's Social Vulnerability Index to determine where communities at high risk of contracting COVID-19 are. By mapping these indicator's against the city's census tracts, the team identified and visualized where vulnerable groups lived. It also worked with Cityfi, the tech start-up, to identify where foot traffic had declined in response to efforts to control COVID-19. The analysis found a total decline of 70% between March and April.
- **Participants:** Los Angeles Data Team; Cityfi
- **Contact:** Eva Pereira, Deputy Chief Data Officer of Los Angeles

Canadian Survey on Business Conditions: Impact of COVID-19 on businesses in Canada, March 2020
- **Start Date:** 29 April 2020
- **Regional Focus:** Canada
- **Description**: Statistics Canada, in collaboration with the Canadian Chamber of Commerce, conducted a survey of 12,600 businesses from 3 April to 24 April to understand how the COVID-19 pandemic is affecting them. The study found that over half of all businesses have seen a 20 percent or more decline in revenue while almost two-thirds have been severely impacted by lower demand. The research also finds significant impacts on labor and that over two-fifths of all businesses are trying to find new ways to interact with customers amid social distancing procedures. Data from the survey is available to the public.
- **Participants:** Statistics Canada; Canadian Chamber of Commerce
- **Contact:** STATCAN.infostats-infostats.STATCAN@canada.ca

Model-Based Estimate of COVID-19 Burden in King and Snohomish Counties through April 7, 2020
- **Start Date:** 10 March 2020
- **Regional Focus:** Washington, United States

- **Description:** Using regional mobility data collected from Facebook's Data for Good program, researchers from various organizations published a paper projecting COVID-19 cases in two Washington state counties. The working paper, which has not yet been peer-reviewed, projects different scenarios for how many cases King and Snohomish counties could have by 7 April under different circumstances.
- **Participants**: Institute for Disease Monitoring, Bill & Melinda Gates Foundation, Fred Hutchinson Cancer Research Institute, and Facebook
- **Contact:** Mike Famulare (mfamulare@idmod.org)

National COVID Cohort Collaborative

- **Start Date**: 5 June 2020
- **Regional Focus**: United States
- **Description**: The National COVID Cohort Collaborative is an initiative led by the National Center for Advancing Translational Sciences at the National Institutes of Health to develop a data management platform that can harmonize the large clinical datasets being created on research efforts focused on COVID-19. The organizers intend for the initiative to lead to a centralized national data resource that researchers can use to study COVID-19 and identify treatments. The effort will allow for faster collection and analysis of combined datasets.
- **Participants**: National Center for Advancing Translational Sciences
- **Contact**: NCATS_N3C@nih.gov

Mastercard Recovery Insights

- **Start Date:** 29 May 2020
- **Regional Focus:** United States
- **Description:** The multinational financial services company Mastercard is creating data-driven tools for US small business owners to help them understand the effects of COVID-19 as they ready for reopening. The company will also provide data-based research on the short- and long-term impact on economies, businesses, and people in the coming weeks that focus on issues such as retail's shift to digital services.
- **Participants**: Mastercard
- **Contact:** Julia Monti (julia.monti@mastercard.com)

Medical Home Network AI

- **Start Date:** April 2020
- **Regional Focus:** Chicago, United States

- **Description**: The Medical Home Network, a non-for-profit medical technology organization, is working with ClosedLoop, a Texas-based AI company to develop a predictive model for assessing which patients are at highest risk of suffering complications from COVID-19. The tool relies on data from 122,000 patients to determine which social and medical factors increase vulnerability.
- **Participants**: Medical Home Network; ClosedLoop
- **Contact:** N/A

How Did COVID-19 and Stabilization Policies Affect Spending and Employment? A New Real-Time Economic Tracker Based on Private Sector Data

- **Start Date:** May 2020
- **Regional Focus:** New York, United States
- **Description**: Raj Chetty and his colleagues published a working paper on the effects of COVID-19 and subsequent responses to it on the US economy. The working paper relies on granular, real-time anonymized data collected from businesses to provide information on weekly consumer spending, business revenue, employment rates, and other information. The analysis shows high-income groups reduced spending in March 2020, especially in those areas most affected by COVID-19 and that stimulus payments increased consumer spending among low-income households. The paper also suggests "state-ordered reopenings of economies have little impact on local employment."
- **Participants**: Raj Chetty, John Friedman, Nathaniel Hendren, Michael Stepner, The Opportunity Insights Team
- **Contact:** N/A

Essential workers' bike access limited during COVID-19 crisis

- **Start Date:** 19 June 2020
- **Regional Focus:** New York, New York, United States
- **Description**: Researchers with IQSpatial, a geospatial data company for transportation and urban planning, published an analysis of the availability of safe bicycle riding for New York City's essential workers. The analysis—which relied on data sourced fron the New York City Department of Transportation, Citibike, and the US Census Bureau—found that fewer than 35 percent of the city's essential workers had access to safe bicycle infrastructure and only 18 percent had access to the city's bikeshare services. The analysis goes son to demonstrate that many of the city's safe bicycling lanes are in wealthier and whiter community districts than the rest of the city.
- **Participants**: IQSpatial
- **Contact:** Alyssa Pichardo and Jose Pillich, IQSpatial

Opportunity Insights Economic Tracker

- **Start Date:** 7 May 2020
- **Regional Focus:** United States
- **Description**: Opportunity Insights is an initiative sponsored by the Bill & Melinda Gates Foundation and Brown University to track economic activity across the United States amid the COVID-19 pandemic and recent economic downturn. The site aggregates data from various sources—small business activity, employment numbers, and consumer spending—along with policy and epidemiological developments to provide a real-time overview of the economic situation nationwide and across the US states. The site represents this information in a unified dashboard.
- **Participants**: Harvard University; Brown University; Bill & Melinda Gates Foundation
- **Contact:** overmann@fas.harvard.edu

Quandl Analysis of COVID-19's Economic Impact

- **Start Date:** 15 April 2020
- **Regional Focus:** United States, China, and Japan
- **Description**: Quandl, a financial services company that indexes numerical datasets, used its "alternative data" assets to assess the economic impact of the COVID-19 pandemic in China, Japan, and the United States. The company uses data from transit authorities, railway operators, telecommunications networks, and government briefings on consumer traffic to assess the impact of shelter-in-place directives, noting the orders led to substantial declines in movement. The analysis also uses time-tracking data from software companies like Homebase to measure the number of small-business closures. This analysis suggests roughly 65 percent of New York businesses closed in January 2020 while 50 percent of Texan businesses and 52 percent of Californian businesses did that same. Quandl's proprietary data on US job listings, meanwhile, suggested large increases in hiring by large companies such as Amazon, Kroger, Walmart, and AT&T.
- **Participants**: Quandl
- **Contact:** Newsletter sign-up

California COVID Assessment Tool

- **Start Date:** 22 June 2020
- **Regional Focus:** United States
- **Description**: The California Covid Assessment Tool is an open-source "model of models," created by the State of California, that seeks to compile different assessments of the spread of COVID-19 statewide in California and locally. Individuals

can view a nowcast (which assesses the current situation), forecasts (which assesses expected impact in 2–4 weeks), and scenarios (which look at long-term impact). Officials intend for the site to improve how the state, counties, and public make decisions and to spur collaboration with other states and researchers. The source code is publicly available on GitHub.

- **Participants**: California Department of Public Health
- **Contact:** covmodeling@cdph.ca.gov

COVID Risk Level map

- **Release Date:** 1 July 2020
- **Regional Focus:** United States
- **Description:** Research, policy, and public health experts from the Harvard Global Health Institute worked with partners to create a framework and dashboard providing clarity on the metrics for coronavirus response. The framework articulates the conditions needed to contain and control the spread of novel coronavirus while the dashboard visualizes the severity of the outbreak and the steps needed to meet the framework's guidance, such as testing and tracing and supported isolation.
- **Participants:** Harvard Global Health Institute; Harvard's Emond J. Safra Center for Ethics; Rockefeller Foundation; CovidActNow; Covid-Local; CIDRAP
- **Contact:** Ben Linville Engler, Massachusetts Manufacturing Emergency Response Team and MIT (benle@mit.edu)

Committee for a Responsible Federal Budget COVID Money Tracker

- **Release Date:** 24 April 2020
- **Regional Focus:** United States
- **Description:** The Committee for a Responsible Federal Budget, an independent, bipartisan think tank focused on deficit reduction, has created a summary of all expenditures toward addressing the coronavirus pandemic. Individuals can view a table of policies enacted thus far and their cost as well as analysis of these actions. The organizers intend for the project to provide clarity to the public on pandemic spending, tax cuts, loans, grants, subsidies, and other measures through legislation, executive action, and the Federal Reserve.
- **Participants:** Committee for a Responsible Federal Budget
- **Contact:** Contact form

NYC Recovery Data Partnership

- **Release Date:** 23 July 2020
- **Regional Focus:** New York City
- **Description:** The NYC Recovery Data Partnership is a data collaboration between the City of New York and community, nonprofit, and private organizations on COVID-19

response and recovery. Partner organizations provide data to improve local understanding of how New Yorkers have been affected by COVID-19. This information, in turn, can be requested by city agencies. Use cases are evaluated by partnership staff with input from external advisors who seek to guarantee privacy, fairness, accountability, and transparency of data usage.
- **Participants:** StreetEasy; LinkedIn; Kinsa; Foursquare; BetaNYC; ioby; SafeGraph; OATS; Cuebiq; Upsolve; Urban Systems Lab
- **Contact:** RecoveryData@cityhall.nyc.gov

Data Mining on Open Public Transit Data for Transportation Analytics During Pre-COVID-19 Era and COVID-19 Era
- **Release Date:** 21 August 2020
- **Regional Focus:** Winnipeg, Manitoba, Canada
- **Description:** Researchers with the University of Manitoba sought to estimate the impact of the COVID-19 pandemic on use of public transportation in Winnipeg. The researchers used the city's open data platform to find when and how often specific buses in the city were too full to take on new passengers. The researchers find varying changes in usage and recommend that officials use the data to inform their decision making, such as where to add and remove buses.
- **Participants:** University of Manitoba; Winnipeg Transit
- **Contact:** kleung@cs.umanitoba.ca

WVU Rockefeller Neuroscience Institute–Oura Health COVID-19 Monitoring Study
- **Start Date:** 28 May 2020
- **Regional Focus:** United States
- **Description:** The West Virginia University Rockefeller Neuroscience Institute and WVU Medicine formed a partnership with Oura, a company which produces a wearable activity-tracking ring, to study whether wearable devicess and a artificial intelligence-driven model can identify people infected with coronavirus before they become contagious. The study makes use of Oura's smart ring and a smartphone app through which individuals can measure daily changes in how participants feel physiologically, psychologically, and cognitively. The study is open to the general public.
- **Participants**: West Virginia University Rockefeller Neuroscience Institute; WVU Medicine; Oura Health
- **Contact:** Contact form

Digital Bridge
- **Release Date:** Fall 2016
- **Regional Focus:** United States

- **Description:** The Digital Bridge collaborative is a coalition of those working in public health, public health delivery, and electronic health records to "solve information exchange challenges." As part of these efforts, Digital Bridge had begun to develop an app capable of facilitating rich, real-time data flow for public health purposes. The app—which has recently been developed, tested, and deployed—has now been used amid the pandemic to support the exchange of COVID-19 data across state and local health departments, including more than 2,4000 facilities from 26 systems.
- **Participants:** Allscripts; American Medical Association; Association of Public Health Laboratories; Association of State and Territorial Health Officials; Blue Cross and Blue Shield of North Carolina; Centers for Disease Control and Prevention/Center for Surveillance, Epidemiology, and Laboratory Services; Centers for Disease Control and Prevention Foundation; Cerner; Council of State and Territorial Epidemiologists; Deloitte; de Beaumont Foundation; eClinicalWorks; Epic Systems; HealthPartners; Health and Human Services (HHS) Office of the Chief Technology Officer; Health and Human Services (HHS) Office of the National Coordinator; Intermountain Healthcare; Kaiser Permanente; Meditech; National Association of County and City Health Officials; Robert Wood Johnson Foundation
- **Contact:** Contact form

National Wastewater Surveillance System

- **Release Date:** 17 August 2020
- **Regional Focus:** United States
- **Description:** The Centers for Disease Control and Prevention along with the US Department of Health and Human Services and other agencies throughout the US federal government are creating a national database for state, tribal, local, and territorial health departments to submit wastewater for COVID-19 surveillance. This resource will provide information on changes in total COVID-19 infection and healthcare behavior by the public. This increased public health surveillance is intended to support decision-making at all levels of government. The effort will include participation from wastewater treatment plants, workers, and worker representatives as well as public health laboratories.
- **Participants:** Centers for Disease Control and Prevention; US Department of Health and Human Services; state, tribal, local, and territorial health departments; wastewater workers; laboratories
- **Contact:** eocevent456@cdc.gov

Satcher Health Leadership Institute Study of Racial Impact of COVID-19

- **Release Date:** 28 May 2020

- **Regional Focus:** United States
- **Description:** Supported by Google.org, the Satcher Health Leadership Institute will collect and analyze detailed data to better understand why communities of color hve been disproportionately harmed by COVID-19. The research will build a database representing the virus's impact by race, ethnicity, gender, and socioeconomic status while also examining the trajectory of COVID-19 cases, hospitalizations, and deaths. In addition to providing financial support, Google will also provide a team of engineers and data scientists who will support the Satcher Health Leadership Institute on a full-time basis over the next six months. The effort is further supported by a collaboration with the CDC Foundation.
- **Participants:** Satcher Health Leadership Institute at Morehouse School of Medicine; Google.org
- **Contact:** Dr. Plamen Akaliyski, Keio University Graduate School of System Design and Management

COVID-19 Data Discovery from Clinical Records Consortium

- **Start Date:** September 2020
- **Regional Focus:** United States; Germany
- **Description:** The COVID-19 Data Discovery from Clinical Records Consortium is a network of 202 hospitals across 12 health systems that compiles electronic health record data to help researchers address complex clinical questions related to COVID-19. To better preserve patient and institutional privacy, the consortium does not share individual records but instead exchanges aggregate statistics to inform medical research.
- **Participants:** UC San Diego; UC Davis Health; UTHealth; University of Southern California; San Mateo Medical Center; University of Colorado; Ludwig-Maximilians-Universitat Munchen; Cedars Sinai; University of California, San Francisco; University of California, Los Angeles; Vanderbilt University
- **Contact:** Jihoon Kim, MS; contact form

COVID Pau

- **Start Date:** 11 September 2020
- **Regional Focus:** Hawaii, United States
- **Description:** COVID Pau is an effort from the Hawai'i COVID Collaborative to provide public health information for Hawai'i communities to help them better respond to the COVID-19 pandemic. The site provides data dashboards complimented by community- and topic-specific analysis and first-person accounts of the pandemic. The Hawai'i House Select Committee on COVID-19 convened the effort, which has been supported by businesses, academic institutions, and nonprofits across the state.

- **Participants:** Hawai'i Pacific Health; Hawai'i Community Foundation; Queen's Medical Center; HMSA; Bank of Hawaii; State of Hawaii; Economic Research Organization at the University of Hawai'i; Hawaii Data Collaborative; Omidyar Group; Aulani Disney Resort and Spa; Hawai'i Executive Collaborative; Paliku
- **Contact:** Director Na'alehu Anthony, awai'i COVID Collaborative; Contact form

COVID-19 Outbreak Detection Tool

- **Start Date:** 15 September 2020
- **Regional Focus:** United States
- **Description:** Using machine-learning methods, researchers at Massachusetts General Hospital, Harvard Medical School, Georgia Tech and Boston Medical Center developed a tool to detect and predict outbreak spread at a county level in the United States. The tool relies on officially reported COVID-19 cases and deaths as well as factors like mask mandates, social distancing policies, and the CDC's Social Vulnerability Index. Data updates two-to-three times per week and the tool visualizes all findings on a publicly available county map of the United States.
- **Participants:** Massachusetts General Hospital; Harvard Medical School; Georgia Tech; and Boston Medical Center
- **Contact:** Noah Brown, nbrown9@partners.org

South Asia

Covid-19 co-morbidity risk maps for India

- **Start Date**: 21 March 2020
- **Regional Focus: India**
- **Description**: Covid-19 experience (China, Italy) shows that elderly populations and patients with conditions like hypertension, diabetes, respiratory disease have at least six times more risk (fatality rate) than patients with no comorbid conditions. This has an implication for planning our resources for reducing loss of lives. As data scientists and planners, we have come together to generate co-morbidity risk maps and risk-index for 600+ districts (county level) in India. https://tinyurl.com/wrghh7a Interactive maps are available here: https://public.tableau.com/profile/kandarp6755#!/vizhome/Covid_Comorbidity/Comorbidity
- **Participants**: UNDP Accelerator Lab India, Finance Commission of India
- **Contact**: Swetha Kolluri, UNDP Accelerator Lab

Corona virus tracker - India

- **Regional Focus:** India

- **Description**: GRAM is a data portal and platform created by the firm How India Lives. The portal is making freely accessible several datasets and visualizations related to the COVID-19 pandemic, including national and subnational information related to incidence of the disease and the availability of health resources such as hospital beds.
- **Participants**: How India Lives
- **Contact**: John Raja, johnraja@howindialives.com

Nepal COVID19 API

- **Start Date:** 2020
- **Regional Focus:** Nepal
- **Description**: The Nepal COVID19 API is a volunteer-led initiative to share information on the spread of the COVID-19 pandemic in Nepal. The site allows individuals to look at where officially reported cases of the virus have occurred, as well as recovered cases, deceased, and tested. This information is represented on a province map of Nepal.
- **Participants:** Volunteers
- **Contact:** https://github.com/rupeshshrestha722

Sub-Saharan Africa

Coronavirus in Sub-Saharan Africa

- **Release Date:** 18 March 2020
- **Regional Focus:** Kenya, South Africa and Nigeria
- **Description**: GeoPoll, a mobile-based insight provider, has released a free report on the coronavirus. This initial report includes data from populations in South Africa, Kenya, and Nigeria and is available here: https://www.geopoll.com/blog/coronavirus-africa/. In the coming weeks, GeoPoll will be running additional studies on coronavirus' impact around the globe, and they encourage you to share questions you'd like to see.
- **Participants**: GeoPoll
- **Contact:** Scott Lansell, VP for International Development; scott@geiopoll.com

CoviDash

- **Release Date:** 15 March 2020
- **Regional Focus:** Kenya
- **Description**: A consortium of University of Nairobi, Washington Statement University, and Qhala to Model the spread of the COVID19, impact on health care, and the economy. We use spatial, health, mobility, and population data. Products feeding directly into the Ministry of Health. To access contact the below

- **Participants**: University of Nairobi; Washington Statement University; Qhala
- **Contact:** Prof Thumbi Mwangi, Washington State University, thumbi.mwangi@wsu.edu, Dr. Shikoh Gitau, CEO, Qhala shikoh@Qhala.com ; Dr. Loice Achieng University of Nairobi, loicea.la@gmail.com>

Coronavirus COVID-19 (2019-nCoV) Data Repository for South Africa

- **Release Date:** 15 March 2020
- **Regional Focus:** South Africa,
- **Description**: COVID 19 Data for South Africa created, maintained and hosted by Data Science for Social Impact research group, led by Dr. Vukosi Marivate, at the University of Pretoria. See the Dashboard: https://bitly.com/covid19za-dash; Repo: https://github.com/dsfsi/covid19za
- **Contact:** Dr. Vukosi Marivate vukosi.marivate@cs.up.ac.za

Coronavirus COVID-19 (2019-nCoV) Data Repository for Africa

- **Release Date:** 15 March 2020
- **Regional Focus:** Africa
- **Description**: The purpose of this repository is to collate data on the ongoing coronavirus pandemic in Africa. Our goal is to record detailed information on each reported case in every African country. We want to build a line list – a table summarizing information about people who are infected, dead, or recovered. The table for each African country would include demographic, location, and symptom (where available) information for each reported case. The data will be obtained from official sources (e.g., WHO, departments of health, CDC etc.) and unofficial sources (e.g., news). Such a dataset has many uses, including studying the spread of COVID-19 across Africa and assessing similarities and differences to what's being observed in other regions of the world.
  - Dashboard: https://bitly.com/covid19africa-dash
  - Repo: https://github.com/dsfsi/covid19africa
- **Contact:** Dr. Vukosi Marivate vukosi.marivate@cs.up.ac.za

Fraym Geospatial Data for COVID-19 Prevention and Crisis Response

- **Start Date**: 27 March 2020
- **Regional Focus**: Nigeria, Kenya, Rwanda, Senegal, Pakistan, and Guatemala
- **Description**: Fraym is contributing its hyperlocal geospatial data in the fight against the global pandemic. With gridded data that can provide information on people down to a resolution of one square kilometer, Fraym is providing information on risk and

transmission factors such as population density, household size, elderly populations, smoking prevalence, child wasting, and handwashing practices.
- **Participants**: Fraym
- **Contact**: info@fraym.io

Mobility Analysis to Support the Government of Ghana in Responding to the COVID-19 Outbreak

- **Start Date**: 3 April 2020
- **Regional Focus:** Ghana
- **Description**: Ghana Statistical Services is working with Vodafone Ghana, the telecommunications company, and the Flowminder Foundation, the Stockholm-based nonprofit, are collaborating through their Data For Good partnership. Using anonymised and aggregated mobile phone data provided by Vodafone, Ghana Statistical Services and Fowminder will try to identify where mobility restrictions instituted by the government are being adhered to on a district, regional, and national level. These analyses will inform subsequent government action to combat COVID-19 spread. It has also informed this public report.
- **Participants**: Ghana Statistical Services; Vodafone Ghana; Flowminder Foundation
- **Contact**: Samuel Kobina Annim, Ghana Statistical Services; Tracey Li, Flowminder

ICU beds in Kenyan hospitals

- **Start Date**: 4 April 2020
- **Regional Focus:** Kenya
- **Description**: Upande, using data taken from the Kenya Healthcare Federation, visualized the number of hospital beds available in Kenya.
- **Participants**: Upande; Kenya Healthcare Federation
- **Contact**: N/A

Measuring the Coronavirus' impact on food security in humanitarian settings

- **Start Date**: April 2020
- **Regional Focus:** Mauritanie (Mbera and Bassikounou)
- **Description**: To quickly assess and follow the impact of COVID-19 pandemic on food and nutrition security of displaced people in humanitarian setting subdued to isolation, lack of accessibility and restricted movements through mobile applications
- **Participants**: Action Against Hunger-Spain; Innovation and Technology Innovation Centre. Madrid Polytechnic University
- **Contact**: agomez@achesp.org

Surveillance, Outbreak Response Management and Analysis System

- **Start Date:** 2014

- **Regional Focus:** Nigeria; Ghana; Fiji
- **Description:** The Surveillance, Outbreak Response Management and Analysis System (SORMAS) is a consortium between the Helmholtz Centre for Infection Research and the Nigeria Centre for Disease Control in 2014 to improve disease surveillance amid the Ebola virus epidemic. The organization manages an open-source mobile health system that helps organize disease control and outbreak management for healthcare personnel and improves analysis and surveillance for all other levels of the public health system. Amid the pandemic, Ghana Health Services and the Nigeria Centre for Disease Control have added a new module to SORMAS targetted at COVID-19. Other countries interested in adopting the platform are encouraged to contact SORMAS.
- **Participants**: Nigeria Centre for Disease Control; Ghana Health Services; German Development Ministry; European Union; Deutsche Gesellschaft für Internationale Zusammenarbeit
- **Contact:** sormas@helmholtz-hzi.de

Is Africa Flattening the Curve?

- **Start Date:** April 2020
- **Regional Focus:** Africa
- **Description:** Genesis Analytics, the economics consulting firm based in Johannesburg, South Africa, and the Daily Maverick, an online South African newspaper, launched a dashboard describing the COVID-19 pandemic in Africa. The resource, which uses reported figures from Johns Hopkins University on cases and deaths, visualizes the continent's experiences managing the pandemic. Users can compare against other African countries or against others on other continents.
- **Participants**: Genesis Analytics; Daily Maverick newspaper
- **Contact:** contact@genesis-analytics.com

Impact of COVID-19 on Sub-Saharan Africa

- **Start Date:** 20 April 2020
- **Regional Focus:** Sub-Saharan Africa; Global
- **Description:** The World Bank used data from PovcalNet, the World Bank's online tool for estimating global poverty, to estimate and extrapolate global economic output from 166 countries following the COVID-19 pandemic. The analysis finds that COVID-19 is likely to cause the first increase in global poverty since 1998. The analysis further estimates that, while Sub-Saharan Africa has been relatively less affected by the virus to date, the region will likely be among the wrost affected by an increase in pandemic-related extreme poverty. It estimates the largest increase in the number of poor will occur in India (12 million), Nigeria (5 million), and the Democratic Republic of Congo (2 million).

- **Participants:** World Bank; PovcalNet
- **Contact:** Daniel Gerszon Mahler; Christoph Laknerr; Andres Castaneda Aguilar; Haoyu Wu, World Bank

The ONE Africa COVID-19 Tracker

- **Start Date:** May 2020
- **Regional Focus:** Africa
- **Description**: The One Campaign, an international nonprofit and advocacy organization that seeks to eliminate extreme poverty, released a dashboard that allows individuals to track the impact of COVID-19 on Africa. Individuals who navigate to One's site can view sectoral indicators on health, economics, demographics, governance, and social attributes, or indicators by country. The information represented comes from a variety of sources including the One Campaign, international organizations, and news organizations.
- **Participants:** One Campaign
- **Contact:** Contact form

COVID.ZA

- **Start Date:** 14 May 2020
- **Regional Focus:** South Africa
- **Description**: The Global Survery Foundation and United Nations Institute for Training and Research worked with Slalom, a technology consulting firm, and the University of Cape Town's Global Survery Division to create COVID.ZA, a low-data digital app that South Africans can use to assess symptoms of COVID019 and identify potential virus hotspots. The app is a short questionnaire (available in three languages) asking individuals to provide details about their symptoms, health history, and location. Using this information, the app tells users whether they are likely to be infected with COVID-19. The responses then feed into a repository that can be used to identify where likely cases of COVID-19 are.
- **Participants:** Global Surgery Foundation; United Nations Institute for Training and Research; Slalom; University of Cape Town's Global Surgery Division; Rali and Makentse Mampeule Foundation
- **Contact:** N/A

Africa UN Knowledge Hub for COVID-19

- **Release Date:** 15 April 2020
- **Regional Focus:** Pan-African

- **Description**: A consortium of UN-sourced official data on COVID-19 for Africa, encompassing impact by sector, country response, ongoing research and activities being carried out by each UN entity to combat the spread.
- **Participants**: United Nations System entities & partners (WHO, INCB, WFP, UNEP, UNIDO, ILO, UN Women, IOM, FAO, UN Aids, UNFPA, UNHCR, OCHA, ICAO and more)
- **Contact:** Irene Onyancha (Knowledge Management) onyancha@un.org, Ahmed Al-Awah (ITSS) al-awah@un.org

COVID-19 symptom tracking pilot

- **Release Date:** August 2020
- **Regional Focus:** Malawi
- **Description:** The COVID-19 Symptom Tracking Pilot will test the use of interactive voice response (IVR) to collect ongoing data on COVID-19 related symptoms experienced by the sample population. IVR will be used to deliver a series of questions - during a phone call - that collect data on the study participant's background (age, gender and location) as well as symptoms that they are experiencing. Automated phone calls will be made to collect periodic follow-up data on symptoms. Data from the pilot will be incorporated into the epidemiological model created by Kuunika and used by the Government of Malawi to guide the epidemic response. The pilot will focus on a sample of 5000 people that will be selected as part of the study *Investigating the frequency and distribution of SARS-COV-2 infection in Malawi*. The 5000 people will be selected randomly from frontline health workers and the general public in five districts. If the pilot is successful the coalition will seek additional support to open the study to include anyone in Malawi. This will be done via a free short code that enables anyone with a phone to call up and enroll in the study and report their symptoms via IVR.
- **Participants:** Kwantu, CARE Malawi, Malawi College of Medicine, Unicef and Viamo. The coalition receives financial support from Traction, a DFID funded programme as part of it's COVID-19 pivot.
- **Contact:** Rob Worthington rob@kwantu.net

Sierra Leone National COVID-19 Emergency Operations Centre Geospatial Analysis

- **Release Date:**
- **Regional Focus:** Sierra Leone
- **Description:** Amid the COVID-19 pandemic, the Government of Sierra Leone has activated a National COVID-19 Emergency Operations Centre, comprised of various government bodies, to work with international parties—such as GRID3; Esri; Maxar Technologies; Fraym; Global Partnership for Sustainable Development Data; and UN Economic Commission for Africa—on pandemic response. The organizations use

geospatial datasets under an open, non-commercial license to produce analyses and tools that support official COVID-19 response. The geospatial data helps clarify various risk factors for COVID-19 infection as well as socio-economic vulnerability to shocks that the pandemic might cause.
- **Participants:** Directorate of Science, Technology & Innovation; Statistics Sierra Leone; Ministry of Information and Communication; Ministry of Health and Sanitation; GRID3; Esri; Maxar Technologies; Fraym; Global Partnership for Sustainable Development Data; UN Economic Commission for Africa
- **Contact:** N/A

Africa Centres for Disease Control Data Portal

- **Release Date:** March 2020
- **Regional Focus:** Africa
- **Description:** The Africa Centres for Disease Control created a dashboard to visualize publicly reported coronavirus-related statistics. Individuals who visit the can view in which countries and regions public health authorities report the most cases. Individuals can also find recommended health practices and health policy updates via the site.
- **Participants:** African Union; Africa Centres for Disease Control
- **Contact**: africacdc@africa-union.org

GEPP Ghana

- **Start Date:** August 2019
- **Regional Focus:** Ghana
- **Description:** In August 2019, shortly before COVID-19 began to spread, the Korean telecommunications provider KT and the Ghanaian government finished development of GEPP Ghana, a platform intended to help Ghana fight pandemics. The platform has warns Ghanaians who are visiting epidemic-prone areas, enables the public to make real-time reports to health officers, and helps the government monitor the crisis using data collected and provided by residents. The platform was developed to help Ghana respond to the Ebola virus.
- **Participants**: KT; Ghana Health Service
- **Contact:** kt.gmrt@gmail.com

Global

COVID-19 Data Collaborative: Providing functional and trusted access to Mobility Data for Transforming current and future Epidemic Monitoring and Response

- **Start Date**: 13 March 2020

- **Regional Focus:** Global
- **Description**: Cuebiq proposes to make its anonymized mobility data and data expertise available to trusted researchers of COVID-19 to study aggregate human mobility patterns as COVID-19 spreads, the secondary impacts of the disease and health interventions, and to model the possible spread of the disease based on historic mobility patterns. It also proposes creating an online Situation Room for regular check-ins for researchers working on these areas.
- **Participants**: Cuebiq; Independent Researchers
- **Contact**: Brennan Lake, Cuebiq

HealthMap: Novel Coronavirus (COVID-19)

- **Start Date**: 2006
- **Regional Focus:** Global
- **Description**: HealthMap is a situational awareness and social listening platform originally created in 2006 and now in use in the context of the coronavirus pandemic. The platform collects data from local newspapers, social media, and other local data sources to generate a dynamic, publicly-accessible map of the outbreak. HealthMap seeks to track both the spread of the disease and shifts in public perception surrounding it. The dataset behind this project and the related working group can be found on GitHub at: https://github.com/beoutbreakprepared/nCoV2019.
- **Participants**: Harvard Medical School, World Health Organization, Centers for Disease Control and Prevention
- **Contact**: Professor John S. Brownstein, Harvard Medical School

Measuring the Coronavirus' impact on trade

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: MarineTraffic analyses vessel traffic data collected through the Automatic Identification System (AIS) which vessels are equipped with, to represent COVID-19's impact on trade. Researchers use visualisation to show impact. The site will keep updating as new data becomes available.
- **Participants**: MarineTraffic; various AIS volunteers
- **Contact**: MarineTraffic Research

COVID-19 Therapeutics Accelerator

- **Start Date**: March 20, 2020
- **Regional Focus:** Global

- **Description**: The Gates Foundation, Mastercard Center for Inclusive Growth, and Wellcome Trust are funding and coordinating a COVID-19 Therapeutics Accelerator, which will work with national and international bodies as well as regulatory institutions to coordinate research and development around drug development efforts to address the epidemic.
- **Participants**: Gates Foundation, Mastercard Center for Inclusive Growth, Wellcome Trust
- **Contact**: Casey Stavropoulos, Mastercard

COVID19 Infodemics Observatory

- **Start Date**: Early March 2020
- **Regional Focus:** Global
- **Description**: A digital platform for the interactive visualization of the infodemic risk due to exposure to unreliable information in Twitter. To date, more than 140M messages analyzed. Based on network science/machine learning techniques to classify human vs non-human (bot) activity, as well as to classify the reliability of news sources according to a huge database of several expert-curated lists. Aggregated data and results publicly available.
- **Participants**: Fondazione Bruno Kessler (Italy)
- **Contact**: Manlio De Domenico, CoMuNe Lab, FBK

CoronaCheck

- **Start Date**: 13 March 2020
- **Regional Focus:** Global
- **Description**: This project's focus is on the automatic verification of statistical claims about coronavirus to fight online misinformation. Its methods for computational fact checking are based on machine learning. Every claim assessment is explained with the (automatically generated) query that has been used to check it. When the model is not able to verify the claim, the site asks users for feedback to create new training data with a crowdsourcing approach. Participants are working on the project to expand it in terms of datasets, statistical operations and supported languages.
- **Participants**: EURECOM (France); Cornell University (USA)
- **Contact**: Paolo Papotti (EURECOMAIr), Immanuel Trummer (Cornell)

SurveyCOVID19.com

- **Start Date**: March 2020
- **Regional Focus:** Global

- **Description**: This initiative intends to create an original and representative survey dataset on public sentiment, behavior, and mental/financial health during the COVID-19 pandemic. The resource is updated daily. Those interested in volunteering, please reach out to covid19surveyinfo@gmail.com
- **Participants**: Various volunteers representing a range of expertise. See full list here.
- **Contact**: covid19surveyinfo@gmail.com

COVID-19 Online Survey

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: This initiative intends to assess public knowledge of COVID-19 as well as public trust in response efforts. The information will allow researchers to analyze the socio-behavioral aspects of outbreak control to ensure future response efforts are people-centered and communicate in a constructive manner.
- **Participants**: Brigham and Women's Hospital; Harvard Humanitarian Initiative
- **Contact**: Dr. Phuong Pham, Harvard Humanitarian Initiative

Safe Paths

- **Start Date**: 17 March 2020
- **Regional Focus:** Global
- **Description**: The Safe Paths app is a free and open-source application for Android and iOS devices that tracks the user's movement and who they have been near to better control COVID-19's spread. Users can see if they have come in contact with anyone carrying coronavirus. To preserve privacy, information between phones is encrypted and does not pass through a central authority.
- **Participants**: MIT Media Lab; Genetic Consulting; Facebook; Harvard University; TripleBlind; Massachusetts General Hospital; Mayo Clinic; GSI Research and Consulting; Public Consulting Group; EyeNetra, Inc; Plant-for-the-Planet; Link Ventures; International Digital Health & AI Research Collaborative; World Health Organization; US Department of Health and Human Services
- **Contact**: Ramesh Raskar, MIT Media Lab

Predict COVID-19: comparing contagion predictions to improve policy making

- **Start Date**: 17 March 2020
- **Regional Focus:** Global
- **Description**: The project aims to compare and, eventually, integrate, different predictive models of COVID-19 contagion, based on machine learning and/or on

health econometric models. With the aim of producing highly accurate models that can be reliable for policy interventions. Predictions may concern the number of infected people, the number of hospitalised people, the number of severe cases, and the number of deceased. Each prediction has a different meaning in terms of policy. The project aims also to assess the effect of policy intervention, comparing their effect on the observed outcomes.
- **Participants**: University of Pavia (Italy, coordinator); machine learning, econometrics and statistics experts from a consortium of 24 Universities and start-up companies in Europe, including University College of London, Humboldt University of Berlin, Paris I University (Sorbonne), Zhaw University of Zurich, WU Vienna, University Complutense of Madrid, ASE Bucaresti, Josef Stefan Institute Lijubliana, University College Dublin
- **Contact**: Paolo Giudici, University of Pavia

Disease Prevention Maps

- **Start Date**: May 2019
- **Regional Focus:** Global
- **Description**: Facebook's Disease Prevention Maps use anonymized and aggregated versions of the company's mobility data (acquired from Facebook users who opt-in to have Location Services enabled) to aid vetted NGOs and researchers respond to public health crises. In response to COVID-19, it is developing maps for Hong Kong, Taiwan, South Korea, Singapore, Japan, Italy, 20 US metro areas, and Mexico City, and more can be generated upon request.
- **Participants**: Facebook
- **Contact**: Alex Pompe, Facebook (alexpompe@fb.com)

Mapping for humanitarian aid and development with weakly and semi-supervised learning

- **Start Date**: April 2019
- **Regional Focus:** Global
- **Description**: Facebook artificial intelligence researchers and data scientists created high-resolution population maps for 22 countries using census and satellite data in conjunction with machine learning techniques. The resource is intended to help humanitarian organizations determine how to best deliver services and where remote populations might be located. The maps are available on UN OCHA's Humanitarian Data Exchange and Amazon AWS Open Data Sets.
- **Participants**: Facebook, Columbia University
- **Contact**: Alex Pompe, Facebook (alexpompe@fb.com)

Crowdtangle COVID-19 Dashboard

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: Facebook researchers have created a dashboard to collect social media content from various channels on the coronavirus. These cover 21 languages and tracking across a variety of social media platforms.
- **Participants**: Facebook
- **Contact**:

Kaggle Initiatives

- **Start Date**: N/A
- **Regional Focus:** Global
- **Description**: Kaggle, the online community of data scientists and machine learning researchers, hosts several initiatives on coronavirus. Here, individuals from around the world come together to share datasets, comment on issues, and conduct analysis.
- **Participants**: Various
- **Contact**: N/A

Tableau COVID-19 Data Hub

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: The company Tableau has created a free resource page about COVID-19 and the response to it. The page includes datasets shared and reported by health organizations, news outlets, and other trusted sources of information as well as visualizations of that information. It also includes a quickstart Tableau dashboard to help individuals explore the data. These assets can be directly accessed and downloaded to promote understanding of the situation and facilitate an organized response. Users are encouraged to use the data for their own analysis and to participate in the community conversation at: https://community.tableau.com/community/resources/covid-19-forum/activity
- **Participants**: Tableau; Mapbox; Path; Snowflake; Datablick; Starschema
- **Contact**: Nick Hara, Tableau

COVID19 Galaxy Project

- **Start Date: 27 February 2020**
- **Regional Focus:** Global

- **Description**: Using free, publicly available software tools, researchers studied all COVID-19 genomic data available in the public domain to reconstruct a full-length COVID-19 genome, estimate the date of the most recent common ancestor of COVID-19, analyze genomic variation within samples, and conduct recombination and selection analysis. Through this work, the researchers sought to emphasize the need for more primary data to better respond to global emergencies and demonstrate how analysis could be done transparently with open-source, publicly available tools.
- **Participants**: Galaxy Team of Penn State's Center for Comparative Genomics and Bioinformatics; HyPhy
- **Contact**: Anton Nekrutenko; Sergei L. Kosakovsky Pond

The Open Data Kit: mobile data collection tools for COVID-19 response

- **Start Date**: 2008
- **Regional Focus**: Global
- **Description**: The Open Data Kit (ODK) is a free, open-source software that collects data quickly, accurately, offline, and at scale. The software is in active use around the world, supported by an active community of users. ODK was used at scale in the Ebola outbreaks in 2014 in West Africa and the recent outbreak in the Democratic Republic of the Congo in 2018. Use-cases included contact tracing, decision support, community education, strategic mapping, and case management. ODK's lead developers are offering free and ongoing help for any organization working on the COVID-19 response. Individuals can request support through it at https://forms.gle/xMJZPAzKQwgeMzE17
- **Participants**: Nafundi
- **Contact**: Yaw Anokwa, yanokwa@nafundi.com

Data-Driven Curation of COVID-19 News based on bias

- **Start Date**: May 2019
- **Regional Focus:** Global
- **Description**: VeriCrypt measures bias in text and can be used to score how objective the text is. In this time, our news infrastructure is being overwhelmed by sensational headlines, which in fact bury important information both related to and unrelated to COVID-19. This project prioritizes/bubbles up the most objective news content right now, and can be helpful to users who are trying to sort through growing amounts of information.
- **Call for action:** if you are a news provider interested in partnering with us, please reach out via email!
- **Participants**: Vericrypt's team and network

- **Contact**: teamvericrypt@gmail.com

COVID WikiProjects (Wikipedia + Wikidata)

- **Start Date**: January 2020
- **Regional Focus:** Global
- **Description**: Maps of the pandemic, underlying data, properties + schemas for related data feeds and sources; integration into Wikipedia articles in ~100 languages
- **Participants**: (a host of wikipedians) the set of overview maps/templates for the pandemic have over 1000 contributors.
- **Contact**: Lane Rasberry

Opendemic

- **Start Date**: 17 March 2020
- **Regional Focus:** Global
- **Description**: Opendemic is an app created by students at Harvard University and the Massachusetts Institute of Technology that allows users to anonymously share their location and COVID-19 status on a daily basis. Using this information, the app notifies users if they have been in proximity with any potential cases. The information is only shared with relevant public health authorities.
- **Participants**: Student technologists at Harvard University and the Massachusetts Institute of Technology
- **Contact**: David Hachuel, Harvard University; Alfonso Martinez, Massachusetts Institute of Technology

UNICEF Innovation - Magic Box

- **Start Date:** 2014
- **Regional Focus:** Global
- **Description:** UNICEF is through its big data platform, Magic Box, working to measure the secondary effects of COVID-19 and response efforts, to understand the impacts on social behavior, education, critical supplies, sentiment, opinion, and vulnerable populations. In addition to providing guidance on how to pinpoint and combat misinformation about COVID-19.
- **Participants:** UNICEF Innovation is creating a network of researchers to measure and quantify the secondary effects of COVID-19 and to mitigate and combat the effects of misinformation. They are leveraging data from private companies and have partnered with researchers from multiple universities, including University of Notre Dame, Copenhagen University, MIT, and Humboldt University.

- **Contact:** mherranz@unicef.org

UN Office for the Coordination of Humanitarian Affairs - Humanitarian Data Exchange COVID-19 Pandemic Page

- **Start Date**: 22 January 2020
- **Regional Focus:** Global
- **Description**: Datasets and visualizations from a wide variety of humanitarian partners; new partners and sources added every day. As of 19 March, the dashboard contains novel coronavirus case data from Johns Hopkins School of Public Health and the World Health Organization (WHO); global travel restrictions and airline information from the World Food Programme (WFP), global school closures from the UN Educational, Scientific and Cultural Organization (UNESCO), a dataset of government measures from ACAPS, a variety of World Bank 'indicators of interest', and data from a study on knowledge and perceptions of coronavirus in South Africa, Kenya, and Nigeria from GeoPoll.
- **Participants**: UN Office for the Coordination of Humanitarian Affairs and partners including Johns Hopkins University, WHO, WFP, UNESCO, ACAPS, the World Bank, and GeoPoll.
- **Contact**: centrehumdata@un.org

How the Virus Got Out

- **Start Date**: 22 March 2020
- **Regional Focus:** Global
- **Description**: Using data from public health, transportation, telecommunications, and other sources, the New York Times visualized how coronavirus spread from Wuhan through China and across the world.
- **Participants**: New York Times
- **Contact**: Jin Wu, Weiyi Cai, Derek Watkins and James Glanz, New York Times

COVID-19 Digital Rights Tracker

- **Start Date**: 20 March 2020
- **Regional Focus:** Global
- **Description**: Top10VPN, the digital privacy monitor, is tracking government responses to the COVID-19 pandemic and its effect on digital rights. On a regional and country-level basis, the organization is noting where digital tracking efforts, censorship, and surveillance is occurring. It is updated weekly.
- **Participants**: Top10VPN

- **Contact**: Samuel Woodhams, Top10VPN

CoEpi: Community Epidemiology In Action

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: The CoEpi Project is an initiative to build an mobile app that will provide users with contextual hygiene reminders, show a timeline of personal location history, alert individuals when they come in contact with other CoEpi users, allow individuals to track their respiratory and gastrointestinal symptoms, and share relevant information with public health officials. The app and server code will be open source and free to use.
- **Participants**: Online volunteers
- **Contact**: N/A

COVID-19 Data Exchange

- **Start Date**: 26 March 2020
- **Regional Focus:** Global
- **Description**: The COVID-19 Data Exchange Initiative is a pro bono effort launched by data-exchange company Dawex to allow organizations to share non-personal data that could be useful in addressing COVID-19 and its economic impacts. Through a centralized platform, public and private organizations can share statistical data, research data, anonymized raw data, test results, equipment sourcing and inventory data, sentiment data, and other assets.
- **Participants**: Dawex; Deloitte; Microsoft
- **Contact**: contact@covid19-dataexchange.org

Location Data in Action: Heatmaps To Track Coronavirus Across the Globe

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: Tectonix, a data visualization company, and X-Mode, a location-technology company, collaborated on an effort to measure social distancing, whether individuals were isolating themselves. Researchers created heat maps showing movement over a four-week period, demonstrating the effect of isolation and lockdowns on mobility and subsequent disease spread.
- **Participants**: X-Mode; Tectonix
- **Contact**: Joseph Green, X-Mode

Data Wrangling and Progressive LOD Cloud Knowledge Graph Enhancement

- **Start Date**: 17 March 2020
- **Regional Focus:** Global
- **Description**: This resource documents volunteer efforts to develop knowledge graphs based upon various open and linked datasets on the COVID-19 pandemic for researchers to use and share.
- **Participants**: Kingsley Uyi Idehen
- **Contact**: Kingsley Uyi Idehen

COVID-19 GIS Hub

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: The global mapping service Esri is using its community to provide visualizations of the COVID-19 pandemic. Individuals can map cases, vulnerable populations, disease spread and capacity to improve the ability of organizations to communicate via maps.
- **Participants**: Esri
- **Contact**: N/A

COVID-19 Pandemic Symptom Trackers

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: The Alan Turing Institute has created a dedicated resource on GitHub to serve as a repository of COVID-19 pandemic symptom trackers. These trackers can be from governments, academia, commercial organizations, and individuals.
- **Participants**: Alan Turing Institute
- **Contact**: N/A

COVID-19 PoliMap: A global repository of policy responses to tackle COVID-19

- **Start Date**: March 25, 2020
- **Regional focus**: Global
- **Description**: The objective is to develop a data repository of the policy responses to COVID-19 that each of the countries worldwide have adopted. The database will be open access and available on GitHub, with updates on a weekly basis. Additionally, it will develop a visualization tool to allow policy-makers to obtain country-specific

reports and to compare policy responses across countries and subnational units, as well as over time.
- **Participants**: Collaboration group of researchers and practitioners
- **Contact**: sebastian.penafajuri@thl.fi

Djinn Sensor

- **Start Date**: November 2018
- **Regional Focus:** Global
- **Description**: Djinn Sensor is a vendor offering a device and cloud service being used to monitor the indoor air quality of health and social institutions. The system detects conditions amenable to disease spread, including COVID-19. The monitor collects information on CO2, dust, volatile organic compounds, temperature, humidity, and other information on the environment to warn users when there is increased risk of spreading respiratory tract infections or might be health risks to healthcare workers and patients. This analysis is based on Avicenna Math, a mathematical software package for analyzing, processing, submitting, and presenting information of environmental factors on human health.
- **Participants**: Medium Systems LLC UK; Djinn Sensor
- **Contact**: Alesia Dusmikeeva, hello@djinnsensor.com

COVID-Net: A Tailored Deep Convolutional Neural Network Design for Detection of COVID-19 Cases from Chest Radiography Images

- **Start Date**: 22 March 2020
- **Regional Focus:** Global
- **Description**: Researchers with the University of Waterloo, Canada and DarwinAI Corp. collaborated on a study to improve the effectiveness of screening of patients with COVID-19. The study introduces an AI system, COVID-Net, a neutral network designed to detect COVID-19 cases from chest radiography images. The system is open source and available to the general public, with the hope that broad access might allow the system to be built upon and improved by other researchers and data scientists to accelerate treatment for those who need it.
- **Participants**: University of Waterloo, Canada; Waterloo Artificial Intelligence Institute; DarwinAP Corp
- **Contact**: Linda Wang, University of Waterloo, Canada

Quantified Flu

- **Start Date**: 25 November 2019

- **Regional Focus:** Global
- **Description**: Quantified Flu is a research project that aims to study whether physiological data collected by wearable devices can predict when people are becoming sick. Individuals can share information about themselves, their past illnesses, and their future symptoms, which will be made available in an aggregated and de-identified form for individual researchers. The project has recently incorporated COVID-19 into its work.
- **Participants**: Open Humans Foundation; Center for Research & Interdisciplinarity
- **Contact**: Mad Price Ball, Open Humans Foundation

Data Visualization Society COVID-19 Partnership

- **Start Date**: Unknown
- **Regional Focus:** Global
- **Description**: Data Visualization Society links data visualization experts and health practitioners who are working on COVID-19 to collaborate and make COVID-19 data more accessible to the wider audience.
- **Participants**: Data Visualization Experts, Health Practitioners
- **Contact**: Data Visualization Society

COVID-19 public dataset program: Making data freely accessible for better public outcomes

- **Start Date**: 30 March 2020
- **Regional focus**: Global
- **Description**: To support research into COVID-19, Google is hosting a repository of datasets from John Hopkins, the World Bank, OpenStreetMaps, and others. Individuals can freely use Google's BigQuery ML to try and train machine learning models on the data.
- **Participants**: Google; John Hopkins Center for Systems Science and Engineering; World Bank; OpenStreetMaps
- **Contact**: Chad W. Jennings, Google

Virus Outbreak Data Network

- **Start Date**: March 2020
- **Regional focus**: Global
- **Description**: The GO FAIR Foundation, in the interest of ensuring that data relevant to the coronavirus is findable, accessible, interoperable, and thus reusable by humans and machines for response work, is assembling a network of experts. The

organization is both assembling and offering support from a network of experts who can make it easier for local caregivers to create FAIR clinical research form data.
- **Participants**: Various. See full list.
- **Contact**: Bert Meerman, GO FAIR Foundation (Contact Form)

FAIRsharing resource

- **Start Date**: 2011
- **Regional focus**: Global
- **Description**: FAIRsharing.org is a curated, informative and educational resource on data and metadata standards, inter-related to repositories and data policies. FAIRsharing guides consumers to discover, select and use these resources with confidence, and producers to make their resources more findable, more widely adopted and cited. The FAIRsharing COVID-19 Collection has been launched to collate coronavirus, clinical trial, public health and patient data-related formal databases, repositories, registries and standards.
- **Participants**: Various, also part of GO FAIR and the Research Data Alliance, see communities and adopters; the Operational Team is based at the University of Oxford, UK.
- **Contacts**: Email: contact@fairsharing.org; Twitter: @fairsharing_org

UN Global Platform (*Working together, learning together*)

- **Start Date**: April 2018
- **Regional Focus:** Global
- **Description**: Under the United Nations Global Working Group on Big Data for Official Statistics the UN Global Platform has developed a cloud-service ecosystem to support international collaboration in the development of Official Statistics using new data sources and innovative methods and to help countries measure the Sustainable Development Goals (SDGs) to deliver the 2030 Sustainable Development Agenda. The UN Global Platform has Hubs in Brazil, UAE, China and Africa. The live data feeds of flights and shipping is currently used for economic and other indicators related to Covid-19. In collaboration with Planet high resolution satellite imagery is also available to the user community.
- **Participants**: Australia; Bangladesh; Brazil; Cameroon; Canada; China; Colombia; Denmark; Egypt; Germany; Indonesia; Ireland; Italy; Mexico; Morocco; Poland; Netherlands; Oman; Pakistan; Philippines; Rwanda, Republic of Korea; Saudi Arabia; South Africa, Switzerland; United Arab Emirates; United Kingdom; United Republic of Tanzania; United States of America, United Nations Statistics Division, United Nations

Economic Commission for Africa , Nations Economic and Social Commission for Asia and the Pacific, United Nations Economic Commission for Europe, United Nations Statistical Institute for Asia and the Pacific, United Nations Global Pulse, International Telecommunication Union, Universal Postal Union, African Development Bank; CARICOM, GCCSTAT, Eurostat/European Commission, International Monetary Fund, OECD, World Bank

- **Contact**: support@officialstatistics.org

Collective and Augmented Intelligence Against Covid-19 (CAIAC)

- **Start Date**: April 2020
- **Regional Focus:** Global
- **Description**: A dynamic, easy-to-use Knowledge Base and 'Sense-Making' Platform - combining collective and augmented intelligence-to structure the world's information on Covid-19 and make it immediately useful for front-line policy makers, healthcare leaders, the scientific community, and other stakeholders. Our mission is to create a system that helps decision makers navigate and make sense of information for a holistic, efficient response to the health, economic, and social implications of COVID-19 - as well as potential future pandemics.
- **Participants**: The Future Society, Stanford HAI, UN Global Pulse, UNESCO, Stability.ai
- **Contact**: Cyrus Hodes(cyrus@ai-initiative.org)

MOBS Tracking Platforms

- **Start Date**:
- **Regional focus**: Global
- **Description**: The Laboratory for the Modeling of Biological and Socio-Technical Systems (also known as MOBS Lab) at Northeastern University has, in coordination with international research institutions, developed several platforms which could improve understanding of COVID-19 and its spread. These platforms include EpiRisk, a platform that provides quick estimates of probability of people from regions affected by disease spreading an outbreak to other regions. It also includes the Risk Analysis Dashboard, which assesses the risk of importing a case of COVID-19, and a situation report on mainland China. The analyses from these platforms inform papers and reports published by MOBS lab.
- **Participants**: Laboratory for the Modeling of Biological and Socio-Technical Systems; University of Florida; Northwestern University; Fred Hutchinson Cancer Research Center; ISI Foundation; NIH Fogarty Institute; Bruno Kessler Foundation
- **Contact**: a.vespignani@neu.edu

COVID-19 Citizen Science

- **Start Date**: 26 March 2020
- **Regional focus**: Global
- **Description**: Physician-scientists at the University of California, San Francisco launched an application that seeks to improve understanding of how novel coronavirus spreads. The application asks users to complete a 10–15 minute survey about their health and daily habits. Individuals can receive follow-up questions to their device, which could take between 5 and 15 minutes a week. They can also provide location data or data from biometric devices to enable study of the virus. The project is built on the Eureka platform, funded by the National Institutes of Health and National Institute of Biomedical Imaging and Bioengineering.
- **Participants**: University of California, San Francisco
- **Contact**: Gregory Marcus, COVID-19 Citizen Science

Mozilla Social Distancing Analysis

- **Start Date**: 30 March 2020
- **Regional focus**: Global
- **Description**: Data scientists at Mozilla released and conducted analysis on an observational dataset describing aggregated desktop usage of Firefox, which they believe could be useful for assessing social distancing measures. Researchers found increases in usage outside normal hours in countries such as France after 16 March, when many countries started instituting social distancing measures. The full dataset, which identifies deviations at the country and city level, is available to the public under the Creative Commons.
- **Participants**: Mozilla
- **Contact**: Jesse McCrosky, Mozilla

Epidemic Datathon

- **Start Date**: 30 March 2020
- **Regional focus**: Global
- **Description**: This project calls upon developers to create better epidemic modeling and forecasting to understand the spread of COVID-19 in various regions. The organizers will release the models created through this hackathon to the public, in an effort to help stop the spread of the disease.
- **Participants**: ETH Zürich; University of California, Los Angeles; University of Bologna; University of Zagreb; New York University
- **Contact**: info@epidemicdatathon.com; Nino Antulov-Fantulin (Computational Social Science, ETH); Dirk Helbing (Computational Social Science, ETH); Lucas Böttcher

(Computational Medicine, UCLA & Institute for Theoretical Physics, ETH); Zhang Ce (DS3-LAB, Computer Science, ETH); David Dao (DS3-LAB, Computer Science, ETH)

COVID-19 Worldwide Survey - IReport-Covid App

- **Start Date**: Unknown
- **Regional focus**: Global
- **Description**: Algorand Foundation initiated a worldwide survey to capture people's experience with COVID-19, including symptoms (if any), medical care, and quarantine information. The survey is recorded on a public blockchain, therefore cannot be changed. People whose experience changes can add new information through the app.
- **Participants**: Algorand Foundation
- **Contact**: contact@algorand.foundation

The COVID-19 Host Genetics Initiative

- **Start Date**: March 2020
- **Regional focus**: Global
- **Description**: This initiative facilitates collaboration among the human genetics community to share and analyze data to generate insights about the genetic determinants of COVID-19 susceptibility, severity, and outcomes.
- **Participants**: List of Partners
- **Contact**: Contact Form; Andrea Ganna and Mark Daly, University of Helsinki's Institute for Molecular Medicine Finland (FIMM)

MIDAS Online Portal

- **Start Date**: Unknown
- **Regional focus**: Global
- **Description**: MIDAS (Models of Infectious Disease Agent Study), a network of infectious disease experts, created an online portal for COVID-19 modeling research where researchers can exchange data, events, funding opportunities, and other information related to the disease.
- **Participants**: MIDAS members
- **Contact**: questions@midasnetwork.us

Data Against COVID-19

- **Start Date**: 20 March 2020
- **Regional focus**: Global

- **Description**: Data Against COVID-19 is an online platform meant to help facilitate the work of individuals interested in contributing to work on COVID-19. The site redirects clinicians to a survey where they can report local cases and redirects data scientists and members of the public to dedicated communities where they can provide their knowledge and expertise.
- **Participants**: Volunteer medical professionals and life and data scientists
- **Contact**: Various. See full list here

Citymapper Mobility Index

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: CityMapper, the public transit and mapping service, is providing an analysis of its app's usage to attempt to represent mobility in major cities. Every two days, the company posts comparisons of how many people are planning trips in the app relative to a typical usage period. These comparisons are used as proxies for "percent of the city moving."
- **Participants**: CityMapper
- **Contact**: N/A

COVID-19 Disinformation Report

- **Start Date**: February 2019
- **Regional Focus:** Global
- **Description**: AI analytics company, Blackbird, published two reports on disinformation surrounding COVID-19. The company analyzed over 50 million tweets from over 15 million unique users to track where and how false information is spread online. The company found that 38% of the analyzed tweets contain manipulated content.
- **Participants**: Blackbird AI
- **Contact**: Contact Form

bit.io CovidExplorer: SQL access to up-to-date COVID-19 Data

- **Start Date**: 2020
- **Regional Focus:** Global
- **Description**: The bit.io/covid open data repo contains prominent and up-to-date COVID-19 related datasets. Users can explore the data via a SQL interface or request direct database access credentials to use their own analysis tool or build an app on the data. To add data, contact: covid@bit.io
- **Participants**: bit.io
- **Contact**: Adam Fletcher, Dr. Jonathan Mortensen, bit.io, covid@bit.io

UN COVID-19 Data Hub

- **Start Date**:
- **Regional Focus:** Global
- **Description**: Organized by UN Department of Economic and Social Affairs Statistics (DESA), the UN COVID-19 Data Hub provides various geospatial datasets and web services to support the analysis and visualization of information relevant to the response to the pandemic. Its data offerings are organized into four categories: COVID-19 data, healthcare resources, economic, and population.
- **Participants**: United Nations Department of Economic and Social Affairs Statistics
- **Contact**: covid-19.stats@un.org

COVID-19 Mobility Data Network

- **Start Date**: 26 March 2020
- **Regional Focus:** Global
- **Description**: The COVID-19 Mobility Data Network is a network of researchers at institutions such as Harvard TH Chan School of Public Health, Indian University of Bombay, and Warwick University who have agreed to collaborate with technology companies to produce situation reports on COVID-19. Data from companies such as Facebook, Camber Systems, Cuebiq informs intelligence reports that local officials can use to inform their decision making.
- **Participants**: Various. See ful list here.
- **Contact**: contact@covid19mobility.org

How OpenMRS Can Help Countries Flatten the COVID-19 Curve

- **Start Date**: 24 Jan 2020
- **Regional Focus:** Global
- **Description**: The Columbia International Ehealth Laboratory (CIEL) has produced an open source data dictionary to support applications managing COVID-19. Updated on a regular basis, this concept dictionary contains terminology mapped to international standards like SNOMED, ICD-10, LOINC, RxNORM to support use cases like screening, reporting to CDC and WHO, etc. Distributed through dropbox or the Open Concept Lab. A subset of terms can be found here: https://openconceptlab.org/orgs/CIEL/collections/COVID-19-Starter-Set/concepts/
- **Participants**: Columbia International eHealth Laboratory, OpenMRS, Open Concept Lab
- **Contact**: Andrew Kanter ask2164@cumc.columbia.edu

@CoronaSurveys: Monitoring the Incidence of COVID-19 via Open Surveys

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: @CornaSurveys is an initiative launched by a network of university scientists to improve detection of the SARS-CoV-2 virus through surveys. By visiting the site and navigating to their country of residence, individuals can answer questions about whether they are suffering symptoms consistent with COVID-19. The site claims to estimate cases with 95 percent accuracy. This data will be used to estimate the number of infected persons.
- **Participants**: Institute IMDEA Networks; University of Cyprus; Algolysis; USC Viterbi School of Engineering; Technical University of Darmstadt; Tokyo University of Agriculture and Technology; University of Edinburgh Informatics; University of Minho; Institute for Systems and Computer Engineering, Technology and Science; University of Trent
- **Contact**: Antonio Fernandez Anta, IMDEA Networks Institute; cornoasurveys@gmail.com

Global COVID-19 Case Fatality Rates

- **Start Date**: 17 March 2020
- **Regional Focus:** Global
- **Description**: Oxford University's Centre for Evidence-Based Medicine is providing daily updates on the COVID-19 pandemic using estimates built on official statistics scraped from worldometers.info. The analysis is notable for estimating the fatality in all those with the infection and among those with undetected infections.
- **Participants**: Centre for Evidence-Based Medicine at Oxford University
- **Contact**: Mandy Payne, Health Watch

ResearchGate COVID-19 Research Community

- **Start Date**: 6 April 2020
- **Regional Focus:** Global
- **Description**: ResearchGate, the social networking site for researchers, created a discussion group on its website devoted to COVID-19 to facilitate collaboration on it. The site boosts the visibility of COVID-19 research, allows users to ask questions that other researchers might be studying, and facilitates other conversations.
- **Participants**: ResearchGate
- **Contact**: N/A

Data-Pop Alliance's C-19 Observatory

- **Start Date**: March 2020
- **Regional Focus:** Global South
- **Description**: The Data-Pop Alliance is monitoring the spread of COVID-19 in countries across the Global South using its network of local actors. It is compiling estimated deaths and providing country briefs, relying on World Bank data sources, that it hopes can inform local actors.
- **Participants**: Data-Pop Alliance
- **Contact**: covid19@datapopalliance.org

Humanitarian OpenStreetMap Team COVID-19 Work

- **Start Date**: 2010
- **Regional Focus:** Global
- **Description**: The Humanitarian OpenStreetMap Team (HOT) is a volunteer non-profit that uses donated satellite imagery to create open-source maps on the OpenStreetMap platform of under-mapped regions so that governments and other groups can better provide services to individuals there. For its COVID-19 work, as with all its projects, anyone can volunteer to contribute so long as they complete a mandatory online training. HOT leaders report over 1,400 contributors on COVID-19-related work, tagging over 200,500 buildings and 3,000 miles of road.
- **Participants**: Humanitarian OpenStreetMap Team; Maxar
- **Contact**: info@hotosm.org

Carrot Health Critical Infection Risk Dashboard and Index

- **Start Date**: 8 April 2020
- **Regional Focus:** United States
- **Description**: Carrot Health, the Minneapolis-based health software company, created a dashboard using Tableau that represents estimates of novel coronavirus infection, critical case volume, and mortality. This information appears in both a series of charts and an interactive county map of the United States. The representation is based on Carrot Health's demographic and behavior data on US adults as well as data from the Centers for Disease Control and Dartmouth Atlas. The estimates rely on research published in the Journal of the American Medical Association, New England Journal of Medicine, and CDC Morbidity and Mortality Report.
- **Participants**: Carrot Health
- **Contact**: Contact form

Apple and Google COVID-19 Contact Tracing

- **Start Date**: 10 April 2020
- **Regional Focus:** Global
- **Description**: Apple and Google announced they would partner to allow their platforms to conduct contact tracing that was interoperable between Android and iOS devices. The coming change will use bluetooth to determine whether any user has come into close contact with any other user who indicates they have tested positive for COVID-19. Information is stored locally to preserve privacy and security. Draft technical documentation was released alongside the announcement.
- **Participants**: Apple; Google
- **Contact**: Fred Sainz, Apple (sainz@apple.com)

Amazon Web Services COVID-19 Data Lake

- **Start Date**: 10 April 2020
- **Regional Focus:** Global
- **Description**: Amazon Web Services created a centralized repository of datasets related to coronavirus. The repository contains data gathered from John Hopkins, the New York Times, Definitive Healthcare, and other organizations. Individuals can use the data lake to experiment and try new forms of analysis that might be used to help local health authorities, epidemiologists, and others.
- **Participants**: Amazon Web Services; John Hopkins; New York Times; Definitive Healthcare; Allen Institute for AI
- **Contact**: N/A

Monitoring World Heritage site closures

- **Start Date**: April 2020
- **Regional Focus:** Global
- **Description**: UNESCO is tracking the effect the COVID-19 epidemic is having on world heritage site. Through a dedicated webpage, visitors can see the number of countries with totally closed sites, the number that have kept sites open, and countries with partial closures. Staff have additionally done some analysis tracking the status of sites over time. The information will be updated on a weekly basis.
- **Participants**: UNESCO
- **Contact**: N/A

COVID-19 Health Behavior Survey

- **Start Date**: March 2020
- **Regional Focus:** Global

- **Description**: This online survey aims to collect timely data on people's reactions to the COVID-19 pandemic in terms of behaviors, attitudes, perceived risk, symptoms, health-seeking behavior, and daily social contacts. Such information will serve to provide insights into individual behavior across countries and to narrow the data gap about human behavior in response to epidemics. The survey is currently running in Belgium, France, Germany, Italy, Netherlands, Spain, United Kingdom and United States.
- **Participants**: Max Planck Institute for Demographic Research (MPIDR)
- **Contact**: Daniela Perrotta (perrotta@demogr.mpg.de), André Grow (grow@demogr.mpg.de), MPIDR

Vespa CORD-19 Search

- **Start Date**: 10 April 2020
- **Regional Focus:** Global
- **Description**: Verizon Media, the media devision of Verizon Communications, created a search engine for the open COVID-19 Open Research Dataset (CORD-19). Using text and structured searching, the engine tries to help researchers find specific articles on COVID-19 with greater ease.
- **Participants**: Verizon Media
- **Contact**: info@vespa.ai

Apple Mobility Trends Report

- **Start Date**: 14 April 2020
- **Regional Focus:** Global
- **Description**: Apple released its store of aggregated mobility data to support research into the spread of COVID-19. By visiting apple.com/covid19/mobility, individuals can view mobility trends for major cities and 63 countries or regions. The data comes from requests for directions made on the Apple Maps platform. The platform has built-in functionality to try and preserve user privacy.
- **Participants**: Apple
- **Contact**: jacqueline_roy@apple.com

EisphorIA COVID-19 Library

- **Start Date**: 2020
- **Regional Focus:** Global
- **Description**: EisphorIA, a legal data intelligence company, as created a library of COVID-19 related scientific papers, supported by the organization's search engine. The database requires researchers to register on the site with an institutional email before they can access the documents.
- **Participants**: EisophorIA

- **Contact**: N/A

GISAID

- **Start Date**: May 2008
- **Regional Focus:** Global
- **Description**: The GISAID Initiative is a public–private partnership between the Federal Republic of Germany, the nonprofit Friends of GISAID, and various other national health authorities to share "influenza virus sequences and related clinical and epidemiological data associated with avian and other animal viruses" to improve understanding of disease spread and pandemics. It provides public access to a collection of genetic sequence data of influenza viruses. GISAID has hosted discussions on COVID-19, provided a platform for countries to share COVID-19 genome sequences, and conducted other work to help improve understanding of novel coronavirus.
- **Participants**: Federal Government of Germany; Centers for Disease Control; Singapore Agency for Science, Technology and Research; Sanofi Pasteur's Foundation for Influenza Epidemiology; Friends of GISAID
- **Contact**: Contact form

MIT–World Bank COVID-19 Observatory

- **Start Date:** 16 April 2020
- **Regional Focus:** Global
- **Description:** The MIT–World Bank COVID-19 Observatory is an initiative which combines the efforts of computer scientists, social scientists, and business leaders to analyze and produce intelligence on data to improve COVID-19 response. Researchers aim to assess how social distance policies are implemented and the economic impact of restrictions. Participants hope to inform policymakers and the general public while respecting individual privacy.
- **Participants**: World Bank; MIT
- **Contact:** c19-observatory@mit.edu

PATH responds to COVID-19

- **Start Date:** April 2020
- **Regional Focus:** Global
- **Description:** PATH, the Seattle-based medical nonprofit, is working with ministries, governments, and companies to improve their capacity to respond to COVID-19. This work includes providing technical and logistical support to the Democratic Republic of Congo's Presidential COVID Task Force, developing data analytics and diagnostics with private industry in India, supporting disease surveillance in Senegal, and developing dashboards and mapping tools in Vietnam.

- **Participants**: PATH; various governments and businesses
- **Contact:** info@path.org

FAO's Big Data tool on food chains under the COVID-19 pandemic

- **Start Date:** 24 April 2020
- **Regional Focus:** Global
- **Description:** Researchers at the United Nations' Food and Agriculture Organization have created an open-access tool that gathers and analyzes information on a daily basis to assess the COVID-19 pandemic's effect on food and agriculture. The elements of this tool includes an analysis tool, which conducts sentiment analysis on COVID-19 tweets of over 270 newspapers; a food prices monitor, which provides average prices on 14 food commodities from 14 February onward; a Twitter Semantic Search to capture new topics and trends on Twitter; and a news search which provides news coverage on food chains across the world. Certain aspects of the tool require login to access.
- **Participants:** Food and Agriculture Organization of the United Nations;
- **Contact:** ESS-datalab@fao.org

UBS COVID-19 Insights

- **Start Date:** April 2020
- **Regional Focus:** Global
- **Description:** The Swiss multinational bank UBS has used datasets available on the open web to assess the impact of COVID-19 on the economy. This work includes monitoring Spotify performance, Amazon brand popularity, air pollution, and use of QSR apps.
- **Participants:** UBS Evidence Lab
- **Contact:** N/A

Interactive Splunk COVID-19 Dashboard

- **Start Date:** 14 March 2020
- **Regional Focus:** Global
- **Description:** Splunk, the multinational search software company, created an interactive dashboard displaying officially reported statistics on COVID-19. Users can view reported cases and deaths by country and see the information visualized on a map.
- **Participants:** Splunk
- **Contact:** Doug Merritt, Splunk

COVID-19: Insights & Feelings - Expert System

- **Start Date:** 28 April 2020
- **Regional Focus:** Global

- **Description:** The software company Expert System and the artificial intelligence company Sociometrica are analyzing the emotional content social media posts about COVID-19. The system, which specializes in semantics and natural-language reading, collects English posts that use hashtags such as #coronalockdown and #covid19. The companies produce reports every few days.
- **Participants:** Expert System; Sociometrica
- **Contact:** Contact on Twitter at @Expert_System or @apreiti

COVID19 DFI Tracker

- **Start Date:** 21 February 2020
- **Regional Focus:** Global
- **Description**: This initiative visualizes data of the disclosed COVID-19 related financing projects from 14 development finance institutions tracked by the Early Warning System. The data can be accessed at: bit.ly/COVID19_DFI_Tracker
- **Participants:** International Accountability Project, Early Warning System
- **Contact:** Contact on Twitter: @4accountability

Predictive Monitoring of COVID-19

- **Start Date:** May 2020
- **Regional Focus:** Global
- **Description:** Singapore University of Technology and Design's Data-Driven Innovation Lab is running an independent research project to apply predictive monitoring to COVID-19 statistics. The organization uses daily, updated data to estimate the pandemic life cycle curve globally and in 22 countries.
- **Participants:** Singapore University of Technology and Design Data-Driven Innovation Lab
- **Contact:** Contact form

COVIDEX - Advanced Information Retrieval for Clinical and Academic Literatures

- **Start Date:** April 2020
- **Regional Focus:** Global
- **Description**: This project from researchers at the University of Waterloo and New York University applies neutral networking and artificial intelligence to the COVID-19 Open Research Dataset to generate new insights that might be used to combat COVID-19. The work will improve search time and capacity.
- **Participants:** CIFAR; New York University; University of Waterloo
- **Contact:** Jimmy Lin, University of Waterloo (jimmylin@uwaterloo.ca); Kyunghyun Cho, New York University (kyunghyun.cho@nyu.edu)

Planning as Inference in Epidemiological Models

- **Start Date:** 30 March 2020
- **Regional Focus:** Global
- **Description**: This research, funded by CIFAR, the Canada-based charity, seeks to demonstrate how existing software tools can be used to automate disease control related to COVID-19 and other pandemics. The piece shows how insights can be gleaned from automated tools to develop more effective and less economically damaging solutions to the ongoing crisis.
- **Participants:** CIFAR; Mila; University of British Columbia
- **Contact:** Frank Wood, CIFAR AI Chair, Mila, and the University of British Columbia (fwood@ubc.ca)

Tracking Mental Health During the Coronavirus Pandemic

- **Start Date:** May 2020
- **Regional Focus:** Global
- **Description**: Researchers from CIFAR, the Canada-based charity, and Amii, the Alberta-based machine intelligence nonprofit, are working with the University of Alberta, Western University, and New York University to use social media to study the COVID-19 pandemic's effects on mental health. The research, funded by a CIFAR AI grant, will apply AI techniques and natural language processing to data from Twitter and Reddit.
- **Participants:** CIFAR; University of Alberta; Western University; New York University; Amii
- **Contact:** Alona Fyshe, Amii and CIFAR AI Chair (Contact form)

PsyCorona Study

- **Start Date:** 2 April 2020
- **Regional Focus:** Global
- **Description**: The PsyCorona Study is an initiative put forth by researchers at the University of Groningen and New York University Abu Dhabi to understand changes in human psychology resulting from the pandemic. The study involves a questionnaire seeking to understand the respondent's living situation, day-to-day activities, and other information. Several follow-up questionnaires will help researchers better understand daily activities, concerns, and feelings.
- **Participants:** University of Groningen; New York University Abu Dhabi
- **Contact:** Dr. Pontus Leander and/or Dr. Jocelyn Belanger (psycorona@rug.nl)

COVID-19 and world trade

- **Start Date:** 2020

- **Regional Focus:** Global
- **Description**: The World Trade Organization has created a centralized repository for its work in tracking the impact of COVID-19 on world trade. These resources include data-driven reports, WTO member proposals on the pandemic, andother useful collections of information.
- **Participants:** World Trade Organization; World Trade Organization member-states
- **Contact:** N/A

COVID-19 Disorder Tracker

- **Start Date:** May 2020
- **Regional Focus:** Global
- **Description**: The Armed Conflict Location and Event Data Project (ACLED), an NGO devoted to collecting and reporting conflict data, is maintaining a collection of analysis on COVID-19's impact on political violence and disorder around the world. This analysis, which combines the ACLED's real-time data on disorder with reported public health figures, takes the form of reports, forecasts, and bulletins. Through them, researchers seek to evaluate the extent to which pandemic management coincides with demonstrations, whether state repression and mob violence will rise, and how the disease will impact overall armed conflict rates.
- **Participants:** Armed Conflict Location and Event Data Project
- **Contact:** admin@acleddata.com (questions on ACLED datasets); communications@acleddata.com (media)

Coronavirus Disease 2019 (COVID-19) Clinical Data Repository

- **Start Date:** 2020
- **Regional Focus:** Global
- **Description**: Carbon Health, a medical technology company, and Braid Health, a medical diagnostic imaging company, have created a repository detailing the clinical characteristics of patients tested for COVID-19. This repository includes the characteristics of positive- and negative-tested patients and symptoms as well as chest x-rays. The organizers intend for the information to accelerate information sharing and facilitate studies on COVID-19.
- **Participants:** Carbon Health
- **Contact:** General (covidclinicaldata@carbonhealth.com); Vivian Liu, Braid Health (vivian@braid.health)

How COVID-19 Is Changing the World: A Statistical Perspective

- **Start Date**: May 2020
- **Regional Focus:** Global

- **Description**: Various statistical agencies, coordinated by the Committee for the Coordination of Statistical Activities, released a report summarizing COVID-19's impact based on their collected data and activities. The report provides summaries of economic impact, social impact and regional impact. It also provides information on the specific challenges facing statistical agencies during the Pandemic, such as the difficulty in conducting census and the need for modern data infrastructure.
- **Participants:** Committee for the Coordination of Statistical Activities; various statistical agencies and international organizations (see full list)
- **Contact:** Angela Me, Committee for the Coordination of Statistical Agencies; Haishan Fu, Committee for the Coordination of Statistical Agencies

JPMorgan Chase Institute COVID-19 Research

- **Start Date:** March 2020
- **Regional Focus:** Global
- **Description**: The JPMorgan Chase Institute, a research group and a unit of the larger JPMorgan Chase company, has created a listing of its research on COVID-19's effects. This research, which relies on JPMorgan Chase's data (e.g. credit and debit card usage) and data from other sources, provides information on how the pandemic has affected households, businesses, financial markets, and communities
- **Participants:** JPMorgan Chase Institute
- **Contact:** Contact form

COVID-19 Cognitive City

- **Start Date:** 20 March 2020
- **Regional Focus:** Global
- **Description**: Exaptive, Inc, a computer software company whose products target technologists and researchers, created a free and publicly available online repository of COVID-19 research with support from the Bill & Melinda Gates Foundation. The repository, called a cognitive city, catalogues datasets, analyses, tools, articles, and research questions from the 1,700 researchers who use the site. Individuals can also use the site as a kind of social network, connecting with researchers they are interested in or offering support on particular hibs of activity—care, community, diagnostics, drugs, economy, or a vaccine.
- **Participants:** Exaptive, Inc; Bill & Melinda Gates Foundation
- **Contact:** N/A

Vivli Platform

- **Start Date:** July 2018

- **Regional Focus:** Global
- **Description**: Vivli is a nonprofit organization that operates as a data broker, managing a platform of the same name allows organizations to share individual participant-level data from completed clinical trials for research purposes. Through the platform, individuals can search listed studies, request data sets or aggregated data, and share data of their own. During the COVID-19 pandemic, the platform has formed a relationship with d-wise, a clinical data consulting company, to waive all fees for sharing and accessing clinical trial data to encourage individuals to share and use data through the site to pursue COVID-19 treatments.
- **Participants:** Vivli; d-wise
- **Contact:** support@vivli.org

Yahoo Knowledge COVID-19 API

- **Start Date:** April 2020
- **Regional Focus:** Global
- **Description**: Yahoo! has created a dashboard representing the spread of COVID-19 globally. The site shows a simple map and several charts depicting confirmed cases, fatalities, and recoveries. It relies on publicly sourced data from organizations such as the World Health Organization and the US Centers for Disease Control. Additional information can be found on its GitHub (https://github.com/yahoo/covid-19-api/)
- **Participants:** Yahoo!
- **Contact:** Jon Kilroy, Aaron Klish, and Chandrasekar Rajasekar, Yahoo! (yk-covid-19-os@verizonmedia.com)

Fitbit COVID-19 Study

- **Start Date:** 21 May 2020
- **Regional Focus:** Global
- **Description:** The Fitbit COVID-19 Study is an initiative by the activity tracker company FitBit to determine whether its products can aid in the early detection of COVID-19. The study builds on similar initiatives by Scripps Research and the Stanford Medicine Healthcare Innovation Lab, which both attempt to assess if wearable devices can help detect early onset diseases. Individual FitBit owners can support the effort by opting in to the study via their account and completing a regular questionnaire.
- **Participants**: FitBit
- **Contact:** Participation form

UCSF TemPredict Study

- **Start Date:** 23 March 2020
- **Regional Focus:** Global

- **Description:** The UCSF TemPredict Study is a research initiative sponsored by Oura, a company which produces a wearable activity-tracking ring, at the University of California, San Francisco. The effort aims to study whether physiological data collected by an Oura ring, combined with symptom surveys, better predict the onset, progression, and recovery for COVID-19. The study will rely on 2,000 healthcare workers who will receive Oura rings and submiti daily surveys of their symptoms. Current Oura owners can also sign up for the study via a dedicated webpage
- **Participants**: Oura; University of California, San Francisco
- **Contact:** TemPredict@ucsf.edu

COVIDentify

- **Start Date:** 9 April 2020
- **Regional Focus:** Global
- **Description:** The Duke COVIDentify study is an initiative spearheaded by Duke University doctors and scientists to determine whether data collected from smartphones and smart watches can predict COVID-19 infection and disease severity. Individuals participate by signing up on the study;s dedicated webpage and completing regular surveys from the research team.
- **Participants**: Duke University
- **Contact:** covidentify@duke.edu

Financial Times Excess Mortality and Deaths During the COVID-19 Pandemic

- **Start Date:** 9 June 2020
- **Regional Focus:** Global
- **Description:** The Financial Times is publishing its collection of data on reported COVID-19 deaths and excess mortality. This information, collected from statistical bureaus, health ministries, and government departments around the world operating on a national, regional, and municipal basis provides insight into where and when deaths are occurring. The information can allow journalists to conduct cross-national comparisons and to otherwise inform reporting around the pandemic.
- **Participants**: Financial Times
- **Contact:** John Burn-Murdoch, Financial Times Visual & Data Journalism Team (coronavirus-data@ft.com)

Global Healthsites Mapping Project

- **Start Date:** 2016
- **Regional Focus:** Global
- **Description:** The Global Healthsites Mapping Project is an initiative that emerged from the response to the 2014 Ebola outbreak to help international aid providers better respond to the needs of people affected by disease outbreak. The effort

facilitates this work by compiling validated information on where health facilities around the world are, ensuring organizations can deliver support to the right place in a crisis. This location data is available freely. The initiative has sought to make its information available and useful for the ongoing response to COVID-19.

- **Participants**: Geomatica; International Committee of the Red Cross; International Hospital Federation; Humanitarian OpenStreetMap; Medecins Sans Frontieres; Missing Maps; CartOng; Radiant Earth Foundation; IT4Life; eHealth Africa; Kartoza; Heidelberg Institute for Geoinformation Technology; ProMed International Society for Infectous Disease
- **Contact:** Contact form

Accessible M-Lab NDT data for Internet Performance research during COVID-19

- **Start Date:** 20 May 2020
- **Regional Focus:** Global
- **Description:** The Measurement Lab is a research consortium holding the world's largest collection of Network Disagnostic Tool data, which it uses to assess open Internet performance and discuss global network performance. To respond to the COVID-19 pandemic, the organization worked with the Internet Society, a nonprofit dedicated to Internet issues, to create a series of dashboards to visualize Internet performance across the United States and globally. Individuals can use the platforms to compare different regions and assess the impact that the pandemic has had on internet performance.
- **Participants**: Measurement Lab; Internet Society
- **Contact:** Lai Yi Ohlsen, Measurement Lab

New York Times Coronavirus Vaccine Tracker

- **Start Date:** 10 June 2020
- **Regional Focus:** Global
- **Description:** The New York Times has created a centralized location for individuals to track global progress on developing a vaccine to COVID-19. The site breaks progress into phases and by vaccine type (e.g. genetic vaccine, viral vector vaccine, and whole-virus vaccine).
- **Participants**: New York Times
- **Contact:** Jonathan Corum and Carl Zimmer, *New York Times*

Societal Experts Action Network (SEAN) COVID-19 Survey Archive

- **Start Date:** April 2020
- **Regional Focus:** Global

- **Description**: The Societal Experts Action Network—an expert group created by the National Academies of Sciences, Engineering, and Medicine and National Science Foundation to support evidence-based decisionmaking for local, state, and national policymakers—created a searchable archive of probability-based surveys on the COVID-19 pandemic. Users who visit the site can search for survey questions (obtained from open-access sources) polled in the United States and internationally. The network also provides a weekly summary of updates to the archive.
- **Participants**: See full list of participating organizations here
- **Contact:** covid-19@parc.us.com

TomTom Traffic Index

- **Start Date:** July 2012
- **Regional Focus:** Global
- **Description**: The Dutch location-technology company TomTom releases an annual measure of worldwide traffic congestion using data from its navigation and mapping tools. The ranking sorts congestion into its overall level, morning peak, and evening peak as percentages of increased travel time. The site also collects real-time traffic across various cities, showing how above or below normal congestion those areas are. This information can be used to estmate the impact of the COVID-19 pandemic on activity within these regions.
- **Participants**: TomTom
- **Contact:** Contact Us form

BBVA COVID-19 Analysis

- **Start Date:** June 2020
- **Regional Focus:** Global
- **Description**: BBVA, the Spanish multinational banking company, is using its proprietary data to produce analyses of the economic impact. Its recent work has used data collected from credit and debit card usage to track consumption habits, finding that spending dropped across Spain in April, though deterioration in spending stopped by 1 June.
- **Participants**: Raj Chetty, John Friedman, Nathaniel Hendren, Michael Stepner, The Opportunity Insights Team
- **Contact:** N/A

Institute for Data Valorization COVID-19 Data Hub

- **Start Date:** 1 May 2020
- **Regional Focus:** Global

- **Description**: The Institute for Data Valorization, an academic and industrial initiative between HEC Montréal, École Polytechnique de Montreal and Université de Montréal, has created a unified, cleaned collection of data related to COVID-19 to simplify data acquisitions and support use of data around the world. It supports 190 countries. The source code for the project is available on GitHub.
- **Participants**: Institute for Data Valorization; Institut de Valorisation des Donnees; HEC Montreal; ACK Zurich
- **Contact:** Emanuele Guidotti (emanuele.guidotti@unine.ch)

Harvard Global Health Institute Testing Target Dashboard

- **Release Date:** 6 July 2020
- **Regional Focus:** Global
- **Description:** The Harvard Global Health Institute created a dashboard displaying the extent to which different countries have met the minimum targets for COVID-19 testing based on estimates and public reporting. Individuals can look at progress for suppression on a country-level. The dashboard finds most countries below these targets.
- **Participants:** Harvard Global Health Institute; Microsoft AI for Health
- **Contact:** AllforHealth_C19@microsoft.com

COVID-19 Impact seen by Satellite

- **Release Date:** 25 June 2020
- **Regional Focus:** Global
- **Description:** NASA, the European Space Agency, and the Japan Aerospace Exploration Agency created a dashboard combining their satellite observations of the COVID-19 pandemic. Navigating through the platform, individuals can track how the pandemic has affected airport and shipping traffic, city night lights, agricultural production as well as greenhouse gases, air quality, and watar quality. These statistics are used as economic, agricultural, and environmental indicators. Information can be accessed in table or map form.
- **Participants:** National Aeronautics and Space Administration; European Space Agency; Japan Aerospace Exploration Agency
- **Contact:** N/A

PeaceTech Lab COVID-19 Violence Tracker

- **Release Date:** July 2020
- **Regional Focus:** Global
- **Description:** PeaceTech Lab, an independent nonprofit that seeks to use data and technology to support peacebuilding, has created a dashboard to “better understand

and predict the threat of COVID-related violence." The resource maps the location of news related to violence, whether that be domestic violence, conflict over resources, or other incidents. Individuals can sort the map by date, type of violence, country, media type, and publisher. The project relies on thousands of volunteers across 20 countries and support from Hogan Lovells, Vizonomy, and Mapbox.
- **Participants:** PeaceTech Lab; Hogan Lovells; Vizonomy; and Mapbox
- **Contact:** info@peacetechlab.org

Collective and Augmented Intelligence Against Covid-19 alliance
- **Release Date:** 9 July 2020
- **Regional Focus:** Global
- **Description:** The Future Society and the Stanford Institute for Human-Centered Artificial Intelligence—supported by UNESCO, World Bank, and Global Pulse—has created a nonpublic, password protected website to help the World Health Organizations and other public health organizations make decisions on the COVID-19 pandemic. The site includes three elements: contact-tracing information made available through apps and AI; misinformation about the pandemic; and the pandemic's health and economic effects on marginalized areas. These resources draw on 80 sources of information, including data provided by the World Bank and the World Health Organization's COVID-19 database.
- **Participants:** The Future Society; Stanford Institute for Human-Centered Artificial Intelligence; World Bank; UNESCO; Global Pulse
- **Contact:** Partner Request Form; Volunteer Request Form

CoronaNet Research Project
- **Release Date:** 11 April 2020
- **Regional Focus:** Global
- **Description:** The CoronaNet Research Project is an initiative spearheaded by researchers at NYU Abu Dhabi, Hochschule für Politik at the TU Munich, and Yale University to compile data on government responses to the COVID-19 pandemic. The initial hand-coded dataset—assembled in cooperation with 500 political, social, and public health scholars from around the world—provides information on 15,000 separate policy announcement from governments beginning in 31 December. These actions are coded to indicate the level of government responding (e.g. national, regional, or local), the specific actions taken (e.g. travel bans, investments), geographic areas targeted, population or object targeted, compliance mechanism, and timing.
- **Participants:** NYU Abu Dhabi; Hochschule für Politik at the TU Munich; Yale University
- **Contact:** Contact form

Google Community Mobility Reports

- **Release Date:** June 2020
- **Regional Focus:** Global
- **Description:** To support public health officials internationally, Google has created a series of reports, based on aggregated, anonymized data from its products, that chart changes in movement due to the pandemic. Individuals can download documents on over 130 countries that chart movement trends over time by geography and location type (e.g. retail, recreation, groceries). This information will be available "so long as public health officials find them useful in their work to stop the spread of COVID-19."
- **Participants:** Google
- **Contact:** N/A

Oxford Coronavirus Government Response Tracker

- **Release Date:** 25 March 2020
- **Regional Focus:** Global
- **Description:** The Oxford Coronavirus Government Response Tracker is a tool launched by the University of Oxford's Blavatnik School of Government to systematically track and score responses to COVID-19 worldwide. Measured against 17 indicators that score responses on a 1 to 100 scale, the tracker assesses how forceful a government is in responding to the pandemic. Noting diverging approaches and outcomes in the United States, an update to the platform in April provided users with the ability to view policy responses in the US on a state-by-state level.
- **Participants:** University of Oxford's Blavatnik School of Government
- **Contact:** Contact form

Consortium for Clinical Characterization of COVID-19 by EHR

- **Start Date:** June 2020
- **Regional Focus:** Global
- **Description:** The Consortium for Clinical Characterization of COVID-19 by EHR (also known as 4CE) is an international consortium of researchers from hospitals around the world seeking to pool efforts toward creating a common data model and shared analytic framework for electronic health records related to COVID-19. Led by the i2b2 international academic users group, participants hope to develop ways to better inform doctors, epidemiologists, the public, and others about COVID-19 patients. The effort includes data on 27,000 COVID-19 cases and 187,000 laboratory tests. The group published its first paper in June.
- **Participants**: Various; see full list
- **Contact:** 4CE@i2b2transmart.org

KT Study of AI/Bigdata-based Epidemic Preparedness

- **Start Date:** May 2020
- **Regional Focus:** Global
- **Description:** KT, South Korea's largest telecommunications company, received USD 10 million from the Bill & Melinda Gates foundation to explore the use of artificial intelligence and big data for pandemic response. Building on KT's work supporting the South Korean government during the COVID-19 pandemic, KT will develop algorithms to improve early diagnosis and predict spread of viral infection. The project will make use of mobility data.
- **Participants**: KT Corporation; Korea University Hospital; Bill & Melinda Gates Foundation
- **Contact:** N/A

Internet Searches for Acute Anxiety During the Early Stages of the COVID-19 Pandemic

- **Release Date:** 24 August 2020
- **Regional Focus:** Global
- **Description:** Researchers at the University of California, Johns Hopkins University, and Institute for Disease Modeling released a research letter proposing the use of internet search engine data to monitor the emergence of mental health problems amid the pandemic. The researchers use Google Trends to illustrate an increase in search queries related to acute anxiety in the days and weeks following President Trump's national emergency declaration on March 28, with the number of queries only returning to normal levels on April 15.
- **Participants:** University of California; Johns Hopkins University; Institute for Disease Modeling
- **Contact:** ayers.john.w@gmail.com

ACAPS COVID-19 - Government measures

- **Release Date:** May 2020
- **Regional Focus:** Global
- **Description:** ACAPS, a nonprofit, nongovernmental project that supports humanitarian groups, is maintaining a dashboard summarizing government responses to the pandemic, including social distancing requirements, movement restrictions, public health measures, social and economic responses, and lockdowns. Individuals can filter by country, measure type, date, and whether the measure is being introduced or phased out. ACAPS updates the dataset once a week and intends for it to support humanitarian organizations and other partners.
- **Participants:** ACAPS
- **Contact:** info@acaps.org

Nextstrain SARS-CoV-2 Research

- **Start Date:** September 2016
- **Regional Focus:** Global
- **Description:** Nextstrain is an inter-institutional, open source project to track the evolution of pathogens around the globe to aid in epidemiological research and outbreak response. Amid the ongoing COVID-19 pandemic, the Nextstrain research team has analyzed data on SARS-CoV-2 by region and published regular updates on its genomic epidemiology work.
- **Participants:** Fred Hutch; Max Planck Institute for Developmental Biology; National Institutes of Health; Mapbox; European Research Council; Open Science Prize; Biozentrum
- **Contact:** hello@nextstrain.org

COVID-19 Reddit Algo-Tracker

- **Start Date:** April 2020
- **Regional Focus:** Global
- **Description:** The Citizens and Technology Lab at Cornell University has developed a service monitoring the algorithms on the social media platform Reddit, taking snapshots every two-to-three minutes. During the COVID-19 pandemic, Cornell is using its service to better understand communication during the pandemic, collecting posts that use coronavirus-related, English-language terms. The work will inform the Citizens and Technology Lab's collaborations with Reddit communities. It will also help the lab understand the role ranking algorithms play on public discourse. Results from the collection are displayed with visualiztions available on the tracker's website.
- **Participants:** Citizens and Technology Lab; Reddit
- **Contact:** Dr. J. Nathan Matias, Citizens and Technology Lab

Privacy in Crisis: A study of self-disclosure during the Coronavirus pandemic

- **Start Date:** 21 April 2020
- **Regional Focus:** Global
- **Description:** Researchers at Pennsylvania State University sought to assess the impact of the coronavirus pandemic on social ties and individual perceptions of privacy. Using a collection of English language Tweets, the researchers found that, between 1 March and 3 April 2020, people were more willing to disclose aspects of their personal identity. Through text analysis, they further found the tone of conversations to be more supportive and support-seeking.

- **Participants:** Pennsylvania State University
- **Contact:** thb5018@psu.edu

DATA CHALLENGES AND CALLS FOR PROPOSALS

Coronavirus Funding Monitor

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: The open-access publisher Frontiers manages a list of funding opportunities for research and projects on COVID-19 and coronavirus. The list updates daily. Funding calls are open to researchers, non-profit organizations, and commercial enterprises.
- **Participants**: Frontiers
- **Contact**: stephan.kuster@frontiersin.org

Call for R&D Projects: AI 4 COVID-19

- **Deadline**: 28 May 2020
- **Regional focus**: Europe and Central Asia
- **Description**: The Fundação para a Ciência e Tecnologia, the Portuguese government organ responsible for evaluating and funding scientific research, announced it was receiving proposals for projects using data science and artificial intelligence aimed at addressing COVID-19 and future pandemics. Projects must take 24 to 36 months and there will be a maximum funding limit of EUR 240,000. Applications must be submitted in English by 28 May 2020.
- **Participants**: Fundação para a Ciência e Tecnologia
- **Contact**: Concursoprojetos@fct.pt

TechForce19

- **Deadline**: 31 March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: NHSX, the technology, digital, and data best-practices unit of the United Kingdom's National Health Service, and Public, a govtech start-up accelerator, put forth an open call for proposals on ways to support the elderly, vulnerable, and self-isolating during the COVID-19 challenge. Individuals can apply to develop technologies that can support remote social care, improve staffing, and promote mental health. Up to GBP 25,000 in government funding is available to test the solution.
- **Participants**: NHSX; Public
- **Contact**: Application

COVID-19 Challenge Grant

- **Deadline**: 30 March 2020
- **Regional Focus:** North America
- **Description**: The Aspen Tech Policy Hub, a San Francisco-based organization that combines civic technology and policy making, is accepting applications from technologists for new tools and policy solutions to help communities mitigate the effects of COVID-19. Applicants are asked to submit proposals that make use of data or other innovative resources. The Aspen Tech Policy Hub will issue up to 3 grants of up to USD 15,000.
- **Participants**: Aspen Tech Policy Hub
- **Contact**: Application

#CodeVsCOVID19

- **Deadline:** Sign-ups end 27 March 2020
- **Regional Focus:** Global
- **Description**: The Swiss federal government is hosting a 72-hour hackathon to develop innovative approaches to the COVID-19 pandemic. Possible topics for participants could include developing tools to improve virus detection, better analyze or visualize data, or facilitate homeschooling.
- **Participants**: Swiss Federal Department of Economic Affairs, Education and Research and the Federal Department of Home Affairs
- **Contact**: Sign-up Form

AI Techniques to Mitigate Pandemic

- **Deadline**: 1 May 2020
- **Regional Focus:** Global
- **Description**: The C3.ai Digital Transformation Institute, a consortium between C3.ai and Microsoft, and various universities, put forth a request for proposals on innovative AI methods in pandemic settings. Projects might involve efforts to curb spread, identify medical solutions, assess public health interventions, or improve societal resilience. Up to USD 5.8 million will be awarded, with grants ranging from USD 100,000 to 500,000. Recipients will also receive access to the C3 AI Suite and Microsoft Azure cloud platform as well as access to the Blue Waters supercomputer.
- **Participants**: C3.ai Digital Transformation Institute; Microsoft Corporation, the University of Illinois at Urbana-Champaign (UIUC); the University of California, Berkeley; Princeton University; the University of Chicago; the Massachusetts Institute of Technology; Carnegie Mellon University; and the National Center for Supercomputing Applications at UIUC
- **Contact**: Application Information

Covid-19 Solution Challenge

- **Deadline:** 31st March 2020
- **Regional focus**: India
- **Description:** The Government of India is requesting solutions that can help it provide information to citizens about COVID-19 and the advisories being issued by Ministry of Health & Family Welfare as well as other innovative approaches to COVID-19 that make use of bioinformatics, datasets, and apps for diagnosis. Submitted solutions will be evaluated for adoption and those selected will be rewarded. First prize receives INR 100,000.
- **Contact:** https://innovate.mygov.in/covid19/

The COVID-19 High Performance Computing Consortium

- **Deadline:** N/A
- **Regional Focus:** North America
- **Description**: The COVID-19 High Performance Computing Consortium, announced by the White House, is an effort to use computing resources from the federal government, industry, and academia to support COVID-19 research. Researchers are invited to share research proposals that would incorporate the use of computing resources to understand the virus and develop programs to address it.
- **Participants**: IBM; Amazon Web Services; Google Cloud; Microsoft; Hewlett Packard Enterprise; MIT; Rensselaer Polytechnic Institute; University of California, San Diego; Department of Energy National Laboratories; National Science Foundation; NASA
- **Contact**: Research Proposal Form

MIT SOLVE Challenges: Health Security & Pandemics

- **Deadline:** 18 June 2020
- **Regional Focus:** Global
- **Description**: MIT Solve is hosting a challenge to tech innovators to develop solutions that could enable better prevention, detection, and rapid response around COVID-19. Interested researchers are asked to submit proposals, though individuals can also donate money to support the challenge.
- **Participants**: MIT Solve
- **Contact**: Application Form

The Global Hack

- **Deadline**: April 9-12, 2020
- **Regional Focus:** Global
- **Description**: The Global Hack invites program developers from around the world to participate in a hackathon aiming to build solutions that can help tackle the changing world resulting from societal transformation of different shapes and forms.

- **Participants**: Program Developers
- **Contact**: hello@theglobalhack.com

Epidemic Preparedness: Coronavirus (COVID-19) funding call

- **Deadline**: Closed
- **Regional Focus:** Low/Middle Income Countries
- **Description**: Wellcome and the UK Department for International Development (DFID) launched a call for funding application aiming to tackle the pandemic, specifically in low and middle income countries. Organizations can receive up to £2 million for up to 2 years.
- **Participants**: Researchers
- **Contact**: epidemics@wellcome.ac.uk

COVID-19 Open Research Dataset Challenge (CORD-19)

- **Deadline**: April 16, 2020
- **Regional Focus:** Global
- **Description**: A coalition of public and academic institutions prepared CORD-19, a database of 45,000 scholarly articles about COVID-19, SARS-CoV-2, and related coronaviruses. This dataset is made freely accessible for the global research community who are interested in applying natural language processing and other AI techniques to gain deeper understanding about the disease. Researchers can access the dataset through data competition platform Kaggle. Projects that met the competition's criteria will be awarded $1,000 each.
- **Participants**: Public
- **Contact**: Devvret Rishi, Product Manager, Google

European Open Science Cloud: Fast Track Process for Covid-19 Co-Creation Request

- **Start Date**: 27 March 2020
- **Regional focus**: Europe and Central Asia
- **Description**: The European Open Science Cloud, The European Commission initiative to promote open science, is providing funding for projects that use open science research and EOSC communities to address the COVID-19 pandemic. Any individual or entity residing in a European Union member-state can apply, so long as they are not receiving support from other resources for identical activities. Proposals will be evaluated weekly and the maximum amount will be EUR 45,000.
- **Participants**: European Open Science Cloud
- **Contact**: Visit EOSCsecretariat.eu

Call for R&D Projects: AI 4 COVID-19

- **Deadline**: 28 May 2020

- **Regional focus**: Europe and Central Asia
- **Description**: The Fundação para a Ciência e Tecnologia, the Portuguese government organ responsible for evaluating and funding scientific research, announced it was receiving proposals for projects using data science and artificial intelligence aimed at addressing COVID-19 and future pandemics. Projects must take 24 to 36 months and there will be a maximum funding limit of EUR 240,000. Applications must be submitted in English by 28 May 2020.
- **Participants**: Fundação para a Ciência e Tecnologia
- **Contact**: Concursoprojetos@fct.pt

Zindi Africa: AI4D Predict the Global Spread of COVID-19

- **Deadine**: 19 April 2020
- **Regional Focus:** Sub-Saharan Africa; North Africa
- **Description**: The Artificial Intelligence for Development Africa (AI4D-Africa) Network, a network of excellence in AI-related areas in Sub-Saharan Africa, launched a competition on the Zindi Africa platform requesting projects from data scientists to better predict the spread of COVID-19 over the following months. This work will support policymakers and health workers take action to mitigate the disease. Individuals should submit their projects by 19 April 2020. Prizes, which range from USD 2,500 to USD 1,500 wil be awarded.
- **Participants**: Artificial Intelligence for Development Africa(AI4D-Africa) Network; Zindi Africa
- **Contact**: Sign-up form

QED CGDV: Flattening The Curve: COVID-19 Data Challenge

- **Deadline**: 3 May 2020
- **Regional Focus:** Global
- **Description:** A robust response to the COVID-19 pandemic requires data and keen analysis. Play a role in the response by creating a COVID-19-focused data visualization and sharing with the global health and data visualization communities. Everyone can participate in this Challenge, with separate tracks for students and professionals. Submissions from each track are judged separately and prizes awarded for each track.
- Participants: Students and professionals
- Contact: Sign-up Page

Call to the GEO Community on COVID-19

- **Start Date**: April 2020
- **Regional Focus:** Global

- **Description**: The Group on Earth Observations Secretariat is requesting examples of work involving Earth observation to support COVID-19 monitoring, response, and recovery. It intends to share the compiled projects through its website and provide support to communities or otherwise facilitate research sharing.
- **Participants**: Group on Earth Observations Secretariat
- **Contact**: covid19@healthdata.org

#AfricavsVirus Challenge

- **Deadline**: 19 April 2020
- **Regional Focus:** Africa
- **Description**: From 17–19 April, 2020, the African Development Bank Group and partners will host a competition to solicit tech and non-tech solutions to the problems facing the African continent amid the COVID-19 pandemic. These problems can touch on one of nine themes, which include education, entertainment, food security mad vulnerable populations. Participants can include citizens from around the world and those in charge of problems in their context (e.g. hospital managers, social workers, and government agencies). Organizations and experts can also contribute by providing support or mentorship to those interested in signing up.
- **Participants**: African Development Bank Group; Fund for African Private-Sector Assistance; Swiss Confederation; European Commission; African, Caribbean and Pacific Group of States; The Innovation Lab; Souk At-tanmia
- **Contact**: Registration form

Data for Hope

- **Deadline**: 15 April 2020
- **Regional Focus:** Global
- **Description**: Data for Hope is an event and a challenge. On Wednesday, 15 April the challenge will unite 50 entrepreneurs from the spanish and global ecosystem as well as experts and investigators from CSIC and the Spanish Health Ministry to work on three challenges that could support efforts to address to the COVID-19 crisis.
- **Participants**: CloudDistrict, Narrativa, Agencia EFE, RTVE, SouthSummit and others.
- **Contact**: info@dataforhope.com

Hackathon: Monitoring COVID-19 Effects

- **Deadline**: 24 March 2020
- **Regional Focus:** Switzerland
- **Description**: From 18 March to 24 March, 2020, the Statistical Office of the Canton of Zurich, Switzerland oversaw a hackathon. The office challenged participants to develop data tools capable of helping elected officials and the media understand the country's current situation as it pertained to the COVID-19 pandemic. The hackathon

yielded several projects, including a common dataset from different Swiss authorities on the current number of COVID-19 cases; a visualization of cases by canton; a project to measure disease control efforts; and an attempt to understand hospital-bed capacity.
- **Participants**: Statistical Office of the Canton of Zurich, Switzerland
- **Contact**: Matthias Mazenauer, Deputy Head of the Statistical Office of the Canton of Zurich (datashop@statistik.zh.ch)

COVID-19 Business Pivot Challenge

- **Deadline**: 30 April 2020
- **Regional Focus:** Switzerland
- **Description**: Open Ideo, in collaboration with Fortune, the Vodafone Americas Foundaton, and the Stanford Social Innovation Review, is hosting a competition calling for solutions to help communities through the COVID-19 crisis. Submissions must focus on the Internet of Things, Artificial Intelligence, or Mobile Data and Technology. Projects are highly encouraged to focus on issues affecting women and girls. Five submissions will receive USD 10,000 from the Vodafone Americas Foundation.
- **Participants**: Open Ideo; Fortune; Vodafone Americas Foundation; Stanford Social Innovation Review
- **Contact**: Submission form

UNESCO CodeTheCurve Hackathon

- **Deadline:** 30 April 2020
- **Regional Focus:** Global
- **Description:** UNESCO, in collaboration with IBM and CodeTheCurve, ran a hackathon to spur ideation on COVID-19 among young people. Participating teams were required to sumit a short video explaining their idea, with 40 promising ideas invited to work on their idea within the context of promoting continued education; managing data and information; and addressing societal and health issues.
- **Participants**: UNESCO; IBM; SaP
- **Contact:** Bernard Giansetto, UNESCO b.giansetto@unesco.org

QE Community COVID Data Challenge

- **Deadline:** 3 May 2020
- **Regional Focus:** Global
- **Description:** The International Society for Quantitative Ethnography is running a data competition inviting researchers to collaboratively analyze public data (parrticularly quantitative ethnographic data) that could provide insights into how the world is reacting to the COVID-19 crisis. Teams are provided with a curated dataset containing

information that might be relevant and a list of possible topics, such as addressing misinformation on asymptomatic and surface spread, studying media reaction, and studying reaction to containment and mitigation measures. Teams are ask to register by 24 April. Final analysis from the teams will be shared by 3 May.
- **Participants:** International Society for Quantitative Ethngraphy
- **Contact:** Registration form; data <dot> challenge <at> qesoc <dot> org

#DigitalAgainstCovid19 Challenge
- **Deadline:** 26 June 2020
- **Regional Focus:** Asia and the Pacific
- **Description:** The Asian Development Bank is hosting a challenge calling on researchers to develop ways to measure economic activity using alternative, non-statistical sources and approaches. The challenge aims to help countries in Asia and the Pacific region to respond more rapidly to the COVID-19 pandemic. Individuals who apply to participate are asked to tackle one of four areas of focus: production; demand; external trade and income; or prices.
- **Participants:** Asian Development Bank
- **Contact:** Sign-Up Form

EUvsVirus Challenge
- **Deadline:** 26 April 2020
- **Regional Focus:** European Union
- **Description:** he European Innovation Council led a pan-European hackathon of civil society, innovators, partners, and investors to develop innovative approaches to the COVID-19 pandemic. The event received 2,160 solutions spread acros 37 challenge areas. A jury subsequently assessed submissions and distributed EUR 100,000. A follow-up meeting will be held 22 May through 25 May to match proposers with end users.
- **Participants:** European Commission; European Innovation Council; EU member-states
- **Contact:** RTD-PAN-EUROPEAN-COVID-HACKATHON@ec.europa.eu

COVID-19 Funding Compass
- **Start Date:** May 2020
- **Regional Focus:** Austria
- **Description**: Austria's Federal Ministry of Finance is maintaining a repository of funding opportunities for citizens and companies who might pursue projects related to COVID-19. Each entry provides a description of the funding opportunity, the funding provider, requirements, and required documents.
- **Participants:** Austrian Federal Ministry of Finance
- **Contact:** Contact form

The ScotlandIS Challenge

- **Deadline:** 16 June 2020
- **Regional Focus:** Scotland
- **Description**: The ScotlandIS Challenge is an initiative launched in part by the Scottish government calling companies to submit ideas to improve Scotland's technological development. The challenge calls on individuals to propose innovative ways to deploy technology to improve current business models and public service. It specifically asks for work that can improve work in light of the ongoing COVID-19 pandemic,
- **Participants:** Scottish Government,
- **Contact:** digitalnation@gov.scot

COVID-19 Virtual Study-a-Thon

- **Deadline:** 26–29 March 2020
- **Regional Focus:** Global
- **Description**: The Observational Health Data Sciences and Informatics, a multistakeholder collaborative devoted to maximizing the value of health data, ran a four-day international virtual study-a-thon. For three days, 320 participants from 30 countries collaborated to generate real-world evidence on research questions shared by national governments, public healt hagencies, and community members. Participants also sought to design studies related to COVID-19 that could be organized when the relevant data was made available. Updates on the products of the study-a-thon can be found here.
- **Participants:** Observational Health Data Sciences and Informatics
- **Contact:** contact@ohdsi.org

The COVID-19 Symptom Data Challenge

- **Deadline:** 29 September 2020
- **Regional Focus:** Global
- **Description:** The Delphi Group at Carnegie Mellon University, the Joint rogram on Survey Methodology at the University of Maryland, the Duke Margolis Center for Health Policy, and Resolve to Save have launched a public competition seeking innovative uses of Facebook–Carnegie Mellon's COVID-19 Symptom Survey data. The publicly available data, which was collected by Facebook, provides aggregated information on the prevalence of different COVID-19 symptoms in the United States and globally. Teams and individuals can apply for entry into the challenge provided they provide a description of who they are, their approach, methods, and results. Entries will be judged based on their ability to provide new insights that can be integrated into dashboards, forecasts, and other tools for decision-makers.

- **Participants:** Facebook; Catayst@Health 2.0; Carnegie Mellon University; University of Maryland; Duke Margolis Center for Health Policy; Resolve to Save Lives
- **Contact:** innovate@catalyst.health

REQUESTS FOR DATA AND EXPERTISE:

The National Emergencies Trust

- **Start Date**: 18 March 2020
- **Regional Focus:** United Kingdom
- **Description**: The National Emergencies Trust is set up to coordinate charitable funding of national emergencies in the UK. It was activated for the first time in response to the COVID-19 outbreak. We are looking for datasets to help us identify the parts of the UK where the social need is likely to be greatest.
- **Contact**: nationalemergenciestrust.org.uk

Smart Villages: Positivity and Connectedness of Local Communities

- **Start Date**: 18 March 2020
- **Regional Focus:** Kenya
- **Description**: This project involves telling inspirational stories and messages from villages using local resources and knowledge. This has inspired positive reactions and likes from the public, despite limited information. Telling citizens' stories on Facebook, Ushahidi deployment and Twitter can inspire people to adopt precautionary measures, alleviate fear and anxiety, and inspire others.
- **Contact**: Rapudo Hawi email:rapudohawi@kijijiyeetu.co.ke (www.kijijiyeetu.co.ke)

COVID-19 Image Data Collection Github

- **Start Date**: March 2020
- **Regional Focus:** Global
- **Description**: This project is attempting to create a database of X-rays and CT images of COVID-19, MERS, SARS, and ARDS cases. The database will be used to develop AI-based approaches to predict and understand the infection. The images will be made publicly available via GitHub
- **Contact**: Joseph Paul Cohen. Postdoctoral Fellow, Mila, University of Montreal

Rapid Assistance in Modelling the Pandemic: RAMP

- **Start Date**: 28 March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: The United Kingdom's Royal Academy is coordinating a call for assistance on modeling the pandemic using software engineering and data analytics. While initial focus is on qualified researchers from the United Kingdom, researchers

internationally are being asked to provide their time and expertise to improve the United Kingdom's modeling capacity, with a goal of having a clearer understanding of potential exit strategies. Individuals can indicate their interest (or the interest of their team or group) and skills via an enclosed form.
- **Participants**: The Royal Society
- **Contact**: Contact form

Quest for Data to Analyse for the Current COVID-19 Pandemic
- **Start Date**: 22 March 2020
- **Regional Focus:** Europe and Central Asia
- **Description**: Researchers at the University of Copenhagen are starting a data project assessing the need for social distancing within households. Working on aggregated statistics from Italy, Brabant, and China, the researchers hope to assess whether secondary cases of COVID-19 infection in larger households suffer high morbidity and mortality. Individuals interested in the project can contact the researchers to inquire about contributing.
- **Participants**: University of Copenhagen
- **Contact**: Rudi Westendorp, Thorkild Sørensen, and Peter Aaby, Department of Public Health at the University of Copenhagen (info@dataforgood.science)

Breathe for Science
- **Start Date**: 28 March 2020
- **Regional Focus:** Global
- **Description**: Two data science scholars at New York University are attempting to determine if there is a link between respiratory disease and breathing patterns to allow for remote, safe COVID-19 diagnoses. They are asking volunteers to answer a brief questionnaire and submit recordings of themselves breathing, both of which will be provided to medical researchers.
- **Participants**: New York University; volunteers
- **Contact**: William Falcon, New York University, waf251@nyu.edu

Cough Against Covid
- **Start Date**: 7 April 2020
- **Regional Focus:** Global
- **Description**: Wadhwani AI, the nonprofit AI research center, is working with Stanford University and others to develop an open-access AI that can analyze coughs to assist in the diagnosis of COVID-19. The organization requests individuals submit recordings of themselves coughing to support the work.
- **Participants**: Wadhwani AI; Bill & Melinda Gates Foundation; Global Good; Stanford University

- **Contact**: coughagainstcovid@wadhwaniai.org

Health Worker Wellbeing Survey

- **Start Date**: 2020
- **Regional Focus:** United States
- **Description**: The Health Worker Wellbeing Survey is an independent initiative to understand the work environment facing health workers during the COVID-19 pandemic. Heath workers are asked to answer a short survey on their physical, psychological, and occupational experiences. The results will be analyzed by a group of researchers, physicians, and epidemiologists working on a voluntary basis with the intent of informing policymakers, public health officials, and other stakeholders on the needs of health care workers.
- **Participants**: Health Worker Data Alliance
- **Contact**: info@https://www.healthworkerdata.org/

Detect Health Study

- **Start Date:** 25 March 2020
- **Regional Focus:** United States
- **Description:** The Scripps Research Center launched the DETECT (Digital Engagement & Tracking for Early Control & Treatment) study to better monitor public health, with the hope of improving detection of disease. Individuals 18 years or older are encouraged to connect their smartwatch or wearable activity tracker—such as a FitBit or Apple Watch—to the DETECT system so researchers can study the relationship between heartbeat, sleep and activity patterns, and other activity. The study looks at infectious disease with respiratory components such as COVID-19.
- **Participants**: Scripps Research Institute
- **Contact:** Detect@scripps.edu

Vocalis Health COVID-19 Study

- **Start Date:** 24 March 2020
- **Regional Focus:** Israel
- **Description:** Vocalis Health, an Israeli start-up, is running an experimental initiative to see if COVID-19 can be screened and monitored through voice recordings. The clinical study will involve regular telephone calls over four weeks, each taking 15–20 minutes, enabled through an iPhone application. Researchers hope that they can achieve insights by applying AI techniques to the resulting dataset.
- **Participants:** Vocalis Health; Israel Ministry of Defense
- **Contact:** Survey Form

Africa Evidence Network Call for Evidence

- **Start Date:** April 2020
- **Regional Focus:** Africa
- **Description:** The Africa Evidence Network put out a call for examples of new evidence, evidence use, and experience on COVID-19 in Africa. The organization hopes to curate a list of best practices, relevant task forces, and other information that might help African decisionmakers better cope with the pandemic and its effects.
- **Participants:** Africa Evidence Network
- **Contact:** ace@uj.ac.za

The COVID-19 Global Rheumatology Alliance

- **Start Date:** May 2020
- **Regional Focus:** Global
- **Description:** The COVID-19 Global Rheumatology Alliance Team is an initiative to collect and share information that can help rheumatology clinicians better treat their patients amid the COVID-19 pandemic. The organization asks clinicians to use the site to report if any of their patients become infected so they can better understand the effects of the disease.
- **Participants:** COVID-19 Global Rheumatology Alliance Team
- **Contact:** rheum.covid@gmail.com

KDD Workshop on Humanitarian Mapping

- **Deadline:** 20 May 2020
- **Regional Focus:** Global
- **Description**: Researchers at MIT Media Lab, Facebook Research, the University of Pittsburgh, and Oak Ridge Laboratory are organizing a workshop on the use of human mobility datasets in crisis situation. The event—which will include researchers, decisionmakers, data scientists, economics, urban planners, computational social scientists, privacy researchers, legal scholars, and humanitarian organizations—will focus significant attention on the COVID-19 pandemic and the ways in which humanitarian mapping can lead to better decision-making. Organizers are asking interested participants to submit research papers, case studies, vision papers, software demos, and extended abstracts to demonstrate how mapping can be used in humanitarian situations to inform the conversations.
- **Participants:** MIT Media Lab; Facebook Research; University of Pittsburgh; Oak Ridge Laboratory
- **Contact:** gaikwad@mit.edu

National Neighborhood Indicators Partnership Convening Around Local COVID-19 Response

- **Start Date:** April 2020
- **Regional Focus:** United States
- **Description:** The National Neighborhood Indicators Partnership, led by staff from the Urban Institute, are looking for examples of how its partners and other local groups are using data to improve their response to the COVID-19 pandemic. Staff are looking especially for examples about sharing levels and trends of COVID-19 infections; identifying areas with health or financial risks; identifying the local implications of response efforts; providing a "help desk" to nonprofits; and analyzing early impacts on the economy. Individuals with compelling examples are asked to contact the organization via email.
- **Participants**: National Neighborhood Indicators Partnership; Urban Institute; local US data organizations
- **Contact:** nnip@urban.org

Coughvid

- **Start Date:** April 2020
- **Regional Focus:** Europe
- **Description**: Coughvid is an initiative undertaken by the Swiss Federal Institute of Technology Lausanne to determine whether it is possible to screen people for COVID-19 infection by analyzing recordings of their coughs. The researchers ask individuals to record themselves coughing and to provide a listing of their symptoms. This information will be used to compile an anonymized sample of recordings from patients with COVID-19. Researchers hope to subsequently apply signal processing, pervasive computing, and machine learning to develop a mobile application that can allow individuals to screen themselves from their homes.
- **Participants**: Swiss Federal Institute of Technology Lausanne
- **Contact:** coughvid@epfl.ch