WIC Imputation

Introduction

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a federal assistance program intended to provide a safety net for low-income families by providing nutritional supplementation. Low-income women who have at risk pregnancies, or who are nutritionally deficient while breastfeeding may qualify for WIC supplementation, as do low-income, at risk infants (age 0), and children (age 1 up to age 5).

The Current Population Survey (CPS) provides WIC micro-data in its March Supplement with its "WICYN" variable; however, this variable does not accurately capture the distribution of infant, child, and women recipients[1]. According to a report by Suzanne Macartney at the US Census Bureau, the CPS WICYN variable falls short by failing to capture any infant or child WIC recipients, while overreporting women WIC recipients. This is shown using the following USDA administrative data. According to 2014 USDA administrative data on the WIC program, there were 1.9 million infant, 4.2 million child, and 1.9 million woman WIC participants; on the contrary, according to the 2015 CPS WICYN variable (which reports 2014 WIC participation), there were only 4,409 child (ages 0-15), and 4.2 million woman weighted WIC participants. Moreover, this relatively small number of children could be attributed to editing errors. Since CPS WIC participants are almost entirely women over the age of 15, Macartney concluded that WICYN is actually reporting the number of families participating in WIC, rather than individual level participation. More specifically, WICYN is instead showing the number of women who have children who are, and/or who themselves are, receiving WIC benefits.

To account for this discrepancy we used a preliminary imputation method, which followed Macartney's method for imputing infant and child participation closely, as well as reducing the amount of woman participants; this method is cited in full detail in the paper above. We describe our use of it below.

First, we include only women CPS WIC recipients ages 15-44. This corrects for likely editing mistakes in the WIC assignment process.

Second, for families that woman reported WIC assistance (WICYN = 1), we impute all infants and children (ages 0 – 4) as WIC participants, and endow them with a corresponding state-level yearly benefit average. We note that since current CPS age is ahead at most one year and three months from the WIC participation in the previous calendar year, we include children ages 0, instead of those of age 5. If we were to include ages from both ends (both ages 0 and 5), this would result in overcounting.

[1] *Estimating the Value of WIC Benefits for the Supplemental Poverty Measure by Suzanne Macartney. SEHSD Working Paper 2013-18. US Census Burea.*

Third, we include only women reporting WIC assistance if they have an infant (age 0), since they were presumably pregnant or breastfeeding (or both in 2014), and women who have no children under the age of 5, since they were presumably pregnant.

After this preliminary imputation CPS totals more accurately reflect the administrative WIC participant distribution. The results before and after the preliminary imputation, and the corresponding administrative totals, are shown below.

Participants	USDA Admin 2014	CPS weighted 2015 After	CPS Weighted 2015 Before
Pregnant Women	~790,000	656,836	
Total Women	1,934,139	1,664,831	4,200,000
Total Infants (Age 0)	1,925,666	1,189,567	Part of 4,409
Total Children (Age 1-4)	4,202,693	3,368,379	Other of 4,409
Total Recipients	8,062,498	6,222,777	4,204,409

Still, total WIC recipients were underreported compared to the administrative totals from US Department of Agriculture (USDA). More specifically, CPS WIC recipients were underreported by about 1.8 million. CPS underreporting typically occurs with government benefit programs.
Since the CPS does not report the value of WIC supplements, we impute this value using the average yearly WIC benefit amount, from the USDA administrative totals, for each recipient's respective state as his/her WIC benefit amount.
We use a three-fold augmentation procedure of recipients from CPS 2015 March Supplement, and their dollar amount of benefits we imputed, to match the 2014 WIC state-level reports provided by USDA for women, infants, and children, separately. We used the 2015 CPS because the WICYN reports the respondents' WIC participation for the calendar year 2014, rather than 2015.

In addition to matching WIC recipient numbers and total benefits, we tried to maintain the original CPS micro-data distribution by utilizing USDA current distribution between women, infants, and children, and WIC eligibility rules. However, since CPS data is insufficient in many ways, a number of assumptions are made in order to augment the data reasonably. This report details those assumptions and explains our imputation procedure.

CPS micro-data and WIC targets

The CPS March Supplement contains WIC recipient information in its "WICYN" variable. Above we described our preliminary imputation of the WICYN variable.

Targets for imputation

The targets for imputation come from USDA official data. The woman, infant, and child recipient amounts come from the USDA's "FY 2014 (final)" report in the Monthly Data – State Level

Participation by Category and Program Costs section of the their website. We use the data sheets "Total Women", "Total Infants", "Children Participating", and "Food Costs" for our administrative totals. These data sheets provide our administrative WIC targets for our three-fold imputation of recipients, and our benefit imputation.

In the fiscal year 2014, administrative data suggests that approximately 8 million individuals claimed roughly 4.1 billion dollars in WIC benefits. The annual average combined benefit for each recipient is approximately $512 with significant variation across states (Table 2). Thus, for our imputation we partition the CPS March Supplement data by state for better measurements.

Imputation Procedure

We follow a similar two-step procedure as the SSI imputation for augmentation. First, we add up the individual weights for each CPS respondent in one of the three categories (women, infant, or child) in the recipient pool to see if we reach the administrative level in the same category for each state. If we do not, then we augment this number by including the most likely recipients in that same category from the non-recipient pool, using probabilities derived from both a logistic regression and a Random Forest classifier model, until we match administrative totals for each state, in that same category. Second, we obtain an adjust ratio for the benefit amount that allows us to match the administrative dollar benefit totals for each state. We then repeat this procedure for each of the remaining categories.

Step I: Recipient Imputation w/ Probabilities From Two Models

Model I:

We propose a basic logistic regression model for analyzing the likelihood of being a WIC recipient. Following WIC eligibility rules, we use the available corresponding CPS information to create independent variables for whether or not individuals get food stamps, whether or not they have private health insurance, whether their child is on Medicaid, whether they are an infant, child or woman, and family wage income. Specifically, for women we included a "has_child" indicator, an "income_eligibility" indicator, and a reason for not working variable. These are all statistically significant independent variables for determining WIC eligibility, and important variables listed in the Random Forest's feature importances.[2]

WIC eligibility rules that we include:

+ According to USDA, families must meet income eligibility criteria for WIC. We include this eligibility by providing the income_eligibility indicator calculated by considering each family's earned and unearned income, family size and state.
+ Eligible WIC individuals must be pregnant or breastfeeding women, or at risk children (ages 0-5). There is no CPS variable that determines whether a women or child is at risk.

2 The code and results for the feature importances can be found in Rf_probs.py

Below we give our proposed logistic regression models for predicting the likelihood of receiving WIC compensation for the three categories

$$WIC\_infant = \alpha + hfdval * \beta_1 + cov\_hi * \beta_2 + ch\_mc * \beta_3 + infant * \beta_4 + fwsval * \beta_5 + \varepsilon$$

$$WIC\_child = \alpha + hfdval * \beta_1 + cov\_hi * \beta_2 + ch\_mc * \beta_3 + child * \beta_4 + fwsval * \beta_5 + \varepsilon$$

$$WIC\_woman = \alpha + hfdval * \beta_1 + rsnnotw * \beta_2 + has\_child * \beta_3 + woman * \beta_4 + fwsval * \beta_5 + income\_eligibility * \beta_6 + caid * \beta_7 + \varepsilon$$

These yielded a pseudo r-squared value of around 0.77, 0.6, and 0.38 respectively.

We then run the model on the CPS dataset. After, we use the fitted coefficients to produce a vector of probabilities for WIC recipients in the three categories. We then rank all recipients within each category according to their fitted probability. For each state sub-group, we aggregate the recipient weights, and add extra non-recipients by likelihood until the weights reach administrative level, for each category.

Model II:

We use a Random Forest Classifier (RFC) model to determine WIC recipient likelihood for the three categories. Random Forests performed much better than the logistic regression model in all cases, with an accuracy/score of 0.98, and 0.99.

To train the RFC model we used all of the CPS variables except those that approximately identified those receiving WIC benefits. To create feasible variables for the training, we converted all variables containing categorical strings into numerical categorical variables, and created proxy variables for many columns with missing data (Not in Universe, None, etc.).

After training the Random Forest on a training set (80% of the data), we computed the probability that each CPS respondent received WIC in each of the categories. Then, we ranked the probabilities as we did above, and imputed recipients until the recipient state totals by category matched the administrative state totals by category [3].

Step II: Benefit imputation

For each imputed/augmented recipient, we assign the average benefit amount for the corresponding state, just like we did for all other recipients. We then calculate the new total outlays for each state, and compare these outlays with USDA administrative state outlays. We calculate the adjustment ratios for each state by dividing administrative outlays by the new outlays. Most adjustment ratios close to 1, but some are significantly larger. We use these adjustment ratios to augment individual's benefits to match the state administrative totals.

3 The code and score results for the Random Forest Classifier model can be found in C-TAM's github documentation

Appendix

Table 1: Annual WIC infant recipient numbers by state for CPS and administration before augmentation

State	CPS total infant recipients	Admin total infant recipients
Alabama	32268	33977
Alaska	3907	4761
Arizona	47788	44679
Arkansas	6560	23083
California	129303	269714
Colorado	12621	21801
Connecticut	6528	13163
Delaware	1494	5209
District of Columbia	2630	4327
Florida	82573	115476
Georgia	34104	64366
Hawaii	3338	8063
Idaho	2145	10181
Illinois	29803	70865
Indiana	33695	39545
Iowa	18197	16268
Kansas	14091	16267
Kentucky	28414	31270
Louisiana	32692	37212
Maine	1622	5457
Maryland	9896	33739
Massachusetts	18679	26356
Michigan	58231	62444
Minnesota	17571	27639
Mississippi	18411	26008
Missouri	18180	37275
Montana	2026	4738
Nebraska	3766	9513
Nevada	12249	17744
New Hampshire	1626	3755
New Jersey	13765	36680
New Mexico	10744	13894
New York	41364	109946
North Carolina	46075	62154
North Dakota	1854	3236
Ohio	51384	65791
Oklahoma	21076	28722
Oregon	12489	22347
Pennsylvania	22978	60728
Rhode Island	2777	5394
South Carolina	13232	32031
South Dakota	3722	4776
Tennessee	43668	42211
Texas	137757	222232
Utah	8332	14246
Vermont	2613	2689
Virginia	15743	36789
Washington	28139	37282
West Virginia	8087	11031
Wisconsin	17941	25844

Wyoming	1391	2748

Table 2: Annual WIC child recipient numbers by state for CPS and administration before augmentation

State	CPS total child recipients	Admin total child recipients
Alabama	65886	65766
Alaska	8959	10048
Arizona	83536	86726
Arkansas	34396	38901
California	527712	777153
Colorado	25693	47493
Connecticut	11221	28127
Delaware	5459	10256
District of Columbia	5167	6446
Florida	189635	236327
Georgia	124182	139055
Hawaii	14649	17783
Idaho	13631	20926
Illinois	82481	132004
Indiana	54226	78051
Iowa	26885	32156
Kansas	39383	34220
Kentucky	48443	61133
Louisiana	85660	59916
Maine	6999	12521
Maryland	48607	73277
Massachusetts	46188	62708
Michigan	108095	132188
Minnesota	51476	65735
Mississippi	64397	41045
Missouri	56579	65663
Montana	7037	9954
Nebraska	18448	20750
Nevada	34648	39430
New Hampshire	9222	7549
New Jersey	43583	89244
New Mexico	23782	30244
New York	216383	260656
North Carolina	103947	132756
North Dakota	4106	6608
Ohio	127334	125745
Oklahoma	53891	57777
Oregon	27808	56263
Pennsylvania	102323	132480
Rhode Island	6876	11897
South Carolina	51721	50631
South Dakota	12637	10434
Tennessee	77684	70401
Texas	386202	451241
Utah	34407	31703
Vermont	3929	8470
Virginia	36765	72116
Washington	105645	103849
West Virginia	11825	22430
Wisconsin	34285	58426

Wyoming	4323	6015

Table 3: Annual WIC woman recipient numbers by state for CPS and administration before augmentation

State	CPS total women recipients	Admin total women recipients
Alabama	49451	31302
Alaska	6793	4794
Arizona	50204	41614
Arkansas	18333	21303
California	222272	302070
Colorado	11460	22696
Connecticut	13710	11270
Delaware	3358	4407
District of Columbia	2914	3726
Florida	93543	114931
Georgia	43276	67993
Hawaii	7221	8075
Idaho	4656	10315
Illinois	62910	63052
Indiana	41223	37725
Iowa	17357	15341
Kansas	13324	15210
Kentucky	37240	29277
Louisiana	45779	33269
Maine	3264	4968
Maryland	11469	33449
Massachusetts	24192	26045
Michigan	58643	57083
Minnesota	29901	28380
Mississippi	25953	20919
Missouri	24774	35717
Montana	3345	4534
Nebraska	7608	8947
Nevada	20355	17087
New Hampshire	3083	3430
New Jersey	15902	37124
New Mexico	11982	14174
New York	69490	115221
North Carolina	70484	60761
North Dakota	3239	2969
Ohio	79915	58833
Oklahoma	31601	27989
Oregon	11859	24616
Pennsylvania	51598	55551
Rhode Island	3780	4847
South Carolina	25502	30516
South Dakota	6360	4361
Tennessee	61215	41129
Texas	148123	242987
Utah	11031	15309
Vermont	3560	3066
Virginia	18729	35691
Washington	34520	42272
West Virginia	10137	10300
Wisconsin	35341	24630
Wyoming	2830	2864

Table 4: Average WIC benefits by state

State	Average benefit
Alabama	542.2409
Alaska	655.7806
Arizona	529.0582
Arkansas	526.8537
California	566.5016
Colorado	491.8754
Connecticut	554.644
Delaware	480.851
District of Columbia	511.9871
Florida	525.5661
Georgia	489.7831
Hawaii	637.2317
Idaho	434.2808
Illinois	573.6631
Indiana	457.119
Iowa	437.7426
Kansas	475.0532
Kentucky	490.3151
Louisiana	586.9681
Maine	532.9711
Maryland	496.6029
Massachusetts	470.3812
Michigan	494.723
Minnesota	525.4248
Mississippi	635.8332
Missouri	458.3544
Montana	467.3708
Nebraska	551.4829
Nevada	447.1657
New Hampshire	389.4792
New Jersey	639.6752
New Mexico	450.4472
New York	663.5371
North Carolina	559.5665
North Dakota	567.5991
Ohio	431.1376
Oklahoma	480.2065
Oregon	465.983
Pennsylvania	501.4545
Rhode Island	531.2341
South Carolina	560.5359
South Dakota	584.5228
Tennessee	528.636
Texas	351.2794
Utah	436.7981
Vermont	634.9149
Virginia	455.0701
Washington	503.559
West Virginia	471.4104
Wisconsin	534.0183
Wyoming	397.9754

Table 5: Adjustment ratios of outlays by state for WIC children (this is somewhat arbitrary since we impute average benefit amount to all recipients)

State	Imputed	Admin	adjust ratio
Alabama	35726165	35661015.0294	0.9981
Alaska	6639175	6589283.4688	0.9924
Arizona	46371072	45883101.4532	0.9894
Arkansas	20825620	20495135.7837	0.9841
California	440615098	440258417.945	0.9991
Colorado	23728325	23360638.3722	0.9845
Connecticut	15786493	15600471.788	0.9882
Delaware	4890297	4931607.856	1.0084
District of Columbia	3346101	3300268.8466	0.9863
Florida	124925627	124205459.715	0.9942
Georgia	67682024	68106788.9705	1.0062
Hawaii	11434613	11331891.3211	0.991
Idaho	9152754	9087760.0208	0.9928
Illinois	75552973	75725823.8524	1.0022
Indiana	35894117	35678595.069	0.9939
Iowa	14001512	14076051.0456	1.0053
Kansas	18709409	16256320.504	0.8688
Kentucky	30279286	29974433.0083	0.9899
Louisiana	50280045	35168780.6796	0.6994
Maine	6626738	6673331.1431	1.007
Maryland	36575061	36389570.7033	0.9949
Massachusetts	29741064	29496664.2896	0.9917
Michigan	64776640	65396443.924	1.0095
Minnesota	34776564	34538799.228	0.9931
Mississippi	40945839	26097773.694	0.6373
Missouri	29589306	30096924.9672	1.0171
Montana	4711293	4652208.9432	0.9874
Nebraska	11584620	11443270.175	0.9877
Nevada	17459866	17631743.551	1.0098
New Hampshire	3591847	2940178.4808	0.8185
New Jersey	56856538	57087173.5488	1.004
New Mexico	13755450	13623325.1168	0.9903
New York	172584500	172954926.338	1.0021
North Carolina	74619714	74285810.274	0.9955
North Dakota	3731992	3750694.8528	1.005
Ohio	54898725	54213397.512	0.9875
Oklahoma	27775955	27744890.9505	0.9988
Oregon	26075886	26217601.529	1.0054
Pennsylvania	66791578	66432692.16	0.9946
Rhode Island	6421382	6320092.0877	0.9842
South Carolina	28991903	28380493.1529	0.9789
South Dakota	7386673	6098910.8952	0.8256
Tennessee	41067082	37216503.036	0.9062
Texas	158086876	158511667.735	1.0026
Utah	15029331	13847810.1643	0.9213
Vermont	5369862	5377729.203	1.0014
Virginia	32577385	32817835.3316	1.0073
Washington	53198984	52294098.591	0.9829
West Virginia	10597508	10573735.272	0.9977
Wisconsin	30962487	31200553.1958	1.0076
Wyoming	2419996	2393822.031	0.9891

Table 6: Administrative and CPS WIC totals for infants after augmentation

State	post augment CPS total benefits (annual)	post augment CPS total infant recipients	Admin total benefits (annual)	Admin total recipients
Alabama	18423719	33567	18423719	33977
Alaska	3122171	4633	3122171	4761
Arizona	23637791	47788	23637791	44679
Arkansas	12161363	22934	12161363	23083
California	152793412	267784	152793412	269714
Colorado	10723375	23902	10723375	21801
Connecticut	7300778	13782	7300778	13163
Delaware	2504752	5071	2504752	5209
District of Columbia	2215368	4333	2215368	4327
Florida	60690270	115175	60690270	115476
Georgia	31525379	64767	31525379	64366
Hawaii	5137999	7911	5137999	8063
Idaho	4421412	10314	4421412	10181
Illinois	40652635	70415	40652635	70865
Indiana	18076770	38830	18076770	39545
Iowa	7121196	18197	7121196	16268
Kansas	7727690	16637	7727690	16267
Kentucky	15332153	31759	15332153	31270
Louisiana	21842256	36918	21842256	37212
Maine	2908423	5581	2908423	5457
Maryland	16754885	33272	16754885	33739
Massachusetts	12397366	25408	12397366	26356
Michigan	30892483	63464	30892483	62444
Minnesota	14522216	27444	14522216	27639
Mississippi	16536749	26326	16536749	26008
Missouri	17085160	37620	17085160	37275
Montana	2214402	4567	2214402	4738
Nebraska	5246256	9917	5246256	9513
Nevada	7934508	17952	7934508	17744
New Hampshire	1462494	3767	1462494	3755
New Jersey	23463286	37198	23463286	36680
New Mexico	6258513	13940	6258513	13894
New York	72953249	111685	72953249	109946
North Carolina	34779296	62357	34779296	62154
North Dakota	1836750	3229	1836750	3236
Ohio	28364973	66527	28364973	65791
Oklahoma	13792491	29266	13792491	28722
Oregon	10413322	21731	10413322	22347
Pennsylvania	30452328	61008	30452328	60728
Rhode Island	2865476	5509	2865476	5394
South Carolina	17954525	32566	17954525	32031
South Dakota	2791680	4760	2791680	4776
Tennessee	22314254	43668	22314254	42211
Texas	78065523	222373	78065523	222232
Utah	6222625	14070	6222625	14246
Vermont	1707286	2906	1707286	2689
Virginia	16741573	36600	16741573	36789
Washington	18773686	37572	18773686	37282
West Virginia	5200128	10892	5200128	11031
Wisconsin	13801168	24785	13801168	25844
Wyoming	1093636	2904	1093636	2748

Table 7: Administrative and CPS WIC totals for children after augmentation

State	post augment CPS total benefits (annual)	post augment CPS total child recipients	Admin total benefits (annual)	Admin total recipients
Alabama	35661015	65886	35661015	65766
Alaska	6589283	10124	6589283	10048
Arizona	45883101	87648	45883101	86726
Arkansas	20495135	39528	20495135	38901
California	440258417	777782	440258417	777153
Colorado	23360638	48240	23360638	47493
Connecticut	15600471	28462	15600471	28127
Delaware	4931607	10170	4931607	10256
District of Columbia	3300268	6535	3300268	6446
Florida	124205459	237697	124205459	236327
Georgia	68106788	138187	68106788	139055
Hawaii	11331891	17944	11331891	17783
Idaho	9087760	21075	9087760	20926
Illinois	75725823	131702	75725823	132004
Indiana	35678595	78522	35678595	78051
Iowa	14076051	31985	14076051	32156
Kansas	16256320	39383	16256320	34220
Kentucky	29974433	61754	29974433	61133
Louisiana	35168780	85660	35168780	59916
Maine	6673331	12433	6673331	12521
Maryland	36389570	73650	36389570	73277
Massachusetts	29496664	63227	29496664	62708
Michigan	65396443	130935	65396443	132188
Minnesota	34538799	66187	34538799	65735
Mississippi	26097773	64397	26097773	41045
Missouri	30096924	64555	30096924	65663
Montana	4652208	10080	4652208	9954
Nebraska	11443270	21006	11443270	20750
Nevada	17631743	39045	17631743	39430
New Hampshire	2940178	9222	2940178	7549
New Jersey	57087173	88883	57087173	89244
New Mexico	13623325	30537	13623325	30244
New York	172954926	260097	172954926	260656
North Carolina	74285810	133352	74285810	132756
North Dakota	3750694	6575	3750694	6608
Ohio	54213397	127334	54213397	125745
Oklahoma	27744890	57841	27744890	57777
Oregon	26217601	55958	26217601	56263
Pennsylvania	66432692	133195	66432692	132480
Rhode Island	6320092	12087	6320092	11897
South Carolina	28380493	51721	28380493	50631
South Dakota	6098910	12637	6098910	10434
Tennessee	37216503	77684	37216503	70401
Texas	158511667	450031	158511667	451241
Utah	13847810	34407	13847810	31703
Vermont	5377729	8457	5377729	8470
Virginia	32817835	71587	32817835	72116
Washington	52294098	105645	52294098	103849
West Virginia	10573735	22480	10573735	22430
Wisconsin	31200553	57980	31200553	58426
Wyoming	2393822	6080	2393822	6015

Table 8: Administrative and CPS WIC totals for women after augmentation

State	post augment CPS total benefits (annual)	post augment CPS total women recipients	Admin total benefits (annual)	Admin total recipients
Alabama	16973224	49451	16973224	31302
Alaska	3143812	6793	3143812	4794
Arizona	22016227	50204	22016227	41614
Arkansas	11223564	22074	11223564	21303
California	171123138	301673	171123138	302070
Colorado	11163604	22201	11163604	22696
Connecticut	6250837	13710	6250837	11270
Delaware	2119110	4456	2119110	4407
District of Columbia	1907663	3766	1907663	3726
Florida	60403837	115126	60403837	114931
Georgia	33301822	68335	33301822	67993
Hawaii	5145645	7713	5145645	8075
Idaho	4479606	10474	4479606	10315
Illinois	36170605	65034	36170605	63052
Indiana	17244814	41223	17244814	37725
Iowa	6715409	17357	6715409	15341
Kansas	7225559	14455	7225559	15210
Kentucky	14354955	37240	14354955	29277
Louisiana	19527841	45779	19527841	33269
Maine	2647800	4692	2647800	4968
Maryland	16610870	33007	16610870	33449
Massachusetts	12251078	26509	12251078	26045
Michigan	28240273	58643	28240273	57083
Minnesota	14911555	29901	14911555	28380
Mississippi	13300994	25953	13300994	20919
Missouri	16371044	35003	16371044	35717
Montana	2119059	4288	2119059	4534
Nebraska	4934117	8917	4934117	8947
Nevada	7640720	20355	7640720	17087
New Hampshire	1335913	3587	1335913	3430
New Jersey	23747302	36763	23747302	37124
New Mexico	6384638	14039	6384638	14174
New York	76453408	116185	76453408	115221
North Carolina	33999820	70484	33999820	60761
North Dakota	1685201	3239	1685201	2969
Ohio	25365118	79915	25365118	58833
Oklahoma	13440499	31601	13440499	27989
Oregon	11470637	24850	11470637	24616
Pennsylvania	27856298	55403	27856298	55551
Rhode Island	2574891	4740	2574891	4847
South Carolina	17105313	29457	17105313	30516
South Dakota	2549103	6360	2549103	4361
Tennessee	21742270	61215	21742270	41129
Texas	85356327	243760	85356327	242987
Utah	6686942	15278	6686942	15309
Vermont	1946649	3560	1946649	3066
Virginia	16241906	35748	16241906	35691
Washington	21286446	41651	21286446	42272
West Virginia	4855527	10496	4855527	10300
Wisconsin	13152870	35341	13152870	24630
Wyoming	1139801	3051	1139801	2864