# Filling the Social Welfare Gap: The Impact of a Nonprofit's Guaranteed Income (GI) Program for Artists

#### Abstract

Young (2000) theorized that nonprofits can serve a supplementary role by addressing unmet demands that fall outside the scope of existing government programs, but empirical evidence of nonprofits' supplementary role is limited. Therefore, this paper uses a case of a guaranteed income (GI) program for artists designed and implemented by a nonprofit based in New York State to test the role of nonprofits in serving populations beyond the reach of government social assistance. We compare a population of artists served by a nonprofit's guaranteed income (GI) program with those receiving support through government social assistance programs. Through regression and simulation analysis, we assess the extent to which the GI program addresses a significant void, both in terms of the number and diversity of artists being served by existing social assistance mechanisms. This provides evidence that nonprofits can serve a supplementary role of filling gaps left by social welfare programs by reaching new and diverse recipients.

**Keywords**: The supplementary model of government-nonprofit, social assistance programs, quantitative analysis, artists

The data are not publicly available due to ethical, legal, or other concerns.

## 1 Introduction

The recent pandemic has profoundly challenged the economy. By the end of 2020, U.S. poverty rates (i.e. the ratio of people whose income falls below the poverty line), reached 11.4%, up from 10.5% in 2019 (Shrider et al., 2021). However, its impact has been particularly noticeable among marginalized populations. People of color, who were already experiencing high levels of poverty, were most affected by the pandemic. According to the U.S. Census Bureau's "Income and poverty in the United States: 2020", the poverty rate of black households was 19.5 % and 17% for Hispanics households compared to 8.2% of white, non-Hispanic households.

Much attention centers on the adequacy of the social safety net provided by the US government. Over time, government social assistance programs, offering both cash and in-kind benefits to those in need, have expanded their scope and eligibility criteria (Varghese, 2019). However, the impact of general social assistance programs on poverty reduction has been uneven. Benefits of social assistance programs have primarily been concentrated among households with higher incomes, even within the poverty threshold, as well as those with elderly or disabled family members, while their effectiveness for other household types has waned (Ben-Shalom et al., 2011). Eligibility requirements, tied to federal poverty guidelines, have been critiqued as limited, failing to reflect the true financial challenges faced by many. These guidelines focus primarily on food consumption, ignoring other essential expenses, and fail to account for regional and demographic variations (Pearce & Brooks, 2000; Mukhopadhyay et al., 2011). Also, work requirements create administrative burdens for marginalized individuals and families in need, further limiting access to benefits (Moynihan et al., 2015; Baekgaard et al., 2021). These limitations contribute to the gap in social assistance programs and disparities in racial representation (Hardy et al., 2019), as marginalized individuals are more likely to fail to prove their employment status due to unstable work conditions and limited social capital (Baekgaard et al., 2021; Wikle et al., 2022).

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However, nonprofits can provide social assistance that can reduce disparities in government social programs. According to Young (2000), nonprofits and government agencies have developed supplementary, complementary, and sometimes adversarial relationships over time to develop social welfare. As public policies evolve and government grants toward nonprofits expand, a complementary role has become more prevalent. Nonprofits operating under complementary roles have effectively mitigated administrative burdens within the social program process (Nisar, 2018; Wiley & Berry, 2018). Their impact, however, remains limited due to existing exclusive and burdensome rules and requirements that affect nonprofits performance within government programs. Nonetheless, nonprofit organizations can expand their role to supplementary roles, providing alternative social assistance programs.

This analysis examines nonprofits' supplementary role in filling the gap in general social assistance programs through the lens of artists. Artists represent a major component of the US workforce, accounting for over 2.4 million workers with diverse demographic backgrounds (National Endowment for the Arts (NEA), 2022). Artists often struggle to prove their employment status, with work conditions varying widely and many working as unregistered self-employed individuals (Woronkowicz & Noonan, 2019). Financial instability is common among artists, who frequently move between multiple jobs and face uncertain earnings, yet their situation may not be represented under traditional poverty guidelines (Menger, 2006).

Creatives Rebuild New York (CRNY), a nonprofit organization based in New York State (NYS), launched a Guaranteed Income for Artists (GIA), providing 2,400 artists with no-strings-attached \$1,000 cash support for each of 18 months starting from June 2022. To examine whether the GIA serves a supplemental role to public social welfare programs for artists, this study examines the program's selection process, particularly its commitment to prioritizing marginalized groups. Using the data on the 21,921 applicants of this program and NYS American Community Survey (ACS) data from 2010 to 2023, we aim to assess whether this focus results in broader coverage than that provided by traditional government assistance programs.

The diversity of the GIA recipients relative to the population of artists already receiving government assistance, and relative to all NYS artists, illustrates the GI program's effects in advancing equity. By addressing these questions, we seek to understand the nonprofits' supplementary role in fulfilling its dual goals of supplementing existing welfare options (more/new recipients) and supporting the diverse needs of the artist community (more diverse recipients). Our results show that in this circumstance, GI provided by a nonprofit organization can serve a more diverse set of beneficiaries compared to public welfare recipients.

## 2 Literature Review

#### 2.1 Supplementary Role of the Nonprofit Sector

According to Young (2000), nonprofits can serve supplementary, complementary, and adversarial roles in government relationships. Nonprofits may assist in delivering programs that are predominantly funded by the government (complementary) or advocate for policy changes (adversarial). In contrast to these roles, nonprofits' supplementary roles involve addressing unmet societal needs that are not adequately covered by government programs. Eligibility guidelines and work requirements mandated by government social programs often fail to adequately reflect financial needs and impose significant administrative burdens. Consequently, these criteria restrict access to social benefits for communities in need (Herd et al., 2013; Heinrich, 2018; Nisar, 2018; Herd Moynihan, 2019). The government may be limited in its ability to reduce systemic hurdles in social assistance for groups facing disproportionate challenges due to regulatory and social constraints. Although efforts to mitigate structural inequalities and barriers to accessing social assistance may be underway, immediate relief from these constraints within the current government system may prove challenging. Therefore, nonprofit organizations can play the supplementary role in existing social assistance programs. One such alternative initiative is the Guaranteed Income (GI) program, which offers an alternative approach to assessing financial needs and alleviates the burdens of work requirements, thereby mitigating the structural gaps in government social programs.

Despite the anticipation of nonprofits playing supplementary roles in social assistance, empirical testing of their effectiveness in such relationships has remained limited compared to other roles of nonprofits. Existing literature has demonstrated the potential supplementary role of nonprofits by revealing a negative correlation between the size of the nonprofit sector and government involvement in areas such as education, health, and human services (Matsunaga & Yamauchi,2004; Lecy & Van Slyke, 2013; Van Puyvelde & Brown, 2016). However, our understanding of whether nonprofits' supplementary role can lead to substantive policy effects remains incomplete. Also, the field lacks empirical evidence of the supplementary role (Shi & Cheng, 2021), as nonprofits often require significant independent funding to fulfill such roles, which is comparatively rare compared to cases where the government financially supports nonprofit activities (Cheng, 2019; Cheng & Yang, 2019). Hence, empirical studies of nonprofit social assistance programs, such as guaranteed income (GI) can also contribute to a better understanding and application of the supplementary role played by nonprofits.

#### 2.2 Gaps in Government Social Programs

The concept of "deservingness", shaped by social constructs, significantly influences eligibility and requirements for receiving social benefits (Schneider & Ingram, 2005; Shaefer et al., 2020; Baekgaard et al., 2021). Political influence and cultural beliefs often prioritize certain groups, such as veterans, working families, and pregnant women, as more deserving of social benefits, while non-working individuals, immigrants, and single households without children are deemed less deserving (Schneider & Ingram, 2005; Moffitt, 2015). General welfare programs that impose eligibility and work requirements disproportionately burden marginalized communities with political intentionality, limit the size of the eligible population among those in need, and reduce the racial diversity of recipients (Peeters, 2020).

Government social assistance programs establish eligibility criteria based on financial need. The majority of these programs, such as the Temporary Assistance for Needy Families (TANF), and the Supplemental Nutrition Assistance Program (SNAP), require individuals or families to be classified as "low-income." Traditionally, "low income" criteria have been based on federal poverty guidelines. The poverty guidelines set by the Department of Health and Human Services adjusts for household size but maintains a fixed ratio between spending on food and other essentials, such as housing. However, the proportion of expenditures allocated to food has decreased over time, while housing costs have become more significant (Mukhopadhyay et al., 2011). Because the guidelines are primarily based on food costs, they fail to adequately reflect the diverse financial needs of modern society (Pearce & Brooks, 2000; Rossi & Curtis, 2013). Today, essential expenses like childcare, internet access, mobile services, and transportation are vital for participation in social programs or employment but not adequately accounted for.

Furthermore, federal poverty guidelines do not consider regional cost variations (Mukhopadhyay et al., 2011). Housing and food expenses differ significantly between urban and rural areas. Thus, applying uniform poverty guidelines across regions fails to reflect the financial needs of individuals. Some states and programs attempt to adjust for regional cost differences by using multiples of the poverty line threshold (Pearce & Brooks, 2000). However, due to the unrealistic composition of predetermined necessary spending in poverty guidelines, this approach remains insufficient(Pearce & Brooks, 2000). As a result, the limited scope of this approach can overlook individuals and households in dire financial need who may not fit within the "low-income" category defined by this measure. The federal poverty guidelines, with narrow representation of financial needs, serve as a significant barrier, limiting the number of eligible individuals

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under social assistance programs.

However, even when individuals and households meet the eligibility criteria according to traditional guidelines, administrative burdens disproportionately deter socially and racially marginalized groups from accessing benefits. The literature on administrative burdens highlights how many eligible individuals struggle to access benefits due to administrative complexities that exceed their capacity to manage. These burdens stem from learning, compliance, and psychological costs (Herd & Moynihan, 2019). Particularly, social minorities with low social capital face higher administrative burdens, as their limited social capital makes it challenging to comprehend the process (learning costs) and fulfill requirements (compliance costs).

Requirements such as work status and job search hours disproportionately impact specific demographic groups, notably immigrants and racial minorities, perpetuating social inequalities (Schneider & Ingram, 2005; Lanford & Quadagno, 2022; Wikle et al., 2022). Research on welfare programs indicates that racial minorities often face more temporary or permanent sanctions resulting in reduced benefits compared to white recipients due to failing to meet work requirements (Schram et al., 2009; Monnat, 2010; Hahn, 2018; Pavetti, 2018). Additionally, bureaucratic encounters and decisions are not perceived as value-neutral, leading racial minorities, immigrants, and gender and sexuality minorities to experience additional psychological burdens due to social stigma (Herd et al., 2013; Heinrich, 2018; Nisar, 2018; Ray et al., 2023).

#### 2.3 Artists and the Government Social Programs

Occupation can pose additional hurdles in complying with these rules. Artists often struggle to prove their work status and financial needs within existing social assistance programs. While the federal government once supported individual artists through the National Endowment for the Arts (NEA), providing direct financial assistance to artists became politically challenging over time, leading to the discontinuation of such federal programs (Brenson, 2001; Burgess, 2006). Although State Arts Agencies (SAAs) still support individual artists, their stability and availability vary across regions due to reliance on state appropriations (Noonan, 2007). Considering these challenges, general social assistance may serve as an alternative public program for artists experiencing financial hardship.

However, artists may struggle to access general public assistance. Artists tend to reside in urban areas, where established venues and networks are abundant, despite the higher living costs compared to non-urban areas. Traditional poverty guidelines fail to account for these regional disparities in living costs and diverse financial needs of artists. Also, artists often encounter difficulties proving their work status within existing social assistance programs due to their self-employed status or irregular work-hour patterns, even when they are in need of financial assistance (Menger, 2001; Woronkowicz & Noonan, 2019). Furthermore, the artist population is racially and ethnically diverse (Borowiecki & Graddy, 2021). As, racial minorities and immigrants are subject to disproportionate administrative burdens under public programs (Moynihan et al., 2015; Baekgaard et al., 2021), these effects can compound the challenges artists face in accessing government assistance programs. Therefore, this paper aims to examine the gap in social assistance through artist populations, exacerbated by eligibility and work requirements within government assistance programs, and how nonprofits can reduce the gap by serving the supplementary role.

## **3** Background and Data Description

New York State initiated a plan for economic and community recovery post-COVID in early 2021. Recognizing the arts and culture sector's prolonged recovery period to pre-pandemic employment levels, New York State recommended initiatives to support the arts and culture sector, which led to the launch of Creatives Rebuild New York (CRNY). This three-year project, supported by the Mellon Foundation, Ford Foundation, and Stavros Niarchos Foundation, aims to restore New York State's arts and cultural sector post-pandemic while ensuring equitable access to opportunities (CRNY, n.d.).

CRNY implemented the Guaranteed Income for Artists (GIA) program to provide support to individual artists in New York State, emphasizing values of racial and gender diversity and economic equality within the cultural ecosystem. The program aims to reduce burdens in the application process, providing assistance to individuals without internet access and translation services, and employing outreach methods to enhance accessibility. Each applicant's eligibility was determined based on financial need according to the Self-Sufficiency Standards (SSS). The Self-Sufficiency Standards (SSS), developed by Diana Pearce in 1996, offers an alternative method for measuring financial needs. Unlike federal poverty guidelines, SSS does not assume a fixed ratio between food and other costs, allowing for adjustments based on the actual costs of each necessity (Pearce & Brooks, 2000). It considers various expenses beyond food and housing, such as childcare, transportation-related fees, and taxes tailored to family types and places of residence (Pearce & Brooks, 2000). SSS allows for greater flexibility in accounting for different types of expenses, household compositions, and geographic locations, making it a potentially valuable tool for assessing financial needs overlooked by federal poverty guidelines.

Pre-selected applicants needed to submit documentation to prove their artistic careers, financial needs, and New York State residency. After the verification process, a lottery was conducted to select the participants out of this eligible pool, with weights based on priority variables, including their race, transgender status, rural residency, disability status, LGBTQIAP identity, immigrant status, justice system involvement, caregiver status, and financial needs (lack of Financial Safety Net). From this pool, 2,400 individual artists were randomly selected to receive a stipend of \$1,000 per month for 18 months, with no strings attached. The program began in February 2022 with the application process. Selected artists were grouped into five cohorts on a rolling basis, each with different payment schedules, with the earliest payments starting in June 2022.

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Our analysis uses data from the applications to the GIA program, which includes measures of socioeconomic background such as sex, gender, race, disability, area of living, legal system involvement, care giving role, financial needs including history of public assistance receipt, and artistic practices information on 21,921 applicants. The subsequent secondary analysis includes ACS data from 2010 to 2023, focusing on individuals who reported having an artist-related job and who reside in New York State. This dataset includes socioeconomic indicators such as wages, household income, welfare income, racial and gender demographics, geographic location of residence, and occupational profiles. The ACS data from 2010 to 2023 includes 10,867 individuals who reported arts-related occupations in the survey year or the year before the survey year. Table 1 lists the GIA priority variables and how each is measured in the CRNY data. Since in a later stage of the analysis we match these variables to ACS data, we also list the matched variables in the ACS.

Variable	CRNY(GIA)	ACS
Race Priority (Non-White)	Race identity other than White only	Race identity other than White only
Transgender Priority	Identified than Female/Male Only	No information
Rural Priority	Living in rural area	Living in non-metropolitan statistical areas
Disability Priority	Identified as deaf or disabled	Identified as disabled
LGBTQIAP Priority	Identified as LGBTQIAP+ group	No information
Immigrant Priority	Identified as an immigrant to the U.S.	Identified as an immigrant to the U.S.
Justice Priority	Identified have criminal legal system involvement	No information
Care Giver Priority	Giving care to adults, children, or elders	Having children in the household
Finance Priority	Lack of Financial Safety Net	Household income below $130\%$ of the federal poverty line
N	21,921	10,867

Table 1: Crosswalk of Priority Variables in CRNY and ACS Data

There are some significant differences between the CRNY and ACS datasets. First, the ACS does not include data on transgender identification, LGBTQIAP+ status, or legal system involvement. Second, the GIA's finance priority variable is assigned to those who self-identify as having "no financial safety net" as an indicator of financial need. While the ACS does not have this information, we use an alternative measure based on eligibility of cash assistance programs for a household.<sup>1</sup> Third, the GIA has a pre-qualification filter that eliminates applicants who do not fall below SSS. We do not

<sup>&</sup>lt;sup>1</sup>The NYS cash assistance eligibility standards, 130% of the federal poverty line as the threshold of eligibility. This threshold serves as a proxy for financial priority, analogous to the lack of a financial safety net priority in the GIA.

use this pre-requisite to filter out individuals from the ACS dataset.<sup>2</sup> Fourth, the GIA has different definitions of artist-related disciplines than the Census data. Figure 1 shows the crosswalk of artistic disciplines as categorized by two different sources: CRNY and U.S. Census Bureau data. The left side shows the discipline categories as defined by CRNY, while the right side shows the classifications according to the ACS data. <sup>3</sup> We use data from the ACS between 2010 and 2023 that includes individuals reported occupations (i.e., artistic disciplines) either in the survey year or one year prior.<sup>4</sup>

## 4 Methodology

Our analysis is driven by two primary questions: (1) Did receiving government assistance significantly influence the likelihood of being selected by the GIA? If so, then this GI program might be seen as amplifying or reinforcing existing government support programs rather than expanding their coverage to fill gaps. (2) Did the GIA support marginalized artists not receiving other forms of public assistance? We first compare summary statistics across the applicant pool, and use logistic regression to understand the selection process of GIA. Monte Carlo Simulation is then applied to examine the consistency of analysis in broader artists community.

#### 4.1 Comparative Summary Statistics

Comparative summary statistics involves examining the demographic and socioeconomic characteristics of the applicants to identify patterns or disparities in the selection process. Such a comparison helps to understand whether the GIA is indeed reaching a diverse and potentially underserved population. We then use T-Tests to assess the statistical significance of differences between applicants who have received

 $<sup>^{2}</sup>$ This will make a difference when it comes to later simulation results, since the majority of applicants to the GIA are not self-sufficient. Conversely, the majority of artists in the ACS data are self-sufficient.

<sup>&</sup>lt;sup>3</sup>This is an approximation of how the disciplines align between these two datasets.

<sup>&</sup>lt;sup>4</sup>There is the possibility that individuals have other jobs in addition to the primary occupations they report in the ACS. This is especially true among artists where having multiple jobs is common.

Interdisciplinary Arts	Artist and Related Workers
Craft	
Oral Traditions	
Performance Arts	Photographers
Social Practice	
Traditional Arts	Broadcast Announcers and Radio Disc Jockeys
	Television, Video, and Film Camera Operators and Editors
Visual Arts	
	Producers and Directors
Media Arts	
	Other Media and Communication Equipment Workers
Film	
	Other Designers
Theater	Arter
	Actors
	Musicians and Singers
Music	Music Directors and Composers
	Disc Jockeys, except Radio
	Crashia Dasimora
	Graphic Designers
Design	Floral Designers
	Fashion Designers
	Commercial and industrial Designers
	Writers and Authors
	Whiters and Authors
Literary Arts	Editors
-	Technical Writers
Dance	Dancers and Choreographers

Figure 1: Discipline Crosswalk between CRNY and ACS Data

public assistance and those who have not. This step is critical in determining whether the program's selection criteria favor one group over another, and directly answers the question of whether receiving government assistance influences the likelihood of being selected by the GIA through the overall characteristics of people who are selected versus not selected. If people who are more likely to be selected by the GIA differ from those who receive government assistance, then it provides evidence that the GIA is covering an expanded population relative to government programs.

#### 4.2 Logit Regression

In addition, our analysis is enhanced by the use of logistic regression analysis to identify factors that influence selection into the GI program. This approach allows us to examine the extent to which receipt of government assistance is a predictor of selection into the GIA, controlling for priority variables, including race, transgender, LGBTQIAP, rural, disability, immigrant, justice, care giver, and finance. The logistic regression model provides a comprehensive insight into selection dynamics. If the beneficiaries of the GIA closely mirror the demographic profile of NYS artists already receiving public support, it would suggest that the program primarily reinforces or substitutes for existing forms of support rather than expanding them. Conversely, a finding that marginalized status significantly predicts participation in the GIA, independent of prior public assistance, would highlight the GIA's role in filling gaps in the social safety net. This statistical analysis is critical to evaluating the GIA's ability to extend support to artists beyond what traditional welfare systems provide.

This regression approach allows us to control for multiple factors that might influence selection, providing a clearer understanding of the unique impact of receiving social welfare assistance on the likelihood of being selected by the GIA. While mean and mode differences in summary statistics comparison provide insights, they do not constitute statistical proof of selection favoritism or effectiveness of a program in expanding coverage. The model estimates the probability of an applicant being selected by the GIA, taking into account whether they have received public social welfare assistance.

$$\log\left(\frac{p}{1-p}\right) = \alpha + \beta_1 \cdot ReceiveAssist + \beta_2 \cdot Race_p + \beta_3 \cdot Trans_p + \beta_4 \cdot Rural_p + \beta_5 \cdot Disability_p + \beta_6 \cdot LGBTQIAP_p + \beta_7 \cdot Immigrant_p + \beta_8 \cdot Justice_p + \beta_9 \cdot Caregiver_p + \beta_{10} \cdot Finance_p$$
(1)

Here, p is the probability that the applicant is selected (Y = 1).  $\alpha$  is the intercept of the model.  $\beta_1, \beta_2, ..., \beta_{10}$  are the coefficients for each predictor variable, representing the effect of a one-unit change in the predictor variable on the log-odds of being selected, holding all other variables constant. *ReceiveAssist* is a binary indicator for whether the applicant has received social welfare assistance (1 if yes, 0 otherwise). *Race<sub>p</sub>*, *Trans<sub>p</sub>*, *Rural<sub>p</sub>*, *Disability<sub>p</sub>*, *LGBTQIAP<sub>p</sub>*, *Immigrant<sub>p</sub>*, *Justice<sub>p</sub>*, *Caregiver<sub>p</sub>* and *Finance<sub>p</sub>* are priority variables capturing various characteristics of the applicants, including their race, transgender status, rural residency, disability status, LGBTQIAP identity, immigrant status, justice system involvement, caregiver status, and financial needs (lack of Financial Safety Net), respectively. Each of these is also a binary indicator (1 for presence of the attribute, 0 otherwise).

Examining whether the GIA merely supplements existing public support or extends its reach to a broader range of marginalized artists is a fundamental aspect of understanding the program's impact. In addition, the program's weighted lottery and prioritization criteria may inadvertently privilege certain types of artists. Therefore, in addition to the baseline model proposed above, we conduct supplementary logistic regression analyses that integrate indicators of artistic discipline and race to discern patterns of selection for the GIA. Artistic disciplines are represented by 14 variables (e.g., Craft, Dance, and Design), and racial identities are captured through 8 variables (e.g., Black or African American, White, and Indigenous American). <sup>5</sup> This approach not only highlights which disciplines are more likely to be included in the GIA, but also suggests a correlation between certain artistic fields and race. Through these analyses, we aim to shed light on the diversity of GIA beneficiaries and the complex dynamics of the program's selection criteria.

#### 4.3 Monte Carlo Simulation of Selection Criteria

To examine the influence of the specific circumstances surrounding the GIA lottery and its applicant pool, which may not accurately represent the broader artist community, we use Monte Carlo simulations on the original application data to test the consistency of the selection results with the actual list of recipients. In addition, we simulate the selection process using a dataset from the NYS ACS data that reflects a broader demographic of artists to understand how the results would vary across a more diverse population of artists.

These simulations allow us to assess the GIA's ability to target its intended demographic and its intersection with existing public assistance frameworks. By conducting this analysis, we aim to determine (a) the effectiveness of the selection process in prioritizing marginalized groups, and (b) potential differences in outcomes if the program were applied statewide.

The Monte Carlo simulations are conducted as follows. First, to account for the varying degrees of priority among different variables, the simulation expanded the number of rows corresponding to each criterion in the dataset. This expansion effectively increased the probability of selection for individuals associated with certain criteria, reflecting their priority status within the simulation framework. For example, if the applicant falls into the LGBTQIAP+ group, then this applicant will have two

<sup>&</sup>lt;sup>5</sup>CRNY categorizes artistic disciplines into 14 categories including Craft, Dance, Design, Music, Film, Interdisciplinary, Literary arts, Media arts, Oral traditions, Performance art, Social practice, Theater, Traditional arts, and Visual arts. Racial identities were captured through 8 categories including, Arab or Middle Eastern, Asian or Pacific Islander, Black or African American, Hispanic or Latinx, Pacific Islander or Native Hawaiian, Indigenous American, White, and More than One Race.

identical rows representing greater probability of being selected. If this applicant meets other priority variables, such as giving care to others, then the applicant will receive an additional row for the expanded probability of being selected.

Second, the process was iterated 1,000 times, simulating a variety of selection scenarios to accurately capture the probabilistic landscape created by the interplay of the defined criteria. Each iteration involved assigning selection results to individuals based on the expanded lines and uniform probability distribution, reflecting the randomness inherent in selection processes.

Third, upon completion of the 1,000 iterations, the simulation aggregated the results to calculate the overall probability of selection for individuals based on the initial priority variables. This culminated in a comprehensive analysis that provides insight into how various factors can affect selection probabilities in practice. The results provide a basis for understanding the potential impact of prioritizing certain groups over others in selection processes, highlighting the nuances of program implementation and the importance of equitable decision-making indicators through social welfare assistance.

## **5** Results

### 5.1 Comparative Summary Statistics

Table 2 shows how several key priorities emerge as significant factors in the selection process. Applicants who identified as non-white were more likely to be selected, with a statistically significant mean difference (p<0.05). Similarly, those who identified as transgender, two-spirit, non-binary, or with multiple gender identities were more likely to be selected. Residence in rural areas also increased the likelihood of selection, indicating the GIA's prioritizing of artists in less urbanized communities. In addition, applicants with disabilities were significantly more likely to be selected. Members of the LGBTQIAP+ community were also favored in the selection process. As expected, the GIA selection process prioritized individuals with a history of involvement in the

	Selected	Not Selected	t-test	Total Applicants		
Variable	Mean	Mean	t-statistics	Mean	Min.	Max.
Race Priority (Non-White)	.6417	.6099	-3.0052*	.6134	0	1
Transgender Priority	.2023	.1577	-5.5656*	.1625	0	1
Rural Priority	.1455	.0524	-17.8212*	.0625	0	1
Disability Priority	.1623	.0966	$-9.9450^{*}$	.1037	0	1
LGBTQIAP Priority	.4802	.4341	-4.2801*	.4391	0	1
Immigrant Priority	.1981	.1901	-0.9338	.1910	0	1
Justice Priority	.0690	.0394	-6.7468*	.04260	0	1
Care Giver Priority	.3869	.2659	-12.4598*	.2790	0	1
Finance Priority	.9512	.9164	-5.9143*	.9202	0	1
Receive Public Assistance	.2839	.2541	$-3.1335^{*}$	.2573	0	1
N	$2,\!378$	$19,\!543$		21,921		

Table 2: Summary Statistics and T-Test Results for Selected vs. Not Selected Applicants

criminal justice system. Caregivers of children or the elderly are also overrepresented among the selected. Finally, a lack of a financial safety net among applicants was a significant factor in selection.

The results in Table 2 show that immigrant status was not significantly different between the selected and the non-selected groups. This is surprising, considering that immigrant status was prioritized in the weighted lottery along with the other priority variables. This reflects the reality that lotteries and randomization do not always result in expected outcomes. Were this lottery to be re-run more times – as shown in the simulation next – more immigrants are likely to be selected.

Overall, the proportion of applicants to the GIA, segmented by their "marginalized" (priority) status and whether they receive public assistance, supports the question of whether the GIA supports a marginalized group. This group tended to receive public assistance more than those not selected, but the proportions of those receiving government assistance are small. Of the 2,378 individuals selected for the GIA, a substantial majority, 1,703 applicants, do not receive public assistance. This distribution, with less than 30% of the selected applicants receiving public assistance, suggests that the GIA primarily benefits those who are not receiving on public assistance and are not self-sufficient, which is about 70% of the selected cohort.

Meanwhile, Table 3 presents comparative statistics for GIA applicants segmented

	Receive Assistance	Not Receive Assistance	t-test	Total Applicants		
Variable	Mean	Mean	t-statistics	Mean	Min.	Max.
Race Priority (Non-White)	.5618	.6313	$9.2532^{*}$	.6134	0	1
Transgender Priority	.1730	.1589	-2.4760*	.1625	0	1
Rural Priority	.0869	.0544	-8.4482*	.0625	0	1
Disability Priority	.1835	.0761	-23.0660*	.1037	0	1
LGBTQIAP Priority	.4414	.4383	-0.4019	.4391	0	1
Immigrant Priority	.1580	.2024	$7.3275^{*}$	.1910	0	1
Justice Priority	.0684	.0337	-11.1728*	.0426	0	1
Care Giver Priority	.3193	.2651	-7.8260*	.2790	0	1
N	5,641	16,280		21,921		

Table 3: Summary Statistics and T-Test Results for Receiving Public Welfare Assistance vs. Not Receiving Public Welfare Assistance Applicants

by whether they receive public assistance. This shows how, among the applicant pool in the lottery, whether those already receiving public assistance tended to have marginalized status. Within the array of priority variables considered during the selection process for the GIA, the majority exhibit statistically significant differences based on the receipt of public assistance, with the notable exception of the LGBTQIAP+ variable. Applicants who receive assistance exhibit some characteristics similar to those selected by the GIA: they are predominantly from rural areas, often have disabilities, and are likely to be caregivers. Conversely, the demographic profile of those receiving government assistance includes a higher proportion of white individuals compared to those not receiving assistance, and this group is less likely to consist of immigrants.

Table 4 provides mean values for a set of priority variables, allowing for a comparison across four distinct groups: those selected and not selected, further divided by the receipt or non-receipt of public welfare assistance. The data suggests nuanced trends across these groups. For instance, applicants not receiving public welfare assistance but selected by the GIA exhibit a higher mean in non-white race priority, with the average exceeding 0.6. Also, applicants who both received public welfare assistance and who were selected by the GIA show a higher mean among all groups. Conversely, applicants not receiving assistance and not getting selected by the GIA show a lower likelihood of having a disability.

	Not Selected & Receive Assistance	Selected & Receive Assistance	Selected & Not Receive Assistance	Not Selected & Not Receive Assistance
Variable	Mean	Mean	Mean	Mean
Race Priority (Non-White)	.5582	.5881	.6629	.6276
Transgender Priority	.1694	.2000	.2032	.1537
Rural Priority	.0715	.1926	.1268	.0460
Disability Priority	.1720	.2681	.1204	.0709
LGBTQIAP Priority	.4366	.4770	.4815	.4333
Immigrant Priority	.1565	.1689	.2096	.2016
Justice Priority	.0652	.0919	.0599	.0306
Care Giver Priority	.2996	.4637	.3564	.2544
Finance Priority	.9241	.9644	.9460	.9138
N	4,966	675	1,703	14,577

Table 4: Summary Statistics of Receiving Public Welfare Assistance or Not for Selected vs. Not Selected Applicants

	Not Selected & Receive Assistance	Selected & Receive Assistance	Selected & Not Receive Assistance	Not Selected & Not Receive Assistance
Age Range	25-34	25-34	25-34	25-34
Race	White	White	White	White
Gender	Female	Female	Female	Male
Rural	No	No	No	No
Disability	No	No	No	No
LGBTQIAP	No	Yes	No	No
Immigrant	No	No	No	No
Justice Involvement	No	No	No	No
Care Giver	No	No	No	No
Finance Needed	Yes	Yes	Yes	Yes
N	4,966	675	1,703	14,577

Data source: CRNY GIA.

Table 5: Mode Statistics of Applicant Characteristics by Selection Status and Welfare Assistance Receipt

Table 5 presents the mode, or most common attributes, across four distinct applicant groups within the dataset. Uniformly, the predominant profile emerging from each group is that of applicants who are in the age bracket of 25-34 years, identify as white, and do not have a disability, do not identify as LGBTQIAP+, have no history of legal involvement, and do not have caregiving responsibilities. This modal demographic suggests a specific tendency in the applicant pool across all groups.

Notably, differences emerge in relation to certain criteria. Female applicants predominantly appear in the subsets of those receiving public welfare assistance and those selected by the program. Additionally, among the cohort that was both selected and receiving assistance, a higher frequency to identify as LGBTQIAP+ is observed. This indicates that while the general applicant profile tends to be quite uniform, certain attributes such as gender and LGBTQIAP+ identification play a role in the selection process.

	Selected by the Program
Receive Public Welfare Assistance	0.0202
	(0.0503)
Race Priority	0.239***
	(0.0482)
Transgender Priority	0.192**
	(0.0629)
Rural Priority	1.126***
	(0.0699)
Disability Priority	0.472***
	(0.0642)
LGBTQIAP+ Priority	0.173***
, and the second s	(0.0503)
Immigrant Priority	0.0858
	(0.0564)
Justice Priority	$0.334^{***}$
	(0.0925)
Caregiver Priority	0.480***
0	(0.0468)
Finance	0.448***
	(0.100)
N	21921

Standard errors in parentheses

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table 6: Logit Regression Results for Selection by the GIA

#### 5.2 Logit Regression

Table 6 shows that receiving public assistance increases the log odds of being selected for the GIA by 0.0202, although this effect is not statistically significant (p > 0.05). This suggests that receipt of public assistance does not significantly affect an applicant's likelihood of being selected for the GIA, controlling for the GIA's various priority variables. In particular, while welfare recipients may appear to be more likely to be selected in an unconditional analysis, this observation is influenced by the overlap between the GIA's priorities and characteristics typical of welfare recipients, as detailed in table 2. The lack of perfect correlation between these factors suggests that the GIA has the potential to expand the scope of the social safety net, despite its neutral stance on public assistance status.

Significantly, the analysis shows that non-white applicants, transgender individuals, and those from rural areas are more likely to be selected. This pattern extends to LGBTQIAP+ individuals, caregivers, those without a financial safety net, those with a history of involvement with the legal system, and applicants with disabilities-who are 0.239 log odds more likely to be selected, holding all else constant. Immigrant status, however, does not significantly affect selection, consistent with the statistical insignificance found in table 2.

These findings suggest that the GIA is effectively targeting a wide range of underrepresented and marginalized groups. This extends beyond those typically served by public assistance and reflects a deliberate effort to include individuals traditionally overlooked by government assistance programs, such as the LGBTQIAP+ community. The lack of a significant correlation between LGBTQIAP+ identity and public assistance receipt underscores a gap in traditional welfare criteria that GI programs seeks to fill.

In sum, the regression results affirm the GI programs' commitment to enriching the welfare landscape by including a broad range of applicants from marginalized communities. The program's eligibility criteria underscore its goal of complementing, rather than duplicating, existing public welfare services, thereby enhancing support for individuals underserved by traditional assistance mechanisms.

In the selection process of the GIA, an artist's likelihood of being selected is influenced by several factors, including self-reported artistic discipline and racial identity. To elucidate the complex dynamics between these factors and selection outcomes, we used coefficient plots derived from our logistic regression analysis. This analysis incorporates artistic discipline and racial category as key variables in the model, along with indicators of public assistance receipt and other priority variables.

In doing so, we aim to dissect the influence of artistic discipline and race on the likelihood of selection, providing insight into whether certain disciplines or racial identities are more favorable within the context of the GIA. This approach allows us to identify the individual and combined effects of artistic discipline and racial identity on selection decisions, while also controlling for the effects of receiving public assistance and the presence of priority variables. Figure 2 presents a coefficient plot using the discipline of "visual arts" as the reference group.<sup>6</sup> This visualization is helpful in showing how different artistic disciplines correlate with the likelihood of being selected for the program, controlling for other priority variables, as well as receiving public assistance.

The coefficient plot reveals a notable trend that applicants who identify their discipline as "Dance" show the strongest positive association with selection, suggesting a particular preference or alignment of the program's criteria with the characteristics inherent in the craft discipline. This is closely followed by artists in "Craft", "Traditional Arts", and "Theater", suggesting that these disciplines also have favorable characteristics that align with the priorities of the selection committee.

In contrast, the plot indicates a relatively lower likelihood of selection for applicants reporting "Music" as their discipline, when controlling for a range of other influencing factors. This differential suggests that, while the program is broadly supportive of diverse artistic expressions, certain disciplines might inherently align more

 $<sup>^6\</sup>mathrm{Visual}$  arts is the most frequently selected discipline by CRNY definition.

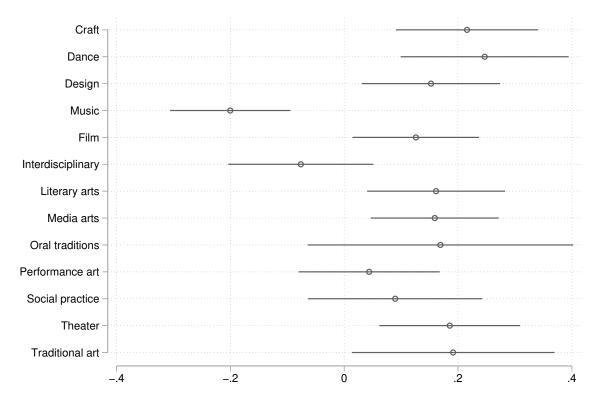
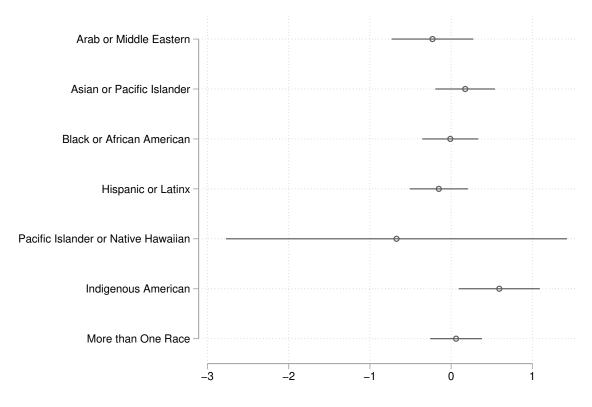


Figure 2: Coefficient Plot of Variety Disciplines Reported (Using "Visual arts" as Reference Group)



Data source: CRNY GIA. Figure 3: Coefficient Plot of Race Reported (Using White as Reference Group)

closely with the program's objectives or appeal more to the selection criteria. This indicates that the GIA's evaluation process is not merely discipline-centered, but takes a comprehensive view that considers multiple dimensions of an applicant's background and identity, such as caregiver role in the household, and financial needs.

Although the selection process for the GIA exhibits a preference for non-white racial groups, significant variations exist among these groups themselves. Figure 3 shows the coefficient plot examining the impact of racial identity on the selection process, with "White" serving as the reference category. The plot shows that applicants who identify as "Indigenous American, First Nation, or Alaska Native" have the highest positive coefficient, indicating a greater likelihood of being selected compared to white applicants. In contrast, applicants identifying as "Pacific Islander or Native Hawaiian" have a lower coefficient, indicating a lower likelihood of selection within this program. The patterns indicate the GIA's selection tendencies with respect to racial identity. Indigenous American, more than one race, and Asian racial groups were more likely to be selected than whites into the GIA. Given that the lottery was weighted to favor (all) non-white racial groups, the fact that some races (e.g., Black, Hispanic, Arab) did not get selected at a higher frequency than whites is not simply a reflection of randomness or systematic bias, but a complex interaction of controlled priority variables within the model. It suggests that the differences in selection among racial groups, including whites, are due to the equitable consideration of priority variables such as disability, transgender identity, and other variables, rather than racial identity alone.

#### 5.3 Monte Carlo Simulation of Selection Criteria

The primary regression analysis does not show a statistically significant effect of receiving public assistance on the likelihood of being selected for the GIA. Conditional on the SSS eligibility criteria, this finding might not be surprising because the weighted lottery among the eligible applicant pool was facially blind to public assistance status. If GIA's chosen priority variables are themselves correlated with receipt of public assistance (see Table 2), then the insignificant result in Table 6 just reflects how the logit model captures the lottery process' blindness to public assistance. Yet it could also be the result of the particular random lottery run by CRNY. After all, the lottery did not favor immigrants as intended. Running the lottery again might yield different results. Further, the tendency of this lottery to select artists already receiving public assistance depends greatly on the initial applicant pool. Because of the non-representative nature of the applicant pool compared to the general population of artists in the state, the previous results may mask the true impact of public assistance on the likelihood of selection. Therefore, a comparison of the GIA's selection process and the broader statewide population is needed.

By replicating the GIA's selection process 1,000 times, this simulation aims to verify if the observed patterns of selection among applicants hold consistently, thereby reinforcing the internal validity of our results. Table 7 illustrates the summary statistics from a Monte Carlo simulation designed to assess the selection priorities of the GIA after 1,000 iterations. Table 7 shows the mean values for the priority variables for the full pool of applicants (rightmost column) and for the selected participants (middle column), as in Table 2. The (leftmost) Monte Carlo column shows the average characteristics among those selected across the thousand lotteries. Comparing the Monte Carlo means to the means of the program participants and the applicant pool lets us discern the GIA's selection inclinations apart from their specific lottery results and their applicant pool.

The Monte Carlo results are consistent with expectations: all priority variables have higher means than the applicant pool, confirming that the lottery was designed to favor these criteria. Non-white, Transgender, LGBTQIAP individuals and immigrants have, on average, been assigned higher priority across iterations, as indicated by their higher mean values. This reflects a systematic preference for these categories within the selection criteria used in the simulation.

However, the nuanced difference in means-especially the slight increase for welfare recipients-suggests careful adherence to the priority variables rather than a substantial bias. Rural, disability, justice-involvement, giving care to others, financially needy, and public assistance-receiving categories have been assigned a lower priority on average, as reflected by their lower mean values. But still, higher than the mean of the total applicant pool.

We also simulated the selection process to the broader NYS population of artists by using data from the 2010 to 2023 ACS. With CRNY selecting 10.8% of its applicants for the GIA, we also selected 10.8% of NYS artists (1,179 out of 10,867) from the ACS data. This approach allows us to analyze the GIA's alignment with the needs of a diverse artist population across the state. By simulating the selection process, we aim to measure the program's impact and its ability to fill gaps not covered by traditional social welfare. This iterative analysis, enriched with more comprehensive data over time, will help us assess the program's effectiveness as a supplemental support system

	Monte (	Carlo Simulation	Selected by CRNY		CRNY	Applicants
Variable	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Race Priority (Non-White)	.6773	.0032	.6417	.4796	.6134	.4870
Transgender Priority	.2155	.0032	.2023	.4018	.1625	.3690
Rural Priority	.0735	.0020	.1455	.3527	.0625	.2421
Disability Priority	.1352	.0027	.1623	.3688	.1037	.3049
LGBTQIAP Priority	.5104	.0035	.4808	.4997	.4391	.4963
Immigrant Priority	.2306	.0032	.1981	.3986	.1910	.3931
Justice Priority	.0569	.0019	.0690	.2534	.0426	.2020
Care Giver Priority	.3298	.0034	.3869	.4871	.2790	.4485
Finance Priority	.9473	.0013	.9512	.2155	.9202	.2710
Receive Public Assistance	.2636	.0031	.2839	.4510	.2573	.4372
N	21	,921x1,000	$2,\!378$		2	21,921

Table 7: Summary Statistics of Monte Carlo Simulation of Selected vs. Actual Selected in CNRY Program

	Monte Carlo Simulation		Total Cer	nsus Artists in NYS
Variable	Mean	Std. Dev.	Mean	Std. Dev.
Race Priority (Non-White)	.3114	.0054	.2017	.4013
Rural Priority	.0053	.0008	.0037	.0606
Disability Priority	.0419	.0024	.0289	.1675
Immigrant Priority	.3593	.0055	.2285	.4199
Care Giver Priority	.4184	.0054	.2920	.4547
Finance Priority	.0145	.0016	.0079	.0886
Receive Public Assistance	.1171	.0036	.1036	.3048
N	10,867 x 1,000		10,867	

Data source: ACS data from 2010 to 2023.

Table 8: Summary Statistics of Monte Carlo Simulation with Selected vs. Total CensusArtists in NYS

and provide a clearer understanding of its potential to strengthen the artistic community statewide. Based on this population of 10,867 artists as defined in the ACS, we replicate the GIA's weighted lottery process using these six available priority variables for 1,000 simulated lotteries.

Table 8 shows the outcome of a Monte Carlo simulation that identifies individuals within the NYS ACS data for artists who are most likely to be selected by the GIA. Specifically, the table compares the weighted mean and standard deviation of NYS artists being selected through 1,000 iterations against the overall demographic profile of artists in the NYS ACS data. The comparison of these means after numerous iterations confirms that the GIA process consistently selects applicants based on these priority variables, demonstrating the program's commitment to supporting a diverse and underserved artist community. Moreover, it provides evidence that the GIA program scaled to a broader population of artists would tend to cover artists mostly not receiving public welfare assistance. Though about 10% of artists in the ACS receive public assistance, the simulated lotteries targeting marginalized status among this artist population selected artists receiving public assistance less than 12% of the time.

The simulation with ACS covering artists in NYS suggests that, even when considering a broader demographic of artists who may not engage with the GIA, prioritizing certain demographics consistently expands support across the population. It does not predominantly target those already receiving public assistance. This disparity indicates that the GIA potentially plays a supplementary role, extending support to individuals who may be underrepresented or insufficiently served by existing public assistance programs. It reflects the initiative's probable intention to address the needs of artists who face extra hurdles to achieving self-sufficiency, including those who may require urgent support in times of crisis, such as during the COVID-19 pandemic. The underrepresentation of individuals already receiving public assistance in the simulation also highlights the program's extension towards artists who, despite financial challenges, may not receive or qualify for other forms of government support. These findings underscore the GIA's potential to fill gaps in the existing safety net, catering to the unique circumstances faced by artists in the state.

## 6 Discussion and Conclusion

Existing literature has underscored the exclusionary nature of current social assistance programs, which often overlook certain populations due to eligibility criteria based on federal poverty guidelines and stringent work requirements. This paper focuses on this gap within social welfare, with a specific focus on artists. Artists face unique financial challenges that may not be captured by federal poverty guidelines, and their unconventional work conditions further challenge them to meet the work status requirements under general social assistance programs. Therefore, the paper is designed to assess whether a nonprofit-initiated guaranteed income program for artists that prioritizes more complex financial needs and reduces burdens in meeting eligibility requirements can effectively address these gaps within the current government assistance framework.

The imperfect correlation among priority factors that reflect populations in need and the receipt of governmental assistance allows for a GI program, like CRNY's, to supplement or expand coverage of the public safety net. The GIA program included priority criteria that targeted marginalized groups, which did not overlap significantly with those receiving public assistance. As we would predict, artists on public assistance were more likely to be selected into the GIA program, but only because the receipt of public assistance is correlated with the priority factors identifying marginalized groups. In other words, conditional on the priority criteria, public assistance neither helped nor hindered the odds of being selected into the GIA program. The GIA program, being blind to governmental assistance, did not just deepen the support to individuals already receiving governmental support, but it expanded coverage in effect widening the social safety net in NYS and serving a supplementary role.

However, our analysis is not without the limitations. First, the GIA applicant data used in this research is self-reported. Despite CRNY's efforts to verify responses regarding household income and the history of receiving social welfare programs through supplementary tax and spending documents, other parts of the responses may contain errors. Additionally, the age of applicants was not recorded, and variations due to age were not considered in the analysis. Second, in the simulation analysis, although efforts were made to match variables in CRNY data to the census data for simulations, it was not a perfect match because the census data does not contain certain variables, such as gender identities and legal system involvement. Lastly, the literature suggests that artists can face substantive hurdles due to their occupational characteristics and demographic conditions, limiting their access to social welfare programs. However, we cannot rule out the possibility that some artists may choose not to apply to welfare programs even when they individually have the means to overcome those hurdles described in the literature. This potential endogeneity can be further explored with qualitative interviews and surveys capturing perceptions and reasons behind individual artists who have not received social welfare assistance despite being in financial need.

Despite the limitations, the CRNY case demonstrates the capacity of nonprofits serving a supplementary role in social assistance diversifying the population of people receiving support. In line with its objectives, GIA program recipients generally exhibited priority factors indicative of marginalized status. Additionally, simulations suggest that extending the GIA program to a wider demographic could encompass a more diverse group of economically vulnerable individuals who may not meet the criteria for public welfare assistance.