



Invest in Open
Infrastructure

Open Data on Funding for Open Infrastructure Services

Presentation for
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Argentina

Tania L. Hernández Ortiz,
Research Data Analyst

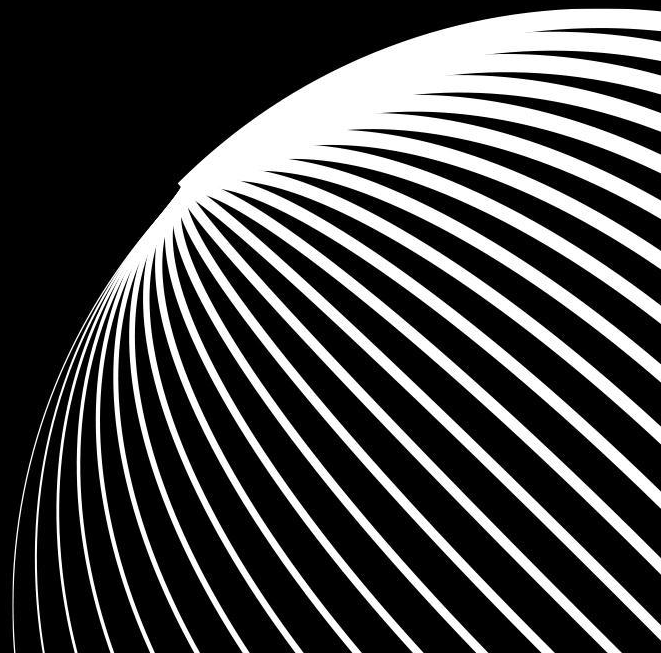
Invest in Open
Infrastructure |
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We work to increase the investment in and adoption of open infrastructure to further equitable access and participation to research.



For open knowledge to flourish, our systems need to be similarly designed. Our work seeks to advance a vision where open infrastructure is the default in research and scholarship.





Our approach



We employ a research-driven approach

to guide strategies and action designed to increase adoption of and investment in open infrastructure.



We provide resources and analysis

to help funders and budget holders assess, evaluate, and make investment decisions about open infrastructure.



We pilot solutions and coordinate stakeholders

to increase the sustainability of the sector, to further a shared agenda for making open infrastructure the default in research.



Trends on Funding for Open Infrastructure Services



The value of this
research

Goal:

Increase the collective
understanding of the funding
for open infrastructure
services

- Understanding where investment is needed requires knowing where the funding is already going
- Particularly important to understand who's funding whom and how much
- Our intention is to identify neglected areas and untapped opportunities to make funding more reliable and consistent over time



How?

Data and Method

Iterative research
process

1. Identified key funders and providers of open infrastructure services
2. Explored sources including grant databases, annual reports, websites and other financial disclosures

Found inconsistent information
between funders and providers

1. Collected information on reported grants by funders from 2010 to 2020
2. Conducted an exploratory data analysis using the funder reported cash grants

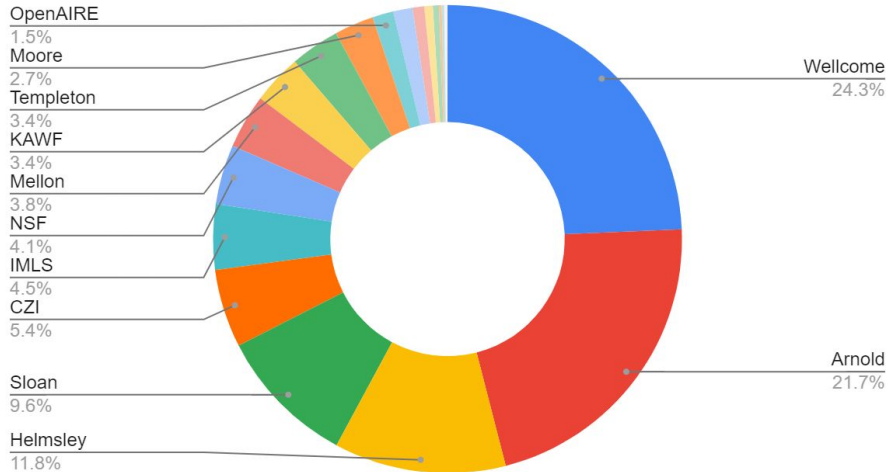


What We Found

Major Funders

(2010-2020)

Funding by Funder (2010-2020)

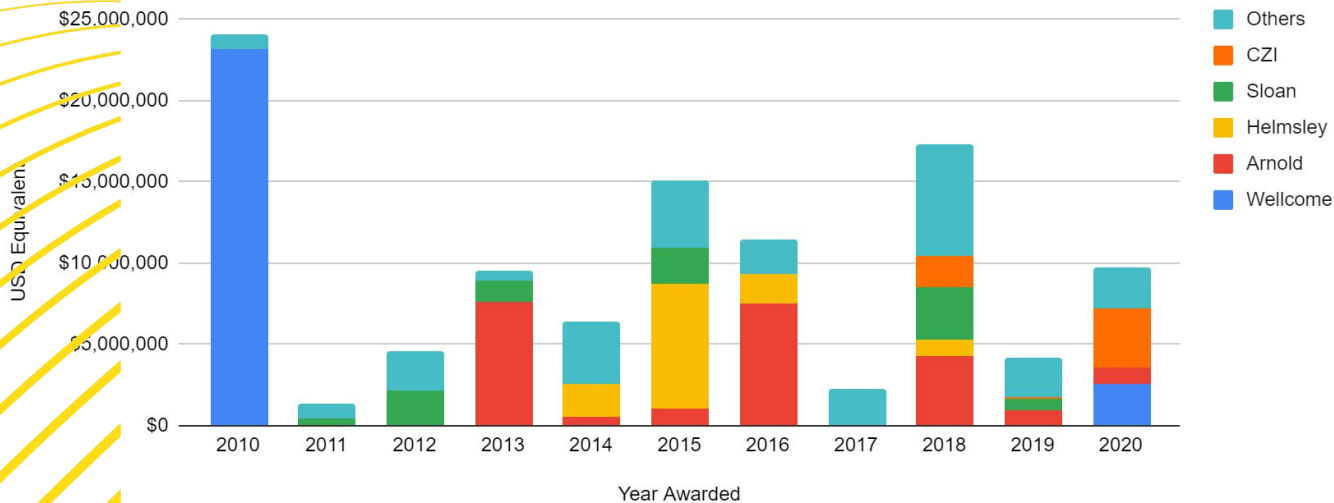


Funder Name	Sum of Funding
Wellcome Trust	\$ 25,823,982.37
Laura and John Arnold Foundation/ Arnold Ventures	\$ 22,988,094.00
The Leona M. and Harry B. Helmsley Charitable Trust	\$ 12,568,430.00
Alfred P. Sloan Foundation	\$ 10,233,375.00
Chan Zuckerberg Initiative (CZI)	\$ 5,732,307.00
Institute of Museum and Library Services (IMLS)	\$ 4,780,566.00
National Science Foundation (NSF) U.S. entity	\$ 4,372,094.00
The Andrew W. Mellon Foundation	\$ 3,988,500.00
Knut and Alice Wallenberg Foundation	\$ 3,630,928.00
John Templeton Foundation	\$ 3,609,856.00
Gordon and Betty Moore Foundation	\$ 2,878,677.00
Open Access Infrastructure for Research in Europe (OpenAIRE)	\$ 1,539,934.02
National Institutes of Health (NIH) U.S. entity	\$ 1,422,178.00
Arcadia Fund	\$ 850,000.00
National Endowment for the Humanities (NEH)	\$ 618,873.00
John D. and Catherine T. MacArthur Foundation	\$ 460,000.00
Robert Wood Johnson Foundation (RWJF)	\$ 184,450.00
James S. McDonnell Foundation (JSMF)	\$ 167,591.00
The Shuttleworth Foundation	\$ 101,000.00
William and Flora Hewlett Foundation	\$ 100,000.00
The Bill and Melinda Gates Foundation	\$ 58,000.00
Grand Total	\$ 106,108,835.39

What We Found

5 Major Funders by Cash Amount (2010-2020)

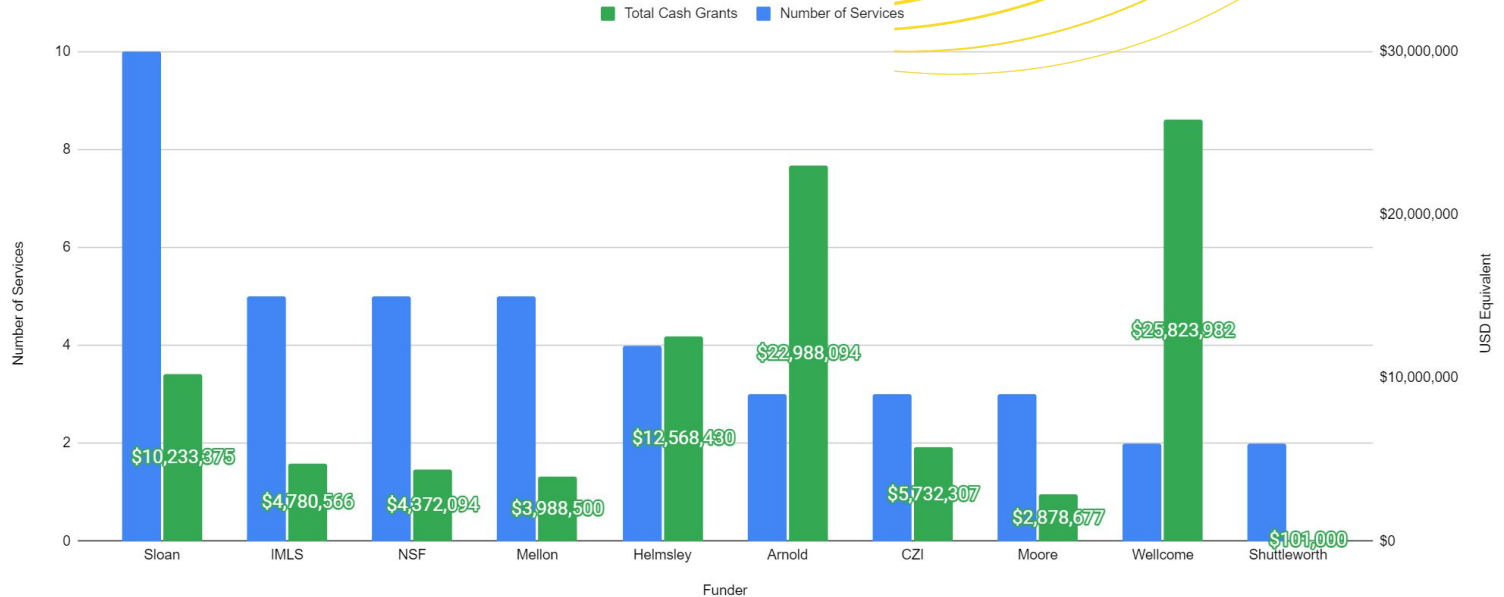
Funding Amount by Funder per Year (Top 5 Funders by Award Year)



What We Found

Funders Have Different Profiles

Number of Services and Funding Amount by Funder (2010-2020)



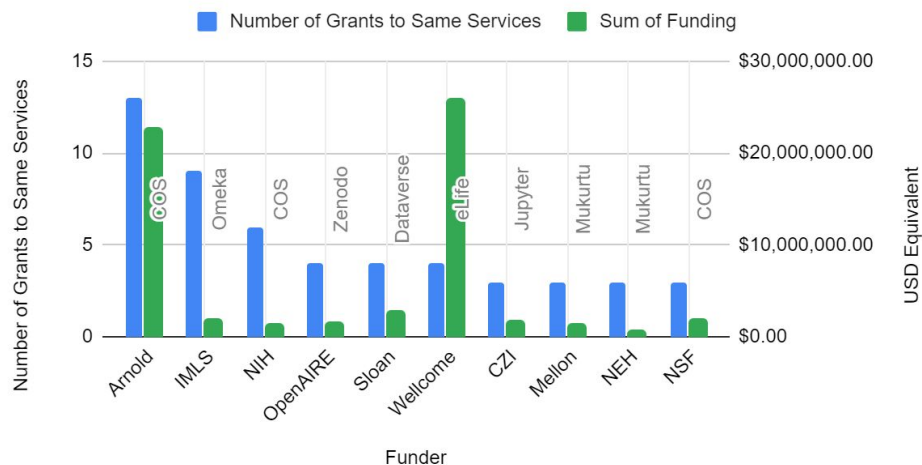


What We Found

Funders Providing Three or More Grants to Open Infrastructure Services Between 2010 and 2020

Funder	Recipient of Grants	No. Grants to Same Services	Sum of Funding
Laura and John Arnold Foundation/ Arnold Ventures	Center for Open Science (COS)	13	\$22,713,328.00
Institute of Museum and Library Services (IMLS)	Omeka	9	\$1,812,880.00
National Institutes of Health (NIH) U.S. entity	COS	6	\$1,422,178.00
Open Access Infrastructure for Research in Europe (OpenAIRE)	Zenodo	4	\$1,539,934.02
Alfred P. Sloan Foundation	Dataverse	4	\$2,812,048.00
Wellcome Trust	eLife	4	\$25,797,509.21
Chan Zuckerberg Initiative (CZI)	Jupyter	3	\$1,749,774.00
The Andrew W. Mellon Foundation	Mukurtu	3	\$1,324,500.00
National Endowment for the Humanities (NEH)	Mukurtu	3	\$618,873.00
National Science Foundation (NSF) U.S. entity	COS	3	\$1,936,162.00

Number of Grants to Same Services and Funding Amounts per Funder (2010-2020)





Key Challenges

What have we learned?

Much of the available **data is incomplete** → the timeframes and total amounts are likely inaccurate given the lack of standards

We only **focused on cash grants** → we don't include in-kind donations or other non-monetary support for ease of analysis

We only analyzed grants that had a **disclosed amount** and could be verified through funder databases → funders that don't disclose funding aren't included in this analysis

All grants have been converted into a **USD equivalent** for comparison purposes → the amounts may be off given currency fluctuations

What we don't see:

Open calls vs. invited calls

Service assessments

Use of the grant money (allocation e.g, salaries, infrastructure technology investments)

Your help is needed!

We would love your feedback on the next phase of the research

- Check the report: [Funding Trends Research: Preliminary Observations and Findings report](#) on Zenodo
- Check the data: [Reported funding data for open infrastructure](#) on Harvard Dataverse
- For feedback: Fill out the [survey](#) with your suggestions on the next phase of the funding trends in open infrastructure research

Thank you

For collaboration opportunities,
please reach out to

Tania L. Hernández at
tania@investinopen.org
or
the research team at
research@investinopen.org

