|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Properties Predicted to be Positive for Violations** | | **Properties Predicted to be Negative for Violations** | |  |
| **Variable** | **Mean** | **Standard Deviation** | **Mean** | **Standard Deviation** | **p-value** |
| Building Permits - Count | 0.54 | 0.97 | 0.37 | 0.89 | <0.001 |
| Calls for Service - Count | 0.22 | 0.61 | 0.31 | 0.84 | <0.001 |
| Fire Incidents - Count | 3.3 | 11.7 | 7.2 | 16.7 | <0.001 |
| Foreclosure Sales - Count | 3 599 | 40 793 | 1 832 | 27 802 | 0.52 |
| Vacant Foreclosed Properties | 0.09 | 0.46 | 0.08 | 0.48 | 0.76 |
| Property Sales - Count | 1.0 | 0.90 | 1.1 | 1.0 | <0.001 |
| Property Sales - Price | 390 909 | 1 097 920 | 373 033 | 1 823 659 | 0.69 |
| Municipal Violations - Count | 8.9 | 11.4 | 3.5 | 8.5 | <0.001 |
| Municipal Violations - Fine | 881 | 2 201 | 304 | 1 766 | <0.001 |
| Police Incidents - Count | 3.2 | 8.5 | 4.2 | 8.0 | <0.001 |
| Rat Baiting - Count | 0.84 | 3.0 | 0.73 | 3.2 | 0.22 |
| Tax Deed\* | 0.07 | 0.25 | 0.06 | 0.24 | 0.27 |
| Total Assessed Value | 462 545 | 1 151 190 | 353 369 | 1 136 502 | 0.01 |
| Bedrooms | 5.7 | 6.0 | 3.4 | 7.5 | <0.001 |
| Building Size | 5 355 | 9 717 | 3 053 | 8 590 | <0.001 |
| Full Bathrooms | 2.6 | 4.7 | 1.9 | 5.9 | <0.001 |
| Land Size | 0.14 | 0.32 | 0.83 | 2.0 | <0.001 |
| Year Built | 1 912 | 25 | 1 935 | 41 | <0.001 |
| Police Incidents After 2015 | 1.4 | 3.8 | 1.6 | 3.2 | 0.65 |
| Building Size-Land Size Ratio | 1.5 | 0.86 | 0.62 | 0.90 | <0.001 |
| Target Area (Y/N) | 0.40 | 0.49 | 0.13 | 0.34 | <0.001 |
| Opportunity Zone (Y/N) | 0.26 | 0.44 | 0.10 | 0.29 | <0.001 |
| Owner Occupied (Y/N) | 0.53 | 0.50 | 0.48 | 0.50 | 0.003 |
| Most Common Residential Building Type | 3-Family Residential | - | Condo NL MDL-05 | - | - |
| Most Common Fuel Type | Gas | - | Gas | - | - |

**Supplemental Table 4: Differences in Properties Predicted to be Positive or Negative for Each Outcome of Interest**

1. **Any Violation**
2. **High Risk**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Properties Predicted to be Positive for Violations** | | **Properties Predicted to be Negative for Violations** | |  |
| **Variable** | **Mean** | **Standard Deviation** | **Mean** | **Standard Deviation** | **p-value** |
| Building Permits - Count | 0.56 | 1.07 | 0.40 | 0.88 | <0.001 |
| Calls for Service – Count | 0.24 | 0.62 | 0.29 | 0.81 | 0.04 |
| Fire Incidents - Count | 3.9 | 14.2 | 6.5 | 15.7 | <0.001 |
| Foreclosure Sales - Count | 7 140 | 59 110 | 1 278 | 21 874 | <0.001 |
| Vacant Foreclosed Properties | 0.11 | 0.55 | 0.08 | 0.45 | 0.04 |
| Property Sales - Count | 1.1 | 0.95 | 1.1 | 0.98 | 0.56 |
| Property Sales - Price | 476 716 | 1 372 610 | 356 062 | 1 693 016 | 0.03 |
| Municipal Violations - Count | 11.1 | 15.5 | 3.8 | 7.3 | <0.001 |
| Municipal Violations - Fine | 1 224 | 3 563 | 308 | 1 229 | <0.001 |
| Police Incidents - Count | 3.8 | 10.6 | 3.9 | 7.5 | 0.61 |
| Rat Baiting - Count | 0.91 | 3.4 | 0.73 | 3.1 | 0.09 |
| Tax Deed | 0.08 | 0.28 | 0.06 | 0.24 | 0.004 |
| Total Assessed Value | 511 081 | 1 493 580 | 357 901 | 1 043 691 | <0.001 |
| Bedrooms | 5.8 | 4.4 | 3.7 | 7.6 | <0.001 |
| Building Size | 5 917 | 11 643 | 3 253 | 8 211 | <0.001 |
| Full Bathrooms | 2.5 | 2.2 | 2.1 | 6.1 | 0.01 |
| Land Size | 0.14 | 0.34 | 0.73 | 1.9 | <0.001 |
| Year Built | 1913 | 24 | 1932 | 40 | <0.001 |
| Police Incidents After 2015 | 1.7 | 4.7 | 1.5 | 3.1 | 0.14 |
| Building Size-Land Size Ratio | 1.7 | 0.90 | 0.71 | 0.91 | <0.001 |
| Target Area (Y/N) | 0.52 | 0.50 | 0.14 | 0.35 | < 0.001 |
| Opportunity Zone (Y/N) | 0.31 | 0.46 | 0.11 | 0.31 | < 0.001 |
| Owner Occupied (Y/N) | 0.46 | 0.50 | 0.51 | 0.50 | 0.003 |
| Most Common Residential Building Type | 3- Family Residential | - | Condo NL MDL-05 | - | - |
| Most Common Fuel Type | Gas | - | Gas | - | - |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Properties Predicted to be Positive for Violations** | | **Properties Predicted to be Negative for Violations** | |  |
| **Variable** | **Mean** | **Standard Deviation** | **Mean** | **Standard Deviation** | **p-value** |
| Building Permits - Count | 0.42 | 0.83 | 0.43 | 0.92 | 0.91 |
| Calls for Service – Count | 0.28 | 0.57 | 0.28 | 0.78 | 0.96 |
| Fire Incidents - Count | 3.5 | 10.7 | 6.1 | 15.5 | 0.06 |
| Foreclosure Sales - Count | 22 016 | 111 425 | 1 922 | 27 909 | <0.001 |
| Vacant Foreclosed Properties | 0.06 | 0.44 | 0.08 | 0.47 | 0.56 |
| Property Sales - Count | 1.2 | 1.1 | 1.1 | 1.0 | 0.32 |
| Property Sales - Price | 815 783 | 1 440 469 | 368 567 | 1 641 898 | 0.002 |
| Municipal Violations - Count | 15.5 | 18.2 | 5.0 | 9.4 | <0.001 |
| Municipal Violations - Fine | 2 101 | 3 993 | 442 | 1 837 | <0.001 |
| Police Incidents - Count | 3.6 | 4.3 | 3.9 | 8.2 | 0.69 |
| Rat Baiting - Count | 0.66 | 2.2 | 0.76 | 3.2 | 0.70 |
| Tax Deed | 0.14 | 0.34 | 0.06 | 0.24 | 0.001 |
| Total Assessed Value | 537 596 | 472 638 | 382 881 | 1 152 359 | 0.12 |
| Bedrooms | 7.1 | 4.7 | 4.0 | 7.2 | <0.001 |
| Building Size | 6 555 | 7 170 | 3 684 | 9 033 | <0.001 |
| Full Bathrooms | 3.1 | 2.2 | 2.1 | 5.6 | 0.05 |
| Land Size | 0.07 | 0.06 | 0.64 | 1.7 | <0.001 |
| Year Built | 1912.5 | 14.8 | 1928.9 | 38.7 | <0.001 |
| Police Incidents After 2015 | 1.7 | 2.4 | 1.5 | 3.5 | 0.49 |
| Building Size-Land Size Ratio | 2.2 | 0.83 | 0.86 | 0.96 | <0.001 |
| Target Area (Y/N) | 0.79 | 0.41 | 0.20 | 0.40 | < 0.001 |
| Opportunity Zone (Y/N) | 0.66 | 0.48 | 0.13 | 0.34 | < 0.001 |
| Owner Occupied (Y/N) | 0.35 | 0.48 | 0.50 | 0.50 | 0.001 |
| Most Common Residential Building Type | 3-Family Residential | - | Condo NL MDL-05 | - | - |
| Most Common Fuel Type | Gas | - | Gas | - | - |

1. **Overcrowding**