

# THE OPPORTUNITY PROJECT

## 2020 ANNUAL REPORT



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Bureau



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# Letter from The Opportunity Project Team

Dear stakeholders,

We are pleased to share the 2020 annual report, which is a testament to the incredible achievements of [The Opportunity Project](#) (TOP) community over the past year. In 2020, our nation faced unprecedented challenges and the nature of work transitioned to be more remote and, in some ways, more isolated than ever before. Though our largely virtual team and sprint process were prepared for this transition, 2020 created many opportunities for us to learn and create a more inclusive process that engaged a more diverse group of collaborators than ever before. We were heartened and inspired by the strength of the TOP community, and the hundreds of people who showed up to solve challenges facing the planet, even in spite of a global pandemic.

TOP brings together technologists, government, and communities to rapidly prototype digital products — powered by federal open data—that solve real-world problems for people across the country. To date, TOP's 12-week technology development sprints have catalyzed over 130 consumer-facing digital products that leverage open data to address challenges like air and ocean pollution, youth and veteran homelessness, the opioid crisis, rural economic development, expanding the innovation economy, and much more.

Last year was also a year of significant growth for the program. It marked a major milestone – **The Opportunity Project's five year anniversary** – and included many successes and innovations. The 2020 sprints focused on 8 Natural and Built Environment challenges including Reducing Ocean Plastic Pollution and Facilitating Sustainable Rural Economic Development. To innovate the way problems are defined in our process, we held a first-ever virtual cross-sector roundtable with 50 participants from 25 different organizations. Major NGOs such as Oceana and National Geographic collaborated with agencies such as NOAA, the Department of Energy, EPA, and more to jointly define pressing challenges. The sprints that followed the roundtable brought together 40 tech teams (more than in any prior year), 20 federal agencies, and 72 nonprofits and state and local governments to develop a record-breaking **38 new digital products for the public**.

TOP's sixth annual Demo Day was held virtually for the first time and was expanded into a [3-day virtual Demo Week](#). This conference saw 1,500 registered attendees, [104 speakers across 24 sessions](#), 17 hours of programming, and over **10,000 YouTube views**. Much more than showcasing the work resulting from the year's sprints, we hosted discussions featuring tribal voices, student presentations, open networking sessions, live interactive virtual demo booths, a product mentoring session, a live virtual meditation, and more. We dove into topics such as the state of the federal innovation ecosystem, and hosted open learning sessions on data and human centered design for public servants. We're proud that our [Demo Week speakers](#) genuinely looked like America, with more than half of the speakers being female, more than one third people of color, speakers ranging in age from 18 to 80, representing diverse political views, and voices such as Native Americans, combat disabled veterans, and more.

The year also heralded unique opportunities and initiatives. We held our first University Sprint, which brought together ten student teams from innovation centers, project-based courses, and student organizations from institutions of higher education across the nation. We launched a national partnership with the American Statistical Association (ASA) on the Annual Data Expo Challenge, in which contestants analyze Census Bureau data to develop visualizations and digital products that "Help Families, Businesses, and Communities Respond to COVID-19." And perhaps most importantly, The Opportunity Project [launched TOPx](#), a detailed toolkit that open sources our tech sprint model, enabling any federal agency to facilitate sprints on their own timelines and topics. We piloted the toolkit with the Department of State's Office of Foreign Assistance (F) and 3 tech teams focused on the challenge of reimagining civics education. **TOPx represents a major milestone in institutionalizing TOP within the federal government's knowledge base**, and we plan to expand its use further in the coming years.

As we continue into 2021, we hope to collaborate with many of you again. Our next Opportunity Project Prize Challenge will award funds to tech teams who utilize the TOP model to develop digital products. In 2021, The Opportunity Project will focus on topics including the economy and sustainability post-COVID-19, and engaging communities with 2020 Census data. Last year demonstrated the remarkable resilience of our community, and whether it's through a sprint, workshop, or TOPx, we look forward to working with new and familiar faces this year.

Sincerely,

The Opportunity Project Team  
at the U.S. Census Bureau

# Our Mission & Values



Pictured from left: (top row) Dominica Zhu, Drew Zachary, Haley Ashcom Miller, (middle row) Radhika Bhatt, Lorena Molina-Irizarry, Anna Valuev, (bottom row) Michael Neal Bagby, Sam Potasznik, Emma Brennan. We'd also like to thank 2020 TOP team members not pictured: Mara Abrams, Ivan Metzger, Anna Kizer, Marcella Maki, Tia Thompson, Jianna So, and Neve Foresti.

**Our Mission:** To catalyze the creation of digital products that use open federal data to solve pressing challenges for communities nationwide.

**Our Values:**

- Building connections across sectors and industries
- Delivering value to the people
- Increasing use of federal open data
- Employing human-centered design principles
- Amplifying community voices, especially those often unheard

# Introduction / How TOP Works

Collaborative technology development sprints.

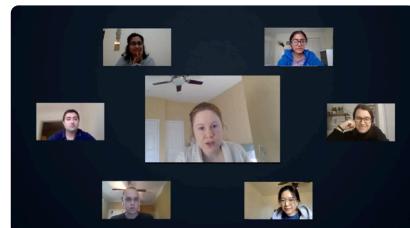
## 1. Identify Challenges

Federal agencies identify high-priority challenges facing the public.



## 2. Team Up

Tech teams from industry and universities sign on to create data-driven, digital products in collaboration with end users, data and policy experts.



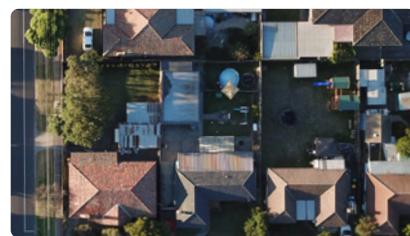
## 3. Build

Tech teams build digital products during a 12 week virtual tech development sprint that includes user research, data exploration, and product development. Past products include mapping tools, apps, websites, games, AI algorithms, network visualizations, and more.



## 4. Launch

At the end of the sprint, products are launched and showcased at Demo Day, an open press event.



## 5. Reach End Users

After the sprint, participants help to get the products to end users and move the needle on national challenges. Teams have the option to apply for a financial prize to continue their work.

"The TOP sprint model exposes tech teams to people we wouldn't otherwise be able to connect with. That not only accelerates the process but it also makes the work we do right the first time"

— 2020 TOP Tech Team Member

# Introduction / Who's Involved

Cross-sector collaborators solve pressing challenges.



## Federal Agencies

Agencies throughout the federal government define major challenges facing the public. During the 12-week sprint, policy experts and data stewards from each agency provide feedback to the participating teams and assistance working with federal open data.



## User Advocates

Community leaders, advocates, and people with direct lived experience in the target challenges who guide tech teams in designing solutions that are realistic and useful for the target end users.



## Sustainability Partners

Technology accelerators and other organizations focused on product launch and go-to-market strategy act as advisors to the tech teams.



## Tech Teams

Companies, universities, non-profits, and students who build digital products in the sprints.



## Product Advisors

Technology product experts who consult tech teams on how to develop viable products that can be sustained after the sprint.

"It was really fun to be able to use my experience for a product being developed. As community advocates, we often work in a silo, and the lessons we learn don't get distributed. Through TOP, we see people come together from different perspectives and create something that will be useful."

— 2020 Sprint User Advocate

# 2020 Earth Sprints / Themes

In 2020, The Opportunity Project sprints focused on 2 critical themes through 8 problem statements:

## 1. Natural Environment

Developing Markets for Recycled Materials  
*U.S. Environmental Protection Agency*

Reducing Ocean Plastic Pollution  
*U.S. Department of State & The Wilson Center*

Increasing Awareness of Transportation Emissions' Effects on Air Quality  
*U.S. Environmental Protection Agency*

Aiding Agriculture Decision-Making  
*U.S. Department of Agriculture*



## 2. Built Environment

Helping Families Achieve Economic Self-Sufficiency  
*U.S. Department of Housing & Urban Development*

Assisting Recently Resettled Refugees  
*USA for UNHCR*

Facilitating Sustainable Rural Economic Development  
*U.S. Environmental Protection Agency*

Tracking Impact of Disaster and Emergency Spending  
*Office of Management & Budget*

Participants worked with topic-specific datasets listed on The Opportunity Project [Data Curation Hub](#), with modules curated for the [Natural](#) and [Built](#) Environment.

The 3 sprints in 2020 included:

**40 Tech Teams**

**20 Federal Agencies**

**72 Nonprofits + State and Local Government**

**38 Digital Tools**

"I really enjoyed engaging with others interested in the same topics, seeing the variety of people and what they could create."

— 2020 TOP User Advocate

# 2020 Sprints / Collaborators

Below are some of our collaborators from 2020.  
Others are listed on page 20.

## Tech Teams

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**alteryx**



GEORGETOWN UNIVERSITY  
McCourt School of Public Policy



THE BEST RUN



## Government Agencies and Problem Statement Leaders

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U.S. Energy Information Administration



★ = TOP

# 2020 Sprints / Collaborators

## User Advocates



Robert Wood Johnson Foundation



ENVIRONMENTAL LAW & POLICY CENTER

## Product Advisors & Sustainability Partners



"A big part of TOP are user advocates, or the people who will benefit from the product. Having them involved with the tech teams, and then having product advisors and data steward support, creates synergies between all of those groups and sets you up for more success than if it was just a federal agency or even an agency and a tech team collaborating."

– 2020 TOP Participant,  
U.S. Department of Agriculture

# 2020 Sprints / Products

## Natural Environment

### Reducing Ocean Plastic Pollution

*U.S. Department of State & The Wilson Center*

1.  **Georgetown University Campus Plastic Initiative by Georgetown University Beek Center**  
Tracks plastic pollution on college campuses and educates students on the impacts of plastics in their communities through educational modules, a dashboard, and a playbook.  
Data used: Earth Challenge Integrated Dataset and Earth Challenge 2020 app.
2. **The UN Environment Programme Dashboard by IBM**  
Shows the power of Data and AI to address the need to demonstrate progress against the Sustainable Development Goal 14- Life Below Water by setting a baseline for global marine litter density using Machine Learning methods.  
Data used: Earth Challenge Integrated Data: Plastic Pollution (MLW, MDMAP, TIDES).
3. **Ocean Plastics Story Map by Esri by Resource Recycling Systems (RRS)**  
Compiles tangible and novel data sets to energize public consciousness and provide new insights into ocean plastic pollution, offering actions for citizens and policymakers to solve this challenge.  
Data used: EPA; Citizen Science Portal; Interpol; GRID-Arendal; PEW; Woldemar d'Ambrières.

### Developing Markets for Recycled Materials

*U.S. Environmental Protection Agency*

1.  **Chicago Circular Economy by SAP**  
Empowers city officials to make informed decisions around waste management that lead to transparency, investment, and job creation through a circular economy.  
Data used: EPA; Association of Plastics Recyclers; Illinois Recycling Association; Plastics Markets - Buyers and Sellers; Institute of Scrap Recycling Industries; The Recycling Partnership.

### Penn Data Science

Depicts a story map illustrating how plastics find their way to the ocean and ultimately the food chain, as well as the subsequent health effects.

Data used: Earth Challenge 2020 Integrated Data.

### PPIO by Rutgers University

Increases awareness of beach cleanup events and helps organizers plan future cleanups by predicting the number of volunteers needed.

Data used: Earth Challenge Integrated Data: Plastic Pollution (MLW, MDMAP, TIDES).

### Pollution Policy Watch by George Mason University

Visualizes the effect of plastic bans on coastal plastic pollution for policy makers and advocates.

Data used: Earth Challenge 2020 Consolidated Data.

### Sea Scavenger by Code for Tucson

Highlights the issue of ocean plastic pollution through an interactive game for all age groups.

Data used: Earth Challenge Integrated Data: Top 10 Sources of Plastic Pollution by Country; Earth Challenge Integrated Data: Plastic Pollution (MLW, MDMAP, TIDES).

### The Ghost Gear Project by Harvard University Institute of Politics

Visualizes the location of discarded fishing nets and explores solutions for policymakers, NGOs, and the general public.

Data used: Global Fishing Watch's Anchorage Dataset; Earth Challenge 2020 Integrated Data.

### Eco Bloc

Creates a B2B Marketplace for recycled materials that helps to enable local circular economies.

Data used: EPA Facts and Figures about Materials, Waste and Recycling; USGS Mineral Commodity Summaries.

### TruCycle MRF by Resource Recycling Systems (RRS)

A certification for material recovery facilities reflecting level of community relationship, material sorting, value of materials, and end market success.

Data used: Census Bureau; EPA WARM Model; EPA Municipal Solid Waste Report.

# 2020 Sprints / Products

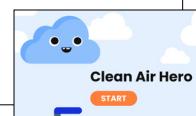
## Natural Environment

### Increasing Awareness of Transportation Emissions' Effects on Air Quality *U.S. Environmental Protection Agency*

1.  **AirMotionDC by American University**  
Compiles and analyzes real-time data on traffic patterns and air pollution in DC, allowing policymakers to explore the effect of transportation on air quality.  
Data used: EPA AirNow; Open Data DC Street Segments API; DC GIS Master Address Repository; TomTom Traffic API.
2. **Air Aware by George Mason University**  
Identifies neighborhoods for people seeking to move to locations with better air quality.  
Data used: EPA National Emissions Inventory; National Lung Association State of the Air.

### Aiding Agriculture Decision-Making *U.S. Department of Agriculture*

1.  **NAIP Explorer by Mapbox**  
Provides a gentle on-ramp and simple way to explore NAIP imagery for users at USDA and the farmers they serve.  
Data used: USDA National Agriculture Imagery Program (NAIP).
2. **Cesium**  
Increases accessibility of NAIP imagery data for farmers and other interested stakeholders by pulling this data into the existing Cesium platform.  
Data used: USDA National Agriculture Imagery Program (NAIP).

3.  **Clean Air Hero by Rutgers University**

Educes young students about air quality and bus emissions and encourages students, parents, and teachers to create healthier school environments.

Data used: EPA Idle-Free Schools Toolkit.

4. **AQ Snapshot by OpenAQ**  
Generates air quality reports based on location, date, and pollutant type.  
Data used: EPA AirNow.
5. **Code for South Florida**  
Visualizes air quality data, which local government officials can use for decision making and residents can use to better understand the air in their communities.  
Data used: EPA Air Now.

3.  **NAIP Downloader and Education Modules by Geosurge**

Lowers the barrier to learning about agricultural imagery for farmers and anyone who wants to learn.

Data used: WUSDA National Agriculture Imagery Program (NAIP).

4. **PAGAF: Precision Ag for all American Farmers by New Light Technologies**  
Uses NAIP data to provide free precision agriculture services to farmers.  
Data used: USDA National Agriculture Imagery Program (NAIP); USDA Cropland Data Layer; ESA Sentinel 2.

# 2020 Sprints / Products

## Built Environment

### Help Families Achieve Economic Self-Sufficiency U.S. Department of Housing & Urban Development

1.  **The EnVision App by Organizational Performance Systems, Inc.**

Helps economically disadvantaged Americans break the cycle of generational poverty and create a positive path to self-sufficiency.

Data used: HHS Poverty Guidelines; Census Income and Poverty; Census ACS; GAO.

2. **America's Community Collaboration Platform by Council Exchange Board of Trade**

Connects service providers and low income families to program resources that enable self-sufficiency and economic mobility.

Data used: HUD Picture of Subsidized Households; HUD Federal Programs; HUD EnVision Centers; HUD Opportunity Zones; IRS SOI Tax Stats.

3. **Envision Success by Tech Levitate**

Utilizes AI technology to help case managers assist low income families moving toward economic self-sufficiency.

Data used: IRS SOI Tax Stats.

4.  **Julius Career Journey Program by Julius Education**
- Brings job opportunities and career maps to life, enabling a clear path for job seekers to training and employment.
- Data used: Census Quarterly Workforce Indicators; Census Economic Data; BLS Occupational Employment Statistics.
5. **iDISPLA 360-Degree Data Fusion Virtual Ecosystem Platform by Greer Institute-ISC iDISPLA Consortium**
- Provides novel insights to promote economic self-sufficiency to low-income families by integrating federal data and user-generated content.
- Data used: HUD; Census Bureau ACS; FCC Broadband.
6. **Self-Sufficiency Pathways by Emsi**
- Identifies career opportunities that will allow career coaches and case managers to help individuals move away from requiring supplemental assistance.
- Data used: HUD Services and Benefits.

### Assisting Recently Resettled Refugees USA for UNHCR

1.  **FindHello by USAHello + SAS**

Connects immigrants, refugees, and asylum seekers connect with resources in their area, using a data set built in partnership with service organizations.

Data used: State Department WRAPSnet; FindHello database.

2. **RefugeeAssist by Georgetown University and Columbia University**
- Enables refugees to identify community resources near them during and after their resettlement period in the United States.
- Data used: State Department WRAPSnet; NTIA BroadbandUSA.
3. **Resettled Refugee Services and Data Explorer by Graphicacy & Mapbox**
- Helps recently resettled refugees locate vital services within their area and see the landscape of refugees around the United States by country of origin.
- Data used: State Department WRAPSNET; Charity Navigator.

# 2020 Sprints / Products

## Built Environment

### Facilitating Sustainable Rural Economic Development

*U.S. Environmental Protection Agency*

1.  **R Story by Columbia University**  
Simplifies and visualizes federal open data to support storytelling for rural economic development.  
Data used: Census ACS; FCC Form 477; BLS Quarterly Census of Employment and Wages; EPA National Walkability Index; BEA GDP and Industry Data; HUD Fair Market Rents.

### 2. City Builder by Citi Ventures

Provides data-driven transparency into communities' needs, so investors can create targeted positive impact through local investments.

Data used: Census ACS; FCC Form 47; Institute of Museums and Library Services Museum Data Files; Public Libraries Survey; CDC Social Vulnerability Index; USDA Food Access Research Atlas; National Council of State Housing Agencies; SEC EDGAR database.

3. **Maine Business Resources by Syracuse University**

Helps small business owners in Maine to grow together by providing them with information necessary to start/expand their business.

Data used: Census County Business Patterns.

4. **True Connections by YouthMappers**

Uses federal open data sets and citizen science to help rural communities share their stories of internet access.

Data used: FCC Form 477.

5. **Tech Talent Tracker by Center on Rural Innovation (CORI)**

Creates digital economy reports for rural leaders designing economic development strategies.

Data used: Census ACS; NAICS; DOE College Scorecard; Census County Population by Characteristics; Census County Business Patterns; USPTO Inventors Geocoded.

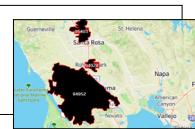
6. **TeleCommunity by Tierra Plan**

Facilitates rural economic development by connecting remote workers with rural communities.

Data used: FCC Broadband; Census ACS; EPA Smart Location Database; EPA Atlas of Rural America; EPA Livability Indicators.

### Tracking Impact of Disaster and Emergency Spending

*Office of Management & Budget*

1.  **Emergency & Disaster Funding Tracking by RevealGC & Alteryx**  
Tracks and analyzes the impact of disaster relief funding for mitigation and recovery efforts using big data, aerial imagery, predictive analytics and geo-spatial technologies.  
Data used: USASpending; FEMA; HHS Annual Performance Report; HUD Fair Market Rents; IRS; CDC/SVI; Census Bureau; DOL; BLS.

2.  **Disaster Spending Tracker by Baruch College Public Finance Institute**

Tracks the flow of COVID-19 related spending by the federal government and its impact on economic recovery.

Data used: USA Spending.

3. **Urban Footprint**

Provides nationwide, sector-specific insights to answer critical questions on urban transformation and policy, community resilience, hazard and climate risk, and social equity.

Data used: USA Spending, proprietary data.

# Demo Week / Overview

Each year, The Opportunity Projects facilitates a Demo Day, typically an in-person event in Washington DC, where the tech industry, academia, government, and communities gather for an annual showcase of digital tools built through TOP.

For the first time this year, Demo Day was expanded into Demo Week, a virtual 3-day conference, allowing for a record-breaking number of sessions, participants, and perspectives.

Demo Week was a celebration of work accomplished in 2020 and the values the TOP community embodies:



*Collaboration across all sectors and silos*



*Human-centered design as a critical part of data and technology*



*The promise of government innovation and the future of civic tech*



*Lifting up the voices of those too often left out of conversations about data and tech*



*The power of "building with, not for"*

Demo Week by the Numbers:

**3 Days**

**24 Sessions**

**17 Hours of Programming**

**104 Speakers**

**1,500 Registered Attendees**

**10,000+ YouTube Views**

"Having Demo Week was something that we were all looking forward to in order to take our product and pull it together to make it presentable for people to view. It helped solidify our entire experience."

– 2020 TOP Tech Team Member

# Demo Week / Speaker Highlights

## Technology



**Batool Hussain**  
Head of Americas Sustainability Services, SAP



**Pat Bajari**  
VP and Chief Economist, Amazon Core AI



**Kunal Sawarkar**  
Principal Data Scientist, IBM



**Linda Ge**  
Vice President, Digital Product Manager Lead, Citi Ventures

## Education



**Elizabeth Nguyen**  
Undergraduate Student, Georgetown Beeck Center



**Michelle Zee**  
Graduate Student, Columbia University Quantitative Methods in the Social Sciences



**Sukhmeet Bedi**  
Undergraduate Student, Rutgers Innovation, Design, and Entrepreneurship Academy



**Andreen Soley**  
Director, Public Interest Technology (PIT) University Network, New America

## Government



**Ron Jarmin**  
Current Acting Director, US Census Bureau



**Matt Dalbey**  
Director, Office of Community Revitalization, U.S. Environmental Protection Agency



**Nico Papfil**  
Director, 10x, General Services Administration



**Sara Brenner**  
Associate Director for Medical Affairs & Chief Medical Officer for In Vitro Diagnostics, Food and Drug Administration



**Jennifer Lassiter**  
Chief of Staff and Operations Lead, Design + Development, Tech & Innovation, Consumer Financial Protection Bureau



**Ben Carson**  
Secretary, Former U.S. Secretary of Housing and Urban Development



**Aden Van Noppen**  
Founder & Executive Director, Mobius



**Jenna Jambeck**  
Distinguished Professor and National Geographic Fellow, University of Georgia



**Maria Howeth**  
Sr. Customer Success Manager and Tribal Specialist, Choctaw Nation of Oklahoma and, eCivis



**Basma Alawee**  
Florida Refugee Organizer, Refugee Congress



**Dan Correa**  
Director, Day One Project & Strategic Advisor, Partnership for Public Service



**Ben Sledge**  
Director of Veteran Outreach, HeartSupport

# Demo Week / Session Spotlights

The wide variety of Demo Week sessions included:

- Keynote addresses
- Tech team lightning talks
- Hands-on learning workshops
- Live Technology Product Demos

## 1. Empowering Communities for Resilience and Sustainable Growth

The health of rural communities and access to services, infrastructure, and data is critical to implementing solutions that tackle economic, environmental and human health challenges. In this session, technologists and community leaders came together to showcase creative solutions that help the American public understand the challenges, gaps and opportunities to help facilitate sustainable rural economic development and track federal financial assistance to local communities in response to emergencies and disasters.

## 2. Learn with TOP: A Master Class on Human-Centered Design for Public Servants (of any kind!)

How can government adopt design methodologies to become more efficient, modern, and accessible? This workshop was a masterclass in Human Centered Design taught by 3 seasoned experts from government and industry. The session covered basic methods of human centered design, including topics like user research, ideation, and storytelling.



## 3. Native Voices: What Do We Need To Hear? How Technology, Data and Government Can Best Serve Tribal Communities

An intimate discussion with leaders of the Choctaw Nation, Tsuut'ina Nation, and Muscogee (Creek) Nation on their needs during exceptionally challenging times, the work currently being done by tribal organizations, and the most effective and appropriate ways to create external partnerships that center on native communities' well-being. These tribal members discussed the complexity and discrepancies within the digital divide, what economic development really means, the importance of understanding sovereignty within the context of Indian people, and how to create meaningful partnerships.

## 4. Hearing Veterans Voices: Community + Tech to Support Mental Health

When WWII veterans served, they made up 11% of the US population... today, in the midst of our longest running conflicts, it's less than 1%. What burden has that placed on our vets, especially when many are not truly heard about what they've seen and experienced? How can technology and The Opportunity Project community can support? This session featured a TED-style talk by writer, veteran and advocate Ben Sledge on his story and the conversations we need to have about supporting veterans, and a raw and personal fireside chat between 3 post-9/11 veterans that addressed a range of topics including trauma, mental health, the difficulties in returning back to civilian life, and the pressing need for veterans to connect to one another for support and technologies' role in facilitating these connections.

# New in 2020 / Highlights

## Aligning on Cross-Sector Priorities



### Earth Sprint Roundtable

On March 20, 2020, The Opportunity Project convened its first roundtable, focused on natural and built environment challenges, and dedicated to a more inclusive method of problem definition that engaged national and global NGOs alongside federal agencies. Nearly 50 participants virtually joined the event, representing expertise from 25 organizations, including Ocean Conservancy, UN Environment, National Geographic Society, U.S. Environmental Protection Agency and others. Participants shared their organizations' critical priorities, identified areas of alignment, and brainstormed ways these challenges could be addressed through The Opportunity Project. Many of the ideas discussed at the roundtable formed the bases of the eight problem statements addressed through the 2020 TOP Earth Sprints.

## Engaging the Next Generation of Technologists

### University Sprint

For the first time in fall 2020, The Opportunity Project facilitated a sprint composed entirely of university technologists. Ten teams made up of undergraduate and graduate students from institutions of higher education participated, representing project-based courses, innovation centers, and student organizations. Participating universities included Georgetown, Columbia, Syracuse, Harvard, George Mason, Rutgers, and American University, as well as a cross-university team from YouthMappers.

## Employing Census Bureau Data to Address the COVID-19 Pandemic

### American Statistical Association Partnership

In 2020, The Opportunity Project partnered with the American Statistical Association on its annual [Data Expo Challenge](#), a competition with cash prizes for the best analysis and visualization of government data. Crowdsourcing from within the Bureau, this year's theme is "Helping Families, Business, and Communities Respond to COVID-19." The Opportunity Project launched a [module](#) on its Data Curation Hub focused entirely on COVID-19 open data sets primarily from the Census Bureau. Contestants are challenged to analyze this data and/or develop digital products, and present their findings at ASA's Joint Statistical Meeting (JSM). Abstract submissions are due April 14, 2021.

## Charting a Path for TOP's Collaborations with NGOs



### USA for UNHCR Developed a TOP Built Environment Problem Statement

This year marked the first time an NGO, [USA for UNHCR](#), rather than federal agency, took the role of a problem statement lead, aiming to catalyze tools that use federal open data to support refugees resettling into American communities. This partnership charts a path for future TOP efforts, allowing agencies and NGOs to easily collaborate and achieve a shared mission.

# New in 2020 / Highlights

## TOPx Toolkit Launch

The screenshot shows the TOPx Toolkit website. At the top, there's a navigation bar with links for 'INTRODUCTION', 'PHASE 1', 'PHASE 2', 'PHASE 3', and 'GLOSSARY'. On the right side of the header is a 'DOWNLOAD PDF' button. Below the header, the main content area has a dark background with white text. A large blue box highlights 'Step 2: Sprint Facilitation'. To the left of this box is a vertical sidebar with a table of contents: 'STEP 1', 'STEP 2', 'STEP 3', 'STEP 4', 'STEP 5', and 'STEP 6'. Step 2 is highlighted with a blue background and the number '2' in white. The main content area contains sections for 'Sprint Facilitation', 'Key Actions', and 'Resources'. The 'Sprint Facilitation' section includes a sub-section titled 'Step 1: Ongoing Tasks' with a time estimate of 'Time: 12-16 weeks' and an effort level of 'Effort: 3'. The 'Key Actions' section lists five numbered steps with descriptions. The 'Resources' section includes a link to 'Introduction to TOPx Email'.

This screenshot shows the 'Resources' page from the TOPx Toolkit. It features a grid of colored squares in shades of blue and grey. Below the grid, there are three numbered sections: '1. What Makes a Good Problem Statement', '2. Past TOP Problem Statements', and '3. Problem Statement Template'. Each section has a brief description and a link to the resource.



At Demo Week, The Opportunity Project publicly launched TOPx, a toolkit for federal agencies that opens up the The Opportunity Project playbook to enable federal agencies to transform open data into digital tools that solve key national challenges at the hearts of their missions, all on flexible and modifiable timelines. **The TOPx toolkit includes detailed descriptions of each step** in facilitating a TOP sprint as well as checklists with key action items, timelines, effort levels, tips and best practices, as well as downloadable templates.

Agencies can freely use the toolkit to support their own tech sprints, or partner with Census Bureau to receive additional support and guidance. **TOPx represents a major milestone in institutionalizing TOP within the federal government's knowledge base, and we look forward to expanding its use further in the coming years.**

## TOPx Pilot Sprint

### Re-imagining Civics Education for the Next Generation

In the fall of 2020, The Department of State's Office of Foreign Assistance (F) was the first agency to use the TOPx toolkit through a pilot sprint that challenged participants to reimagine civics education, bringing open data and evidence-based examples to the classroom. Our pilot with the State team helped to improve the TOPx toolkit and demonstrate its viability as a model for scaling TOP further across government.

In collaboration with 12 organizations representing teachers, students, and education advocates, 3 tech teams developed digital products to address this important challenge.

#### Tech Teams:



#### User Advocates:



# Happening in 2021 / Get Involved

## TOPx Sprints

### Enabling COVID-19 Diagnostic Products

The Opportunity Project is collaborating with the US Department of Health and Human Services on a sprint focused on [COVID-19 Diagnostic Data Tools](#). The goal of the sprint is to increase speed, quality, comprehensiveness, and utility of COVID-19 diagnostic test data, as well as ensure that diagnostic tools can securely transmit test results to local and national public health authorities, and to health care providers and patients. These capabilities will be critical for data capture and reporting when at-home, non-prescription, and over-the-counter tests are authorized and begin saturating the market.

## 2021 Themes

Each year since 2018, we've run sprints focused on broad themes, like workforce, geospatial challenges, and earth-related challenges. In 2021, The Opportunity Project will focus on COVID-19 economic recovery, climate, and engaging communities meaningfully with 2020 Census and other statistical data. Public servants, companies, universities and any other stakeholders interested in participating in TOP sprints related to these topics are encouraged to [sign up for updates](#) or reach out to the TOP team at [census.opportunityproject@census.gov](mailto:census.opportunityproject@census.gov).

## Data Curation Hub

This year we'll continue to expand [The Data Curation Hub](#) with open federal datasets focused on this year's sprint themes. This resource allows the public to access issue-specific data and connect with federal data experts familiar with each resource. Those working in the open data community, we hope you will utilize these datasets and connect with the data experts knowledgeable about each one!

The screenshot shows the homepage of the Data Curation Hub. At the top, there's a navigation bar with links for 'ABOUT', 'PROCESS', 'WORK', 'PRESS', 'RESOURCES', and 'GET INVOLVED'. Below the navigation, a section titled 'Curated Datasets' is displayed, stating 'by The Opportunity Project' and describing it as 'Discover issue-specific data recommended by government experts and test-driven by teams working to solve the nation's biggest challenges.' Three cards are shown: 'Workforce Challenges' (57 datasets), 'Natural Environment' (75 datasets), and 'Built Environment' (60 datasets). Each card has a small thumbnail image and a brief description.

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**Interested in TOPx?**

We encourage federal agencies to reach out to the TOP team at [census.opportunityproject@census.gov](mailto:census.opportunityproject@census.gov) so that we can provide more information and help you get started.



## TOP Prize Challenge

Given the importance of product sustainability, in 2021, The Opportunity Project will be facilitating the second Opportunity Project prize challenge. Teams who have participated in The Opportunity Project are eligible to compete for funding to expand their impact, deploy tools to end users, and deliver impact on critical problems facing the public. [Sign up here to receive updates on the 2021 prize challenge.](#)

## Strategic Partnerships

The Opportunity Project will continue to develop strategic partnerships, seeking collaborations to expand the TOP model and opportunities to support technologists developing solutions to these critical challenges. If your organization is interested in exploring a partnership, please reach out.

[Get Updates](#)

# Acknowledgments

Thank you to all of the individuals and organizations that collaborated with The Opportunity Project.

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Those who were not previously mentioned in the report include:

180 Cares	North Dakota State University
5Gyres	Office of Hawaiian Affairs
Alina Okun	Our Children's Earth
Acadiana Planning Commission	Papa Ola Lōkahi
Advance Project	Plants Project
Architecture for Refugees	Plastics Industry Association
Aspen Institute Community Strategies Group	Revolution Systems
Catholic Community Services	Rural Community Assistance Corporation (RCAC)
Center for Disaster Philanthropy	Rural Policy Research Institute
Center for New Economy	Save the Children
Center for Rural Affairs	SLC Air Protectors
Center for Sustainable Communities	Southeast Recycling Development Council
City of Baltimore	State of Louisiana
Clean Air Council	State of Rhode Island
Colangelo Carpenter Innovation Center-Leadership Foundations	Sustainable Native Communities
Council of State Community Development Agencies (COSCDA)	Collaborative/MASS Design
Eagle County Materials and Recycling Facility	UN Environment
Family Promise	University of Delaware
Georgetown University, Beeck Center	University of Georgia
Hello Neighbor	University of Maryland School of Public Health
HUD midwest region	University of Washington
Inceodia	Urban Design 4 Health
Institute of Scrap Recycling Plastics (ISRI)	Utah Geographic Reference Center (AGRC)
Integrity Management Services Inc	Waste Management
KW Plastics	Western Leaders Network
Lafayette Utilities System	
Lonely Whale	
Louisiana Governor's Office	
Mapbox	
National Farmers Union	
National Federation of Filipino American Organizations (NaFFA)	
National Voluntary Organizations Active in Disaster	
Neighborhood Innovation Center	
National Instruments	