Table 1: County Vaccine Uptake Predictive Performance by Inclusion/Exclusion of Groups of Features

All but this Category

% Reduction

-37.3%

-37.4%

-37.5%

-37.6%

-37.7%

-37.8%

-38.0%

-38.0%

-38.1%

-38.2%

-38.2%

-38.2%

-38.5%

-38.5%

-38.5%

-38.7%

-38.8%

7.3

6.98

6.96

6.92

6.94

6.98

6.82

6.85

6.79

6.9

6.86

6.77

6.82

6.81

6.74

6.78

6.82

 $\mathbf{RMSE}$ 

Cumulatively Include Categories

% Reduction

-35.5%

-38.4%

-38.6%

-38.9%

-38.7%

-38.4%

-39.8%

-39.5%

-40.1%

-39.1%

-39.5%

-40.2%

-39.8%

-39.8%

-40.5%

-40.2%

-39.8%

housing	2955	8.8	-22.3%	7.3	-35.5%	8.6	-24.1%
masking	5	9.33	-17.6%	7.21	-36.3%	7.88	-30.4%
race	8038	8.51	-24.9%	7.2	-36.4%	7.59	-33.0%
healthcare_services	4	9.73	-14.1%	7.18	-36.6%	7.26	-35.9%
disabilities	561			7.18	-36.6%	6.98	-38.4%
$economy\_employment$	138	8.99	-20.6%	7.15	-36.9%	7.07	-37.6%
transportation	1803			7.15	-36.9%	7.23	-36.2%
population	7621	10.8	-4.2%	7.13	-37.0%	7.35	-35.1%
family_structure	2143	11.3	-0.1%	7.13	-37.0%	7.07	-37.6%
$mobility\_safegraph$	6	9.78	-13.6%	7.11	-37.2%	7.16	-36.8%

7.11

7.09

7.07

7.07

7.06

7.04

7.03

7.02

7.01

7

7

7

6.97

6.97

6.97

6.95

6.93

	-33.270	1.04	-24.170	0.0	0
8.6	-35.5%	7.3	-22.3%	8.8	2955
7.88	-36.3%	7.21	-17.6%	9.33	5

RMSE

voting	6	8.6	-24.1%	7.34	-35.2%		
housing	2955	8.8	-22.3%	7.3	-35.5%	8.6	

-3.6%

-7.8%

-21.4%

-25.8%

-24.5%

-16.2%

-1.8%

-5.8%

-19.3%

-17.0%

-21.1%

-5.5%

-8.0%

% Reduction

Only this Category

 $\mathbf{RMSE}$ 

Count

8052

860

404

143

9968

1236

5090

3

7

1447

761

4408

6874

1503

1316

4

2

10.9

10.4

8.91

8.41

8.56

9.49

11.1

10.7

9.14

9.4

8.94

10.7

10.4

**Features** 

Category

age

insurance

amenities

education

households

 $google\_mobility$ 

vaccine\_supply

longer\_term\_mobility

military

occupation

marriage

covid

foreign\_born

vaccine\_demand

 $wealth\_employment$ 

religion

sex