



Introduction

As climate change progesses, the U.S. is expected to experience increases in both frequency and intensity of disasters (NOAA, 2022). In 2023 alone, a record-breaking 24 disasters costing over a billion dollars in damages have occurred (NOAA, 2023). The costs, however, are often borne by those in marginalized and stigmatized communities. This is especially true for the 16 million Lesbian, Gay, Bisexual, Transgender, and Queer and Questioning (LGBTQ+; Whittington et al., 2020) individuals and those who have intersecting identities such as race, gender, and class that amplify their risk of harm and displacement (Lynn et al., 2011; Vinyeta et al., 2015; Hunter et al., 2018).

Displacement "refers to situations where people are forced to leave their homes or places of habitual residence as a result of a disaster or in order to avoid the impact of an immediate and foreseeable natural hazard" (The Nansen Initiative, 2015, p. 16). Disaster preparedness and response entities need to better understand and address the systemic and contextual factors that contribute to disparate rates of displacement of LGBTQ+ individuals. This in addition to assessing how their displacement experiences differ from those in the cisgender, heterosexual population. Although, federal agencies under the Biden Administration have demonstrated a commitment to equity (see E.O. 13985), goals have yet to be fully realized or implemented.

In our analysis of 2022-2023 data from the U.S. Census Household Pulse Survey, we find evidence that supports qualitative research that suggests <u>LGBTQ+ communities</u> are disproportionately impacted by disaster displacement and <u>have more negative disaster experiences</u> compared to cisgender, heterosexual individuals (Goldsmith, Raditz & Méndez, 2022). Our results suggest that <u>state-level LGBTQ+</u> <u>displacement is generally larger in states that have a higher</u> <u>number of anti-LGBTQ+ policies.</u>

National Disaster Displacement

Nationally, an estimated 1.5% of the total U.S. population was displaced due to a disaster within a 12-month period. However, of those who identified as <u>LGBTQ+</u>, <u>displacement</u> <u>was nearly twice (2.4%) the national average</u>, in comparison to those who identified as cisgender and heterosexual (1.4%). Additionally, we find LGBTQ+ individuals with intersecting marginalized identities are at greater risk of displacement during disasters compared to White cisgender, heterosexual individuals (see Tables 1 and 2 for more details; Goldsmith, Méndez, & Raditz, 2023)

OUR STUDY

To assess LGBTQ+ inequitable disaster displacement rates and the disaster experiences, we utilize responses from Weeks 52-60 (December 9, 2022-August 7, 2023) of the Census Household Pulse Survey (*n* = 606,277). The Household Pulse Survey (HPS) was designed to collect rapid responses from large metropolitan, state, nationally representative samples to quickly assess experiences during the COVID-19 Pandemic and was expanded to address other economic and social issues (Census Bureau, 2023).

Each week or wave of the survey was disseminated nearly every month and was in the field for a twoweek long period. Starting in Week 52, the HPS incorporated items on disaster displacement from hurricanes, floods, fires, tornados and other disasters. To our knowledge, this is the only study to utilize the combined weeks to assess displacements rates. This approach allows us to leverage the larger sample size to produce better displacement estimates for sub-populations focusing on both national and state levels.

KEY FINDINGS

- National LGBTQ+ disaster displacement is nearly 2x higher than cisgender, heterosexual displacement.
- LGBTQ+ individuals face worse displacement conditions compared to cisgender, heterosexual individuals. Highest among LGBTQ+ people of color.
- Although, there is a lot of state-level variation, LGBTQ+ displacement is higher than cisgender, heterosexual displacement in most states.
- LGBTQ+ displacement is potentially related to overall state-level positions on LGBTQ+ civil rights. Meaning, states with more anti-LGBTQ+ policies also generally have higher LGBTQ+ displacement during disasters.



Disaster displacement experiences of LGBTQ+ individuals are different from their cisgender, heterosexual counterparts. LGBTQ+ people are more likely to experience a shortage of food (46%), water insecurity (43%), unsanitary conditions (44%), feelings of isolation (52%), and fear of crime (52%). Finally, as detailed in Table 3, those who identify as LGBTQ+ are more likely to never return to their homes after displacement (32%). Permanent displacement can cause individuals to be removed from supportive social networks during a time when they likely need them the most. Displacement experiences can have immediate and chronic impacts on mental health in addition to exacerbating existing mental health struggles (Fritze et al., 2008; Chu, 2017; Clayton et al., 2017). Differences between LGBTQ+ and cisgender, heterosexual experiences are both substantively meaningful and statistically significant (see Appendix B).

State-Level Disaster Displacement

Throughout the U.S., there is a large amount of variation in disaster displacement by state. The state-level variation can be attributed to differences in disaster frequency, or inadequate disaster preparedness and response policies, or both. <u>Louisiana leads the nation with nearly 10% of the total</u> <u>state population displaced, followed by Florida with 6%</u> <u>displacement (see tables in Appendix A for list). However, we</u> find Nebraska, Georgia, and South Dakota, have some of the highest LGBTQ+ displacement rates but are not among the higher rates of LGBTQ+ displacement cannot be attributed to overall displacement alone suggesting that there may be something unique about these states that contributes to higher LGBTQ+ displacement.

<u>Nine of the top ten states with highest rates of LGBTQ+</u> <u>displacement have low or negative overall LGBTQ+ equality</u> <u>policy tallies</u> (see Appendix Table A.2; MAP, 2023a). Additionally, many of these states, such as Mississippi, Arkansas, and Florida have service exemption laws that allow faith-based organizations and health care providers to refuse service based on their religious belief to LGBTQ+ individuals (MAP, 2023a). Governments, moreover, often rely on faithbased organizations to provide shelter and resources during disasters and, consequently, may present a major barrier for LGBTQ+ individuals from accessing services during disasters. This may lead to worse displacement experiences in those states (Keller, 2017; Goldsmith, Raditz & Méndez, 2022).



DISASTER DISPLACEMENT & INTERSECTIONALITY

Displacement is higher for LGBTQ+ compared to cisgender, heterosexual individuals across racial and ethnic groups. <u>White</u> <u>cisgender</u>, heterosexual individuals have the lowest displacement <u>rates and highest among LGBTQ+ individuals of color</u>, especially Black LGBTQ+ individuals.

Additionally, LGBTQ+ individuals in both low- and high-income groups experienced higher proportions of displacement, than cisgender, heterosexual counterparts. This is likely due to large groups of LGBTQ+ individuals residing in coastal cities where wealth inequality is often highest.

Table 1: Proportions of displacement by race and ethnicity.

	LGBTQ+	Cis-Heterosexual			
White	1.5%	1.2%			
Asian	4.2%	0.9%			
Latino	3.9%	1.3%			
Black	3.6% 2.2%				
Table 2: Proportions of displacement by income.					
Table 2: Proportion	s of displacement by	y income.			
Table 2: Proportion	s of displacement by LGBTQ+	r income. Cis- Heterosexual			
Table 2: Proportion					
	LGBTQ+	Cis- Heterosexual			

DISPLACEMENT EXPERIENCES

Respondents who indicated they had been displaced as a result of a disaster were asked to elaborate on their experiences during the first month of displacement.

Table 3: Disparate displacement experiences betweenLGBTQ and cisgender-straight populations.

	LGBTQ+	Cis- Heterosexual
Length of Displacement	32%	12%
(Never Returned)		
Food Insecurity	46%	35%
(Some or A lot)		
Water Insecurity (Some or	43%	29%
A lot)		
No Electricity	63%	58%
(Some or A lot)		
Unsanitary Conditions	44%	27%
(Some or A lot)		
Feelings of Isolation	52%	39%
(Some or A lot)		
Fear of Crime	52%	31%
(Some or A lot)		

Note: Responses were recoded 0 to 1 where 1 indicates respondent answered some or a lot for each item. Estimates were created using weighted means.





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Furthermore, states with higher LGBTQ+ displacement also have large rural populations. For example, 53.7% of Mississippi's population resides in rural areas. (Census Bureau, 2020). LGBTQ+ identifying individuals reside in every county in the U.S., including rural regions (Whittington et al., 2020). According to the Map Advancement Project, of those who identify as LGBTQ+, nearly 5% live in rural areas (MAP, 2019a). LGBTQ+ individuals living in rural areas are more likely to face discriminatory policies and barriers to accessing services (MAP, 2019a), which can increase displacement during disasters and create worse disaster experiences. In addition, Black same-sex couples are concentrated in the South, a region that has states with both high rurality and the highest LGBTQ+ displacement (MAP, 2019b).

Taken together, our findings indicate there is a likely relationship between anti-LGBTQ+ policies, rurality, and negative disaster displacement outcomes on the state-level.

Disaster Event by Category

The overall displacement and disaster patterns per state generally follow our expectations—increased fire displacement in western states, amplified hurricane displacement along the Gulf of Mexico, and so on (see Figure 1).

However, the displacement among LGBTQ+ individuals reveal types of disasters that lead to higher rates of LGBTQ+ displacement. Specifically, we see that fires (30%) and tornados (21%) lead to nearly double and triple the displacement, respectively, among LGBTQ+ populations compared to cisgender, heterosexual populations at the national level. This pattern also emerges when examining state-level differences in LGBTQ+ and cisgender, heterosexual populations displacement by disaster type (Figure 2). It is also important to consider that LGBTQ+ individuals are more likely to never return to their home after a disaster and, consequently, may reside in a different state than where they experienced a disaster.

Table 4: National Disaster Type and LGBTQ+ Displacement

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	LGBTQ+	Cisgender,		
		Heterosexual		
Fire	30%	14%		
Hurricane	44%	47%		
Flood	30%	19%		
Tornado	21%	7.4%		

Note: Responses were recoded 0 to 1 and percentages were generated using weighted averages. Respondents could select multiple disaster types.

SPOTLIGHT: California and Mississippi

Our results indicate that the LGBTQ+ population displacement is, at least in part, related to state level differences in anti-LGBTQ+ policies. To better illustrate this point, we will take a closer look (Tables 5 & 6) at disaster displacement in California, a leader in pro-LGBTQ+ policies, and Mississippi, a state with some of the most anti-LGBTQ+ laws in the country (MAP, 2023b).

Displacement experiences are generally worse in Mississippi, at 1.9% for the total population and 5% LGBTQ+ displacement, which are both higher than the national average. California, on the other hand, has a total (1.4%) and LGBTQ+ (2.4%) displacement similar to the national average. Specifically, LGBTQ+ individuals report higher levels of food (79%) and water insecurity (50%), electricity loss (64%), unsanitary conditions (45%), and feelings of isolation (42%) during displacement in Mississippi compared to California.

However, LGBTQ+ individuals in California experience higher levels of permanent displacement, which could be due to higher cost of living, and fear of crime. It is unclear why LGBTQ+ individuals are experiencing higher levels of fear of crime during displacement in California indicating more research is needed to fully understand displacement experiences.

Table 5: California displacement experiences.

	LGBTQ+	Cis- Hetero			
Length of Displacement	52%	17%			
(Never Returned)					
Food Insecurity	25%	23%			
(Some or A lot)					
Water Insecurity (Some or A lot)	39%	20%			
No Electricity	51%	39%			
(Some or A lot)					
Unsanitary Conditions	47%	19%			
(Some or A lot)					
Feelings of Isolation	29%	35%			
(Some or A lot)					
Fear of Crime	70%	35%			
(Some or A lot)					
Table 6: Mississippi displacement experiences.					
Table 6: Mississippi displacement e	xperiences.				
Table 6: Mississippi displacement e	LGBTQ+	Cis- Hetero			
Length of Displacement					
	LGBTQ+	Cis- Hetero			
Length of Displacement	LGBTQ+	Cis- Hetero			
Length of Displacement (Never Returned)	LGBTQ+ 34%	Cis- Hetero 12%			
Length of Displacement (Never Returned) Food Insecurity	LGBTQ+ 34%	Cis- Hetero 12%			
Length of Displacement (Never Returned) Food Insecurity (Some or A lot)	LGBTQ+ 34% 79%	Cis- Hetero 12% 54%			
Length of Displacement (Never Returned) Food Insecurity (Some or A lot) Water Insecurity (Some or A lot)	LGBTQ+ 34% 79% 50%	Cis- Hetero 12% 54% 39%			
Length of Displacement (Never Returned) Food Insecurity (Some or A lot) Water Insecurity (Some or A lot) No Electricity	LGBTQ+ 34% 79% 50%	Cis- Hetero 12% 54% 39%			
Length of Displacement (Never Returned) Food Insecurity (Some or A lot) Water Insecurity (Some or A lot) No Electricity (Some or A lot)	LGBTQ+ 34% 79% 50% 64%	Cis- Hetero 12% 54% 39% 74%			
Length of Displacement (Never Returned) Food Insecurity (Some or A lot) Water Insecurity (Some or A lot) No Electricity (Some or A lot) Unsanitary Conditions	LGBTQ+ 34% 79% 50% 64%	Cis- Hetero 12% 54% 39% 74%			
Length of Displacement (Never Returned) Food Insecurity (Some or A lot) Water Insecurity (Some or A lot) No Electricity (Some or A lot) Unsanitary Conditions (Some or A lot)	LGBTQ+ 34% 79% 50% 64% 45%	Cis- Hetero 12% 54% 39% 74% 46%			
Length of Displacement (Never Returned) Food Insecurity (Some or A lot) Water Insecurity (Some or A lot) No Electricity (Some or A lot) Unsanitary Conditions (Some or A lot) Feelings of Isolation	LGBTQ+ 34% 79% 50% 64% 45%	Cis- Hetero 12% 54% 39% 74% 46%			

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POLICY RECOMENDATIONS

Increase in funding opportunities for LGBTQ+-inclusive disaster management.

- Additional funding opportunities for LGBTQ+ and allied organizations in states and rural areas, especially in regions with higher amounts of anti-LGBTQ+ policies and large proportions of LGBTQ+ disaster displacement. Particularly, for regions with high levels of LGBTQ+ of color disaster displacements.
- Grants, particularly focused on mitigation and relief, should explicitly name LGBTQ+ communities in eligibility criteria.

Guidance and Data for equitable disaster response and recovery.

- Disaster and emergency response entities should update policies and guidance materials in collaboration with LGBTQ+ communities based on audits of mitigation and response activities that identify reasons for and solutions to higher rates of displacement within LGBTQ+ communities.
- Provide specific guidance and resources for LGBTQ+ individuals and families translated into multiple languages (e.g., Spanish and Chinese) on temporary shelters, transitional housing, resource centers, and housing/rental aid. Ensure that they are disseminated to those communities.
- Establishment of a federal interagency LGBTQ+ Equity Taskforce, co-chaired by FEMA to consult with experts, organizations, and leaders to equitably serve LGBTQ+ communities during disasters. It can draw on resources such as the federal Equitable Data Working Group chaired by the Office of Science and Technology Policy to develop metrics and identify better practices to collect sexual orientation and gender identity data.

Accountability in Disaster and Emergency Management

 Stronger accountability and oversight mechanisms are needed to ensure all entities who receive federal aid follow federal equity standards to advance equity for LGBTQ+ individuals (e.g., E.O 13985 and E.O 14075).

Conclusion

Our results support previously published qualitative research that suggests LGBTQ+ communities are disproportionately impacted by disaster displacement and have more negative experiences compared to cisgender, heterosexual individuals (Goldsmith, Raditz & Méndez, 2022). Our findings uplift previous research on the compounding effect of intersecting identities on LGBTQ+ displacement (Lynn et al., 2011; Vinyeta et al., 2015; Hunter et al., 2018). Finally, the results suggest differences in state-level LGBTQ+ displacement is generally greater in states that have histories of anti-LGBTQ policies and larger rural populations.

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Overall, these findings indicate that federal agencies have yet to fully realize their equity goals (see E.O. 13985). National and state disaster response organizations have an obligation to take a more active role in enforcing nondiscriminatory policies to ensure equitable treatment of LGBTQ+ individuals.

This is an especially urgent matter considering the <u>United States ranks third globally in the number of</u> <u>Trans and gender diverse people murdered</u> (Fleck, 2023). Therefore, stronger accountability and oversight mechanisms are needed to ensure all entities who receive federal aid follow standards to advance equity for LGBTQ+ individuals (e.g., E.O 13985 and E.O 14075). To assist federal agencies with enforcement, Congress should pass the Equality Act, which will explicitly include sexual orientation, gender identity, gender expression, and sex characteristics in the Civil Rights Act of 1964. This legislation would make it illegal for states to discriminate against LGBTQ+ individuals. Please see the *Policy Recommendations* section for further recommendations and details.

Our analysis is limited in that we are only able to investigate the extent of the problem and are unable to determine with certainty *why* LGBTQ+ communities are experiencing higher rates of displacement and more negative displacement experiences. Although there is work that suggests anti-LGBTQ+ policies and bias in response programs are major contributors (Marquez, 2017), [continues on next page]



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these mechanisms driving differential displacements rates and experiences will likely vary by state and region (urban and rural).

More in-depth research at the state and region-level is required. Additionally, the Household Pulse Survey does not allow us to differentiate between where permanently displaced people are currently residing and where they experienced a disaster. This information would highlight which states are receiving displaced individuals. Further research is needed to determine the types of resources these states need to support newly arrived displaced LGBTQ+ people. This work should be helmed by or, at the very least, in collaboration with LGBTQ+ communities with first-hand experiences and knowledge. This would increase the efficacy of preparedness and response policies (Maskrey 2011; Van Niekkerk et al. 2017; Allen 2006).

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Figure 1. Disaster Type and Total Displacement per State



Flood Displacement by State

Tornado Displacement by State



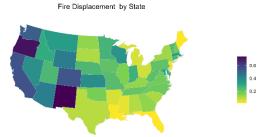




Hurricane Displacement by State



Figure 2. Disaster Type and LGBTQ+ Displacement per State



Fire LGBTQ Displacement by State

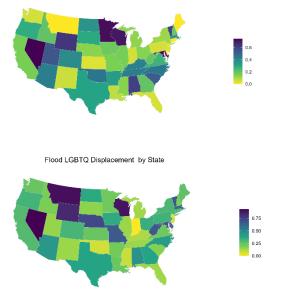


0.8 0.6 0.4 0.2 0.0

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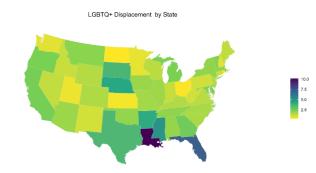
Tornado LGBTQ Displacement by State



Hurricane LGBTQ Displacement by State

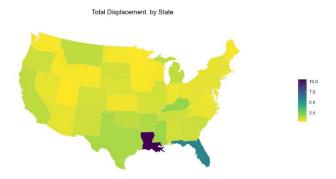


Figure 4. LGBTQ+ Displacement per State



Note: Estimates were created using weighted means. LGBTQ was coded 1 for those who identified as either Lesbian, Gay, Trans, Queer or Questioning, and 0 for those who did not identify as LGBTQ. Individuals who answered "none" or "I don't know" to either sexual orientation or gender items were considered Queer or Questioning. Please see File & Schere (2022) for their analysis of "residual" respondents to sexual orientation and gender survey items and their characteristics.

Figure 3. Total Displacement per State



Note: Estimates were created using weighted means.

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Appendix A

Table A.1: Percent of total displacement per state.

State	Total	Total SE
Louisiana	10.39696	0.560988564
Florida	5.896196	0.255632901
Kentucky	2.01551	0.196033537
Mississippi	1.884083	0.213716882
Texas	1.739583	0.125504393
Arkansas	1.625238	0.224914767
California	1.422331	0.145819804
Alaska	1.419061	0.298128071
Oklahoma	1.405291	0.169322701
Montana	1.389626	0.26353984
Michigan	1.3854	0.149414378
South Carolina	1.206216	0.213301603
Tennessee	1.174852	0.139962972
Oregon	1.167328	0.126064944
Georgia	1.164203	0.140529498
New Mexico	1.161094	0.12964496
Illinois	1.104481	0.183124338
Colorado	1.09373	0.118533679
Alabama	1.069606	0.159950882
South Dakota	1.057504	0.211422837
Missouri	1.001916	0.161763109
Nebraska	0.930065	0.21377582
New Jersey	0.84344	0.149048546
West Virginia	0.808748	0.140568848
Vermont	0.800159	0.179258567
Pennsylvania	0.787637	0.150086261
District of Columbia	0.783745	0.243694443
Massachusetts	0.76813	0.165631599
Arizona	0.753652	0.118686079
New York	0.752297	0.143347952
Nevada	0.752112	0.172621089
Maryland	0.752062	0.182028777



New Hampshire	0.734457	0.172343309
North Carolina	0.732597	0.128168754
Ohio	0.709363	0.132816308
Connecticut	0.637684	0.115672564
Virginia	0.631505	0.118621005
Indiana	0.628805	0.100778278
Kansas	0.589932	0.084583534
Delaware	0.548645	0.170628168
North Dakota	0.52727	0.181884603
Wisconsin	0.524371	0.1042254
Hawaii	0.515352	0.14194276
Maine	0.512675	0.12338365
Idaho	0.499247	0.122835295
Washington	0.489795	0.064902114
Wyoming	0.464029	0.141903884
Iowa	0.460343	0.100801412
Minnesota	0.410083	0.100173176
Rhode Island	0.380572	0.076675604
Utah	0.379589	0.081649382



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Table A.2: Percent of LGBTQ+ and cisgender, heterosexual displacement per state.

State	LGBTQ+	LGBTQ+ SE	Cisgender, Hetero	Cisgender, Hetero SE	Gap
Louisiana	10.11919	2.112450596	10.21354644	0.553246184	-0.09435
Florida	7.098822	0.844934083	5.708008951	0.253550817	1.390813
Mississippi	5.066879	1.771634575	1.572751574	0.227965846	3.494128
Nebraska	4.187808	1.733211591	0.533889346	0.114211552	3.653918
Arkansas	4.122632	1.435573374	1.34294291	0.190287418	2.779689
Alaska	3.65333	1.1340624	1.063103602	0.299787605	2.590227
South Dakota	3.608137	1.937457338	0.824847327	0.167967872	2.783289
Texas	3.517989	0.685072807	1.452240608	0.117232974	2.065749
Georgia	2.56688	0.624705299	0.968710821	0.125106996	1.59817
District of Columbia	2.463766	0.975187933	0.25142106	0.107425454	2.212345
Delaware	2.459314	1.213105337	0.302139629	0.091240131	2.157174
California	2.434219	0.514252455	1.249197781	0.123770021	1.185021
Oregon	2.318643	0.645594614	0.925633343	0.140790388	1.393009
Michigan	2.295854	0.83971409	1.280158219	0.140776854	1.015695
Maryland	2.20929	1.108240698	0.556202201	0.115818273	1.653088
Vermont	2.145589	0.90408028	0.607004603	0.121167209	1.538585
Montana	2.10153	1.028375174	1.310548372	0.243909114	0.790981
Massachusetts	2.023461	0.75166296	0.506826234	0.149320614	1.516635
Tennessee	1.997282	0.430518998	1.055098925	0.149848376	0.942183
New York	1.99376	0.689469449	0.526435341	0.11130583	1.467324
Oklahoma	1.979342	0.519649619	1.27194194	0.165824258	0.7074
Alabama	1.940157	0.981733373	1.004010533	0.160391119	0.936146
lowa	1.861881	0.795472726	0.29700575	0.052722194	1.564875
Arizona	1.848044	0.682978216	0.581038438	0.107495406	1.267005
Illinois	1.785871	0.703245039	0.992293455	0.172938646	0.793577
Missouri	1.744264	0.516274596	0.91572965	0.16303513	0.828534
North Carolina	1.672763	0.797083795	0.60496561	0.102040128	1.067797
South Carolina	1.625173	0.765628025	1.136418036	0.229183184	0.488755
Colorado	1.601286	0.469056542	1.012572994	0.107473351	0.588713
New Jersey	1.574475	0.748481562	0.71712772	0.13419436	0.857347
Kentucky	1.560218	0.461418586	2.030152129	0.213468808	-0.46993
Wyoming	1.512338	0.881084168	0.349069987	0.093926721	1.163268
Virginia	1.406537	0.648504609	0.52448043	0.094456439	0.882057
Wisconsin	1.40164	0.55512057	0.417894574	0.097759335	0.983745



Maine	1.333934	0.653391932	0.392493281	0.102274008	0.941441
Nevada	1.294442	0.655069938	0.633969924	0.154530902	0.660472
Indiana	1.239811	0.579696671	0.559320558	0.087212881	0.68049
Idaho	1.206093	0.638259798	0.421463742	0.122666712	0.784629
Connecticut	1.171314	0.519403388	0.520057743	0.104954912	0.651257
Pennsylvania	1.074187	0.611167889	0.761662642	0.157527212	0.312524
West Virginia	1.054277	0.416578769	0.688579244	0.13864707	0.365697
New Mexico	1.025411	0.345338439	1.108731141	0.139538321	-0.08332
Hawaii	0.999496	0.701861379	0.427647034	0.136988646	0.571849
New Hampshire	0.79915	0.376730248	0.689591178	0.181737265	0.109559
Washington	0.795298	0.229747719	0.443760216 0.060806685		0.351537
Minnesota	0.713649	0.377108453	0.369951377	0.369951377 0.085014402	
Utah	0.612514	0.321447723	0.350396267	0.350396267 0.076240101	
Rhode Island	0.486292	0.323814445	0.300670369	0.065986973	0.185622
Kansas	0.480411	0.24363307	0.597471954	0.095445008	-0.11706
Ohio	0.410765	0.195897744	0.764335714	0.150854317	-0.35357
North Dakota	0.341422	0.224226087	0.560160762	0.202849279	-0.21874

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Appendix B

Table B.1: National linear probability models of displacement based on LGBTQ+ status holding age, education, race, and income constant.

	Dependent variable: Displaced		
	Survey-weighted	Non-weighted	
	(1)	(2)	
LGBTQ	0.009**	0.003***	
	(0.002)	(0.0005)	
Age	0.0001	0.00001	
	(0.00002)	(0.00001)	
College	0.00001	-0.00001	
	(0.001)	(0.0003)	
Income	-0.002**	-0.001***	
	(0.0003)	(0.0001)	
White	-0.008^{*}	-0.005***	
	(0.002)	(0.001)	
Black	0.001	0.005^{***}	
	(0.001)	(0.001)	
Asian	-0.008^{*}	-0.005***	
	(0.003)	(0.001)	
Latino	-0.005	-0.001	
	(0.002)	(0.001)	
Constant	0.024***	0.019***	
	(0.002)	(0.001)	
Observations	486,790	486,790	
Log Likelihood	201,998.500	431,132.800	
Akaike Inf. Crit.	-403,979.100	-862,247.600	

*p<0.1; **p<0.05; ***p<0.01



Note: Linear probability models generated using the *svyglm* from the *survey* package in *R* using personal weights and the appropriate replicate weights. LGBTQ was coded 1 for those who identified as either Lesbian, Gay, Trans, Queer or Questioning, and 0 for those who did not identify as LGBTQ. Individuals who answered "none" or "I don't know" to either sexual orientation or gender items were considered Queer or Questioning. Please see File & Schere (2022) for their analysis of "residual" respondents to sexual orientation and gender survey items and their characteristics. The *survey* package returns robust models using Horvitz-Thompson-type standard errors (https://search.r-project.org/CRAN/refmans/survey/html/svyglm.html)



Table B.1: National binary logistic regressions modeling differences in displacement experiences based on LGBTQ+ status.

	Dependent variable:						
-	Food Insecurity	Water Insecurity	Loss of Electricity	Unsanitary Conditions	Fear of Crime	Feelings of Isolation	Never Returned Home
LGBTQ	0.544*	0.616**	0.391	0.777**	0.850**	0.601*	1.065**
	(0.165)	(0.098)	(0.136)	(0.158)	(0.155)	(0.163)	(0.150)
Age	0.008	0.001	0.001	0.005	0.009**	-0.001	0.021*
	(0.003)	(0.004)	(0.001)	(0.003)	(0.002)	(0.003)	(0.006)
College	-0.432	-0.269	-0.307*	-0.146	-0.161	0.059	-0.280
	(0.156)	(0.096)	(0.087)	(0.085)	(0.090)	(0.069)	(0.206)
Income	-0.245**	-0.148*	-0.039	-0.166**	-0.135*	-0.213**	-0.135
	(0.039)	(0.050)	(0.023)	(0.037)	(0.040)	(0.029)	(0.052)
White	-0.917*	-0.424	0.263	-0.235	-0.289	-0.206	-1.051
	(0.312)	(0.394)	(0.284)	(0.202)	(0.148)	(0.235)	(0.383)
Black	-0.057	0.133	0.510	-0.093	0.240	0.082	-0.963*
	(0.308)	(0.325)	(0.336)	(0.228)	(0.128)	(0.271)	(0.327)
Asian	-0.760	0.275	0.233	0.194	-0.045	0.090	-0.404
	(0.508)	(0.505)	(0.405)	(0.371)	(0.296)	(0.400)	(0.433)
Latino	-0.869**	0.078	0.380	0.375	0.017	-0.354	-0.604
	(0.198)	(0.311)	(0.245)	(0.188)	(0.132)	(0.263)	(0.291)
Constant	0.566	-0.233	0.168	-0.625	-0.643	0.453	-1.715**
	(0.310)	(0.546)	(0.352)	(0.327)	(0.295)	(0.393)	(0.330)
Observations	4,853	4,842	4,845	4,841	4,844	4,836	4,788

*p<0.1; **p<0.05; ***p<0.01

Note: Binary logistic regression models were generated using the *svyglm* from the *survey* package in *R* using personal weights and the appropriate replicate weights. All experiences, with the exception of Never Returned, were coded as binary variables (experienced some or a lot = 1, not at all or a little = 0). Never Returned, length of displacement, was coded 1 if respondents indicated they experiences permanent displacement and were never able to return to their homes, and 0 for all other lengths of displacement (less than a week, more than a week but

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less than a month, one to six months, or more than six months). LGBTQ was coded 1 for those who identified as either Lesbian, Gay, Trans, Queer or Questioning, and 0 for those who did not identify as LGBTQ. Individuals who answered "none" or "I don't know" to either sexual orientation or gender items were considered Queer or Questioning. Please see File & Schere (2022) for their analysis of "residual" respondents to sexual orientation and gender survey items and their characteristics.