

# From One Report, Many

Using Parameterized Reporting to Generate  
Dozens, Hundreds, or Thousands of Reports  
at the Same Time

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# About Me



# Why Parameterized Reporting?





Census data determines the allocation of federal and other funds to vital social programs, guides redistricting, and informs research. Therefore, an accurate census that captures historically undercounted populations<sup>2</sup> is crucial for our democracy. Since 2016, a collaborative of philanthropic funders has worked to align and pool funding to build and strengthen the infrastructure needed to support a fair and accurate count.

The Democracy Funders Collaborative's Census Subgroup, which is the steering committee for the census funder collaborative, engaged ORS Impact as a partner to develop state-level reports that provide an overview of philanthropic efforts to promote the 2020 Census within and across the 50 states, as well as the District of Columbia and Puerto Rico. This report provides a summary of census efforts for the State of Minnesota based on review of secondary data, and interviews with key actors involved (n=4).

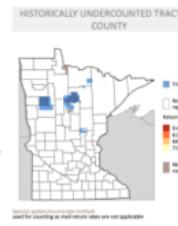
<sup>2</sup>We have opted to use the term "historically undercounted populations" in our narrative, but the term is interchangeable with "hard-to-count," which we use when our informants opted to do so.

## State Overview

### OVERVIEW GOING INTO 2020 CENSUS

**5,527,358**

TOTAL POPULATION  
**151,840**  
TOTAL POPULATION LIVING IN HISTORICALLY UNDERCOUNTED CENSUS TRACTS



### Population

Past analyses of Census data have consistently shown differences in self-response rates based on household or individual characteristics, indicating that certain populations are at higher risk of being undercounted. The following graphs show the distribution of selected populations within the state that have historically been more likely to be undercounted. Data for all maps and graphs provided by CUNY Graduate Center via the Census 2020 Hard to Count/Response Rate map at [www.CensusHardToCountMaps2020.us](http://www.CensusHardToCountMaps2020.us).

### INDIVIDUALS

Percent of total number of individuals in the state that have characteristics of historically undercounted populations:

American Indian	2%
Asian	4%
Black	7%
Hispanic	8%
Native Hawaiian/Pacific Islander	1%



LIMITED ENGLISH PROFICIENCY (LEP)  
NO INTERNET ACCESS  
RENTERS (VS. HOMEOWNERS)

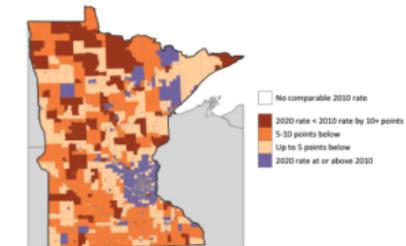
n = 1,367,800

## State Overview

### OVERVIEW OF CENSUS SELF-RESPONSE RATES

YEAR	SELF RESPONSE	CHANGE
2020	75.1%	+1.0
2010	74.1%	

CENSUS TRACTS WHERE 2020 CENSUS RETURN RATE WAS LOWER THAN 2010



## 2020 Census Outreach

### STRUCTURE OF CENSUS OUTREACH

Minnesota's 2020 Census efforts were grounded in a large, cross-sector collaboration, co-led by philanthropy, state government, and nonprofit organizations, which focused on reaching historically undercounted communities. Efforts benefited from foundational organizing that began several years before the response period, considerable investments by philanthropy and the state, and complementary statewide activities on the part of the state demographer's office. Important milestones in the development of efforts in the state and a description of key structures and actors follow.

An early start on building a collaborative structure for the 2020 Census founded in authentic engagement of historically undercounted community leaders set up Minnesota for success. In 2015, spurred by the Minnesota Council on Foundations (MCF) began designing what became the Minnesota Census Mobilization Partnership (MCMP) as a complement to anticipated public sector efforts. MCF engaged the Minneapolis Foundation, the St. Paul & Minnesota Foundation, and the Blandin Foundation in early design conversations. MCF hired Grassroots Solutions, a Minnesota-based consulting firm, to form a Co-Creation Table (CCT) to develop a vision, strategy, and plan for mobilizing historically undercounted communities around the 2020 Census. The Grassroots Solutions senior strategist who led this foundational effort—herself a trusted messenger within communities of color—recruited community leaders from civic engagement groups and racial equity organizations across the state to join the CCT. Framing the census as a community power-building opportunity helped overcome any initial reluctance to join the CCT due to distrust of the federal government. Initial meetings of the CCT raised members' awareness of the history of undercounting Minnesota's Black communities, indigenous communities, and communities of color; how that related to underinvestment in those same communities; and federal laws ensuring the strict confidentiality of census data within the US Census Bureau. CCT members were paid for their time attending CCT meetings and for time to meet with members of their respective communities to inform the CCT's vision, strategy, and plan.

The collaborative structure allowed for both independent and coordinated leadership among a diversity of invested community stakeholders. In 2018, the CCT completed the organizing and mobilizing strategy and decided on the structure and timeline for what became Our Minnesota Census Campaign, which later became part of the state's We Count! census campaign. MCMP was organized into five coordinating hubs:

- Our Minnesota Census Campaign Hub, focused on relational organizing with historically undercounted communities (driven by former CCT members)
- Complete Count Committees Hub, focused on supporting the more than 200 local government, nonprofits, and affinity group complete count committees across the state
- Greater Minnesota/Rural Hub, focused on leveraging the networks of community foundations in MCF membership to support census engagement in Greater Minnesota and rural communities



# How Parameterized Reporting Works

# **Make a Report for One Location**

- - -

- - -

^ ^ ^ { x }

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report.qmd

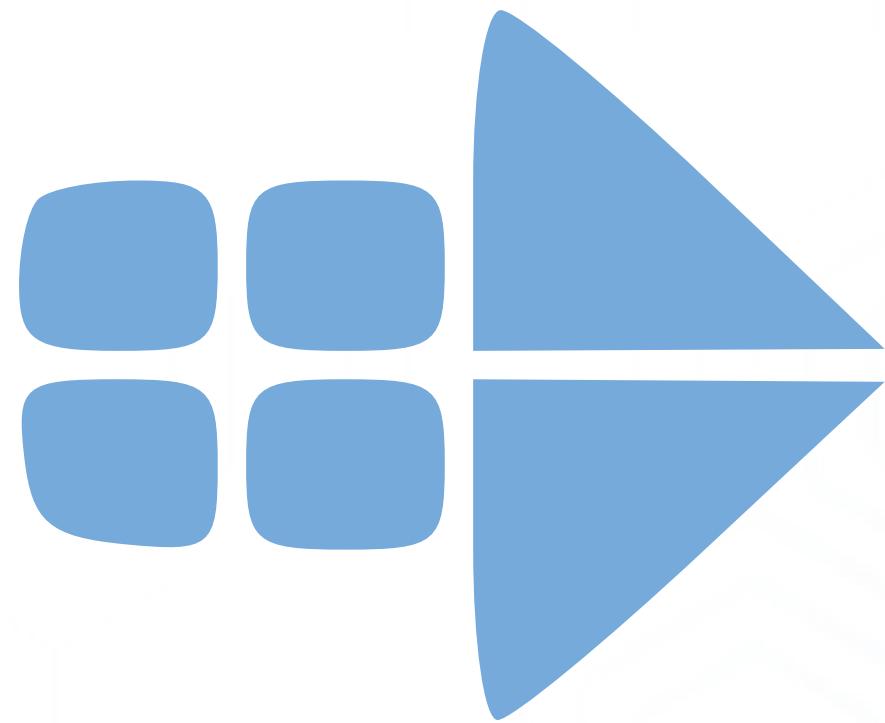
# Add a Parameter to Our Report

```
---  
params:  
  location: "RF4"  
---
```

```
``` {r}  
filter(data == params$location)  
```
```

report.qmd

# Manually Render One Report



**Render**

# Manually Render Multiple Reports

```
---  
params:  
  location: "RF4"  
---
```

```
```{r}  
filter(data == params$location)  
```
```

report.qmd

```
---  
params:  
  location: "AAH"  
---
```

```
```{r}  
filter(data == params$location)  
```
```

report.qmd

# Semi-Manually Render Report with R Script File

```
library(quarto)  
quarto_render()
```

render.R

```
---  
params:  
  location: "RF4"  
---  
  
```{r}  
filter(data == params$location)  
```
```

report.qmd

## Report #1

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report.html

# Automatically Render Multiple Reports with R Script File

```
library(quarto)  
reports  
reports %>%  
  walk(quarto_render)
```

render.R

```
---
```

```
params:  
  location: "RF4"  
---
```

```
```{r}  
filter(data == params$location)  
```
```

report.qmd

## Report #1

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report.html

## Report #2

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report.html

## Report #3

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report.html

# Summary

1. Create report
2. Add parameter to report
3. Create render.R script file
4. Create function to render one report
5. Create vector of all locations
6. Create tibble with information about all reports
7. Use reports tibble to render all reports