

Analyzing how non-profit revenue is impacted by income.

Presenter
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JOURNEY

Mission

Data Source

Experiment Design

Technology

Visualization

Findings

What Next?

Connect

MISSION

Drive social impact by focusing business resources

Identify areas of interest by State & City.

DATA SOURCE

Non-profit data www.irs.gov

US income & demographics www.census.gov

EXPERIMENT

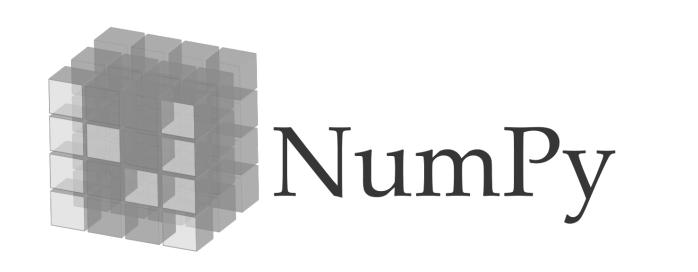
H₀: mean of NPs' revenue <u>are the same</u> in lower-half & upper-half of mean household income.

H_{A:} mean of NPs' revenue <u>are NOT the same</u> in lower-half & upper-half of mean household income.

Setting $\alpha = .10$

TECHNOLOGY





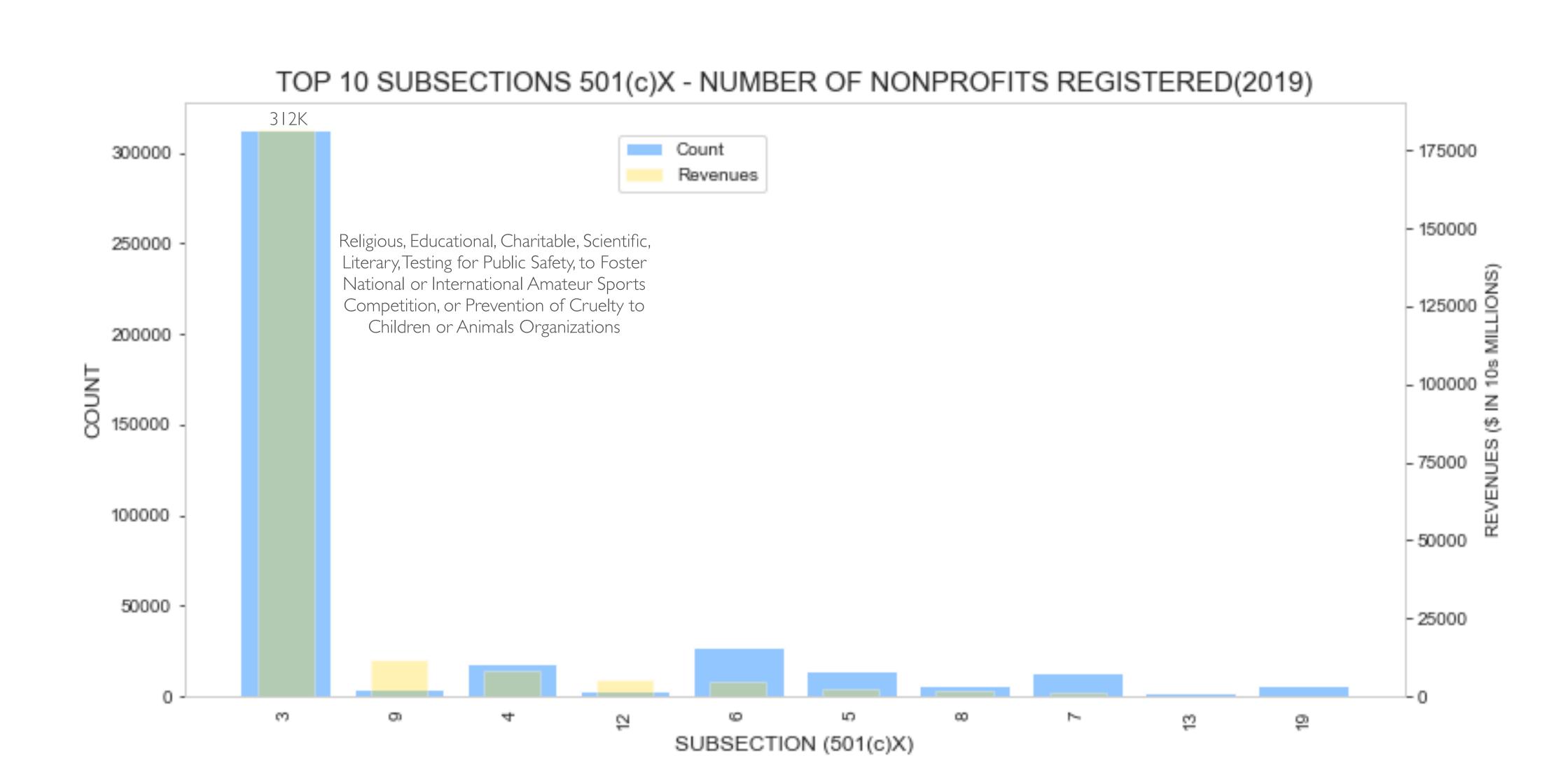


matplatlib

Seaborn

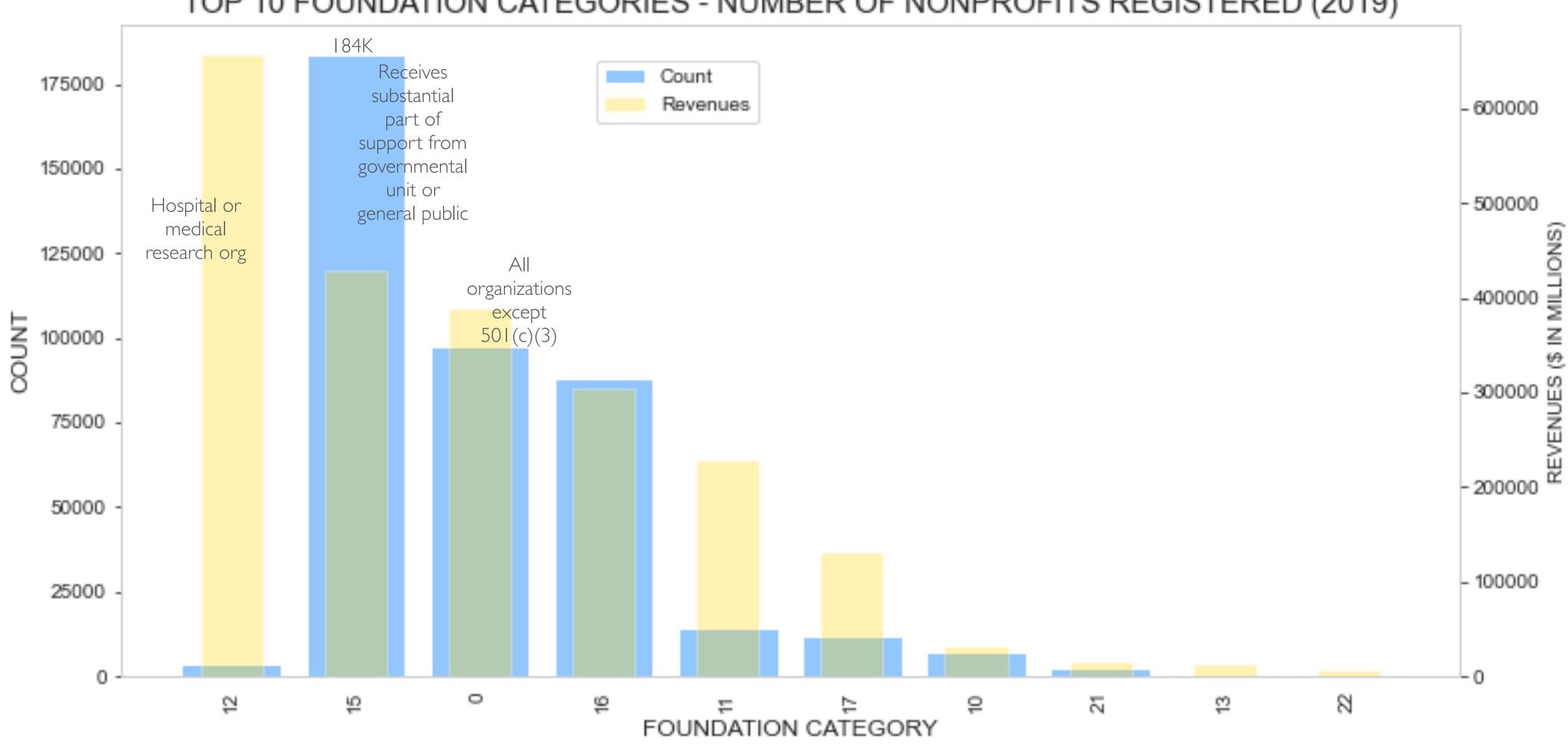


VISUALIZATION

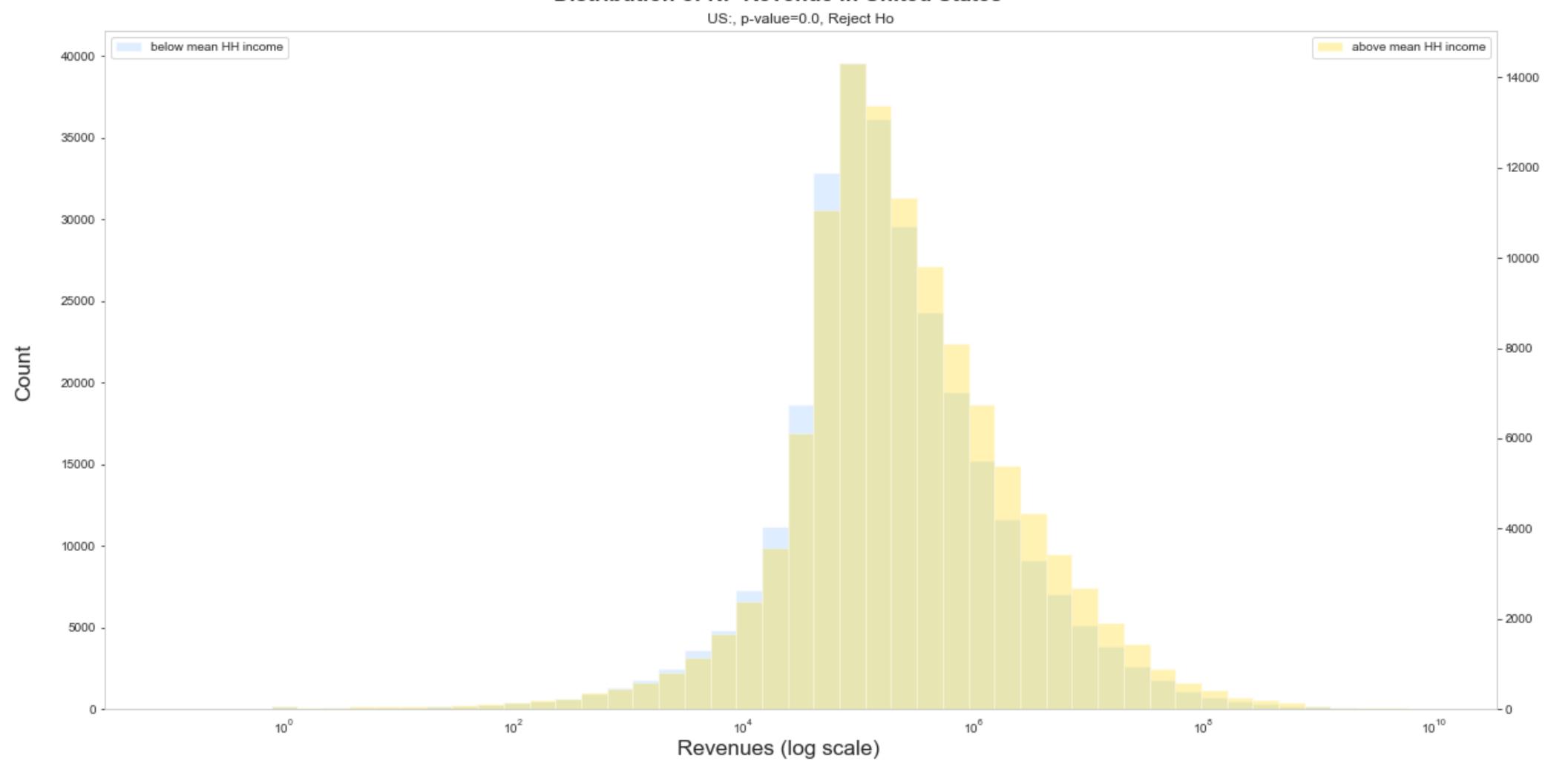


VISUALIZATION





Distribution of NP Revenue in United States



Distribution of NP Revenue by State CA:, p-value=0.0177, Reject Ho NY:, p-value=0.0, Reject Ho above mean HH income above mean HH income below mean HH income below mean HH income 2000 1400 - 500 - 700 1200 - 600 - 400 1500 -1000 -- 500 - 300 800 - 400 1000 -- 300 600 -- 200 400 - 200 500 -- 100 200 -- 100 10¹⁰ 10¹⁰ 10² 10⁴ 10⁶ 10⁵ 10² 10⁴ 10⁶ FL:, p-value=0.1871, Fail to Reject Ho PA:, p-value=0.0024, Reject Ho 1000 below mean HH income below mean HH income above mean HH income above mean HH income - 350 800 - 350 800 - 300 - 300 - 250 600 600 - 250 - 200 - 200 400 400 - 150 - 150

Revenues (log scale)

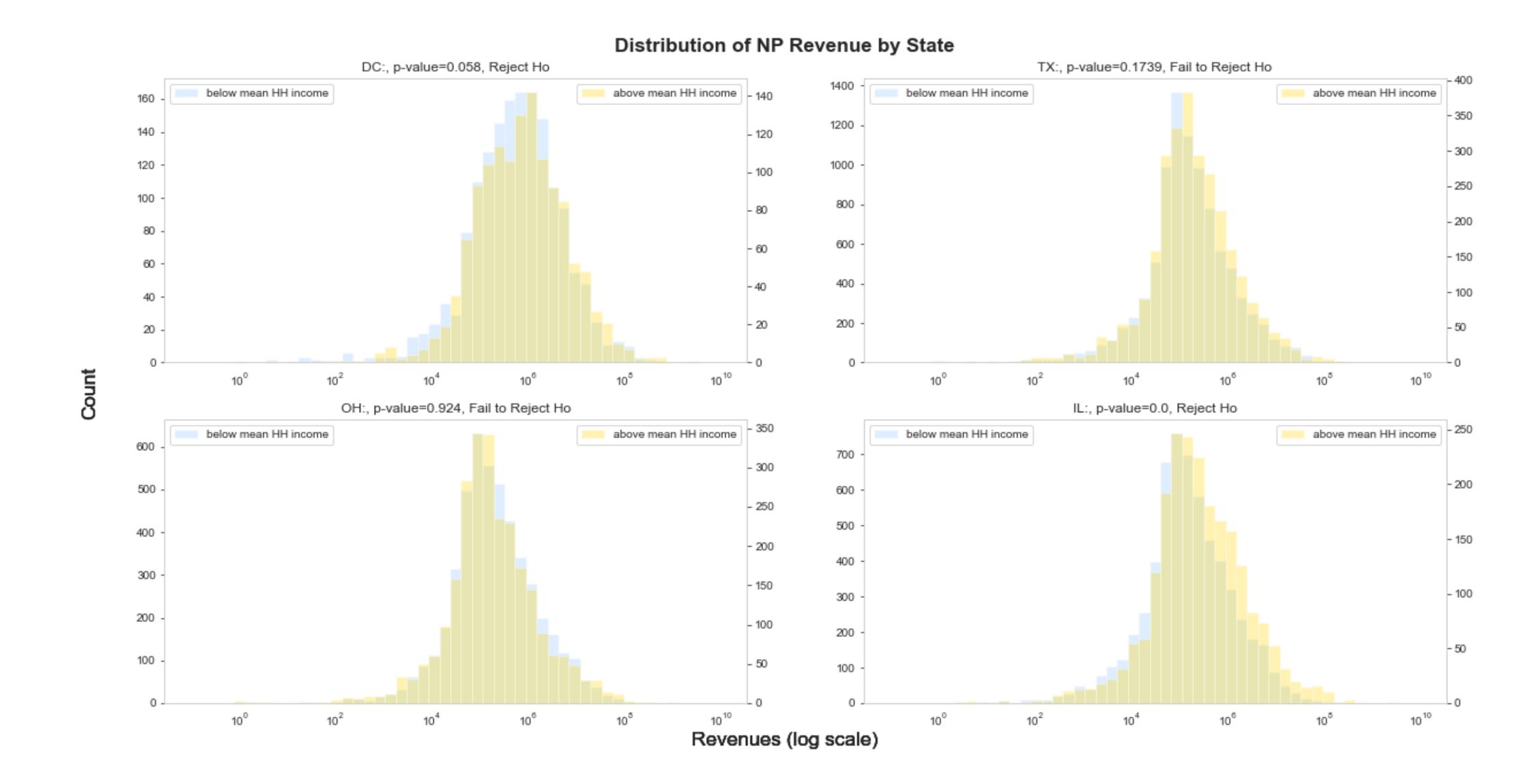
10²

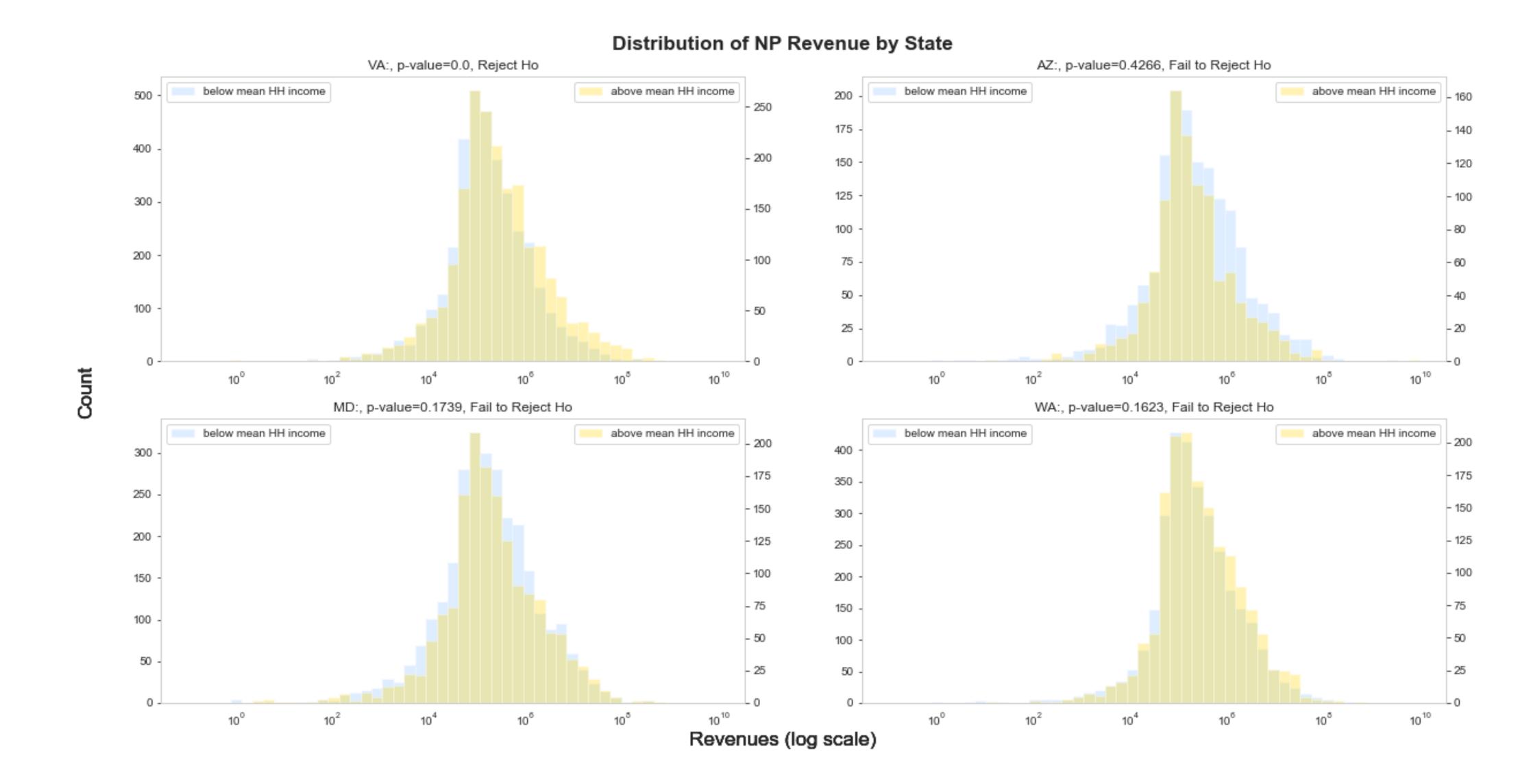
10⁶

10¹⁰

10⁶

Top 4 states





WHAT NEXT?

Cities in states that reject Ho

501(c)3 - 15 and funding by govn't vs individual

Further business needs with Change Unlimited

Create NP impact metrics within regions



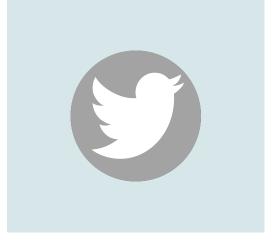
CONNECT



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