BeautifySJ Requests Demographic Descriptors Analysis

Michael Spencer, Barbara Cardona, Guillermo Camarillo, Jorge Nam Song

2/26/2020

Summary Tables & Charts

```
## # A tibble: 3 x 3
##   incident_source      n percent_of_total
##   <chr>            <int>            <dbl>
## 1 Mobile           69529            0.520
## 2 Web              50098            0.375
## 3 Agent desktop    14056            0.105


## # A tibble: 6 x 3
##   service_requested        n percent_of_total
##   <chr>                <int>            <dbl>
## 1 Abandoned Vehicle    70781            0.530
## 2 Illegal Dumping      20216            0.151
## 3 General Request      18162            0.136
## 4 Graffiti             12334           0.0923
## 5 Streetlight Outage    8585           0.0642
## 6 Pothole               3605            0.027


## # A tibble: 18 x 5
##    incident_source service_request~     n percent_of_sour~ percent_of_total
##    <chr>           <chr>            <int>            <dbl>            <dbl>
##  1 Agent desktop   General Request   6756            0.481           0.0505
##  2 Agent desktop   Abandoned Vehic~  5548            0.395           0.0415
##  3 Agent desktop   Illegal Dumping   1246           0.0886          0.00930
##  4 Agent desktop   Streetlight Out~   379            0.027           0.0028
##  5 Agent desktop   Pothole             76           0.0054          0.000600
##  6 Agent desktop   Graffiti            51           0.0036           0.0004
##  7 Mobile          Abandoned Vehic~ 29661            0.427            0.222
##  8 Mobile          Illegal Dumping  16062            0.231            0.120
##  9 Mobile          Graffiti         11253            0.162           0.0842
## 10 Mobile          General Request   7505            0.108           0.0561
## 11 Mobile          Streetlight Out~  3131            0.045           0.0234
## 12 Mobile          Pothole           1917           0.0276           0.0143
## 13 Web             Abandoned Vehic~ 35572            0.71             0.266
## 14 Web             Streetlight Out~  5075            0.101            0.038
## 15 Web             General Request   3901           0.0779           0.0292
## 16 Web             Illegal Dumping   2908            0.058           0.0218
## 17 Web             Pothole           1612           0.0322           0.0121
## 18 Web             Graffiti          1030           0.0206           0.0077


## # A tibble: 7 x 3
##   request_creation_weekday     n percent_of_total
##   <ord>                    <int>            <dbl>
## 1 Mon                      23756            0.178
## 2 Tue                      22344            0.167
```

```
## 3 Wed                         22159            0.166
## 4 Thu                         21436            0.160
## 5 Fri                         19199            0.144
## 6 Sun                         12804            0.0958
## 7 Sat                         11985            0.0897


## # A tibble: 10 x 3
##    san_jose_council_district       n percent_of_total
##    <chr>                       <int>            <dbl>
##  1 3                           24718            0.185
##  2 7                           17931            0.134
##  3 6                           14245            0.107
##  4 5                           13797            0.103
##  5 8                           12822            0.0959
##  6 2                           12592            0.0942
##  7 4                           10842            0.0811
##  8 1                            9920            0.0742
##  9 10                           8927            0.0668
## 10 9                            7889            0.059


## # A tibble: 10 x 3
##    census_block_id      n percent_of_total
##    <chr>            <int>            <dbl>
##  1 060855031151      1165           0.0087
##  2 060855003001      1015           0.0076
##  3 060855031051       971           0.0073
##  4 060855022011       917           0.0069
##  5 060855014021       909           0.0068
##  6 060855031221       891           0.0067
##  7 060855050062       873           0.0065
##  8 060855031121       871           0.0065
##  9 060855043181       845           0.0063
## 10 060855031211       823           0.0062
```
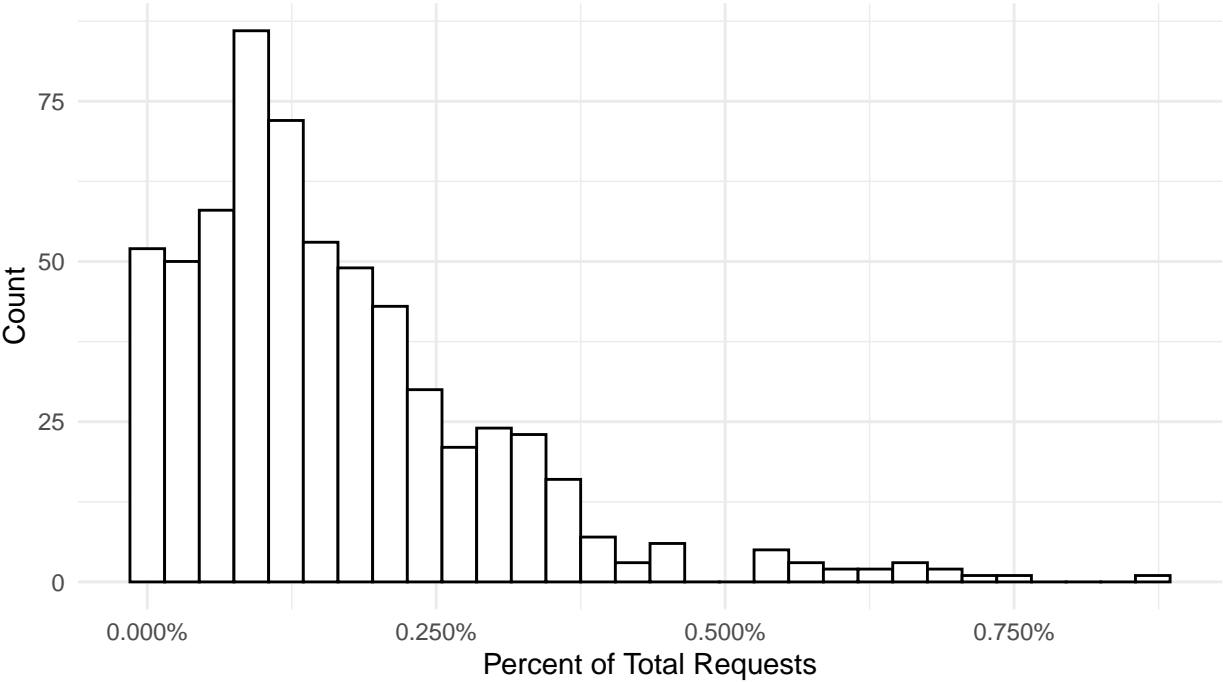
Distribution of Requests Across Census Block Groups

The distribution is right skewed, indicating that a handful of block groups
recieve a larger amount of requests than most others.

Source: City of San Jose

Demographic Descriptors By Channel and Request Type

All Requests

All MySanJose Platforms

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	2.0000	1.0000	14.0000	61.0000	533.0000
linguistic_isolation_(percent_households)	0.0313	0.0528	0.0528	0.0833	0.0818
cellular_data_subscription_(percent_of_pop)	0.6531	0.5331	0.5974	0.5828	0.5887
broadband_subscription_(percent_of_pop)	0.9429	0.9085	0.9085	0.9243	0.8878
bg_pop_percent_white	0.5037	0.4808	0.2509	0.1416	0.2749
bg_pop_percent_hispanic	0.1099	0.1165	0.1465	0.1904	0.2558
bg_pop_percent_asian	0.3219	0.3511	0.3962	0.5072	0.2456
bg_percent_prop_households_renter_occ	0.0680	0.0063	0.1645	0.2164	0.3407
bg_percent_prop_households_owner_occ	0.9320	0.9937	0.8355	0.7836	0.6593
bg_med_income	157199.5000	128667.0000	154668.0000	132875.0000	106181.0000
bg_med_age	59.6500	53.0000	39.2000	39.7000	37.9500
bg_ed_percent_college_educated	0.7212	0.7080	0.6352	0.5521	0.5193

MySanJose Mobile App

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	30.0000	154.0000	254.0000	145.000	20.000
linguistic_isolation_(percent_households)	0.0404	0.0512	0.0949	0.148	0.121
cellular_data_subscription_(percent_of_pop)	0.6212	0.6098	0.5797	0.555	0.585
broadband_subscription_(percent_of_pop)	0.9364	0.9246	0.8897	0.854	0.822
bg_pop_percent_white	0.3521	0.3702	0.2405	0.178	0.330
bg_pop_percent_hispanic	0.0938	0.1500	0.2667	0.423	0.161
bg_pop_percent_asian	0.3945	0.3113	0.2463	0.230	0.307
bg_percent_prop_households_renter_occ	0.1285	0.2134	0.3237	0.477	0.610
bg_percent_prop_households_owner_occ	0.8715	0.7866	0.6763	0.523	0.390
bg_med_income	161627.0000	126771.0000	105156.5000	80536.000	83427.000
bg_med_age	44.7000	40.5500	37.4000	35.700	34.900
bg_ed_percent_college_educated	0.6669	0.5894	0.5062	0.364	0.586

MySanJose Web Platform

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	57.000	253.000	227.000	57.0000	7.0000
linguistic_isolation_(percent_households)	0.146	0.108	0.062	0.0423	0.0905
cellular_data_subscription_(percent_of_pop)	0.536	0.575	0.600	0.6215	0.5968
broadband_subscription_(percent_of_pop)	0.819	0.877	0.919	0.9325	0.9483
bg_pop_percent_white	0.136	0.194	0.380	0.3381	0.2019
bg_pop_percent_hispanic	0.514	0.303	0.202	0.1168	0.1162
bg_pop_percent_asian	0.230	0.271	0.264	0.2401	0.6876
bg_percent_prop_households_renter_occ	0.612	0.345	0.248	0.2699	0.2708
bg_percent_prop_households_owner_occ	0.388	0.655	0.752	0.7301	0.7292
bg_med_income	60600.000	99942.000	120666.000	132417.0000	126944.0000
bg_med_age	33.850	37.100	39.200	41.6000	39.8000
bg_ed_percent_college_educated	0.323	0.463	0.549	0.6561	0.6199

Abandoned Vehicle

All MySanJose Platforms

var	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	1.0000	4.0000	36.0000	548.0000
linguistic_isolation__(percent_households)	0.0810	0.0741	0.0512	0.0826
cellular_data_subscription__(percent_of_pop)	0.5556	0.5621	0.6021	0.5849
broadband_subscription__(percent_of_pop)	0.8568	0.8765	0.9232	0.8909
bg_pop_percent_white	0.5375	0.1518	0.3792	0.2484
bg_pop_percent_hispanic	0.0554	0.3877	0.1450	0.2617
bg_pop_percent_asian	0.2518	0.2501	0.3509	0.2607
bg_percent_prop_households_renter_occ	0.0000	0.5446	0.3010	0.3190
bg_percent_prop_households_owner_occ	1.0000	0.4554	0.6990	0.6810
bg_med_income	156833.0000	112444.0000	123333.0000	105854.0000
bg_med_age	58.0000	39.8500	40.1000	38.1000
bg_ed_percent_college_educated	0.6368	0.4651	0.6711	0.5120

MySanJose Mobile App

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	66.0000	256.0000	179.000	64.000	10.0000
linguistic_isolation__(percent_households)	0.0475	0.0763	0.106	0.140	0.0738
cellular_data_subscription__(percent_of_pop)	0.6142	0.5849	0.580	0.556	0.5331
broadband_subscription__(percent_of_pop)	0.9278	0.9014	0.879	0.854	0.8687
bg_pop_percent_white	0.3664	0.2924	0.181	0.196	0.2309
bg_pop_percent_hispanic	0.1516	0.2196	0.330	0.423	0.3443
bg_pop_percent_asian	0.3354	0.2803	0.239	0.233	0.2305
bg_percent_prop_households_renter_occ	0.2448	0.2980	0.368	0.484	0.3193
bg_percent_prop_households_owner_occ	0.7552	0.7020	0.632	0.516	0.6807
bg_med_income	130803.5000	113828.0000	93611.000	85592.000	61096.0000
bg_med_age	41.1500	38.8500	36.900	35.700	40.8000
bg_ed_percent_college_educated	0.6356	0.5315	0.427	0.360	0.3236

MySanJose Web Platform

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	15.0000	120.000	272.0000	142.0000	33.0000
linguistic_isolation__(percent_households)	0.2379	0.146	0.0833	0.0528	0.0478
cellular_data_subscription__(percent_of_pop)	0.5362	0.556	0.5952	0.6043	0.6142
broadband_subscription__(percent_of_pop)	0.8309	0.860	0.8941	0.9216	0.9220
bg_pop_percent_white	0.0724	0.136	0.2531	0.3619	0.3066
bg_pop_percent_hispanic	0.5702	0.375	0.2725	0.1726	0.1638
bg_pop_percent_asian	0.2302	0.260	0.2660	0.2715	0.3238
bg_percent_prop_households_renter_occ	0.4776	0.407	0.3088	0.2952	0.2573
bg_percent_prop_households_owner_occ	0.5224	0.593	0.6912	0.7048	0.7427
bg_med_income	62601.0000	87837.500	108000.5000	115357.0000	133851.0000
bg_med_age	35.1000	37.000	38.2000	39.2000	41.7000
bg_ed_percent_college_educated	0.2679	0.375	0.5254	0.5588	0.5861

Illegal Dumping

All MySanJose Platforms

var	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	2.0000	16.0000	53.0000	492.0000
linguistic_isolation_(percent_households)	0.0311	0.0371	0.0588	0.0951
cellular_data_subscription_(percent_of_pop)	0.6734	0.6205	0.6050	0.5791
broadband_subscription_(percent_of_pop)	0.9346	0.8773	0.9150	0.8878
bg_pop_percent_white	0.5092	0.4525	0.3978	0.2180
bg_pop_percent_hispanic	0.1038	0.1412	0.1744	0.2721
bg_pop_percent_asian	0.3870	0.2456	0.2799	0.2651
bg_percent_prop_households_renter_occ	0.1935	0.2124	0.2318	0.3432
bg_percent_prop_households_owner_occ	0.8065	0.7876	0.7682	0.6568
bg_med_income	156299.5000	137727.0000	125625.0000	102700.0000
bg_med_age	48.7500	41.3500	40.6000	37.4000
bg_ed_percent_college_educated	0.7741	0.6607	0.5603	0.5006

MySanJose Mobile App

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	2.0000	38.0000	85.000	189.000	240.000
linguistic_isolation_(percent_households)	0.0555	0.0621	0.050	0.105	0.109
cellular_data_subscription_(percent_of_pop)	0.7042	0.6213	0.636	0.577	0.571
broadband_subscription_(percent_of_pop)	0.9708	0.9232	0.922	0.888	0.871
bg_pop_percent_white	0.3020	0.4282	0.386	0.193	0.210
bg_pop_percent_hispanic	0.1393	0.1732	0.185	0.291	0.315
bg_pop_percent_asian	0.3981	0.3041	0.277	0.264	0.264
bg_percent_prop_households_renter_occ	0.3868	0.2008	0.210	0.323	0.413
bg_percent_prop_households_owner_occ	0.6132	0.7992	0.790	0.677	0.587
bg_med_income	160332.0000	120144.5000	131625.000	101528.000	95276.000
bg_med_age	39.3500	44.1000	39.300	37.300	36.400
bg_ed_percent_college_educated	0.5963	0.5681	0.597	0.477	0.457

MySanJose Web Platform

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	284.000	125.0000	38.000	15.0000	7.0000
linguistic_isolation_(percent_households)	0.128	0.0688	0.055	0.0688	0.0213
cellular_data_subscription_(percent_of_pop)	0.562	0.6005	0.648	0.6098	0.6893
broadband_subscription_(percent_of_pop)	0.869	0.9080	0.936	0.9212	0.9270
bg_pop_percent_white	0.154	0.3309	0.404	0.3584	0.6217
bg_pop_percent_hispanic	0.352	0.2191	0.195	0.1909	0.1114
bg_pop_percent_asian	0.272	0.2427	0.250	0.3775	0.1986
bg_percent_prop_households_renter_occ	0.394	0.2573	0.222	0.1455	0.0761
bg_percent_prop_households_owner_occ	0.606	0.7427	0.778	0.8545	0.9239
bg_med_income	93565.500	111719.0000	127726.500	123386.0000	168333.0000
bg_med_age	35.900	38.9000	40.950	44.4000	45.7000
bg_ed_percent_college_educated	0.418	0.5482	0.605	0.5311	0.6820

General Requests

All MySanJose Platforms

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	25.0000	47.000	96.0000	226.0000	188.000
linguistic_isolation_(percent_households)	0.0528	0.081	0.0635	0.0814	0.100
cellular_data_subscription_(percent_of_pop)	0.5793	0.580	0.5988	0.5790	0.585
broadband_subscription_(percent_of_pop)	0.9246	0.941	0.9082	0.8961	0.870
bg_pop_percent_white	0.1820	0.144	0.3080	0.2456	0.269
bg_pop_percent_hispanic	0.1752	0.190	0.2047	0.2424	0.301
bg_pop_percent_asian	0.4561	0.507	0.2650	0.2421	0.241
bg_percent_prop_households_renter_occ	0.1833	0.253	0.2485	0.3043	0.501
bg_percent_prop_households_owner_occ	0.8167	0.747	0.7515	0.6957	0.499
bg_med_income	135208.0000	120000.000	116878.0000	111207.0000	91492.500
bg_med_age	41.5000	39.300	39.4000	38.0500	36.400
bg_ed_percent_college_educated	0.6257	0.552	0.5509	0.5139	0.479

MySanJose Mobile App

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	77.0000	134.0000	220.0000	112.0000	24.000
linguistic_isolation_(percent_households)	0.0852	0.0801	0.0915	0.0927	0.045
cellular_data_subscription_(percent_of_pop)	0.5814	0.5937	0.5849	0.5838	0.602
broadband_subscription_(percent_of_pop)	0.9246	0.9137	0.8772	0.8722	0.880
bg_pop_percent_white	0.1363	0.2429	0.2445	0.2948	0.414
bg_pop_percent_hispanic	0.2033	0.2204	0.2881	0.2843	0.197
bg_pop_percent_asian	0.4874	0.3042	0.2260	0.2333	0.225
bg_percent_prop_households_renter_occ	0.2217	0.2802	0.3568	0.4793	0.519
bg_percent_prop_households_owner_occ	0.7783	0.7198	0.6432	0.5207	0.481
bg_med_income	126786.0000	106903.5000	103668.0000	99475.5000	100793.500
bg_med_age	39.7000	38.5000	37.5000	35.9000	37.600
bg_ed_percent_college_educated	0.5522	0.5190	0.4781	0.4966	0.556

MySanJose Web Platform

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	247.000	227.000	41.000	15.000	7.000
linguistic_isolation_(percent_households)	0.096	0.081	0.102	0.105	0.106
cellular_data_subscription_(percent_of_pop)	0.583	0.581	0.598	0.642	0.625
broadband_subscription_(percent_of_pop)	0.899	0.887	0.894	0.871	0.860
bg_pop_percent_white	0.209	0.253	0.167	0.162	0.269
bg_pop_percent_hispanic	0.249	0.266	0.275	0.266	0.227
bg_pop_percent_asian	0.279	0.234	0.277	0.347	0.225
bg_percent_prop_households_renter_occ	0.304	0.347	0.356	0.250	0.459
bg_percent_prop_households_owner_occ	0.696	0.653	0.644	0.750	0.541
bg_med_income	109625.000	106181.000	93438.000	87589.000	77997.000
bg_med_age	37.400	37.500	37.400	40.100	36.900
bg_ed_percent_college_educated	0.505	0.526	0.452	0.427	0.586

Graffiti

All MySanJose Platforms

var	60%-80%	80%-100%
total_census_blocks	6.0000	519.0000
linguistic_isolation_(percent_households)	0.0511	0.0915
cellular_data_subscription_(percent_of_pop)	0.5711	0.5849
broadband_subscription_(percent_of_pop)	0.8460	0.8868
bg_pop_percent_white	0.3677	0.2290
bg_pop_percent_hispanic	0.3187	0.2699
bg_pop_percent_asian	0.1993	0.2657
bg_percent_prop_households_renter_occ	0.7177	0.3376
bg_percent_prop_households_owner_occ	0.2823	0.6624
bg_med_income	93699.5000	104076.0000
bg_med_age	36.6500	37.4000
bg_ed_percent_college_educated	0.5471	0.5007

MySanJose Mobile App

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	3.000	7.0000	25.0000	54.000	430.0000
linguistic_isolation_(percent_households)	0.096	0.1211	0.0793	0.099	0.0892
cellular_data_subscription_(percent_of_pop)	0.532	0.6435	0.5656	0.585	0.5849
broadband_subscription_(percent_of_pop)	0.824	0.9154	0.8961	0.871	0.8832
bg_pop_percent_white	0.257	0.0874	0.2234	0.171	0.2526
bg_pop_percent_hispanic	0.270	0.2680	0.3340	0.311	0.2626
bg_pop_percent_asian	0.300	0.5452	0.2494	0.296	0.2591
bg_percent_prop_households_renter_occ	0.387	0.3122	0.2500	0.373	0.3410
bg_percent_prop_households_owner_occ	0.613	0.6878	0.7500	0.627	0.6590
bg_med_income	87813.000	79271.0000	105053.0000	89207.500	105854.0000
bg_med_age	40.900	35.9000	39.4000	37.300	37.3000
bg_ed_percent_college_educated	0.404	0.3782	0.4516	0.453	0.5159

MySanJose Web Platform

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	178.000	46.0000	20.0000	8.0000	8.0000
linguistic_isolation_(percent_households)	0.140	0.0933	0.0955	0.1155	0.0885
cellular_data_subscription_(percent_of_pop)	0.575	0.5897	0.5610	0.6322	0.5633
broadband_subscription_(percent_of_pop)	0.862	0.8919	0.8951	0.8983	0.9128
bg_pop_percent_white	0.190	0.1682	0.2180	0.0928	0.1711
bg_pop_percent_hispanic	0.375	0.3228	0.3422	0.2859	0.2101
bg_pop_percent_asian	0.244	0.2962	0.2834	0.4776	0.4543
bg_percent_prop_households_renter_occ	0.493	0.3475	0.2422	0.2995	0.2030
bg_percent_prop_households_owner_occ	0.507	0.6525	0.7578	0.7005	0.7970
bg_med_income	86418.000	93533.0000	102590.5000	83542.0000	98850.5000
bg_med_age	35.800	37.1500	39.5000	35.9500	40.2000
bg_ed_percent_college_educated	0.402	0.4399	0.4418	0.3912	0.5451

Streetlight Outage

All MySanJose Platforms

var	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	2.0000	5.000	24.0000	523.000
linguistic_isolation_(percent_households)	0.2651	0.150	0.0466	0.081
cellular_data_subscription_(percent_of_pop)	0.5220	0.530	0.5864	0.595
broadband_subscription_(percent_of_pop)	0.8402	0.858	0.8982	0.896
bg_pop_percent_white	0.0558	0.183	0.3897	0.269
bg_pop_percent_hispanic	0.5982	0.580	0.2731	0.232
bg_pop_percent_asian	0.3032	0.283	0.2068	0.271
bg_percent_prop_households_renter_occ	0.4889	0.245	0.2249	0.333
bg_percent_prop_households_owner_occ	0.5111	0.755	0.7751	0.667
bg_med_income	73257.5000	103971.000	121207.5000	107473.000
bg_med_age	37.9000	38.500	38.1500	38.400
bg_ed_percent_college_educated	0.3275	0.377	0.5905	0.528

MySanJose Mobile App

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	78.000	171.0000	125.000	56.000	58.000
linguistic_isolation_(percent_households)	0.045	0.0688	0.081	0.106	0.165
cellular_data_subscription_(percent_of_pop)	0.621	0.5978	0.588	0.583	0.557
broadband_subscription_(percent_of_pop)	0.923	0.9120	0.881	0.875	0.860
bg_pop_percent_white	0.351	0.3381	0.279	0.206	0.163
bg_pop_percent_hispanic	0.137	0.2071	0.270	0.306	0.356
bg_pop_percent_asian	0.316	0.2857	0.234	0.223	0.283
bg_percent_prop_households_renter_occ	0.202	0.2671	0.394	0.589	0.480
bg_percent_prop_households_owner_occ	0.798	0.7329	0.606	0.411	0.520
bg_med_income	131616.000	115250.0000	103971.000	96588.500	78631.000
bg_med_age	41.650	39.0000	36.200	35.700	35.900
bg_ed_percent_college_educated	0.601	0.5419	0.484	0.459	0.383

MySanJose Web Platform

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	25.000	75.000	142.0000	171.0000	93.000
linguistic_isolation_(percent_households)	0.110	0.110	0.0718	0.0667	0.068
cellular_data_subscription_(percent_of_pop)	0.596	0.577	0.6019	0.5978	0.580
broadband_subscription_(percent_of_pop)	0.868	0.879	0.8965	0.9186	0.915
bg_pop_percent_white	0.252	0.173	0.2920	0.3471	0.269
bg_pop_percent_hispanic	0.266	0.348	0.2478	0.1977	0.164
bg_pop_percent_asian	0.262	0.240	0.2396	0.2925	0.329
bg_percent_prop_households_renter_occ	0.604	0.470	0.3412	0.2447	0.243
bg_percent_prop_households_owner_occ	0.396	0.530	0.6588	0.7553	0.757
bg_med_income	68418.000	98177.000	111038.0000	122188.0000	114032.500
bg_med_age	36.500	36.000	36.5500	40.4000	40.100
bg_ed_percent_college_educated	0.423	0.468	0.5318	0.5518	0.560

Pothole

All MySanJose Platforms

var	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	2.000	7.0000	11.000	512.0000
linguistic_isolation_(percent_households)	0.162	0.0904	0.239	0.0818
cellular_data_subscription_(percent_of_pop)	0.564	0.6037	0.505	0.5877
broadband_subscription_(percent_of_pop)	0.846	0.9022	0.811	0.8940
bg_pop_percent_white	0.199	0.1968	0.139	0.2593
bg_pop_percent_hispanic	0.493	0.1165	0.486	0.2459
bg_pop_percent_asian	0.240	0.1712	0.236	0.2637
bg_percent_prop_households_renter_occ	0.371	0.3529	0.608	0.3185
bg_percent_prop_households_owner_occ	0.629	0.6471	0.392	0.6815
bg_med_income	89444.000	158000.0000	93373.000	106454.5000
bg_med_age	37.400	40.3000	29.400	38.4000
bg_ed_percent_college_educated	0.360	0.6663	0.317	0.5252

MySanJose Mobile App

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	22.0000	89.000	124.0000	95.000	116.000
linguistic_isolation_(percent_households)	0.0814	0.081	0.0786	0.121	0.104
cellular_data_subscription_(percent_of_pop)	0.5786	0.597	0.5884	0.584	0.562
broadband_subscription_(percent_of_pop)	0.8792	0.911	0.8941	0.872	0.882
bg_pop_percent_white	0.2315	0.269	0.2460	0.275	0.223
bg_pop_percent_hispanic	0.2730	0.250	0.2904	0.277	0.277
bg_pop_percent_asian	0.2972	0.245	0.2633	0.231	0.246
bg_percent_prop_households_renter_occ	0.3156	0.341	0.2904	0.369	0.325
bg_percent_prop_households_owner_occ	0.6844	0.659	0.7096	0.631	0.675
bg_med_income	110779.5000	106750.000	104384.0000	97841.000	106392.000
bg_med_age	38.8500	36.900	38.4000	36.400	38.200
bg_ed_percent_college_educated	0.4522	0.551	0.5089	0.458	0.514

MySanJose Web Platform

var	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
total_census_blocks	47.000	108.0000	113.0000	86.0000	88.0000
linguistic_isolation_(percent_households)	0.143	0.0865	0.0831	0.0662	0.0738
cellular_data_subscription_(percent_of_pop)	0.555	0.5861	0.5910	0.5976	0.6069
broadband_subscription_(percent_of_pop)	0.866	0.8723	0.8941	0.9171	0.9194
bg_pop_percent_white	0.154	0.2580	0.2534	0.2928	0.2811
bg_pop_percent_hispanic	0.406	0.3227	0.2748	0.2051	0.2135
bg_pop_percent_asian	0.213	0.2194	0.2794	0.2507	0.3197
bg_percent_prop_households_renter_occ	0.429	0.3620	0.2992	0.3213	0.2802
bg_percent_prop_households_owner_occ	0.571	0.6380	0.7008	0.6787	0.7198
bg_med_income	87434.000	95750.0000	105053.0000	114391.5000	121321.0000
bg_med_age	36.500	36.2000	38.5000	37.3000	40.1000
bg_ed_percent_college_educated	0.393	0.4555	0.5226	0.5910	0.5496

Duplicates Analysis

```
data_requests %>%
    mutate(
        date = date(date_created) %>% as.character(),
        latitude = latitude %>% round(digits = 3),
        longitude = longitude %>% round(digits = 3)
    ) %>%
    count(request_creation_year, request_creation_month, service_requested, latitude, longitude, census
    mutate(latitude = as.character(latitude), longitude = as.character(longitude))
```

```
## # A tibble: 93,519 x 7
##    request_creatio~ request_creatio~ service_request~ latitude longitude
##               <dbl> <ord>            <chr>            <chr>    <chr>
## 1             2019 Jun              Abandoned Vehic~ 37.306   -121.877
## 2             2019 Feb              Abandoned Vehic~ 37.303   -121.844
## 3             2018 Aug              Abandoned Vehic~ 37.303   -121.874
## 4             2018 Sep              Graffiti         37.324   -121.903
## 5             2019 May              Graffiti         37.324   -121.903
## 6             2019 Apr              Graffiti         37.324   -121.903
## 7             2018 Aug              Abandoned Vehic~ 37.391   -121.863
## 8             2019 Feb              Abandoned Vehic~ 37.307   -121.878
## 9             2018 Dec              Abandoned Vehic~ 37.303   -121.844
## 10            2019 May              Abandoned Vehic~ 37.345   -121.877
## # ... with 93,509 more rows, and 2 more variables: census_block_id <chr>,
## #   n <int>
```

```
data_requests %>%
    mutate(
        date = date(date_created) %>% as.character(),
        latitude = as.character(latitude),
        longitude = as.character(longitude)
    ) %>%
    filter(
        date == "2019-02-27",
        service_requested == "Abandoned Vehicle",
        latitude == "37.3074934",
        longitude == "-121.8783636",
        census_block_id == "060855031211"
    )
```

```
## # A tibble: 22 x 12
##    mysanjose_refer~ service_request~ incident_source latitude longitude
##    <chr>            <chr>            <chr>           <chr>    <chr>
## 1 190227-000289    Abandoned Vehic~ Web             37.3074~ -121.878~
## 2 190227-000294    Abandoned Vehic~ Web             37.3074~ -121.878~
## 3 190227-000296    Abandoned Vehic~ Web             37.3074~ -121.878~
## 4 190227-000298    Abandoned Vehic~ Web             37.3074~ -121.878~
## 5 190227-000299    Abandoned Vehic~ Web             37.3074~ -121.878~
## 6 190227-000301    Abandoned Vehic~ Web             37.3074~ -121.878~
## 7 190227-000302    Abandoned Vehic~ Web             37.3074~ -121.878~
## 8 190227-000304    Abandoned Vehic~ Web             37.3074~ -121.878~
```

```
##  9 190227-000305    Abandoned Vehic~ Web             37.3074~ -121.878~
## 10 190227-000307    Abandoned Vehic~ Web             37.3074~ -121.878~
## # ... with 12 more rows, and 7 more variables: date_created <dttm>,
## #   request_creation_year <dbl>, request_creation_month <ord>,
## #   request_creation_weekday <ord>, san_jose_council_district <chr>,
## #   census_block_id <chr>, date <chr>
```

```r
data_requests %>%
    mutate(
        date = date(date_created) %>% as.character(),
        latitude = latitude %>% round(digits = 3),
        longitude = longitude %>% round(digits = 3)
    ) %>%
    distinct(service_requested, latitude, longitude, request_creation_year,request_creation_month, censu
```

```
## # A tibble: 93,519 x 6
##    service_request~ latitude longitude request_creatio~ request_creatio~
##    <chr>               <dbl>     <dbl>            <dbl> <ord>
##  1 Abandoned Vehic~     37.4     -122.             2018 Jul
##  2 Illegal Dumping      37.4     -122.             2018 Jul
##  3 Abandoned Vehic~     37.3     -122.             2018 Jul
##  4 Abandoned Vehic~     37.4     -122.             2018 Jul
##  5 Illegal Dumping      37.2     -122.             2018 Jul
##  6 Abandoned Vehic~     37.3     -122.             2018 Jul
##  7 Streetlight Out~     37.2     -122.             2018 Jul
##  8 Streetlight Out~     37.2     -122.             2018 Jul
##  9 Illegal Dumping      37.3     -122.             2018 Jul
## 10 Streetlight Out~     37.4     -122.             2018 Jul
## # ... with 93,509 more rows, and 1 more variable: census_block_id <chr>
```