

Technical Appendix

Project name: Improving operational processes at USCIS

Date finalized: 11/24/2025

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Image A1: Informational Letter (front)

Image A2: Information Letter (back)

Table 1: Summary Statistics

	Mean	SD
	Outcomes	
N-400 Submitted	0.085	0.279
N-400 Submitted: Online	0.052	0.223
N-400 Submitted: Mail	0.033	0.178
N-400 Submitted: Full Fee	0.060	0.238
N-400 Submitted: Full Fee Waiver	0.012	0.108
N-400 Submitted: Partial Fee Waiver	0.013	0.113
N-400 Submitted: Any Fee Waiver	0.025	0.156
Treatments		
Treatment Group	0.161	0.368
Letter Delivered	0.144	0.351
Covariates (Strata)		
Years as LPR: 6	0.294	0.455
Years as LPR: 7	0.285	0.451
Years as LPR: 8	0.223	0.416
Years as LPR: 9	0.199	0.399
Class of Admission: Employment	0.102	0.302
Class of Admission: Family	0.281	0.449
Class of Admission: Humanitarian	0.139	0.346
Class of Admission: Parent	0.227	0.419
Class of Admission: Spouse	0.252	0.434
Region of Birth: Caribbean	0.165	0.372
Region of Birth: Central/South America	0.120	0.325
Region of Birth: China/India	0.146	0.353
Region of Birth: Mexico	0.213	0.409
Region of Birth: Other	0.355	0.478
Covariates (Non-Strata)		
Male	0.456	0.498
Age	48.770	16.854
Marital Status: Divorced/Widowed	0.082	0.274
Marital Status: Married	0.661	0.473
Marital Status: Single	0.247	0.431
State: California	0.209	0.407
State: New York	0.140	0.347
State: Texas	0.104	0.305
State: Florida	0.109	0.312
State: New Jersey	0.049	0.215
Propensity to Refile	0.007	0.006
Filed N-400 Prior to Letter Initiation	0.013	0.114
Median Income of Zip Code (\$)	69309.840	30409.916

Notes. Means and standard deviations shown. Strata covariates are the covariates that form the randomization blocks. The Propensity to Refile is a variable calculated internally by USCIS. Due to delays between when N-400 data is uploaded to USCIS servers and the timing of randomization and letter mailings, approximately 1.3% of the randomization pool had already submitted the Form N-400 before the first letters were mailed on October 26, 2023. These pre-submissions are captured by the Filed N-400 Prior to Letter Initiation covariate. (N=1,861,178).

Table A1: Balance Checks

	Means		Difference		
	Treatment	Control	Raw	Standardized	p-value
	(1)	(2)	(3)	(4)	(5)
Strata Covariates					
Years as LPR: 6	0.294	0.294	0.000	0.000	-
Years as LPR: 7	0.285	0.285	0.000	0.000	-
Years as LPR: 8	0.223	0.223	0.000	0.000	-
Years as LPR: 9	0.198	0.199	-0.001	-0.003	-
Class of Admission: Employment	0.102	0.102	0.000	0.000	-
Class of Admission: Family	0.280	0.281	-0.001	-0.002	-
Class of Admission: Humanitarian	0.139	0.139	0.000	0.000	-
Class of Admission: Parent	0.227	0.227	0.000	0.000	-
Class of Admission: Spouse	0.253	0.252	0.001	0.002	-
Region of Birth: Caribbean	0.165	0.165	0.000	0.000	-
Region of Birth: Central/South America	0.120	0.120	0.000	0.000	-
Region of Birth: China/India	0.146	0.146	0.000	0.000	-
Region of Birth: Mexico	0.213	0.213	0.000	0.000	-
Region of Birth: Other	0.355	0.355	0.000	0.000	-
Non-Strata Covariates					
Male	0.457	0.456	0.001	0.002	0.073
Age	48.741	48.776	-0.035	-0.002	0.170
Marital Status: Divorced/Widowed	0.081	0.082	-0.001	-0.004	0.614
Marital Status: Married	0.662	0.661	0.001	0.002	0.854
Marital Status: Single	0.247	0.247	0.000	0.000	0.676
State: California	0.209	0.209	0.000	0.000	0.658
State: New York	0.141	0.140	0.001	0.003	0.688
State: Texas	0.103	0.104	-0.001	-0.003	0.051
State: Florida	0.109	0.110	-0.001	-0.003	0.102
State: New Jersey	0.049	0.049	0.000	0.000	0.329
Propensity to Refile	0.007	0.007	0.000	0.000	0.413
Filed N-400 Prior to Letter Initiation	0.013	0.013	0.000	0.000	0.644
Median Income of Zip Code (\$)	69292.627	69313.148	-20.521	-0.001	0.657

Notes. The table provides mean values for both the treatment group (n=300,000) and the control group (n=1,561,178). Standardized differences are calculated as raw differences divided by the pooled standard deviation. p-values are derived from regressions that estimate differences between the treatment and control group, including fixed effects for randomization strata. Strata covariates are the covariates that form the randomization blocks. No p-values are shown for strata covariates since they are balanced by design. The Propensity to Refile is an internally calculated value by USCIS. Due to delays between the upload of N-400 data to USCIS servers and the timing of randomization and letter mailings, approximately 1.3% of the randomization pool had already submitted the Form N-400 by October 26, 2023. These pre-submissions are captured by the Filed N-400 Prior to Letter Initiation covariate.

Table A2: Effect of the Letter on N-400 Submission for Full Sample and Subgroups

Group	Value	ITT	Std Error	95 LB	95 UB	N
Full Sample	Full Sample	1.01	0.06	0.89	1.12	1,861,178
Class of Admission	Employment	1.44	0.21	1.02	1.85	189,025
Class of Admission	Family	0.89	0.11	0.67	1.10	522,086
Class of Admission	Humanitarian	0.55	0.17	0.23	0.88	258,060
Class of Admission	Parent	0.74	0.10	0.55	0.92	422,180
Class of Admission	Spouse	1.46	0.12	1.23	1.69	469,827
Region of Birth	Caribbean	0.76	0.15	0.47	1.05	307,967
Region of Birth	Central/South America	1.39	0.18	1.04	1.75	223,739
Region of Birth	China/India	0.64	0.13	0.39	0.88	272,434
Region of Birth	Mexico	0.67	0.10	0.48	0.87	396,601
Region of Birth	Other	1.35	0.11	1.14	1.55	660,437
Years as LPR	6 years	1.23	0.11	1.02	1.45	546,740
Years as LPR	7 years	1.08	0.10	0.88	1.29	530,681
Years as LPR	8 years	0.74	0.12	0.51	0.98	414,271
Years as LPR	9 years	0.86	0.13	0.60	1.11	369,486
Gender	Female	0.98	0.08	0.83	1.13	1,010,674
Gender	Male	1.05	0.08	0.89	1.22	848,335
Age	19-29 years	0.67	0.17	0.34	0.99	271,488
Age	30-39 years	1.05	0.15	0.76	1.34	350,658
Age	40-49 years	1.25	0.13	0.98	1.51	388,238
Age	50-59 years	1.23	0.13	0.98	1.48	348,597
Age	60-69 years	0.95	0.14	0.68	1.21	259,868
Age	70-79 years	0.75	0.14	0.47	1.03	159,466
Age	80+ years	0.48	0.14	0.20	0.75	82,853
Marital Status	Divorced/Widowed	0.89	0.17	0.55	1.22	151,985
Marital Status	Married	1.12	0.07	0.98	1.26	1,230,961
Marital Status	Single	0.77	0.12	0.53	1.01	460,261

Notes. Shows estimated intention-to-treat (ITT) effects (in percentage points) with robust standard errors and corresponding 95% confidence intervals (LB and UB) for the overall sample and specific subgroups. The ITT estimates are based on regressions of the N-400 submission on the treatment assignment and randomization strata fixed effects.

Table A3: Robustness Checks: Effect of Letter on N-400 Submissions

	N-400 Submission					
	(1)	(2)	(3)	(4)	(5)	(6)
treat	1.01* (0.06)	1.01* (0.05)	1.01* (0.06)	1.01* (0.05)	1.01* (0.06)	1.01* (0.05)
<i>N</i>	1861178	1836652	1861178	1836652	1861178	1836652
Drop Pre-Submissions	No	Yes	No	Yes	No	Yes
Controls	No	No	Yes	Yes	Yes	Yes
Lin-Estimator	No	No	No	No	Yes	Yes

Notes. Regression estimates shown of intention-to-treat effects with robust standard errors in parentheses.

* p < 0.05. Column (1) is based on a linear regression of N-400 submission on treatment assignment and randomization strata fixed effects. Columns (2), (4), and (6) exclude all observations of N-400 submissions made between the randomization date and the start of letter mailings on October 26, 2023; this exclusion was balanced between the treatment and control group. Columns (3) to (6) add controls for marital status, age, gender, state, and propensity to refile. Columns (5) and (6) estimate treatment effects using the method from Lin (2013), which adds the control variables mean centered and interacted with treatment assignment.

Table A4: Effect Heterogeneity: Class of Admission, Region of Birth, and Years as LPR

	N-400 Submission		
	(1) Class of Admission	(2) Region of Birth	(3) Years as LPR
Treatment Group	0.55* (0.17)	0.64* (0.13)	0.74* (0.12)
Employment · Treatment Group	0.88* (0.27)		
Family · Treatment Group	0.33 (0.20)		
Parent · Treatment Group	0.18 (0.19)		
Spouse · Treatment Group	0.90* (0.20)		
Caribbean · Treatment Group		0.12 (0.19)	
Central/South America · Treatment Group		0.75* (0.22)	
Mexico · Treatment Group		0.03 (0.16)	
Other · Treatment Group		0.71* (0.16)	
6 years · Treatment Group			0.49* (0.16)
7 years · Treatment Group			0.34* (0.16)
9 years · Treatment Group			0.11 (0.18)
N	1861178	1861178	1861178

Regression coefficients with robust standard errors in parentheses. $p < 0.05$. Reference categories are Humanitarian for Class of admission, China/India for Region of birth, and 8 for Years as LPR. All models include randomization strata fixed effects.

Table A5: Effect Heterogeneity: Gender, Age, and Marital Status

	N-400 Submission		
	(1) Gender	(2) Age	(3) Marital Status
Treatment Group	0.98* (0.08)	0.67* (0.17)	0.78* (0.12)
Male · Treatment Group	0.07 (0.11)		
30-39 years · Treatment Group		0.38 (0.22)	
40-49 years · Treatment Group		0.58* (0.21)	
50-59 years · Treatment Group		0.56* (0.21)	
60-69 years · Treatment Group		0.27 (0.21)	
70-79 years · Treatment Group		0.07 (0.22)	
80+ years · Treatment Group		-0.19 (0.22)	
Divorced/Widowed · Treatment Group			0.11 (0.21)
Married · Treatment Group			0.34* (0.14)
N	1859009	1861178	1843207

Regression coefficients with robust standard errors in parentheses. p < 0.05. Reference categories are Female for Gender, 19-29 years old for Age, and Single for Marital Status. Each reference category was selected based on having the smallest observe point estimate for the treatment effect within that class. All models include randomization strata fixed effects and main effects for each moderator category (gender, age, and marital status).

Table A6: Robustness Checks: Effect of Letter Delivered on N-400 Submissions

	Letter Delivered				N-400 Submission			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treatment Group	0.89*	0.90*	0.89*	0.90*				
	(0.00)	(0.00)	(0.00)	(0.00)				
Letter Delivered					1.13*	1.12*	1.13*	1.12*
					(0.06)	(0.06)	(0.06)	(0.06)
Observations	1861178	1836652	1861178	1836652	1861178	1836652	1861178	1836652
Partial F-Statistic	2500000	2800000	2500000	2800000				
Drop Pre-Submissions	No	Yes	No	Yes	No	Yes	No	Yes
Controls	No	No	Yes	Yes	No	No	Yes	Yes

Notes. Regression estimates shown with robust standard errors in parentheses. * $p < 0.05$. Columns (1) to (4) show first stage estimates based on a linear regression of letter delivery on treatment assignment and randomization strata fixed effects. Columns (5) to (8) show local average treatment effect (LATE) estimates based on instrumental variable regressions of N-400 submissions on letter delivery, instrumented by treatment assignment, and randomization strata fixed effects. Columns (2), (4), (6) and (8) exclude all observations of N-400 submissions made between the randomization date and the start of letter mailings on October 26, 2023; this exclusion was balanced between the treatment and control group. Columns (3), (4), (7) and (8) add controls for marital status, age, gender, state, and propensity to refile.

Table A7: Effect of the Letter on N-400 Submission by Mode of Submission and Use of Fee Waiver

Outcome	Value	ITT	Std Error	95 LB	95 UB	N
Mode of Filing	Online	0.71	0.05	0.62	0.80	1,861,178
Mode of Filing	Mail	0.29	0.04	0.22	0.36	1,861,178
Application Fee	Full Fee	0.79	0.05	0.69	0.89	1,861,178
Application Fee	Any Fee Waiver	0.22	0.03	0.15	0.28	1,861,178
Application Fee	Partial Fee Waiver	0.11	0.02	0.06	0.16	1,861,178
Application Fee	Full Fee Waiver	0.11	0.02	0.06	0.15	1,861,178

Notes. Shows estimated intention-to-treat (ITT) effects (in percentage points) with robust standard errors and corresponding 95% confidence intervals (LB and UB) for the overall sample with different outcomes based on mode of submission and use of fee waiver. The ITT estimates are based on regressions of the N-400 submission outcomes on the treatment assignment and randomization strata fixed effects. (N=1,861,178).

Table A8: Robustness Checks: Effect of Letter on N-400 Submissions with Standard Error Adjustments

	N-400 Submission			
	(1)	(2)	(3)	(4)
treat	1.01* (0.06)	1.01* (0.06)	1.01* (0.06)	1.01* (0.09)
<i>N</i>	1861178	1861178	1861178	1861178
Drop Pre-Submissions	No	No	No	No
Controls	No	No	No	No
Lin-Estimator	No	No	No	No
Cluster	None, Robust	Zip Code	CBSA	Randomization Block

Regression estimates shown of intention-to-treat effects with standard errors in parentheses. * $p < 0.05$. All columns are based on a linear regression of N-400 submission on treatment assignment and randomization strata fixed effects. Column (1) uses robust standard errors whereas Columns (2), (3), and (4) cluster by zip code, CBSA, and randomization block. .

Table A9: Heterogeneity: Effect of Letter on N-400 Submissions by Concentration of LPRs per Zip Code

	N-400 Submission				
	(1)	(2)	(3)	(4)	(5)
Treatment Group	1.01*	1.01*	1.07*	1.07*	1.07*
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Treatment Group * Concentration of LPRs			-0.17*	-0.17*	-0.17*
			(0.06)	(0.06)	(0.06)
Observations	1833237	1833237	1833237	1833237	1833237
Concentration control	No	Yes	Yes	Yes	Yes
Income and Population controls	—	—	—	Linear	Cubic

Regression estimates shown of intention-to-treat effects with robust standard errors in parentheses. * p < 0.05. Column (1) is based on a linear regression of N-400 submission on treatment assignment and randomization strata fixed effects after removing individuals with missing zip code data. Columns (2) through (5) include a control for the concentration of LPRs, defined as the number of LPRs in our analytic sample divided by the 2023 ACS 5-Year Zip Code population estimates. Column (3) interacts concentration with our treatment indicator, Column (4) adds linear controls for zip code population size and median income, and column (5) includes cubic controls for zip code population size and median income.

Table A10: Effect of the Letter on N-400 Submission for Full Sample and Subgroups by December 2024

Group	Value	ITT	Std Error	95 LB	95 UB	N
Full Sample	Full Sample	1.13	0.07	1.00	1.27	1,861,178
Class of Admission	Employment	1.28	0.25	0.80	1.76	189,025
Class of Admission	Family	0.91	0.13	0.66	1.16	522,086
Class of Admission	Humanitarian	0.65	0.20	0.27	1.03	258,060
Class of Admission	Parent	0.92	0.12	0.69	1.15	422,180
Class of Admission	Spouse	1.79	0.14	1.51	2.06	469,827
Region of Birth	Caribbean	0.91	0.18	0.56	1.25	307,967
Region of Birth	Central/South America	1.51	0.22	1.09	1.94	223,739
Region of Birth	China/India	0.68	0.15	0.39	0.97	272,434
Region of Birth	Mexico	0.85	0.12	0.61	1.09	396,601
Region of Birth	Other	1.47	0.12	1.23	1.71	660,437
Years as LPR	6 years	1.32	0.13	1.06	1.57	546,740
Years as LPR	7 years	1.12	0.12	0.87	1.36	530,681
Years as LPR	8 years	1.07	0.15	0.78	1.36	414,271
Years as LPR	9 years	0.96	0.14	0.68	1.24	369,486
Gender	Female	1.19	0.09	1.01	1.37	1,010,674
Gender	Male	1.09	0.10	0.90	1.28	848,335
Age	19-29 years	0.68	0.20	0.30	1.07	271,488
Age	30-39 years	1.11	0.17	0.77	1.45	350,658
Age	40-49 years	1.36	0.16	1.04	1.67	388,238
Age	50-59 years	1.28	0.15	0.99	1.57	348,597
Age	60-69 years	1.35	0.17	1.03	1.68	259,868
Age	70-79 years	0.93	0.18	0.59	1.28	159,466
Age	80+ years	0.64	0.17	0.30	0.98	82,853
Marital Status	Divorced/Widowed	0.97	0.21	0.57	1.38	151,985
Marital Status	Married	1.24	0.08	1.08	1.40	1,230,961
Marital Status	Single	0.89	0.15	0.60	1.18	460,261

Notes. Shows estimated intention-to-treat (ITT) effects (in percentage points) with robust standard errors and corresponding 95% confidence intervals (LB and UB) for the overall sample and specific subgroups. The ITT estimates are based on regressions of the N-400 submission on the treatment assignment and randomization strata fixed effects.

Table A11: Effect of the Letter on N-400 Submission by Mode of Submission and Use of Fee Waiver by December 2024

Outcome	Value	ITT	Std Error	95 LB	95 UB	N
Mode of Filing	Online	0.81	0.05	0.71	0.92	1,861,178
Mode of Filing	Mail	0.32	0.04	0.23	0.41	1,861,178
Application Fee	Full Fee	0.78	0.05	0.68	0.88	1,861,178
Application Fee	Any Fee Waiver	0.35	0.05	0.26	0.45	1,861,178
Application Fee	Partial Fee Waiver	0.21	0.04	0.13	0.29	1,861,178
Application Fee	Full Fee Waiver	0.15	0.03	0.09	0.20	1,861,178

Notes. Shows estimated intention-to-treat (ITT) effects (in percentage points) with robust standard errors and corresponding 95% confidence intervals (LB and UB) for the overall sample with different outcomes based on mode of submission and use of fee waiver. The ITT estimates are based on regressions of the N-400 submission outcomes on the treatment assignment and randomization strata fixed effects. (N=1,861,178).

Table A12. Treatment Effects Of Intervention, By Week

Week	Week Date	Treatment			Control			Treatment Effect		
		Mean	Lower Bound	Upper Bound	Mean	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
0	10/26/2023	1.327	1.286	1.368	1.316	1.298	1.334	0.011	-0.034	0.055
1	11/2/2023	1.528	1.484	1.572	1.506	1.487	1.525	0.022	-0.026	0.069
2	11/9/2023	1.728	1.681	1.774	1.69	1.669	1.71	0.038	-0.013	0.089
3	11/16/2023	1.911	1.862	1.96	1.87	1.849	1.891	0.041	-0.013	0.094
4	11/23/2023	2.114	2.063	2.165	2.051	2.029	2.073	0.063	0.007	0.119
5	11/30/2023	2.297	2.243	2.351	2.202	2.179	2.225	0.095	0.037	0.153
6	12/7/2023	2.505	2.449	2.561	2.377	2.353	2.401	0.128	0.067	0.188
7	12/14/2023	2.707	2.649	2.765	2.545	2.52	2.57	0.162	0.099	0.225
8	12/21/2023	2.927	2.866	2.987	2.715	2.69	2.741	0.211	0.146	0.277
9	12/28/2023	3.161	3.098	3.224	2.882	2.856	2.908	0.279	0.211	0.346
10	1/4/2024	3.408	3.343	3.473	3.066	3.039	3.093	0.342	0.272	0.413
11	1/11/2024	3.647	3.58	3.714	3.244	3.216	3.272	0.403	0.331	0.475
12	1/18/2024	3.886	3.817	3.955	3.446	3.418	3.475	0.44	0.365	0.514
13	1/25/2024	4.148	4.077	4.219	3.663	3.633	3.692	0.485	0.408	0.562
14	2/1/2024	4.4	4.327	4.473	3.888	3.858	3.919	0.511	0.432	0.59
15	2/8/2024	4.653	4.578	4.729	4.113	4.082	4.145	0.54	0.459	0.621
16	2/15/2024	4.904	4.827	4.981	4.322	4.29	4.354	0.582	0.498	0.665
17	2/22/2024	5.169	5.09	5.248	4.54	4.508	4.573	0.628	0.543	0.713
18	2/29/2024	5.46	5.378	5.541	4.788	4.754	4.821	0.672	0.584	0.759
19	3/7/2024	5.752	5.668	5.835	5.057	5.023	5.091	0.694	0.605	0.784
20	3/14/2024	6.069	5.984	6.155	5.337	5.302	5.372	0.732	0.64	0.824
21	3/21/2024	6.403	6.316	6.491	5.641	5.605	5.677	0.762	0.668	0.856
22	3/28/2024	6.817	6.727	6.907	6.013	5.976	6.051	0.803	0.707	0.9
23	4/4/2024	7.359	7.265	7.452	6.484	6.445	6.522	0.875	0.774	0.975
24	4/11/2024	7.543	7.449	7.638	6.651	6.612	6.69	0.892	0.791	0.994
25	4/18/2024	7.727	7.631	7.822	6.822	6.782	6.862	0.904	0.802	1.007
26	4/25/2024	7.926	7.83	8.023	7.003	6.963	7.043	0.923	0.82	1.027
27	5/2/2024	8.133	8.035	8.231	7.197	7.157	7.238	0.935	0.83	1.04
28	5/9/2024	8.332	8.233	8.431	7.396	7.354	7.437	0.936	0.83	1.042
29	5/16/2024	8.52	8.42	8.62	7.57	7.528	7.611	0.95	0.843	1.057
30	5/23/2024	8.7	8.599	8.801	7.727	7.685	7.768	0.973	0.865	1.082
31	5/30/2024	8.848	8.747	8.95	7.872	7.83	7.914	0.976	0.867	1.085
32	6/6/2024	9.006	8.903	9.108	8.027	7.984	8.069	0.979	0.868	1.089
33	6/13/2024	9.165	9.062	9.269	8.164	8.121	8.207	1.001	0.89	1.111
34	6/20/2024	9.318	9.214	9.422	8.31	8.267	8.353	1.007	0.896	1.119

Table A13. Treatment Effects By Median Income Of Zip Code Of Residence

Column 1	Median income	Estimate	SD	Lower 95 CI	Upper 95 CI
1	6493	0.004807205	0.003821693	-0.00209609	0.011672302
2	11426.67347	0.004406514	0.005204594	-0.005133917	0.013616066
3	16360.34694	0.004835094	0.003920041	-0.002058687	0.011888455
4	21294.02041	0.004982948	0.003321847	-0.001196916	0.011361971
5	26227.69388	0.005173045	0.002800911	-9.68E-05	0.01081232
6	31161.36735	0.007626483	0.002000429	0.003523879	0.011252724
7	36095.04082	0.007691929	0.001675545	0.004706364	0.011088579
8	41028.71429	0.007807742	0.001521085	0.005031444	0.010861647
9	45962.38776	0.008804528	0.001394768	0.006323829	0.011647298
10	50896.06122	0.007479038	0.001508526	0.004384007	0.010174929
11	55829.73469	0.008323703	0.001472854	0.005511276	0.011030742
12	60763.40816	0.008326246	0.001557514	0.005528105	0.01160289
13	65697.08163	0.008786929	0.00156474	0.005944298	0.011578962
14	70630.7551	0.011781869	0.001678989	0.00852041	0.014811921
15	75564.42857	0.014276556	0.001593935	0.010860792	0.017364486
16	80498.10204	0.014652937	0.001655139	0.011417258	0.0176128
17	85431.77551	0.013453562	0.001686849	0.010510963	0.016725656
18	90365.44898	0.01060258	0.001796436	0.007107951	0.01422736
19	95299.12245	0.009098361	0.001991911	0.005492938	0.012678231
20	100232.7959	0.009672254	0.00195826	0.006224929	0.013751964
21	105166.4694	0.010598921	0.002119331	0.006517143	0.014386257
22	110100.1429	0.011760965	0.002238881	0.00786376	0.015983097
23	115033.8163	0.013370872	0.002388127	0.008843323	0.017495322
24	119967.4898	0.016060358	0.002357534	0.011004763	0.020936809
25	124901.1633	0.018452351	0.002355531	0.013670228	0.023098274
26	129834.8367	0.019776157	0.00262902	0.014262913	0.025711955
27	134768.5102	0.019975989	0.003251229	0.012953343	0.025790556
28	139702.1837	0.019712406	0.003476855	0.013406384	0.026161379
29	144635.8571	0.020544123	0.003621168	0.013390332	0.027450521
30	149569.5306	0.022073204	0.004183518	0.01387674	0.030135448
31	154503.2041	0.022970365	0.004654003	0.014027839	0.030746143
32	159436.8776	0.019712421	0.004540018	0.011128474	0.028229083

Table A14: Treatment and Control Group Means and Sample Sizes by Median Income of Zip Code

Zip Code		Treatment						Control					
		Max	Average	N	Mean	St Dev	Lower 95 CI	Upper 95 CI	N	Mean	St Dev	Lower 95 CI	Upper 95 CI
7500	6493	4	0.0779	0.0037	0.0708	0.0857	18	0.0731	0.0015	0.0701	0.0759		
12500	11426.67347	331	0.0766	0.0054	0.0659	0.0875	1862	0.0722	0.0022	0.0675	0.0762		
17500	16360.34694	413	0.0806	0.004	0.0725	0.0885	2300	0.0758	0.0016	0.0726	0.0787		
22500	21294.02041	1370	0.083	0.0033	0.0766	0.0893	7158	0.078	0.0013	0.0755	0.0806		
27500	26227.69388	6984	0.0861	0.0027	0.0807	0.0909	36227	0.0809	0.001	0.079	0.0829		
32500	31161.36735	9846	0.087	0.002	0.0833	0.0906	51911	0.0794	0.0008	0.078	0.0811		
37500	36095.04082	17357	0.0846	0.0016	0.0814	0.0875	89659	0.0769	0.0007	0.0758	0.0782		
42500	41028.71429	24205	0.0841	0.0013	0.0819	0.0869	125637	0.0763	0.0006	0.0751	0.0773		
47500	45962.38776	20657	0.0864	0.0014	0.0835	0.0893	109119	0.0776	0.0005	0.0766	0.0787		
52500	50896.06122	33290	0.0876	0.0014	0.0849	0.0906	171298	0.0802	0.0005	0.0792	0.0812		
57500	55829.73469	22678	0.0936	0.0014	0.0906	0.0963	119416	0.0853	0.0005	0.0841	0.0862		
62500	60763.40816	25523	0.0923	0.0013	0.0897	0.0947	131714	0.084	0.0005	0.083	0.0849		
67500	65697.08163	18571	0.0926	0.0014	0.09	0.0953	96912	0.0838	0.0006	0.0827	0.0852		
72500	70630.7551	15032	0.098	0.0015	0.0949	0.1012	78261	0.0863	0.0006	0.0852	0.0875		
77500	75564.42857	16211	0.1003	0.0016	0.0976	0.1034	83207	0.0861	0.0006	0.085	0.0873		
82500	80498.10204	12953	0.1008	0.0015	0.0976	0.1033	66793	0.0861	0.0006	0.0849	0.0873		
87500	85431.77551	9812	0.1013	0.0016	0.0985	0.104	50619	0.0879	0.0007	0.0866	0.0891		
92500	90365.44898	9451	0.1008	0.0016	0.0977	0.1042	49766	0.0902	0.0007	0.0889	0.0914		
97500	95299.12245	7244	0.0993	0.0018	0.096	0.1029	37829	0.0902	0.0008	0.0886	0.0916		
102500	100232.7959	7578	0.1	0.0019	0.0965	0.1036	39440	0.0903	0.0007	0.0887	0.0915		
107500	105166.4694	6318	0.1016	0.0022	0.0973	0.1058	33327	0.091	0.0008	0.0894	0.0925		
112500	110100.1429	5097	0.1023	0.0022	0.0986	0.1072	26307	0.0906	0.0008	0.089	0.092		
117500	115033.8163	4138	0.1026	0.0022	0.0987	0.1069	21985	0.0892	0.001	0.0873	0.0908		
122500	119967.4898	2894	0.1043	0.0023	0.0997	0.1085	15451	0.0882	0.001	0.0861	0.0899		
127500	124901.1633	3327	0.107	0.0025	0.1025	0.1118	17273	0.0886	0.0011	0.0865	0.0906		
132500	129834.8367	2999	0.11	0.0028	0.1051	0.1153	15628	0.0902	0.0012	0.088	0.0924		
137500	134768.5102	2692	0.112	0.0032	0.1062	0.119	13440	0.092	0.0013	0.0897	0.0943		
142500	139702.1837	1165	0.1108	0.0032	0.1053	0.1177	6327	0.0911	0.0013	0.0886	0.0935		
147500	144635.8571	1465	0.1091	0.0033	0.1032	0.1164	7544	0.0885	0.0013	0.0859	0.0911		
152500	149569.5306	1355	0.108	0.0038	0.1013	0.1155	7073	0.086	0.0015	0.0828	0.0886		
157500	154503.2041	657	0.1074	0.0041	0.1001	0.115	3380	0.0845	0.0016	0.0812	0.0873		
162500	159436.8776	725	0.1036	0.0039	0.0962	0.1108	4160	0.0839	0.0016	0.0805	0.0866		

Fig A1. Percent Effect of the Letter on N-400 Submission Overall and by Subgroups: This figure presents the estimated intention-to-treat effects with 95% confidence intervals, expressed as the percent increase over the baseline N-400 submission rate in the control group. Effects are displayed for the overall sample as well as for specific subgroups.

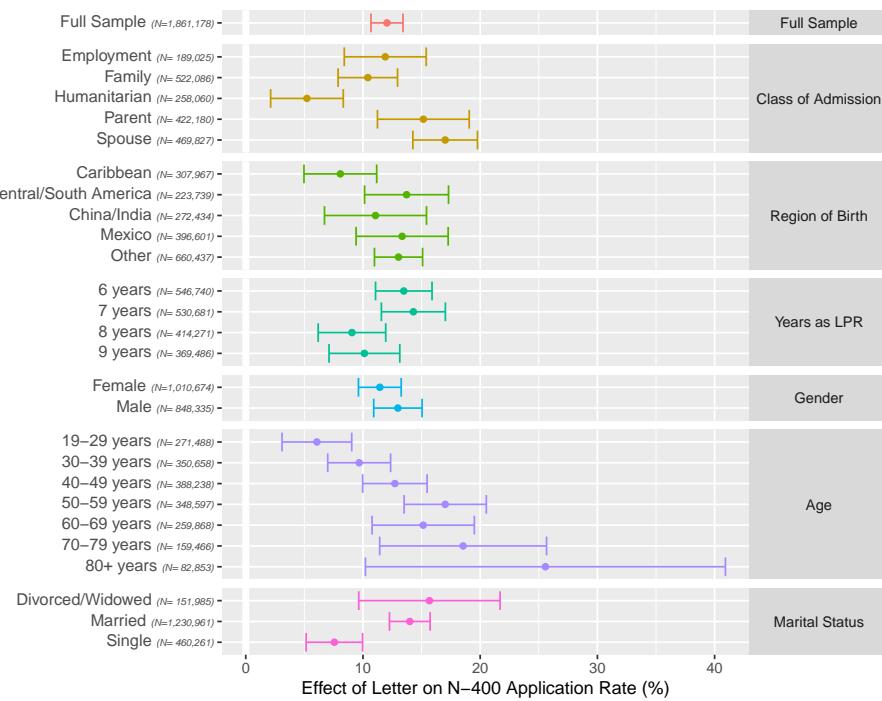
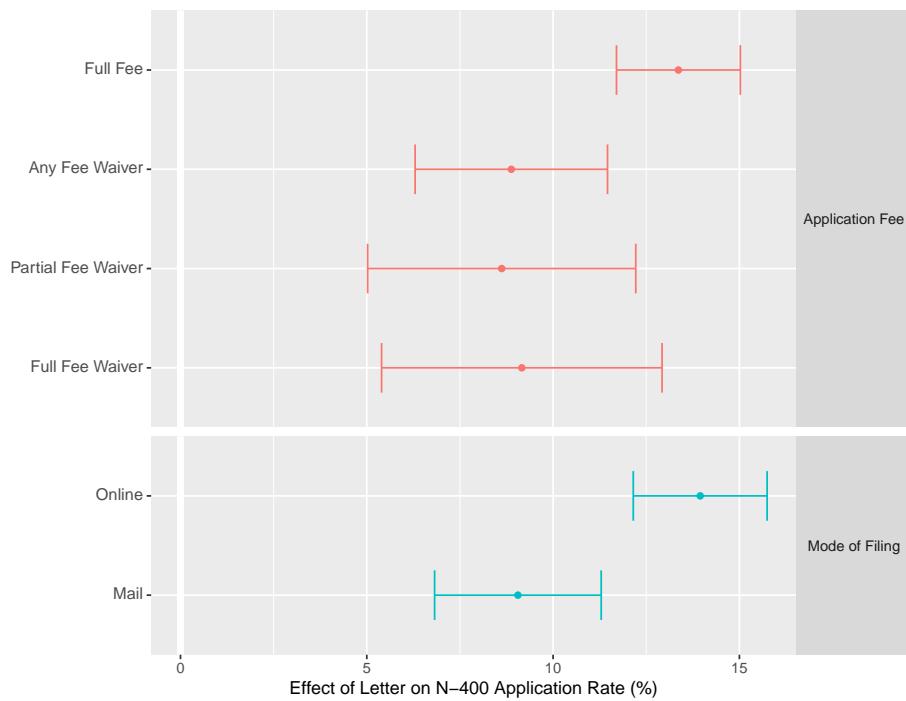


Fig. A2. Effect of the Letter on N-400 Submission by Mode of Submission and Use of Fee Waiver: This figure presents the estimated intention-to-treat effects with 95% confidence intervals, expressed as the percent increase over the mean outcome in the control group. The estimates cover the following outcomes: whether the N-400 application was filed online or by mail, and whether the applicant paid the full fee or used a partial or full fee waiver. (N=1,861,178)





Michael Tilson Thomas
100 Main Street
Anycity, MD 99999

Dear Michael Thomas,

Good news! As a lawful permanent resident for over five years, you may be eligible to become a U.S. citizen through naturalization.

Here's how to start your naturalization application now:

1. Check your eligibility for naturalization online at www.uscis.gov.
2. Consider contacting an authorized immigrant legal service provider for advice, which may be provided for free or at a low cost.
3. Check your eligibility to obtain a fee waiver and potentially apply at a reduced fee or for free.
4. Create an account on my.uscis.gov.
5. Prepare your Form N-400, Application for Naturalization, and submit your application!

The benefits of being a U.S. citizen include:

- The right to remain in the United States;
- Eligibility for a U.S. passport to more easily travel internationally;
- The right to vote, hold elected office, and apply for certain federal and state jobs;
- Avoiding Green Card renewal fees and saving up to \$540 per renewal application;
- The opportunity for citizenship for your children under 18 years of age; and
- The potential for improved employment and income, as some studies suggest.

Over 4.3 million Green Card holders like you have become citizens in the last five years, and more than 95 percent of applicants passed their naturalization test. Don't wait! Start today to enjoy the opportunity to fully participate and integrate into the United States as a citizen.

To access citizenship resources to help you prepare for the naturalization test, or to find out if you qualify for a test exception, please scan the QR code below or visit uscis.gov/naturalizenow.

Sincerely,

A handwritten signature in black ink that reads "UR M. JADDOU".

UR M. JADDOU
Director, U.S. Citizenship and Immigration Services



uscis.gov/naturalizenow

Image A2: Informational Letter (back)



**U.S. Citizenship
and Immigration
Services**

¡Buenas noticias! Como residente permanente legal desde hace más de cinco años, usted puede ser elegible para convertirse en ciudadano estadounidense a través de la naturalización. Para leer esta carta en su idioma y acceder a los recursos de ciudadanía, escaneel código QR que aparece a continuación o visite uscis.gov/naturalizenow.

Magandang balita! Bilang isang residenteng masunurin sa batas nang mahigit limang taon, maaari kang maging karapat-dapat na mamamayan ng Estados Unidos sa pamamagitan ng naturalisasyon. Para mabasa itong sulat sa iyong wika at makakuha ng mapagkukunan sa pagkamamayan, pakiscan ang QR code sa ibaba o bumista sa uscis.gov/naturalizenow.

أخبار جيدة! يصفتك مقىما دائمًا قانونيًا لأكثر من خمس سنوات، قد تكون مؤهلاً لأن تصبح مواطنًا أمريكيًا من خلال التجنس. لقراءة هذا الخطاب بلغتك والوصول إلى موارد الجنسية،
يرجى مسح رمز الاستجابة السريعة أدناه أو زيارة uscis.gov/naturalizenow.

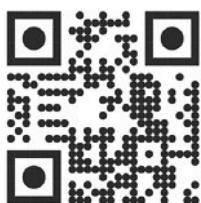
Bonne nouvelle ! En tant que résident permanent en règle depuis cinq ans, vous pouvez être éligible à l'acquisition de la nationalité américaine par naturalisation. Pour lire cette lettre dans votre langue et accéder aux ressources relatives à la nationalité, veuillez scanner le QR code ci-dessous ou consulter uscis.gov/naturalizenow.

Bon nouvèl! Antanke rezidan pèmanan legal depi plis pase senk (5) ane, ou gen dwa pou ou kapab kalifye pou ou vin yon sitwayen Ameriken lè ou naturalize. Pou ou li lèt sa nan lang ou pale a espi pou ou jwenn aksè ak enfòmasyon sou naturalizasyon, tanpri eskane kòd QR ki pi ba a oswa vizite sit uscis.gov/naturalizenow."

好消息！如作为合法永久居民已超过五年，您即可能有资格通过入籍成为美国公民。欲查阅使用您母语的本函版本以及其它有关公民身份的资料，请扫描下面的二维码或访问该网站：uscis.gov/naturalizenow。

좋은 소식! 5년 이상 합법적 영주권자로 있으면 귀화를 통해 미국 시민이 될 자격이 있을 수 있습니다. 이 편지를 한글로 읽고 또한 시민권 취득 자료에 접속하려면 아래 QR 코드를 스캔하거나 uscis.gov/naturalizenow를 방문하십시오.

Có tin mừng! Quý vị có thể hội đủ điều kiện trở thành công dân Hoa Kỳ qua quá trình nhập tịch, nếu là cư dân thường trú hợp pháp hơn 5 năm. Quét mã QR dưới đây hoặc vào mạng lưới uscis.gov/naturalizenow để đọc thư này bằng tiếng Việt và truy cập các nguồn thông tin về quyền công dân.



uscis.gov/naturalizenow