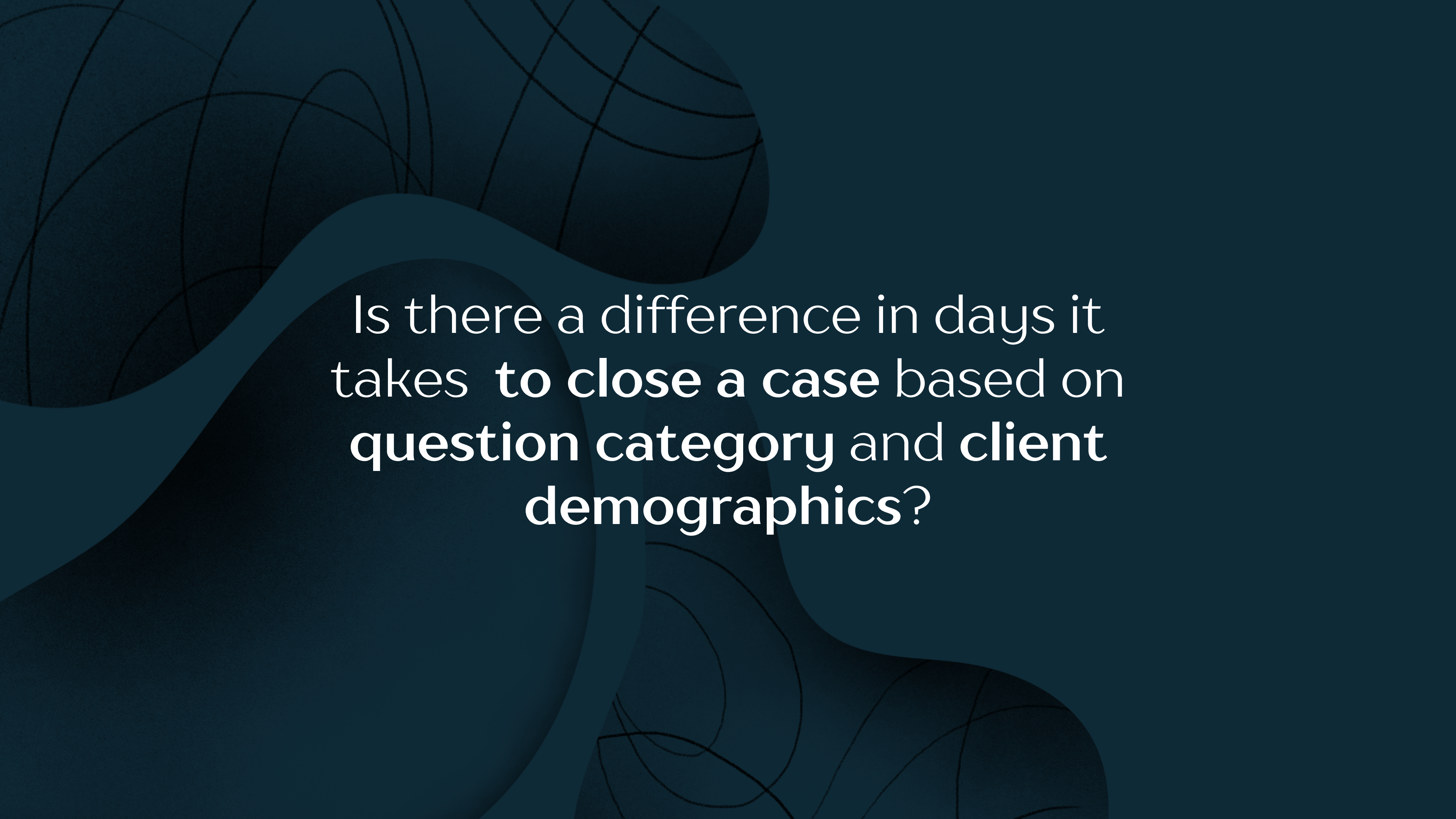


DON'T HATE DPLYR, HATE THE GAME

UW Datafest
April 2, 2023

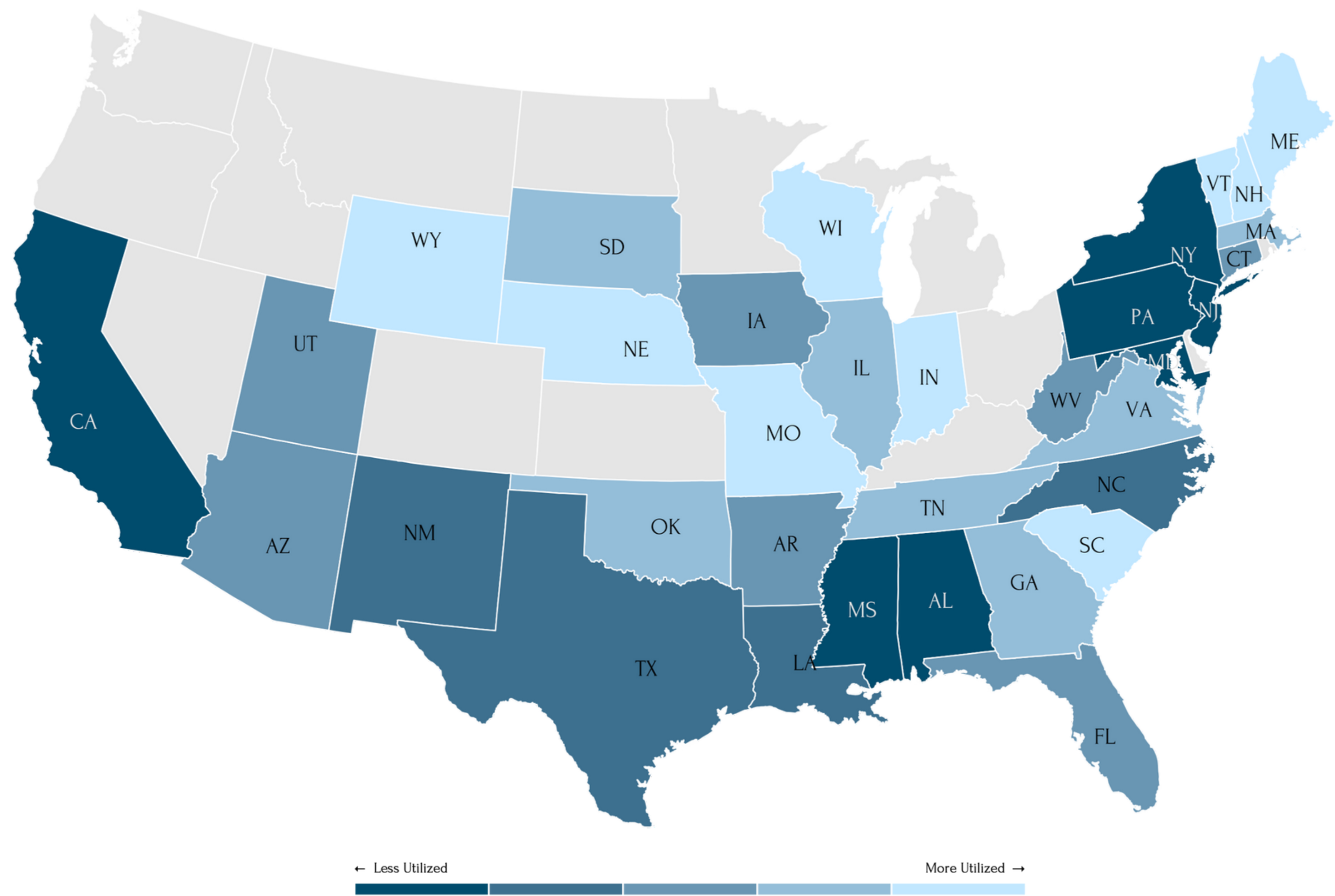
Krista Cherry, Lane Childers, Dante Ramirez, Kobe Sarausad



Is there a difference in days it
takes **to close a case** based on
question category and **client**
demographics?

Geographic Distribution Of Service Utilization

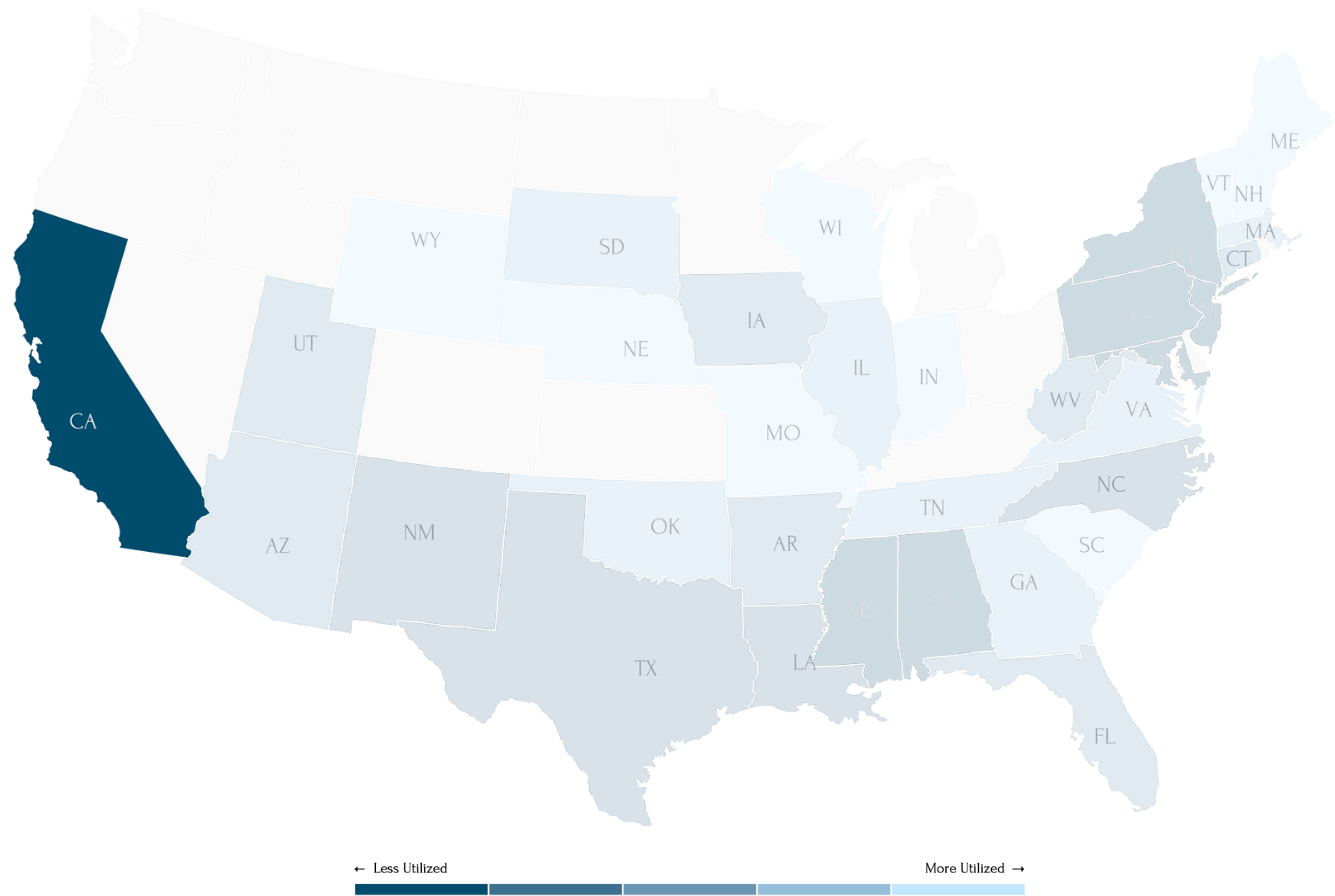
Utilization is the number of unique users of the service over the number of people eligible (estimated poverty population)



Estimated Poverty Population Obtained From Census API

Geographic Distribution Of Service Utilization

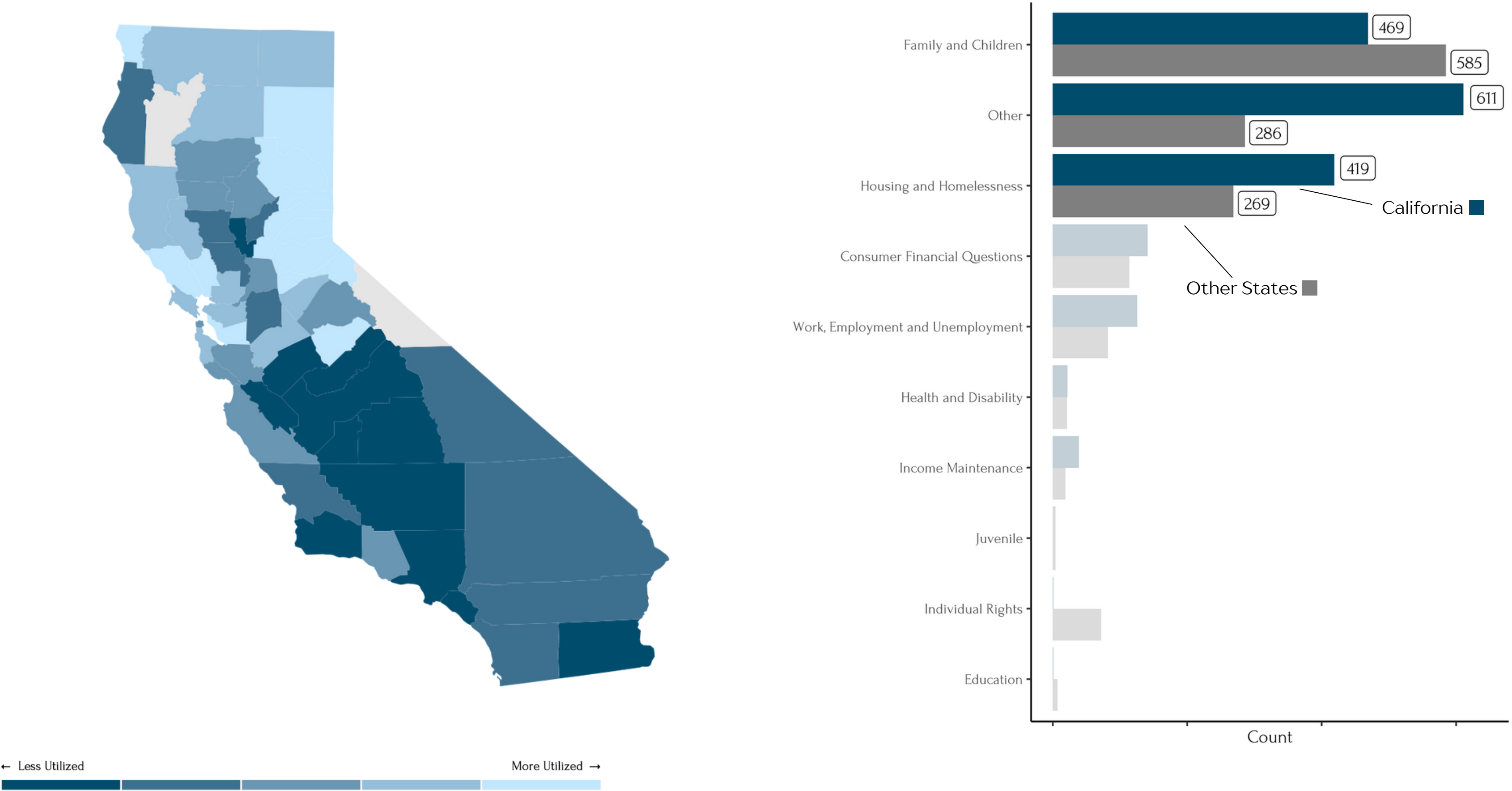
Utilization is the number of unique users of the service over the number of people eligible (estimated poverty population)



Estimated Poverty Population Obtained From Census API

Geographic Distribution Of Service Utilization

Utilization is the number of unique users of the service over the number of people eligible (estimated poverty population)



Estimated Poverty Population Obtained From Census API

RESPONSE VARIABLE:

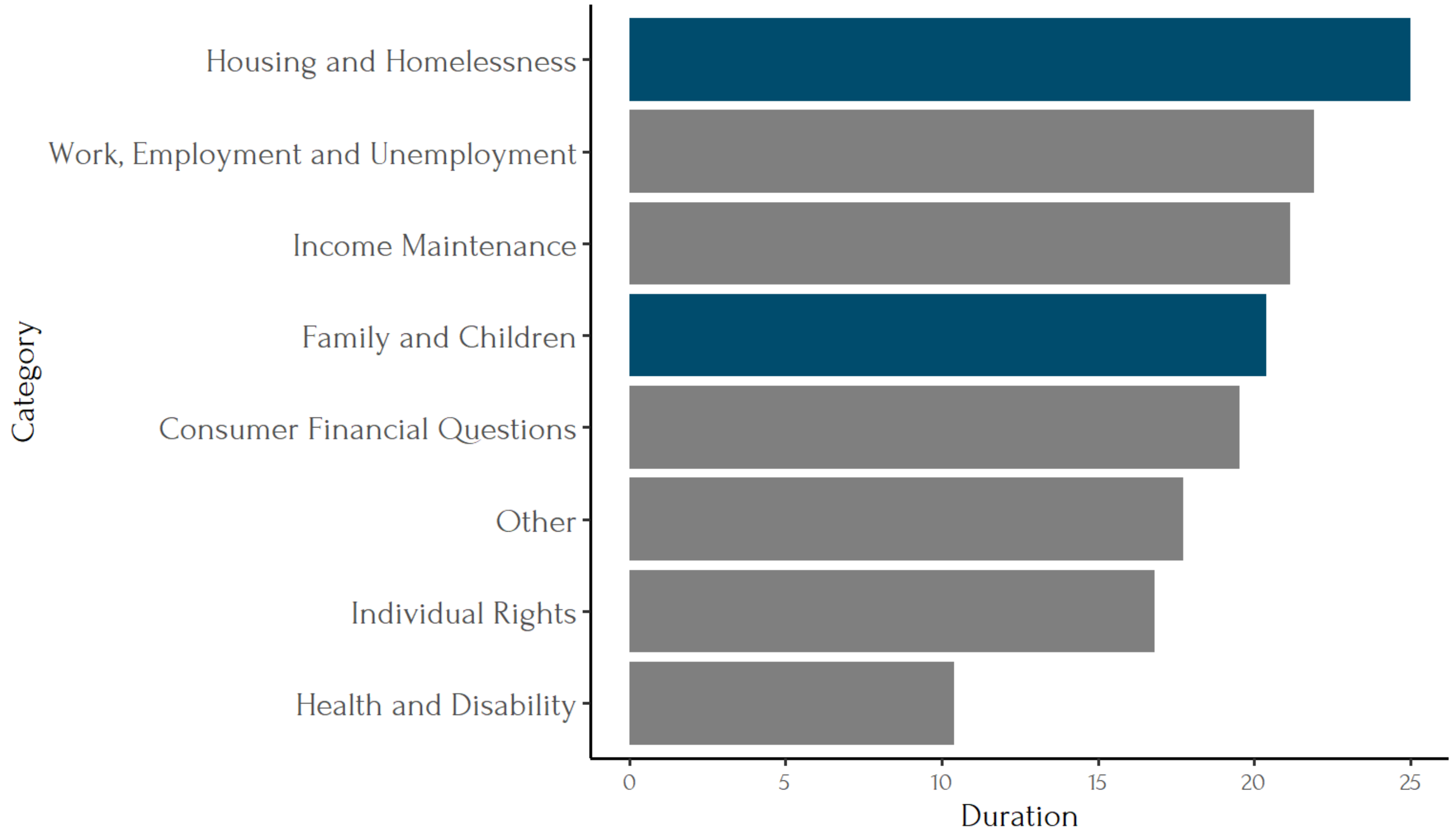
- Duration
- In Questions: $\text{ClosedOnUtc} - \text{AskedOnUtc}$
- UTC date/time stamp indicating when the client's question was closed – UTC date/time stamp indicating when the client submitted the question

NON-PARAMETRIC HYPOTHESIS TESTING

NON-PARAMETRIC HYPOTHESIS TESTING

	Wilcoxon test p-value	Observed mean, category = T	Observed mean, category = F
"Housing and Homelessness"***	2.243e-09	24.99	19.40
"Work, Employment and Unemployment"	0.69	20.87	21.92
"Income Maintenance"	0.74	21.14	20.95
"Family and Children"	0.94	20.37	21.18
"Consumer Financial Questions"	0.20	19.52	21.09
"Other"	2.043e-06	17.74	21.97
"Individual Rights"	0.96	16.81	20.96
"Health and Disability"	0.001	10.41	21.10

Average Response Time in Days



MODEL SELECTION

Included:

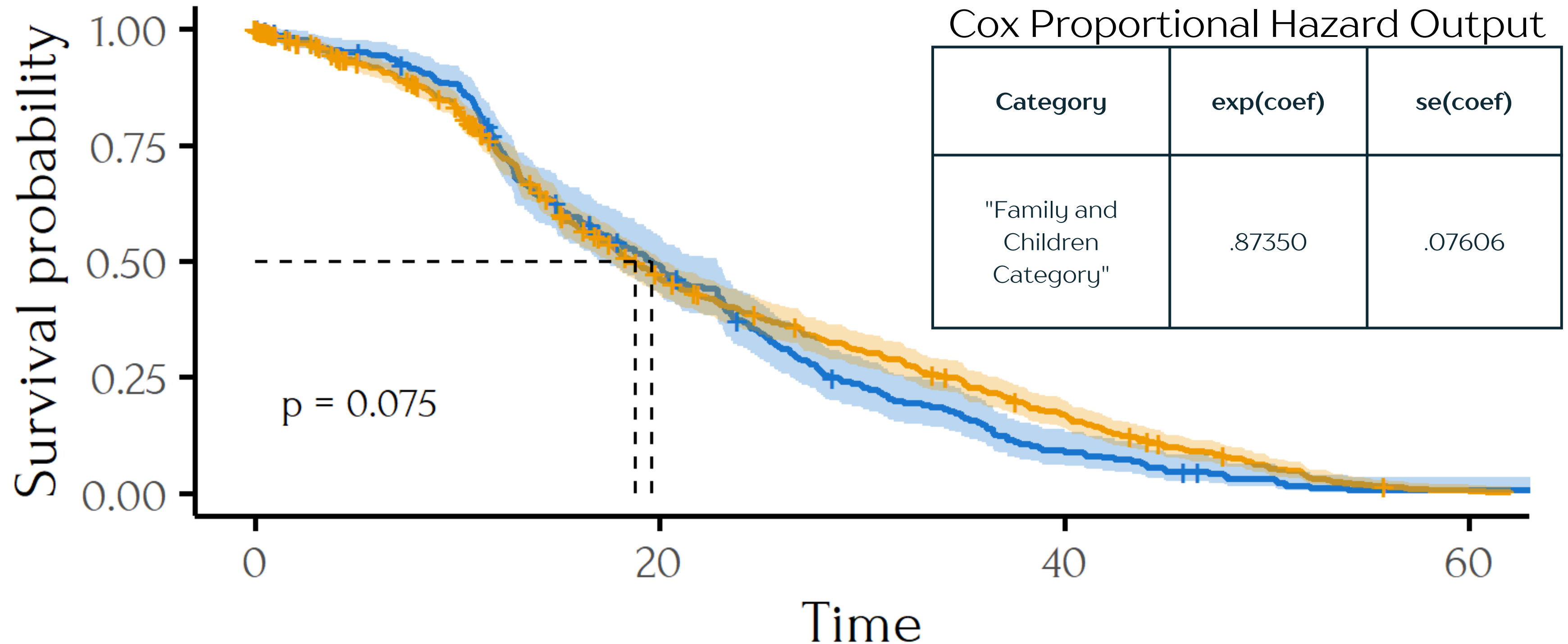
- Housing and Homelessness Category

Excluded:

- Age
- Gender
- Ethnicity
- Number in Household
- Annual Allowed – Annual Income
- Marital Status
- Veteran
- Imprisoned

Response Time Between LSC Categories

Strata + Family and Children Category + Other Categories

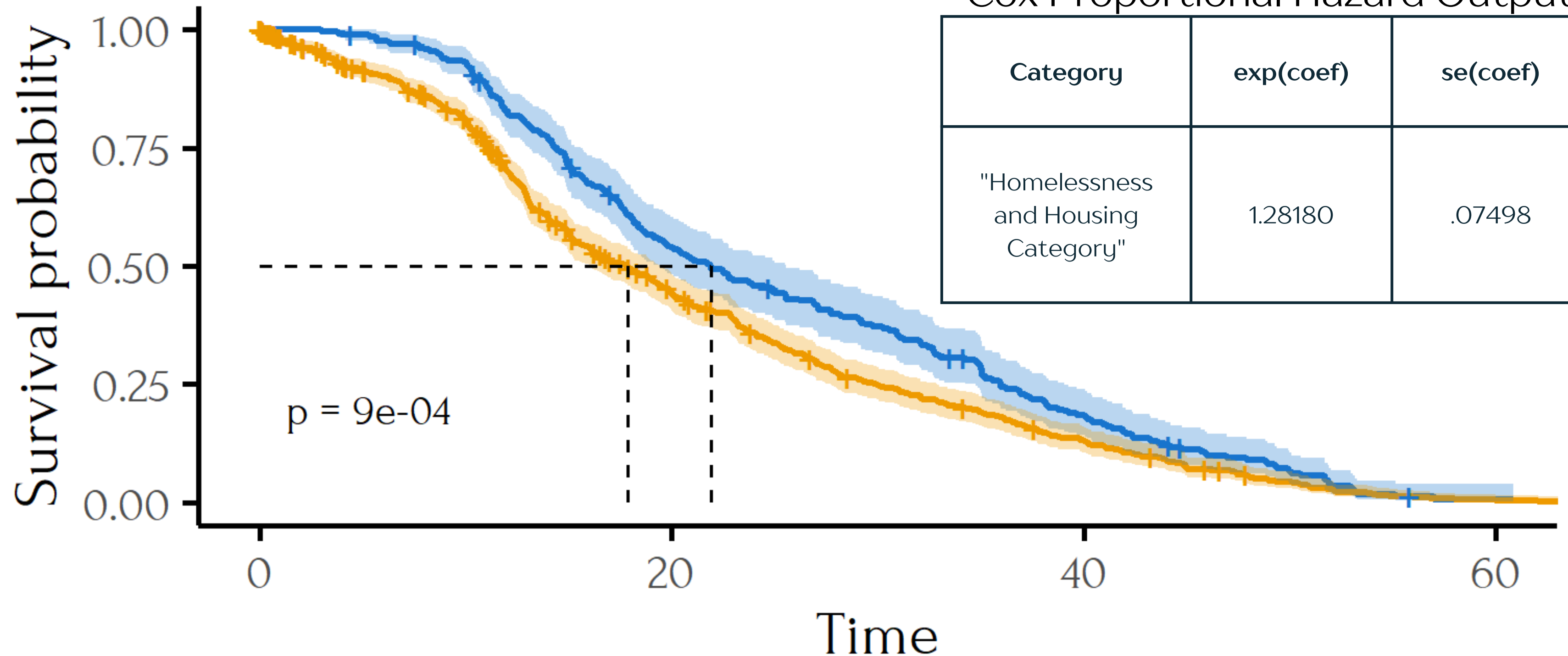


Response Time Between LSC Categories

Strata + Homeless and Housing Category + Other Categories

Cox Proportional Hazard Output

Category	exp(coef)	se(coef)
"Homelessness and Housing Category"	1.28180	.07498



CONCLUSION

There is evidence supporting that cases dealing with Homelessness and Housing are open longer than the other 9 categories, specifically by 28%.

Through Lasso model selection, the only significant parameter in determining response time was category.

We would recommend that the ABA should try to acquire lawyers that specialize in "Housing and Homelessness" for the state of California based off of our analysis.

