

Vacant Property Strategy

Analysis of Service Request Data

City of Ottawa

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Emergency and Protective Services
Public Policy Development Service
City of Ottawa

Executive Summary

This paper examines municipal service request data related to 216 vacant properties (buildings and lands) on the City of Ottawa's Vacant Building List as of October 2021.

Service request data was analysed over four intervals:

- The five-year period prior to a Notice to board up being issued under the Board Up By-law (No. 2010-211) (89 vacant properties)
- The duration of each board up (89 vacant properties)
- The period since a demolition permit was issued (69 vacant properties)
- The ten-year period from 2012 to 2021 inclusive, for each vacant property, to provide insight into the specific service history at individual addresses.

Analysis of service request data during these periods indicates that vacant properties tend to cause increased rates of community nuisance and public health and safety issues, resulting in increased demand for City services. When compared to occupied properties, vacant properties were more than seven times as likely to generate demand for non-emergency municipal services, such as By-law and Regulatory Services, Building Code Services, Public Works, Ottawa Public Health and others. These properties were also 1.5 times as likely to generate demand for Ottawa Fire Services and Ottawa Paramedic Services.

The most significant increases in service requests occur for By-law and Regulatory Services and the Needle Recovery program. These services were approximately 14 times as likely to be requested at vacant properties compared to occupied properties.

Issues with vacant properties are most frequent in urban areas, accounting for 75 percent of the total service requests. Issues tend to be less frequent in suburban and rural areas. A table of service requests by ward is included on page 7.

Staff have noted limitations on available data and analysis in the Methodology section on page 5 and have further considered options to address these issues during the review of the Vacant Building Strategy.

The available service request data was used to review the existing standards for vacant properties established in regulation, including the examination of the administration of vacant properties and applied resources, in order to identify opportunities to further reduce the negative consequences of vacancy within the surrounding community.

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Introduction

This document examines the community impacts of vacant buildings and lands in the City of Ottawa according to municipal service request records.

This analysis has been conducted in support of the review of the City's Vacant Building Strategy, which was approved by Council in 2013. As part of the [2019-2022 By-law Review Workplan](#), Council directed staff to review this strategy and related by-laws, including a review of property standards, property maintenance, and other regulations as they apply to vacant buildings, as well as a review of vacant building strategies in other jurisdictions to attempt to reduce the amount of time a building actually remains vacant. Staff further directed staff to consider pest control for vacant buildings.

In support of this review, staff have conducted a comprehensive review of service requests for each of the 216 vacant properties on the current Vacant Building List maintained by By-law and Regulatory Services, as of October 2021. Staff note that a service request means that municipal resources have been required to investigate and resolve an issue. It does not necessarily mean that a violation has occurred.

Methodology

Vacant properties are identified by By-law and Regulatory Services as a result of community complaints or reports from other City departments. In each case, By-law and Regulatory Services has inspected the property to verify vacancy before adding the property to the Vacant Building List. The Public Policy Development Service has used the Vacant Building List, as of October 2021, to assess community and service impacts associated with these properties.

Data Sources

Multiple datasets from the municipal MAP database were used for this analysis:

- Associated Requests – Service requests for all departments
- Associated Permits – All City-issued permits and applications
- Associated Orders – Orders to comply with legislative requirements
- Associated Heritage – Heritage classifications
- Associated Development – Applications and approvals for zoning amendments or exemptions, site plan control, demolition control and construction

Data selection

Relevant records were identified according to both the Municipal Address and Property Identification Number (PIN) fields. This enabled staff to capture all service requests for properties that have changed address, were joined to or severed from other properties, or had subordinate addresses. The relevant records were then filtered according to the classification of service requests to remove records for unrelated City services. For

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example, service requests regarding on site parking were included but on-street parking service requests were not included.

Analysis

Staff analysed the previous ten years of service requests for all 216 vacant properties, from 19 October 2012 to 19 October 2021. This served to identify the number and nature of service requests occurring at these addresses.

However, for most vacant properties the date that vacancy began is unknown. This limits the ability to identify and measure service impacts specific to vacancy. To address this limitation, staff used data from board up orders and demolition permits to establish a period where the property is confirmed to be vacant. Staff analysed service request data for the 81 boarded up for the five years prior to board up as well the service requests that occurred during a period of board up. The date the board up order was issued was used as the starting date and the ending date was based on the issuance of a demolition or construction permit was issued. For properties that were currently boarded up with no demolition or construction permit, 19 October 2021 was the ending date.

Staff conducted a quality assurance of the service request data. In some cases, records were reclassified to apply consistent nomenclature. Staff then established an “Incident Rate” metric to assess service demand according to the number of service requests per property per year. This further enabled comparative analysis against the incident rate for services requests among 317,651 other municipal addresses.

Additional service data related to emergency services was provided by Ottawa Fire Services and Ottawa Paramedic Services.

Reliability and limitations

The following factors have an impact on the accuracy of this data:

- This data represents service requests that were generated by complaints or proactively by City staff. While the data accurately reflects demand on City services, it does not reflect the outcome of the service request, whether the complaint was founded or unfounded, or the full measure of community impacts related to vacant properties.
- Precise data for vacancy periods is not available. The City does not have records to indicate when each property became vacant, except where catastrophic events are involved. Many properties can sit vacant for some time before they are reported and inspected. As such, the analysis for pre-board up and board-up data should be considered approximate.

Geography

As of October 2021, there were 216 vacant properties recorded on the City's Vacant Building List. Of these, approximately 65 percent are in 5 urban wards, 27 percent are in suburban wards and 7 percent are in rural wards.

Table 1 – Vacant properties by ward, as of 19 Oct 2021

Ward	Vacant Properties
Rideau-Vanier	51
Kitchissippi	38
Somerset	29
Rideau Rockcliffe	13
Knoxdale-Merivale	12
Capital	10
Innes	8
Bay	7
Stittsville	7
Alta Vista	6
College	5
Osgoode	5
River	5
West Carleton-March	5
Cumberland	3
Kanata North	3
Rideau Goulbourn	3
Gloucester-South Nepean	2
Gloucester-Southgate	2
Orléans	2
Barrhaven	0
Beacon Hill-Cyrville	0
Kanata South	0

Vacant properties with boarded up buildings

There are 81 properties on the vacant building list that have been subject to an order to board up a building. Staff examined the service requests for these properties during the period of board up to assess the impacts of vacancy. Staff further assessed the service request history for the five-year period prior to a board up order and the service history following demolition. Overall service demand is assessed according to the incident rate, the average number of service requests received per property in one year.

Table 2 - Boarded up buildings, by Ward

Ward	Board Ups	Service Requests	Average Days of Board Up	Incident Rate
Rideau-Vanier	23	999	1583	10.02
Somerset	15	326	1339	5.93
Kitchissippi	14	218	886	6.42
Innes	4	39	1251	2.84
Rideau-Rockcliffe	4	26	697	3.4
College	3	27	498	6.6
Capital	3	111	2224	6.07
Stittsville	3	56	1532	4.45
Gloucester Southgate	2	45	2886	2.85
River	2	6	132	8.26
West Carleton-March	2	13	770	3.08
Alta Vista	1	67	3695	6.62
Cumberland	1	6	1148	1.9
Kanata North	1	3	277	3.95
Knoxdale-Merivale	1	10	795	4.59
Osgoode	1	6	1862	1.18
Rideau-Goulbourn	1	13	1585	3

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Service demand prior to board up

Staff examined a five-year history of service requests prior the order to board up and identified 1,603 relevant service requests.

- By-law and Regulatory Services was responsible for addressing 75 percent of these requests. The five most common issues were:
 - Property Standards (36 percent)
 - Parking (33 percent)
 - Noise (8 percent)
 - Vandalism Graffiti (8 percent)
 - Animals (5 percent)
- Public Works was responsible for addressing 17 percent of these service requests. Of these, the 5 most common issues were:
 - Solid Waste Collection (35 percent)
 - Roads Maintenance (33 percent)
 - Traffic (11 percent)
 - Graffiti Removal (10 percent)
 - Parking (5 percent)

Service demand during board-up

Staff also reviewed service request history of buildings during periods of board up and identified 1,896 service requests. The average period of board up at the time of data collection was 3.43 years.

Overall demand for City services increases by 72 percent during periods of board up, including:

- By-law and Regulatory Services demand increases 89 percent
- Public Works and Environmental Services demand increases 37 percent
- Building Code Services demand increases 27 percent
- Other Services demand increases 15 percent

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Nature of Issues

By-law and Regulatory Services was responsible for addressing 78 percent of service requests occurring during the board up period. Of these, the 5 most common issues were:

- Property Standards (68 percent)
 - Parking (13 percent)
 - Vandalism Graffiti (11 percent)
 - Noise (4 percent)
 - Zoning Enforcement (1 percent)
- Public Works was responsible for addressing 17 percent of these service requests. Of these, the 5 most common issues were:
 - Solid Waste Collection (49 percent)
 - Roads Maintenance (25 percent)
 - Graffiti Removal (19 percent)
 - Traffic Operations (2 percent)
 - Traffic Management (2 percent)

Service demand post demolition

Staff have identified 311 service requests for 62 addresses following the issuance of a demolition permit. The average time for the post demolition period was 2.2 years.

- By-law and Regulatory Services was responsible for addressing 85 percent of these requests. Of these, the 5 most common issues were:
 - Property Standards (71 percent)
 - Vandalism Graffiti (13 percent)
 - Noise (4 percent)
 - Care of Streets (3 percent)
 - Parking (2 percent)

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- Public Works was responsible for addressing six percent of these service requests. Of these, the 5 most common issues were:
 - Roads Maintenance (70 percent)
 - Graffiti Removal (11 percent)
 - Solid Waste Collection (11 percent)
 - Trees (7 percent)
- Other City departments received 28 service requests following issuance of a demolition permit, and these were for:
 - Building Code Services (54 percent)
 - Needle Recovery (46 percent)

Emergency Services

A review of service data from Ottawa Fire Services and Ottawa Paramedic Service shows that:

- Ottawa Fire Services responded to 47 incidents at 81 boarded up properties in 2019, including 27 emergency response calls.
- Ottawa Paramedic Services responded to an average of 25 calls annually at these same 81 boarded up buildings for the period of 2017 to 2020

Fleet Services

Service Request data shows that since 2010, there have been 10 incidents where the City has had to deploy heavy equipment to address structural collapses or provide emergency demolition at addresses on the Vacant Building List.

Rats and Vermin

Staff reviewed service request data to identify service requests where rats or other vermin were specifically noted and identified 100 unique service requests. This data shows that:

- One in four vacant properties have had service request for pests. (26 percent)
- There were 35 properties with one service request. (16 percent)
- There were 16 properties with two service requests . (7 percent)
- There were 10 properties with more than two service requests . (5 percent)

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There were 39 incidents of repeated service requests relating to rats or other vermin. Of these:

- There were nine reported incidents within six months of the previous service request.
- There were seven reported incidents between six months and one year apart
- The remaining 23 service requests occurred more than one year after the previous one.
- The average period between infestations was 1.9 years.
- The shortest period between service requests was 21 days and the longest was 5.9 years.

The data further showed that:

- Vacant buildings are 2.8 times more likely to have an infestation following board up.
- Vacant buildings are 12 times more likely to have an infestation than a vacant lot.

Analysis

City service request data shows that vacant properties tend to cause significant impact on surrounding neighbourhoods and City services:

- Properties with boarded up buildings tend to generate a higher number service requests each year:
 - The incident rate for emergency services (Ottawa Fire Services and Ottawa Paramedic Services) was 0.81 service requests per property per year, compared to 0.54 for occupied addresses. Staff note that the city-wide incident rate includes traffic accidents and other events not associated with a specific property. As such, the actual difference in risk between occupied properties and boarded up properties will be greater than the above comparison suggests.
 - The incident rate for By-law and Regulatory Services was 4.8 service requests per property per year at boarded up properties, compared to an average of 2.6 in the five years prior to board up. The city-wide incident rate for occupied properties (in 2019) was 0.18 service requests per property per year. This shows a clear elevation in service demand as a property becomes vacant and once it is boarded up.

- After a boarded up building is demolished, the incident rate for By-law and Regulatory Services decreases from 4.8 service requests per property per year to 1.9. While this shows that vacant lands tend to cause less nuisance than vacant buildings, they continue to cause more nuisance issues than occupied properties.
- Property Standards issues, such as building exteriors and unkempt yards, are the most frequently reported type of community nuisance, followed by illegal parking on the property.
- In 2019, the incident rate for needle recovery from vacant properties was 0.11 for vacant properties, compared to 0.008 for occupied properties. Data regarding the location of the needle on the property was not available so it is not known if the needles were recovered from inside a building, on the property, or on the adjacent right-of-way.
- The incident rate for Public Works service requests on vacant properties was 0.8 service requests per property per year during the five years prior to a boarding up. This increased to 1.1 during board up and 1.5 following demolition. The nature of service requests changes as well. Before and during board up, solid waste collection is the dominant issue. Post demolition, roads and traffic management are the dominant issues. This includes providing traffic barricades and utility connections for new construction. The incident rate for vandalism graffiti also decreases, from 0.2 during board up to 0.02 post demolition.

Conclusions

Available service request data suggests that once a property becomes vacant, it is more likely to generate community nuisance complaints and demands for City services. Properties with boarded up buildings on site experience the highest incident rate for City service requests, averaging 6.2 service requests per property per year. Of these, 4.8 were service requests for By-law and Regulatory Services. This compares to an average of 0.18 by-law service requests per property per year in occupied properties.

Limits of Data

The lack of precise dates for the commencement of vacancy and the completion of board up or demolition limits staff's ability to measure the impacts of vacancy with precision. This also limits the ability to conduct trend analysis and detailed modelling. Should this data become available in the future, it may be possible to model service demand based on stages of vacancy, property use (residential, commercial, institutional, etc.), location, built form, number of units and other key factors likely to influence the volume and nature of service requests during each phase of vacancy.

Pest Control

Pest control is a particular issue being considered in the Vacant Building Strategy Review. Service request data suggests an elevated risk of infestation, particularly at boarded up properties. However, available data does not indicate if the location of infestation is within the building or on the lot.

The data does indicate that enforcement of pest control is largely effective. Most properties only experience one reported infestation and there were only 9 incidents where re-infestation occurred within six months. The average period between reported re-infestations was 1.9 years. This suggests that efforts to prevent infestation will provide the greatest opportunity to improve performance on this issue.

Public Works

In addition to service demand for By-law and Regulatory Services, the data shows significant demand for Public Works. This includes planned work, such as road cuts, utility connections, and unplanned incidents that require traffic management and/or heavy equipment. However, an accurate assessment of the service impacts of vacancy was not possible with the data available.

Needle Recovery

In 2019, there were 36 service requests for needle recovery from 12 vacant properties. This represented 1.5 percent of the 2,559 service requests for needle recovery citywide. This shows that while service requests for needle recovery can occur more frequently at vacant properties, it is not a widespread problem.

By-law and Regulatory Services

Vacant properties generate significant service demand for By-law and Regulatory Services. This growth is primarily driven by property standards and property maintenance issues that arise when property owners neglect basic maintenance responsibilities. Increasing accountability for property owners is likely to provide the best opportunity for regulatory solutions to limit the community nuisance and public health and safety impacts occurring on vacant properties.

Non-regulatory programs and services may also serve to reduce these community impacts. Initiatives designed to maintain occupancy, provide for alternative uses, or accelerate redevelopment, may serve to prevent or limit the negative impacts caused by vacancy.

Analysis of service request data supports the need for enhanced regulation of vacant properties. Current practices under the 2013 Vacant Building Strategy are not sufficient for limiting the impact of these properties on City services and in the communities where they are present. Improved administration and appropriate resources will be required to support the enforcement of existing regulations or to implement any new regulations recommended under the Vacant Building Strategy Review.

Appendix A – Glossary of service request types

As noted in the Methodology section, staff did not include service request data for all types of requests, only those relevant to vacant buildings and lands. The following terms describe the nature of service requests included in this analysis.

Animals includes service requests related to the [Animal Care and Control By-law \(No. 2003-77\)](#), such as stray animals, animal feces, dog barking/cat disturbances, dog bites and wildlife.

Building Code Services includes service requests related to construction or demolition sites not being secure, work being conducted without a permit, unsafe conditions, or general information inquiries on construction or demolition sites.

Care of Streets / Care of Roads includes service requests related to roadway damage, dumping on roadways including material, snow, mud, or petroleum products, line of sight issues, and inquiries on general information related to the [Use and Care of Roads By-law \(No. 2003-498\)](#).

Graffiti Removal service requests are addressed by Public Works and Environmental Services. These are related specifically to the removal of vandalism graffiti by City staff. Enforcement of the [Graffiti Management By-law \(No.2008-01\)](#) is addressed under Vandalism Graffiti, as described below.

Needle Recovery / Needle Collections includes service requests related to discarded needles to be collected or recovered.

Noise includes service requests related to excessive noise, including car alarms, construction, delivery loading and unloading, garbage collection, street sweeper/HVAC, idling, machinery, power mowers and generators, shouting, or vehicle repair.

Parking includes service requests related to private parking and unauthorized parking. On-street parking violations were not included.

Property standards includes service requests related to board up, exterior and interior building concerns, dead dangerous trees, derelict vehicles, exterior debris and waste, long grass or weeds, insufficient heat, ice and snow build up, needles and syringes, pool fence, open excavation, pests, right of entry permit, shopping carts, swimming pool water, and general information requests related to the [Property Standards By-law \(No. 2013-416, as amended\)](#).

Roads Maintenance includes service requests related to blocked or broken catch basins, weeds in ditches, damaged or destroyed fences and walls, damaged road boulevards or easements, barricade pick up or installs and road cuts.

Solid Waste Collection includes service requests related to the [Solid Waste Management By-law \(No. 2012-370\)](#). These include goods and appliances dumped on property, large item pick ups, house not collected, mess left behind, bins out too early or too late, over bag limit, and unaccepted material placed in collections.

Traffic Management includes service requests related to contractor road cuts, encroachment complaints, traffic management concerns, and general traffic issues.

Traffic Operations includes service requests related to signs missing or damaged and general information inquiries.

Trees includes service requests for complaints of dead or dangerous trees or general information.

Vandalism Graffiti includes service requests related to the [Graffiti Management By-law \(No.2008-01\)](#) which includes complaints of vandalism, hate, and offensive graffiti on public and private property.

Zoning Enforcement includes service requests related to non-permitted use, parking in yard and oversized vehicles, site plan enforcements, location of accessory buildings, illegal use, and general information related to the [Zoning By-law \(No. 2008-250\)](#).