Mapping Philanthropy & the SDGs

April 3, 2019
Jake Garcia
VP for Data & Technology
Foundation Center (now “Candid.org”)

Leading source of information about philanthropy worldwide

![Map showing global philanthropy data](http://maps.foundationcenter.org)
Networks defined by grantmaking relationships
Candid.org
(Foundation Center + Guidestar as of Feb. 2019)

— 230 employees, U.S.-based

— 85 in Data & Tech
  • 3 Geographers
  • 3 Data scientists
  • 5 designers
  • > 40 programmers/DBAs/QA analysts
  • 20 data analysts
Questions we hear

How can I “scan the landscape” of funding?

Who would be the best funder for me?

What other non-profits or foundations should I partner with?

What regions need the most help?

How does all of our work relate to the SDGs?
Data reported by foundations & non-profits in the U.S.

990: Basic Information

Form 990

Return of Organization Exempt From Income Tax

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except private foundations)

Do not enter social security numbers on this form as it may be made public.

Information about Form 990 and its instructions is at www.irs.gov/form990.

For the 2015 calendar year, or tax year beginning and ending

A

B

C

D

E

F

G

H(a)

H(b)

H(c)

J

K

THE CLEVELAND FOUNDATION

Doing business as

1422 EUCLID AVENUE

34-0714588

2168613810

RONALD B. RICHARD

1,189,823,840.

Yes

No

www.CLEVELANDFOUNDATION.ORG

X

Corporation

X

1914

OH
<table>
<thead>
<tr>
<th>(a) Name and address of organization or government</th>
<th>(b) EIN</th>
<th>(c) IRC section if applicable</th>
<th>(d) Amount of cash grant</th>
<th>(e) Amount of non-cash assistance</th>
<th>(f) Method of valuation (book, FMV, appraisal, other)</th>
<th>(g) Description of non-cash assistance</th>
<th>(h) Purpose of grant or assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>BELOIT COLLEGE 700 COLLEGE STREET BELOIT, WI 53511</td>
<td>39-0808497</td>
<td>501 C 3</td>
<td>30,000</td>
<td>0.0</td>
<td>0.0</td>
<td>$15,000 GENERAL SUPPORT; $7,500 FOR SCHOLARSHIPS FOR OFF-CAMPUS STUDY OPPORTUNITIES; $7,500 TO HARNESSING THE TALENT OF ENCORE ARTISTS TO ENGAGE OUR COMMUNITIES’ ELDER</td>
<td></td>
</tr>
<tr>
<td>BENJAMIN ROSE INSTITUTE 11590 FAIRHILL ROAD CLEVELAND, OH 44120</td>
<td>34-0714482</td>
<td>501 C 3</td>
<td>537,885</td>
<td>0.0</td>
<td>0.0</td>
<td>SCHOLARSHIP SUPPORT FOR THE 2015-2016 ACADEMIC YEAR</td>
<td></td>
</tr>
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<td>BEEREA COLLEGE COLLEGE RELATIONS, CFO 2216 BEEREA, KY 40404</td>
<td>61-0444650</td>
<td>501 C 3</td>
<td>42,000</td>
<td>0.0</td>
<td>0.0</td>
<td>YOUTH DEVELOPMENT</td>
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<tr>
<td>BEST BUDDIES INTERNATIONAL INC 100 S SE SECOND ST SUITE 2200 MIAMI, FL 33131</td>
<td>52-1614576</td>
<td>501 C 3</td>
<td>20,000</td>
<td>0.0</td>
<td>0.0</td>
<td>GENERAL SUPPORT</td>
<td></td>
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<tr>
<td>BETTY FORD CENTER AT EISENHOWER 72901 COUNTRY CLUB DR SUITE 201 RANCHO MIRAGE, CA 92270</td>
<td>95-3863994</td>
<td>501 C 3</td>
<td>10,000</td>
<td>0.0</td>
<td>0.0</td>
<td>BRIDGE SUPPORT DURING THE ORGANIZATIONAL ALIGNMENT WITH BIG BROTHERS BIG SISTERS CENTRAL OHIO</td>
<td></td>
</tr>
<tr>
<td>BIG BROTHERS BIG SISTERS OF GREATER CLEVELAND - 4614 PROSPECT AVENUE, SUITE 410 - CLEVELAND, OH 44103</td>
<td>34-1039700</td>
<td>501 C 3</td>
<td>76,964</td>
<td>0.0</td>
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Machine-readable data is valuable (though not widely available nor timely)

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    <Prepare Firm Name>
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    <Prepare Firm US Address>
      <Address Line 1 Txt>10900 NE 4TH STREET SUITE 1700</Address Line 1 Txt>
      <City Nm>BELLEVUE</City Nm>
      <State Abbreviation Cd>WA</State Abbreviation Cd>
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Candid.
Machine learning & big data methods

Autoclassification
Auto-geocoding
Entity extraction
Entity matching
Predicting giving
News data pipeline
Taxonomies

Philanthropy Classification System (PCS)

taxonomy.foundationcenter.org
Taxonomies

Sustainable Development Goals (SDGs)
“For its efforts to provide access to safe water and sanitation for a hundred and eighty thousand people in Bangladesh. The grant will help fund two Water.org programs - WaterCredit, a microfinance program that provides families with small loans to meet their water and sanitation needs, and the New Ventures Fund, which supports the development of solutions to the global water and sanitation crisis.”

Primary Subject: Water access, sanitation, & hygiene
Additional Subject: Development Finance
Population Group: Low-income and poor people
Geo Area Served: Bangladesh

* Philanthropy Classification System (PCS) & Geonames/GeoTree
How Does Your Work Align with the SDGs?

The **SDG Indicator Wizard** helps you determine which Sustainable Development Goal(s) and Targets relate to your work, and which Indicators you can track in conjunction with your own indicators to measure your work’s impact. It will assist you to translate your strategic priorities into an SDG-compatible framework consisting of the relevant goal(s), targets, and indicators that are universally comparable.

Please enter text describing your work as best as you can. This text can also be your mission statement, project goal(s), and/or funding objective(s). To get the best results, you can include who the direct and indirect beneficiaries are of your work.

For its efforts to provide access to safe water and sanitation for a hundred and eighty thousand people in Bangladesh. The grant will help fund two Water.org programs - WaterCredit, a microfinance program that provides families with small loans to meet their water and sanitation needs, and the New Ventures Fund, which supports the development of solutions to the global water and sanitation crisis.”
“For its efforts to provide access to safe water and sanitation for a hundred and eighty thousand people in Bangladesh. The grant will help fund two Water.org programs - WaterCredit, a microfinance program that provides families with small loans to meet their water and sanitation needs, and the New Ventures Fund, which supports the development of solutions to the global water and sanitation crisis.”

Goal 6: Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all

http://sdgfunders.org/wizard/
Autoclassification (SDGs)

**Targets and Indicators** (ordered by relevance)

**Target 6.b.** Support and strengthen the participation of local communities in improving water and sanitation management

**Indicators**
- 6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

**Target 6.2.** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

**Indicators**
- 6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water

[http://sdgfunders.org/wizard/]
Classification helps us see what is being funded.
Classification helps us see *what* is being funded

**Distribution of Foundation Funding by SDG for 2016+**

Grants for activities in Brazil; starting in year(s) 2006 to present

Classification and geocoding help see *where* projects are happening:

Philanthropy Classification System: **Human Rights**
Entity extraction and matching help figure out *who* the biggest funders and grant recipients are.

<table>
<thead>
<tr>
<th>Funder Name</th>
<th>City</th>
<th>State</th>
<th>Country</th>
<th>* Dollar Value of Grants</th>
<th>Number of Grants</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>Ford Foundation</td>
<td>New York City</td>
<td>NY</td>
<td>United States</td>
<td>$1.9 Billion</td>
<td>6,095</td>
<td></td>
</tr>
<tr>
<td>THE SUSAN THOMPSON BUFFETT FOUNDATION</td>
<td>Omaha</td>
<td>NE</td>
<td>United States</td>
<td>$1 Billion</td>
<td>599</td>
<td></td>
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<tr>
<td>Nationale Postcode Loterij</td>
<td>Amsterdam City</td>
<td></td>
<td>Netherlands</td>
<td>$1 Billion</td>
<td>329</td>
<td></td>
</tr>
<tr>
<td>United States Department of State</td>
<td>Washington</td>
<td>DC</td>
<td>United States</td>
<td>$994.9 Million</td>
<td>681</td>
<td></td>
</tr>
<tr>
<td>Foundation to Promote Open Society</td>
<td>New York City</td>
<td>NY</td>
<td>United States</td>
<td>$760 Million</td>
<td>3,161</td>
<td></td>
</tr>
<tr>
<td>United States Agency for International Development</td>
<td>Washington</td>
<td>DC</td>
<td>United States</td>
<td>$736.6 Million</td>
<td>388</td>
<td></td>
</tr>
<tr>
<td>Bill &amp; Melinda Gates Foundation</td>
<td>Seattle</td>
<td>WA</td>
<td>United States</td>
<td>$579.8 Million</td>
<td>341</td>
<td></td>
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<tr>
<td>Oak Foundation</td>
<td>Genève</td>
<td></td>
<td>Switzerland</td>
<td>$540.3 Million</td>
<td>1,265</td>
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<tr>
<td>NoVo Foundation</td>
<td>New York City</td>
<td>NY</td>
<td>United States</td>
<td>$535.1 Million</td>
<td>1,019</td>
<td></td>
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</table>
Classification and geocoding help see *where* projects are happening:

SDG #4, Quality Education (geo area served: Africa)
Classification and geocoding help see *where* projects are happening:

**SDG #4, Quality Education** (recipients in: *Amsterdam*)
SDG #4, Quality Education (geo area served: Africa)
<table>
<thead>
<tr>
<th>Recipient Name</th>
<th>City</th>
<th>State</th>
<th>Country</th>
<th>* Dollar Value of Grants</th>
<th>Number of Grants</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camfed International</td>
<td>Cambridge</td>
<td></td>
<td>England</td>
<td>$75.6 Million</td>
<td>31</td>
<td></td>
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<tr>
<td>Institute of International Education</td>
<td>New York City</td>
<td>NY</td>
<td>United States</td>
<td>$62.4 Million</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>University of Cape Town</td>
<td>Rondebosch</td>
<td></td>
<td>South Africa</td>
<td>$45.4 Million</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Room To Read</td>
<td>San Francisco</td>
<td>CA</td>
<td>United States</td>
<td>$30.8 Million</td>
<td>917</td>
<td></td>
</tr>
<tr>
<td>Equity Group Foundation</td>
<td>Nairobi</td>
<td></td>
<td>Kenya</td>
<td>$28.3 Million</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Pretoria Sungardens Hospice</td>
<td>Pretoria</td>
<td></td>
<td>South Africa</td>
<td>$27.2 Million</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>BRAC Uganda</td>
<td>Kampala</td>
<td></td>
<td>Uganda</td>
<td>$24.9 Million</td>
<td>7</td>
<td></td>
</tr>
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</table>

**SDG #4, Quality Education** (geo area served: Africa)
Networks defined by grantmaking relationships

SDG #4, Quality Education (geo area served: Ghana)
Data landscape
Foundations, non-profits, grants
Fresh philanthropy data

- Grants just made
- RFPs being offered
- Scholarship programs
- New foundations being created

Coded in our taxonomy & SDGs, with entities extracted

E.g., if you are only interested in current philanthropic activities in Albany related to Economic Development...

Worldwide

- Places big and small
- Organizations big and small
- From multiple languages
ATLANTA, Apr. 11 /CSRwire/ - The NextGen Committee of the Ray C. Anderson Foundation has issued a call for proposals for one $90,000 grant to fund work in the 2019 calendar year for currently existing or new programs that would measurably reduce the concentration of greenhouse gases in the atmosphere, measured by metric tons (or “tonnes”) of carbon dioxide equivalent (CO2e), either by preventing the emission of those gases or by sequestering gases presently in the atmosphere.
Workflow
News scraping on AWS
Enterprise Database Management System (EDMS) Workflow
Current results

News scraping

Prime Minister Research Fellowship scheme open for all science and technology graduates from 2019
Posted: 09/10/2018

Apart from this, each fellowship candidate would be eligible for a research grant of Rs 2 lakhs per year.

Housing Options Scotland expands team after funding boost
Posted: 09/10/2018

The grant aimed at supporting the charity in partnership with Eiderly Accommodation Counsel (EAC) to help.

Burrell wins $500K federal grant to treat opioid addiction in adolescents
Posted: 09/10/2018

families. Burrell was awarded a $541,350 grant through the Substance Abuse and Mental Health Services grant and will help about 500 individuals, an extra 100 youths each year. MORE: Here's what you need to know about the grant and what it means for lived experience.

Preparations ready for Highland Avenue playground build
Posted: 09/10/2018

Allegany State Park, the school can bring kids here." A "Build it with KaBOOM!" playground grant, which

Deadline arrives for severe weather assistance applications
Posted: 09/10/2018

storms, flooding, landslides and mudslides from May 28 to June 3. Eligible counties are Grant

Carnegie Mellon/Pitt team receive $3.8 million NIMH grant to study suicide
Posted: 09/10/2018

A $3.8 million grant from the National Institute for Mental Health (NIMH) has been awarded to expand on their innovative research on how images of the brain can identify individuals with suicidal brains, it identified images with 94 percent accuracy. The NIMH grant will fund the work the greater number of participants allowed by the NIMH funding will additional confirmation.

Current results

News scraping
In an ideal world...

...all foundations and nonprofits would:

• **report electronically** in a standardized format

• report their data **directly to us, more frequently**

• use **unique identifiers** for all other organizations mentioned in their data

• provide **highly detailed descriptions of** their programs and grants...
But because the world of philanthropy data is scattered and messy ... 

We use these machine learning & big data methods to process large amounts of unstructured text:

- Auto-classification
- Is it philanthropy-related?
- If so, what sector?
- Auto-geocoding
- Entity extraction
- Master data mgmt
...so that we can build these:
...in order to help us answer these questions:

How can I “scan the landscape” of funding?

Who would be the best funder for me?

What other non-profits or foundations should I partner with?

What regions need the most help?

How does all of our work relate to the SDGs?
Thank you.

Jake.Garcia@candid.org

http://maps.foundationcenter.org

http://sdgfunders.org/
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td>990 form launched by IRS, 2-page format</td>
</tr>
<tr>
<td>1952-1954</td>
<td>Cox and Reece Commission hearings</td>
</tr>
<tr>
<td>1956</td>
<td>Foundation Center established</td>
</tr>
<tr>
<td>1960</td>
<td>Foundation Center publishes its first annual Foundation Directory (book)</td>
</tr>
<tr>
<td>1950s-1990s</td>
<td>Foundation Center staff use photographs and CD-ROM of PDFs to obtain 990 data from the IRS</td>
</tr>
<tr>
<td>1999</td>
<td>Foundation Center launches Foundation Directory Online</td>
</tr>
<tr>
<td>2015</td>
<td>Foundation Center launches Get on the Map campaign to encourage electronic reporting</td>
</tr>
<tr>
<td>2016</td>
<td>Foundation Center launches new database system, allowing for ingestion of all foundation data and auto-classification</td>
</tr>
<tr>
<td>2016</td>
<td>IRS releases open, machine-readable XML to the public (52,000 out of 103,000 foundations’ data available)</td>
</tr>
<tr>
<td>2019</td>
<td>Joins forces with GuideStar to become Candid.org</td>
</tr>
</tbody>
</table>
Foundation Center’s goals

*Connect* nonprofits to the resources they need to thrive

*Empower* donors with knowledge tools they need to be more strategic

*Build* the global data platform for philanthropy

*Communicate* philanthropy’s contribution to making a better world

*Encourage* greater foundation transparency

*Ensure* that our technology provides a strong foundation for the Center’s work