

Causes for Eviction Notices in Assorted Neighborhoods of San Francisco

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Abstract

Renter eviction leads to the displacement of families and an influx of people at the homeless shelters.

1 Data Collection

We downloaded data on eviction statistics from SF OpenData and counted each of the reasons for eviction with a program we designed and created using C++. For some of these expected counts, the data was less than five so we were unable to incorporate it in our testing. After separating the data into eleven districts based off location, we performed χ^2 Data Tests for Homogeneity using the valid counts.

2 Data Context

here we explain what the various eviction reasons are, and show maps of San Francisco containing all the neighborhoods split up into regions

Categories:

Tenant Action	nonpayment, breach, nuisance, illegal, unapproved subtenant, latepay
Landlord Action	failsignrenew, owner move in, capital improvement, substantial rehab, roommate same unit
Development	demolition, ellis act withdrawal, condo conversion
Just Cause	nonpayment, latepayment, breach of lease, ownermovein, capitalimprovement, ellisactwithdrawal, nuisance, illegal, demolition

can also talk about the legal issues with the landlord tenant relationship

3 Analysis

3.1 Summary Statistics

This table and section is for testing.

4 Inferential Procedures

4.1 District 1

Neighborhoods | Inner Richmond, Lone Mountain, Outer Richmond

Reason	χ^2	df	p-Value
Tenant Action	15.1570	10	0.1264
Landlord Action	10.4669	6	0.1062
Development	0.9854	2	0.6110
Just Cause Removal	39.9610	16	0.0008

For District 1, there was homogeneity shown in all areas besides "Just Cause Removal". This may be because of Lone Mountain's low nonpay component of 0.4827 or Inner Richmond's high ownermovein component of 4.1747.

4.2 District 2

Neighborhoods | Seacliff, Presidio Heights, Marina, Russian Hill, Pacific Heights

Reason	χ^2	df	p-Value
Tenant Action	45.4120	15	0.0001
Landlord Action	11.8037	6	0.0665
Development	0.3398	6	0.9993
Just Cause Removal	127.1146	24	0.0000

For District 2, homogeneity was only shown in "Just Cause Removal" and "Tenant Action." Pacific Heights' high nonpayment component of 11.6593 likely impacts both of these sections.

4.3 District 3

Neighborhoods | North Beach, Nob Hill

Reason	χ^2	df	p-Value
Tenant Action	8.0298	5	0.1955
Landlord Action	2.2699	3	0.7037
Development	0.0000	1	1.0000
Just Cause Removal	19.6549	8	0.0117

For District 4, Homogeneity was shown in all categories but "Just Cause Removal." This may be because of North Beach's almost double nonpayment and ellisactwithdrawal compared to Nob Hill's components.

4.4 District 5

Neighborhoods | Haight Ashbury, Hayes Valley, Western Addition

Reason	χ^2	df	p-Value
Tenant Action	32.491	10	0.0003
Landlord Action	10.671	6	0.0991
Development	0.9271	4	0.9206
Just Cause Removal	111.3054	16	0.0000

Homogeneity is shown in all categories besides "Tenant Action" and "Just Cause Removal." In regards to "Tenant Action," Hayes Valley high nonpayment component of 6.8882 and Western Addition's high nuisance component of 6.3202 likely contribute to the lack of homogeneity, and in "Just Cause Removal," Western Addition's extremely low capital improvement component of 0.1674 does not correlate with the next lowest in Western Addison of 14.6997.

4.5 District 6

Neighborhoods | Tenderloin, South of Market, Financial District/South Beach, Mission Bay

Reason	χ^2	df	p-Value
Tenant Action	46.9304	4	0.0000
Landlord Action	0.0000	-2	1.0000
Development	0.0000	-2	1.0000
Just Cause Removal	63.8182	4	0.0000

Homogeneity is shown in the categories of "Tenant Action" and "Just Cause Removal." This may be because of Financial District/South Beach's high nuisance component of 8.1637 and its low nonpayment component of 6.3031.

4.6 District 8

Neighborhoods | Noe Valley, Glen Park, Twin Peaks

Reason	χ^2	df	p-Value
Tenant Action	10.5992	2	0.0050
Landlord Action	1.1193	0	1.0000
Development	1.1314	0	1.0000
Just Cause Removal	37.6297	6	0.0000

Homogeneity is shown in the categories of "Tenant Action" and "Just Cause Removal." The reasons for this in "Tenant Action" may be Glen Park's low nuisance component of 0.2598, and in "Just Cause Removal" it may be because of Glen Park's high breach value of 5.9563 and low ellisactwithdrawl of 0.0003.

4.7 District 9

Neighborhoods | Portola, Bernal Heights/ Bernal North/ Bernal South, Mission/ Inner Mission

Reason	χ^2	df	p-Values
Tenant Action	12.4686	6	0.0523
Landlord Action	1.3052	2	0.5207
Development	19.1170	0	1.0000
Just Cause Removal	133.8546	12	0.0000

Homogeneity is shown in all areas besides "Just Cause Removal." This is most likely because Portola has an exremely high ellisactwithdrawl value of 20.7812. The next highest is only 4.3994 in Mission.

4.8 District 10

Neighborhoods	Visitacion valley/Bayview Heights, Bayview Valley, Huner's Point, Portero Hill			
Reason	χ^2	df	p-Value	
Tenant Action	3.8906	4	0.4210	
Landlord Action	1.5766	1	0.3173	
Development	0.0000	-1	1.0000	
Just Cause Removal	8.6997	5	0.1640	

District 10 has evidence of homogeneity. Each of the reason's p-Value is above 0.05.

4.9 District 11

Neighborhoods	Oceanview/Merced/Ingleside, Outer Mission, Excelsior			
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Reason	χ^2	df	p-Value
Tenant Action	23.1291	8	0.0032
Landlord Action	2.2277	2	0.3283
Development	3.8359	2	0.1469
Just Cause Removal	30.6304	14	0.0062

Only "Tenant Action" and "Just Cause Removal" do not show evidence of homogeneity in District 11. For "Tenant Action," this may be because of Outer Mission's high breach component of 5.7766, and in "Just Cause Removal" it could be because of the Oceanview/Merced/Ingleside's nuisance component of 0.0220.

5 Conclusion

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A Source code

```
1 #include <iostream>
2
3 int main()
4 {
5     std::cout < S"dF" << SDF"";endl;
6 }
```

B Data source