OFFICE OF INSPECTOR GENERAL
City of Chicago

REPORT OF THE OFFICE OF INSPECTOR GENERAL:

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DEPARTMENT OF BUILDINGS
COMPLAINT-BASED INSPECTIONS
AUDIT

APRIL 2018

OFFICE OF INSPECTOR GENERAL
City of Chicago

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April 10, 2018

To the Mayor, Members of the City Council, City Clerk, City Treasurer, and residents of the City of Chicago:

The City of Chicago Office of Inspector General (OIG) has completed an audit of the Department of Buildings's (DOB) complaint-based inspection operations. The objectives of the audit were to determine whether DOB meets required deadlines for responding to building complaints, whether the Department effectively prioritizes complaints, and whether the records of building code violations available to the public on the City's Data Portal and DOB's Building Violations web page are complete and accurate.

OIG concluded that DOB does not have effective strategies for prioritizing complaint-based inspections, which results in potential health and safety hazards going unaddressed, and that the City's websites do not provide the public with a property's complete violation history.

The audit revealed that DOB met its response deadline for only 36.5% of complaints; had a backlog of over 5,000 open complaints dating back to 2013, including a number that described serious threats to life and safety; and summarily closed more than 2,000 complaints without addressing even those describing plainly hazardous situations. Furthermore, DOB set complaint response deadlines that exceed the 21-day deadline prescribed by Municipal Code of Chicago (MCC), thereby undermining City Council's stated intent to prevent significant delays between the receipt of a complaint and the inspection of a hazardous property. Finally, the City's Data Portal does not provide a property's full violation history, and DOB's Building Violations web page misleadingly fails to indicate when a particular violation has been corrected subsequent to inspection. As a result, DOB supervisors are regularly required to depart from their principal duties and engage in the time-intensive task of researching a property's violation history in response to a public request.

OIG recommends that DOB immediately identify and address any open, overdue emergency complaints. To improve complaint response going forward, the Department should conduct a staffing analysis for all bureaus to determine how many inspectors and support staff are needed to manage each bureau's workload in an effective manner and to respond promptly to complaints. DOB management should develop guidance, and provide training to bureau supervisors, on the most efficient methods of identifying and processing complaints to ensure their prompt treatment. The Department should work with 311 to improve the information collected from complainants, as well as the Office of Budget and Management to obtain the technology necessary for all inspectors to enter complaint outcome and inspection information electronically from the field. To reach better decisions about operational performance, including

the determination of staffing levels appropriate to address the volume of complaints in each bureau, DOB should set policies standardizing the data entry process, and should work with 311 to obtain more useful performance reports.

Furthermore, DOB should revise its complaint response deadlines to ensure that none exceeds the 21-day deadline prescribed by the MCC. In the alternative, the Department should seek amendments to the MCC, provided that any changes heed the ordinance's original intent of preventing "lengthy delays" that might allow "further deterioration" of hazardous conditions, "endanger[ing] the health and safety of residents and neighbors."

Finally, DOB should improve the usefulness of publicly available data by clearly explaining on the Data Portal and Building Violations web pages what information is and is not available on those sites, and should work with the Department of Innovation Technology (DOIT) to provide more meaningful and complete information to the public.

DOB agreed with our audit recommendations and proposed several corrective actions to improve the way it addresses complaints from the public. Specifically, the Department stated that it addressed the open, overdue emergency complaints OIG identified and met with bureau supervisors to "refine protocols" related to how complaints are routed and prioritized. In addition, DOB management explained that it would take into account complaint volume and response time data when reviewing staff levels, and would "refine" reports on complaint data to ensure they meet the Department's operational needs. Finally, DOB committed to work with 311 to ensure that inspectors are able to close out complaint inspections in "real time" using mobile technology, and to work with DOIT to improve the user experience with publicly available building data. We encourage DOB to approach improvements to its complaint-based inspection operations holistically and programmatically, utilizing robust performance metrics to inform a comprehensive, rather than a piecemeal approach.

We thank DOB management and staff for their cooperation throughout this audit. We also thank DOIT for answering our questions related to data systems.

Respectfully,

Joseph M. Ferguson
Inspector General
City of Chicago

<div align="center">TABLE OF CONTENTS</div>

Acronyms

CSR	Customer Service Request System (311)
DOB	Department of Buildings
DOIT	Department of Innovation and Technology
DPD	Department of Planning and Development
MCC	City of Chicago Municipal Code
OBM	Office of Budget and Management
OIG	Office of Inspector General
PPA/SIP	Public Places of Assembly/Special Inspections Program
SR	Service Request
STF	Strategic Task Force

I.   EXECUTIVE SUMMARY

The Office of Inspector General (OIG) conducted an audit of the Department of Buildings's (DOB) complaint-based inspection operations. The objectives of the audit were to determine whether DOB meets required deadlines for responding to building complaints, whether the Department effectively prioritizes complaints, and whether the records of building code violations available to the public on the City's Data Portal and DOB's Building Violations web page are complete and accurate.

OIG concluded that DOB does not have effective strategies for prioritizing complaint-based inspections, which results in potential health and safety hazards going unaddressed, and that the City's websites do not provide the public with a property's complete violation history.

Finding 1: DOB met its response deadline for only 36.5% of complaints; had a backlog of over 5,000 open complaints dating back to 2013, including a number that described serious threats to life and safety; and summarily closed more than 2,000 complaints without addressing even those describing plainly hazardous situations.

OIG found that in the first five months of 2017, DOB met its response deadline for only 36.5% of completed complaints.[1] The Department sets response times for each complaint type, ranging from 3 days for a "No Heat" complaint to 90 days for a "Garage Demo Inspection" complaint. OIG found a wide range of performance among the 12 DOB bureaus that conduct complaint-based inspections—some bureaus responded to all complaints by the designated deadline, while others met the response deadline rarely, if at all. In addition to DOB's low overall on-time rate for completed complaints, OIG found that, as of June 13, 2017, the response deadlines had passed for 5,473 out of 9,419, or 58.1%, of DOB's open (i.e., not completed) complaints. This backlog of 5,473 overdue open complaints included some dating back to 2013, and included complaints describing such serious life and safety hazards as,

- water leaking down an elevator shaft onto electrical wires;
- homes without water;
- seniors without water;
- no hot water for a week at a daycare center;
- blocked exits and escape routes;
- an unfenced excavation site;
- loose, unsecured slats that pose a fall hazard on a 3rd floor walkway;
- bricks falling onto a sidewalk used by children walking to school;
- mouse, rat, mold, and bed bug infestations; and
- living spaces without carbon monoxide or smoke detectors.

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[1] DOB uses the term "completed" to describe a complaint that has been addressed in some way (e.g., an inspection was conducted, the complaint was transferred to another bureau, or DOB determined the complaint was not valid).

OIG also found that in April 2017 DOB had closed 2,075 overdue open New Construction complaints received between April 2010 and December 2015 without taking any action on them, although DOB management stated it reviewed some of the complaints before closing them. In the 311 Customer Service Request System (CSR), 63, or 3.0%, of these complaints were categorized as "emergencies" that could pose life and safety hazards, including complaints describing such conditions as,

- "Property is undergoing a full gut rehab without any proper permits";

- "No Plans or Permits – Roofing And Bricks Hanging Off Side Of Building";

- "No Plans or Permits – caller states that there are bricks that are about to fall – that the property is not secured – there is abestos [sic] siding blowing from the property"; and

- "metal wire and mortar onto pedestrican [sic] walkway. Other – debris falling on sidewalk near scaffolding – Daytime – 20 stories – Rehab."

OIG identified a number of reasons for DOB's large backlog of overdue complaints and low overall on-time complaint response rate. These reasons fall into three general categories: insufficient human and technological resources, poor prioritization, and lack of performance monitoring.

1. Insufficient Human and Technological Resources

Some bureau supervisors told OIG that they had neither enough inspectors to respond expeditiously to complaints nor enough clerical staff to transfer data promptly from paper inspection forms into the electronic database. Most bureaus rely on paper inspection forms because they lack the necessary technology to allow inspectors in the field to enter complaint inspection data remotely. Moreover, DOB management has not provided guidance to bureaus on how they should review complaints or assign complaint-based inspections. OIG found that bureaus have developed a variety of methods for handling complaints, but not all of these methods provide reasonable assurance that the highest priority complaints will be addressed promptly. For example, one supervisor explained to OIG that they print open complaints, place them in a stack on their desk, and instruct inspectors to pick up and process a complaint when they have time. Another supervisor explained that they review open complaints on a daily basis and undertake a triage process to prioritize them. Some supervisors said that 311 does not provide enough information to allow them to easily identify the most serious complaints.

2. Poor Prioritization

Not all DOB bureaus assign the highest priority to complaint-based inspections. In fact, management has asked the majority of bureaus to focus on permit inspections rather than complaint-based inspections due to high demand for building permits and because such permits generate revenue. While inspections related to building permits are an important part of City operations, complaint-based inspections play an important role in identifying and remedying threats to health and safety. Moreover, the majority of bureau supervisors told OIG that DOB management had not provided guidance on how they should review complaints or prioritize the assignment of complaint-based inspections.

3. Lack of Performance Monitoring

To the extent that DOB monitors each bureau's complaint-response performance, it relies on a flawed report. The "311 YTD" report contains data only for completed complaints; it omits important information about overdue open complaints, such as the 2,075 overdue open complaints DOB summarily closed in April 2017. Furthermore, the 311 YTD report does not include information on the outcome of a completed complaint, nor state how long it had been open. By relying primarily on this limited report, DOB management neglects to take into account performance data that would allow it to identify overdue open complaints describing serious life and safety hazards.

Finding 2: DOB set complaint response deadlines that do not comply with the Municipal Code of Chicago (MCC).

MCC § 13-8-060 requires the DOB Commissioner to "cause an investigation to be made of all complaints…no more than 21 days following receipt of any complaint." The 21-day requirement was established in 1981 to address "lengthy delays between the filing of complaints … and the actual City inspections," which resulted in "further deterioration of buildings and … conditions which may endanger the health and safety of residents."[2]

OIG reviewed the complaint response deadlines for each complaint type in the 311 YTD report and found that 6, or 33.3%, of the 18 deadlines exceeded the 21-day limit prescribed by the MCC, thereby placing the Department in violation of a section of the MCC intended to prevent lengthy delays in responding to dangerous conditions.

Finding 3: Information regarding building code violations on the City's Data Portal and DOB's web page did not provide users with a property's complete violation history or present data in a user-friendly manner.

DOB makes building code violation information available to the public through the Chicago Data Portal Building Violations dataset, as well as the DOB Building Violations web page (which DOB calls the "Warehouse"). OIG found that these public resources do not provide a complete or user-friendly history of building violations. The Warehouse, moreover, misinforms users by failing to show which violations have been corrected. Furthermore, neither source contains information related to the original 311 complaint, so it is impossible for the public to determine which complaints resulted in inspections, and whether those inspections yielded violations. Without clear and complete public data, DOB supervisors are regularly required to depart from their principal duties and engage in the time-intensive task of researching a property's violation history in response to a public request.

OIG recommends that DOB immediately identify and address any open, overdue emergency complaints. To improve complaint response going forward, the Department should conduct a staffing analysis to determine how many inspectors and support staff are needed for each bureau to manage its workload effectively and respond promptly to complaints. DOB management should develop guidance, and provide training to bureau supervisors, on the most efficient

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[2] Journal of the Proceedings of the City Council of Chicago, June 26, 1981, at 6426.

methods of prioritizing complaints to ensure they are addressed promptly and in the correct order consonant with public safety and program criteria that the DOB should develop. The Department should work with 311 to maximize the utility of the information collected from complainants, and with the Office of Budget and Management to obtain the technology necessary for all inspectors to enter complaint outcome and inspection information electronically from the field. In order to reach better decisions about operational performance, including setting staffing levels that are appropriate to address the volume of complaints in each bureau, DOB should set policies to standardize the data entry process and work with 311 to obtain more useful performance reports.

DOB should revise its complaint response deadlines to ensure that none exceeds the 21-day limit prescribed by the MCC. Alternatively, the Department should seek amendments to the MCC, provided that any changes preserve the original intent of the ordinance—namely, to prevent "lengthy delays" in complaint responses causing "further deterioration" of hazardous conditions "which may endanger the health and safety of residents and neighbors."

Finally, DOB should improve the usefulness of publicly available data by clearly explaining on the Data Portal and Building Violations web pages what information is and is not available on those sites, and should work with DOIT to provide more meaningful and complete information to the public.

DOB agreed with our audit recommendations and proposed several corrective actions to improve the way it addresses complaints from the public. Specifically, the Department stated that it addressed the open, overdue emergency complaints OIG identified and met with bureau supervisors to "refine protocols" related to how complaints are routed and prioritized. In addition, DOB management explained that it would take into account complaint volume and response time data when reviewing staff levels, and would "refine" reports on complaint data to ensure they meet the Department's operational needs. Finally, DOB committed to work with 311 to ensure that inspectors are able to close out complaint inspections in "real time" using mobile technology, and to work with DOIT to improve the user experience with publicly available building data.

The specific recommendations related to each finding, and DOB's response, are described in the "Audit Findings and Recommendations" section of this report.

II.   BACKGROUND

The DOB "Mission" web page states,

> The Department of Buildings supports the safety and quality of life for the residents and visitors of the City of Chicago through enforcement of the Chicago Building Code. The permitting and inspection process promotes high quality design standards as well as the conservation, rehabilitation and reuse of the City's existing buildings.[3]

MCC § 2-22-040 requires the DOB commissioner to, among other duties, "enforce the provisions of the building code," and "to establish a compliance procedure to determine whether violations have been corrected." To enforce the building code, DOB conducts five major types of inspections described in Figure 1.

Figure 1: Major Types of Inspections Conducted by DOB

Inspection Type	Description
Circuit Court/ Administrative Hearings	Follow-up inspections associated with the adjudication of building code violations.
Complaint-Based	Conducted pursuant to building-related complaints filed with 311 City Services or aldermanic offices. Cover a wide variety of issues, including lack of heat in winter, unstable porches, and lack of smoke detectors.
License	Associated with the issuance and renewal of business licenses. Depending on the type of business, DOB may inspect a business's property to ensure it conforms to MCC requirements regarding such elements as emergency exits, electrical wiring, and plumbing.
Periodic	Inspections of specific buildings (e.g., schools) or building components (e.g., elevators) that the MCC requires at regular intervals, often annually.[4]
Permit and Certificate of Occupancy	Conducted to determine whether permitted construction work conforms to the approved construction permit, including whether new multiple-dwelling buildings meet occupancy standards set by the Building Code.

Source: DOB web page and interviews with DOB staff.

Although this audit focuses on complaint-based inspections, we describe the other inspection types here because the 12 bureaus that conduct complaint-based inspections draw on the same resources to conduct the other types of inspections, as discussed in Finding 1.

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[3] City of Chicago, Department of Buildings, "Mission," accessed September 2, 2017, https://www.cityofchicago.org/city/en/depts/bldgs.html.

[4] In February 2017, at the request of DOB, City Council approved amendments to the MCC that reduce the periodic inspection requirement for certain buildings and building components, which may lead to an increase in DOB's reliance on complaint-based inspections to discover health and safety issues. For example, the revised language maintains annual inspection requirements for "theaters, churches, schools, public assembly units, public places of amusement and open air assembly units," but allows DOB or the Chicago Fire Department (CFD) to inspect certain residential and commercial buildings only "as often as deemed necessary" (MCC § 13-20-020). Buildings inspected by CFD or DOB in regards to a permit, periodic, code compliance, or certificate of occupancy in the prior 12 months are considered to have met these requirements.

A. The 12 DOB Bureaus that Conduct Complaint-Based Inspections

The following organizational chart provided by DOB illustrates the Department's various functions and bureaus. The 12 bureaus that conduct complaint-based inspections are outlined in black. DOB's Managing Deputy Commissioner supervises 2 of these 12 bureaus—Conservation/Code Enforcement and Vacant Property/Demolition—while a Deputy Commissioner supervises the remaining 10, known collectively as the "technical bureaus." In Figure 2, "PPA/SIP" stands for Public Places of Assembly/Special Inspections Program.

Figure 2: DOB Organizational Chart
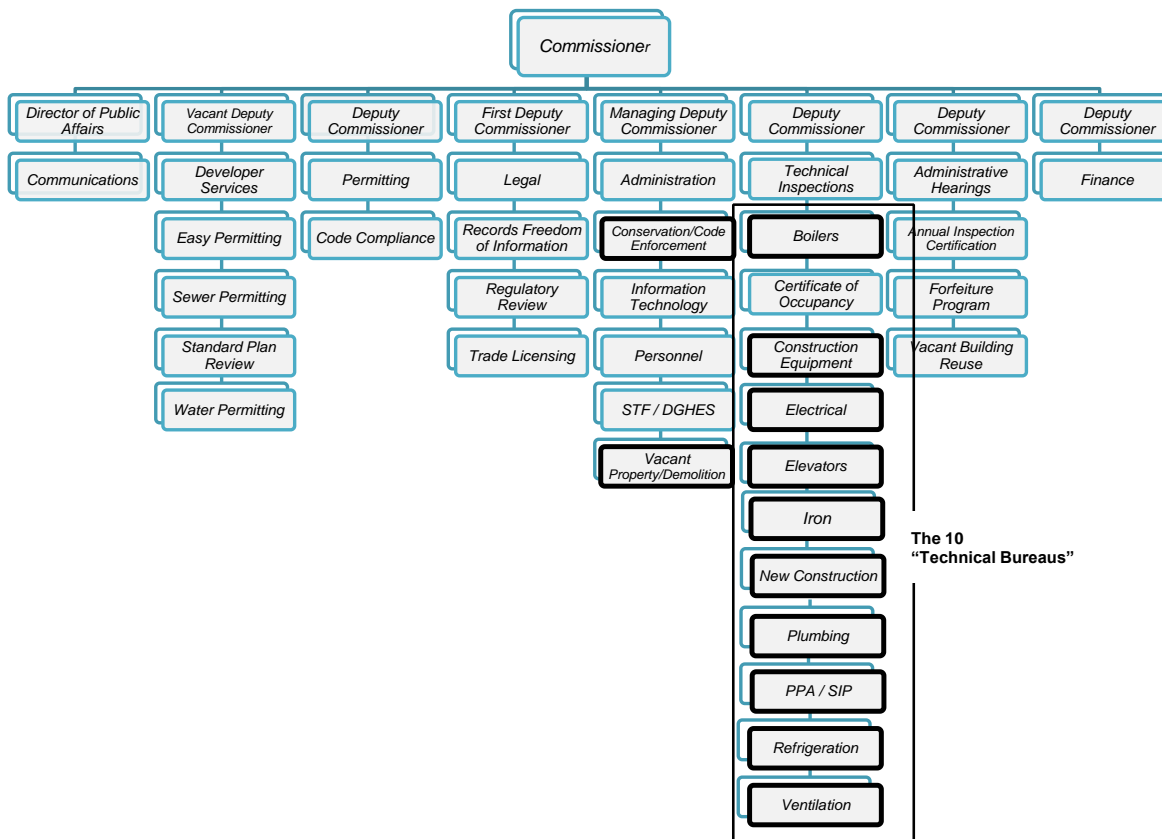
Source: DOB. Emphasis added by OIG.

Bureaus generally conduct inspections related to their name. For example, the Electrical Bureau conducts inspections related to the City's electrical code. Other bureaus conduct broader ranges of inspections. For example, the Conservation/Code Enforcement Bureau conducts inspections related to the general maintenance (i.e., "conservation") of existing, occupied buildings,[5] and the Vacant Property/Demolition Bureau conducts inspections of garages and vacant or abandoned buildings. For further description of the types of inspections conducted by each bureau, see Appendix A.

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[5] This can include inspections of elements such as masonry, walls, entryways, windows, floors, smoke and carbon monoxide detectors, and other general maintenance concerns.

Some DOB bureaus conduct all or nearly all of the Department's five types of inspections, while others conduct only Circuit Court/Administrative Hearings and complaint-based inspections. Figure 3 shows the various types of inspections conducted by each bureau.

Figure 3: Types of Inspections Conducted by the 12 Bureaus that Conduct Complaint-Based Inspections

Non-Technical Bureaus	Circuit Court/ Administrative Hearings	Complaint-Based	License	Periodic	Permit	Certificate of Occupancy
Conservation/Code Enforcement	✓	✓		✓		
Vacant Property/Demolition	✓	✓				

Technical Bureaus	Circuit Court/ Administrative Hearings	Complaint-Based	License	Periodic	Permit	Certificate of Occupancy
Boilers	✓	✓		✓		
Construction Equipment	✓	✓			✓	
Electrical	✓	✓	✓	✓	✓	✓
Elevator	✓	✓		✓	✓	
Iron	✓	✓		✓	✓	
New Construction	✓	✓			✓	✓
Plumbing	✓	✓	✓		✓	✓
PPA/SIP	✓	✓	✓	✓		
Refrigeration	✓	✓		✓	✓	
Ventilation	✓	✓	✓	✓	✓	✓

Source: DOB website and interviews with DOB staff.

B.   Volume of Complaints Received by the 12 Bureaus

As shown in Figure 4 below, the 12 DOB bureaus received over 1 million unique complaints from 2000 through 2016, or a combined average of 60,135 per year.[6] However, the bureaus received significantly different volumes of complaints, ranging from a low annual average of 25 for the Construction Equipment Bureau to a high of 31,531 for the Conservation/Code Enforcement Bureau.[7]

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[6] DOB receives a significantly larger number of "duplicate" complaints, which are complaints regarding the same issue at the same address in a given period of time.

[7] The table shows no complaints over this time period for the PPA/SIP Bureau because that bureau first began conducting complaint-based inspections in February 2017. In 2017, through October 3, the PPA/SIP Bureau received 59 unique complaints.

**Figure 4: Unique Complaints Received by the 12 DOB Bureaus from January 1, 2000 through October 3, 2017**

Bureau	2000-2016 Grand Total	2000-2016 Annual Average	2017 Jan 1-Oct 3
Boiler	20,820	1,225	786
Conservation/Code Enforcement	536,031	31,531	16,930
Construction Equipment	429	25	25
Electrical	48,586	2,858	1,544
Elevator	12,540	738	481
Iron	2,241	132	74
New Construction	109,309	6,430	4,618
Plumbing	75,454	4,438	2,501
PPA/SIP	0	0	59
Refrigeration	759	45	29
Vacant Property/Demolition	194,545	11,444	6,149
Ventilation	21,588	1,270	834
Grand Total	**1,022,302**	**60,135**	**34,030**

Source: OIG analysis of CSR data.[8]

Figure 5 illustrates the complaint volume trend over time. Total unique complaints peaked in 2007 at 73,972 and declined to 49,936 in 2016 (see Appendix B for a detailed data table). Notwithstanding this overall downward trend, Conservation/Code Enforcement complaints have increased since 2012.

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[8] See Appendix B for details on complaint data included in these totals.

Figure 5: Number of Unique Complaints Received by the 12 DOB Bureaus from January 1, 2000 through October 3, 2017
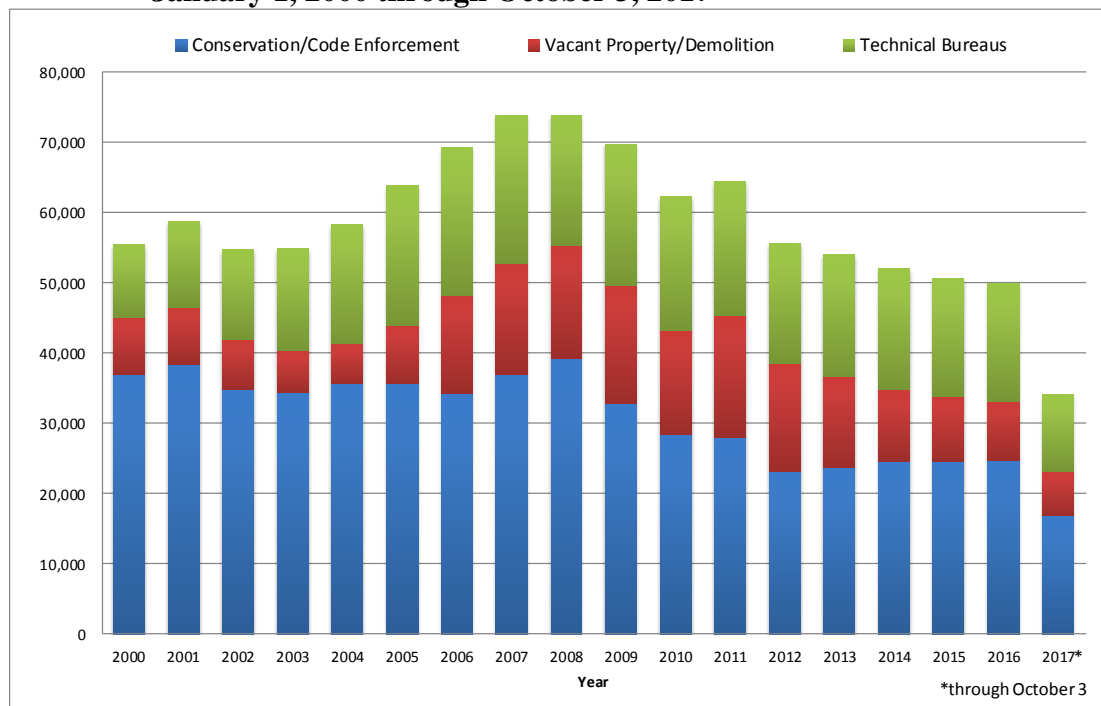
Source: OIG analysis of CSR data.[9]

C. Complaint Intake and Assignment

When a member of the public calls 311 with a building-related complaint, the following process ensues:

| Complaint Received | Complaint Recorded | Complaint Assessed / Inspection Conducted | Outcome Recorded |

To elaborate, the 311 operator asks the caller a series of predetermined "flex questions" to determine how to categorize the complaint.[10] For example, if a caller describes a lack of heat and the operator enters a "No Heat" complaint, 311's CSR prompts the operator to ask, "Is this violation occurring in a business?" If the answer is yes, then CSR instructs the operator to change the complaint type code from BHA (a no heat violation) to BBJ (a business violation). Once the operator has obtained the necessary information, they "open" (i.e., record) the

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[9] See Appendix B for details on complaint data included in these totals.
[10] Complainants who use 311's internet application also follow flex questions. Complaints may be filed online at https://www.cityofchicago.org/city/en/depts/311/supp_info/request_service.html.

complaint in CSR. CSR automatically gives the complaint a service request (SR) number and assigns it to the bureau associated with the complaint type.

Bureau staff must assess each complaint to determine how to prioritize it and determine the appropriate response.[11] As discussed below in Finding 1, not all bureaus assess and respond to complaints in the same way.

Different bureaus have different technologies available to manage their assigned complaint inspections. Personnel working in the Conservation/Code Enforcement Bureau, Vacant Property/Demolition Bureau, and Refrigeration Bureau are equipped with laptops or mobile phones that interface with CSR, allowing supervisors and inspectors to review, assign, track, and complete complaint inspections electronically. In contrast, personnel in the other nine technical bureaus must use paper forms to review, assign, and record complaint-based inspection results, which must then be manually entered into a computer upon an inspector's return to the office.

DOB's methods for assessing complaints and assigning complaint outcomes are discussed further in Finding 1 of this audit.

DOB supervisors are responsible for reviewing the results of inspections to determine whether the inspector's findings are correct. Depending on the nature and severity of any violations discovered by an inspector, DOB may choose to issue a violation notice or pursue other legal action against the property owner.

D.   Complaint Response Times

DOB has assigned each bureau one or more complaint types in CSR, and set a specific response deadline for each complaint type. As shown in Figure 6, DOB's complaint response deadlines range from 3 days for "No Heat" complaints to 90 days for "Garage Demo Inspection" complaints.

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[11] Not all complaints result in an inspection. For example, a complaint may be referred to another bureau, or DOB may determine that the complaint is not valid or actionable by the City.

Figure 6: DOB Complaint Response Deadlines by Type

Bureau	Complaint Type	Complaint Code	Deadline (days)
Boiler	Boiler Violation	BBB	21
Conservation/Code Enforcement	Building Violation	BBA	45
Conservation/Code Enforcement	No Heat	BHA	3
Conservation/Code Enforcement	Porch Inspection	BPI	7
Construction Equipment	Crane Operator License	CRANEOPE	21
Construction Equipment	Heavy Construction Equipment	BCE	21
Electrical	Electrical Sign Inspection	ELECTRIC	21
Electrical	Electrical Violation	BBE	30
Elevators	Elevator Violation	BBH	21
Iron	Structural Violation	BBI	21
New Construction	No Building Permit & Construction Violation	BBD	30
Plumbing	Plumbing Violation	BBC	30
PPA/SIP	Building Public Facility Violation	BBF	15
Refrigeration	Air Conditioning/Refrigeration Violation	BBG	21
Vacant Property/Demolition	Garage Demo Inspection	BGD	90
Vacant Property/Demolition	Vacant/Abandoned Building	BBK	60
Ventilation	Furnace Violation	BBP	21
Ventilation	Ventilation Violation	BBJ	21

Source: OIG analysis of CSR data.

311 told OIG that it collaborated with DOB to set deadlines for each complaint type approximately 10 years ago, based on average historical response times. Not all of these deadlines comply with MCC § 13-8-060, which requires the DOB Commissioner to "cause an investigation to be made of all complaints… no more than 21 days following receipt of any complaint."

DOB considers a complaint response "on time" if it meets the deadline for the pertinent complaint type. The Department measures response time by comparing the opening date to the "completed" date recorded in CSR. However, a complaint may be deemed "completed" without an inspection. For example, DOB may label a complaint "completed" in a situation where an inspector visited the property but could not gain entry, or the complaint was re-assigned to another bureau. If the "completion" event occurred prior to the day the record was updated in CSR, a user may backdate the completion date to reflect the correct completion date.[12]

Each week, 311 sends the 311 YTD report to DOB management. The report shows each bureau's number and percentage of complaints completed "on time" and "overdue." Complaint deadlines and the 311 YTD report are discussed further in Findings 1 and 2 below.

E. Publicly Available Sources of Complaint and Building Violation Data

Members of the public can see the real-time status of a complaint using the City's 311 Service Tracker or the 311 Request web page, illustrated in Figure 7.

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[12] This sort of data entry delay is most likely to arise in the nine bureaus that use paper inspection forms, whose contents are manually entered into CSR and Hansen 7, DOB's building permit and inspection database. We discuss this issue further in Finding 1 below.

Figure 7: 311 Service Tracker and 311 Request Web Pages
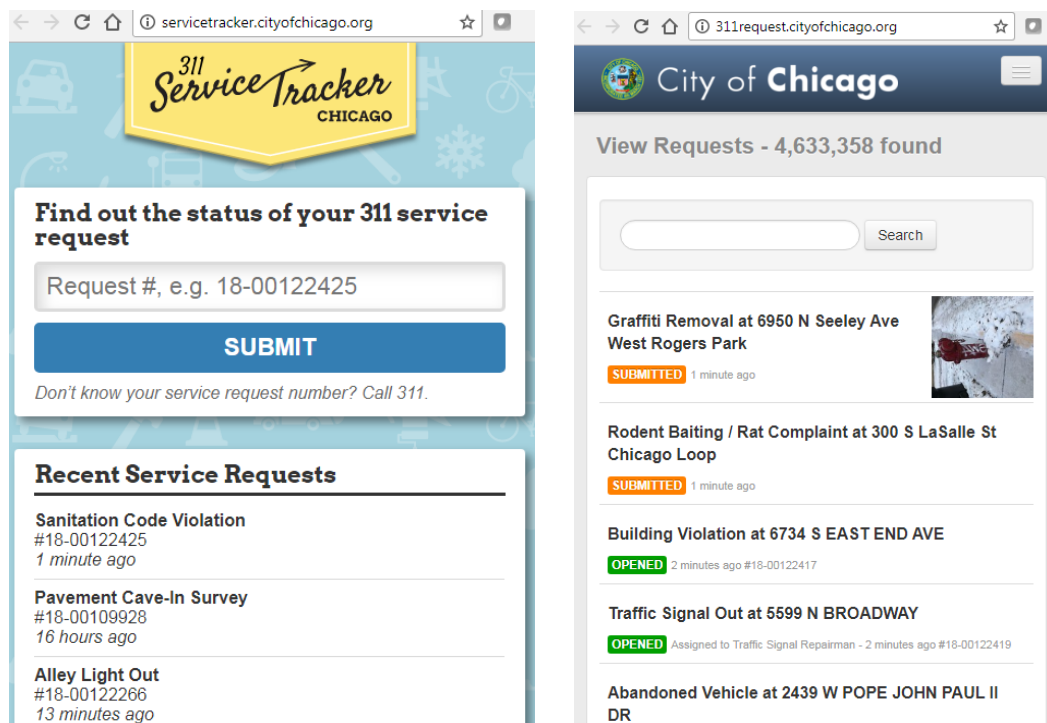
Source: OIG screenshots taken on January 8, 2018.

Both web pages allow users to browse complaints (i.e., service requests) in the following 13 categories:

Graffiti Removal	Tree Debris
Pothole in Street	Traffic Signal Out
Street Light Out	Sanitation Code Violation
Rodent Baiting/Rat Complaint	Pavement Cave-In Survey
Abandoned Vehicle	Restaurant Complaint
Alley Light Out	Street Cut Complaint
Building Violation	

The 311 Request web page allows users to perform a word search of over 4.6 million complaints, while the 311 Service Tracker requires an SR number. Both web pages pull data from CSR.

Violation information for specific properties is available via the DOB Building Violations web page (which DOB calls the "Warehouse") or the Chicago Data Portal Building Violations dataset, illustrated in Figure 8.[13]

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[13] A third online resource called "OpenGrid" allows users to visualize certain Data Portal datasets, including building violations, on a map of Chicago. However, it only displays the 1000 most recent violations posted to the Data Portal. City of Chicago, "OpenGrid," accessed January 8, 2018, http://opengrid.io/.

Figure 8: DOB Warehouse and Chicago Data Portal Web Pages

Source: OIG screenshots taken on January 8, 2018.

As these screenshots show, the DOB Warehouse allows users to search for "permit, inspection and/or violation history for a particular building address," while the Data Portal shows only "violations issued by the Department of Buildings from 2006 to the present." However, the Data Portal allows users to search the entire dataset, while the Warehouse only permits a search by address. Both websites pull data from DOB's building permit and inspection database, Hansen 7.

III. OBJECTIVES, SCOPE, AND METHODOLOGY

A.   Objectives

The objectives of the audit were to determine whether,

- DOB meets MCC and departmental deadlines for responding to complaints;

- DOB effectively prioritizes complaints; and

- building code violation records on the City's Data Portal and DOB's Building Violations web page are complete and accurate.

B.   Scope

The scope of the audit included CSR complaints assigned to the 12 DOB bureaus that conduct complaint-based inspections between 2000 and 2017. Our analysis of complaint response timeliness covered the months of January through May 2017.

C.   Methodology

To determine if DOB meets required deadlines for addressing complaints, OIG analyzed the 311 YTD report received by DOB senior management, compared it to data retrieved from CSR, and conducted multiple interviews with staff from 311 and DOIT.[14]

To determine whether DOB effectively prioritizes complaints, we conducted multiple interviews of DOB senior management, as well as supervisors and support staff from each of the 12 bureaus, regarding their complaint assignment and prioritization practices.

Finally, to determine whether inspection records posted to the City's Data Portal and DOB's Warehouse were complete and accurate, we compared the violation records for several randomly selected properties from each page to data obtained directly from Hansen 7, DOB's database of building permit and inspection records.[15] We also interviewed DOIT and DOB staff in an effort to determine what caused the issues we discovered, as well to gain an understanding of the intended purpose of the Data Portal and the DOB Warehouse.

D.   Standards

We conducted this audit in accordance with generally accepted Government Auditing Standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our

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[14] To determine the reliability of complaint data, we observed DOB staff enter complaint data, interviewed 311 and DOIT staff to gain an understanding of how data was processed, and reviewed the data that underlies the 311 YTD report. We concluded that the CSR data was sufficiently reliable for the purpose of this audit.

[15] We did not select a sample large enough to allow us to statistically project the test results to the full population of building violation records, because that approach would have been exceedingly time consuming. Neither Hansen 7 nor the DOB Warehouse allow bulk data export; consequently, our analysis required us to enter and record manually the results for each property we reviewed. Furthermore, after testing our non-statistical random sample, we found several issues (discussed in Finding 3 below) sufficient to demonstrate that the data in these systems was incomplete.

findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

E.   Authority and Role

The authority to perform this audit is established in the City of Chicago Municipal Code § 2-56-030 which states that OIG has the power and duty to review the programs of City government in order to identify any inefficiencies, waste, and potential for misconduct, and to promote economy, efficiency, effectiveness, and integrity in the administration of City programs and operations.

The role of OIG is to review City operations and make recommendations for improvement.

City management is responsible for establishing and maintaining processes to ensure that City programs operate economically, efficiently, effectively, and with integrity.

IV.   FINDINGS AND RECOMMENDATIONS

Finding 1: DOB met its response deadline for only 36.5% of complaints; had a backlog of over 5,000 open complaints dating back to 2013, including a number describing serious threats to life and safety; and summarily closed more than 2,000 complaints without addressing even those describing plainly hazardous situations.

In the first five months of 2017, the 311 YTD report that DOB uses to monitor complaint response timeliness showed that the Department met its response deadline for only 36.5% of completed complaints. As described in the Background section above, DOB has a response deadline for each complaint type, ranging from 3 days for a "No Heat" complaint to 90 days for a "Garage Demo Inspection" complaint. Figure 9 provides an excerpt of the 311 YTD report showing the total complaints completed by DOB from January through May 2017. In the report, months are shown as the numbers 1-5; "On Time" means completed by the deadline; "Overdue" ("OD") means completed past the deadline; and "SR" means service request (i.e., complaint).

Figure 9: DOB Department-Wide 311 YTD Report for January through May 2017

Buildings

Completed Month	1	2	3	4	5	Sum:
B1 - Total Completed	4,941	7,094	4,129	5,695	3,678	25,537
B2 - On Time	2,309	1,723	2,017	1,456	1,806	9,311
B3 - % On Time	46.73 %	24.29 %	48.85 %	25.57 %	49.10 %	36.46 %
No of Closed Overdue SRs	2,632	5,371	2,112	4,239	1,872	16,226
% Comp OD	53.27 %	75.71 %	51.15 %	74.43 %	50.90 %	63.54 %

Source: DOB.

Notably, the on-time completion rate varied widely among complaint types. Figure 10 shows the total complaints completed and the on-time completion rate by complaint type from January through May 2017.[16] According to the 311 YTD report, none of the 150 "Structural Violation" complaints closed by the Iron Bureau during this period met the response deadline, while all 12 complaints closed by the Construction Equipment Bureau were closed on time. There is no data for the PPA/SIP Bureau, which began accepting complaints in February 2017, because that bureau is not included in DOB's 311 YTD report.

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[16] OIG copied this data from the 311 YTD report provided by DOB.

Figure 10: DOB 311 YTD Report Data for January through May 2017

Bureau	Complaint Type	Total Completed Jan-May 2017	% Completed On Time Jan-May 2017
Boiler	Boiler Violation	802	99.8%
Conservation/Code Enforcement	Building Violation	8,624	16.0%
Conservation/Code Enforcement	No Heat	1,239	81.0%
Conservation/Code Enforcement	Porch Inspection	281	90.4%
Construction Equipment	Crane Operator License	9	100.0%
Construction Equipment	Heavy Construction Equipment	3	100.0%
Electrical	Electrical Sign Inspection	44	90.9%
Electrical	Electrical Violation	779	97.6%
Elevators	Elevator Violation	243	86.0%
Iron	Structural Violation	150	0.0%
New Construction	No Building Permit & Construction Violation	5,265	34.6%
Plumbing	Plumbing Violation	566	2.3%
PPA/SIP	Building Public Facility Violation	n/a	n/a
Refrigeration	Air Conditioning/Refrigeration Violation	12	25.0%
Vacant Property/Demolition	Garage Demo Inspection	2,142	2.5%
Vacant Property/Demolition	Vacant/Abandoned Building	3,534	61.5%
Ventilation	Furnace Violation	450	65.3%
Ventilation	Ventilation Violation	428	78.7%

Source: DOB 311 YTD report.[17]

In addition to DOB's low overall rate of on-time completed complaints, OIG found that, as of June 13, 2017, more than half (5,473, or 58.1%) of DOB's 9,419 open complaints were overdue.[18] This included complaints dating back to 2013 as well as some that described serious life and safety hazards. Figure 11 shows the opening year of the overdue open complaints, sorted by bureau. While several of the technical bureaus had few or no overdue open complaints, others had many—for example, the Plumbing Bureau had 2,797 overdue open complaints, two-thirds of which DOB received in 2016.

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[17] The sum of completed complaints in this table, 24,571, is 966 less than the DOB total of 25,537 shown in Figure 9. This is because the Department-wide total includes two complaint types that are omitted from the detailed data. They are the "Strategic Task Force-DOB" and "Task Force-CPD" types, which, according to DOB, are synonymous and represent an internal referral from CPD, not a public complaint. Therefore, DOB management did not consider these complaint types that technical bureaus were required to address. Nonetheless, they are included in the 311 YTD report Department-wide total.

[18] This number, as well as Figure 11 below, excludes "duplicate" complaints (see explanation of this concept in Appendix B) and includes "open," "new," and "locked" complaints. "Locked" means the complaint is in process or being updated. DOB management stated that it considers "locked" complaints to be "open," therefore we included them in this figure. The number also excludes the "Strategic Task Force-DOB" and "Task Force-CPD" complaint types discussed in the previous footnote.

Figure 11: Overdue Open Complaints by Bureau and Year as of June 13, 2017

Number of Open, Overdue Complaints By Bureau and Year						
Bureau	2013	2014	2015	2016	2017	Total
Boiler	-	-	-	-	-	-
Conservation/Code Enforcement	-	-	-	2	936	**938**
Construction Equipment	-	-	-	-	-	-
Electrical	-	-	-	-	17	**17**
Elevator	-	-	-	-	2	**2**
Iron	-	-	-	74	32	**106**
New Construction	1	-	1	542	249	**793**
Plumbing	-	-	2	1,880	915	**2,797**
PPA/SIP	-	-	-	-	3	**3**
Refrigeration	-	-	-	-	6	**6**
Vacant Property/Demolition	2	-	1	654	153	**810**
Ventilation	-	-	-	-	1	1
Total	**3**	**-**	**4**	**3,152**	**2,314**	**5,473**

Source: OIG analysis of CSR data as of June 13, 2017.

OIG found that 199 of these overdue open complaints were labeled "urgent" or "emergency" in CSR. They described a variety of life and safety hazards, including,

- water leaking down an elevator shaft onto electrical wires;

- homes without water;

- seniors without water;

- no hot water for a week at a daycare center;

- blocked exits and escape routes;

- an unfenced excavation site;

- loose, unsecured slats that pose a fall hazard on a 3rd floor walkway;

- bricks falling onto a sidewalk used by children walking to school;

- mouse, rat, mold, and bed bug infestations; and

- living spaces without carbon monoxide or smoke detectors.

OIG also found that DOB closed over 2,000 older complaints at once without taking action on them. By examining the Department's 311 YTD reports, OIG discovered that in April 2017 DOB had closed 2,075 overdue open New Construction complaints received between April 2010 and December 2015. Of these, 63, or 3.0%, were categorized in CSR as "emergencies" that could pose life and safety hazards, including complaint descriptions such as,

- "Property is undergoing a full gut rehab without any proper permits";

- "No Plans or Permits – Roofing And Bricks Hanging Off Side Of Building";

- "No Plans or Permits – caller states that there are bricks that are about to fall – that the property is not secured – there is abestos [sic] siding blowing from the property"; and

- "metal wire and mortar onto pedestrican [sic] walkway. Other – debris falling on sidewalk near scaffolding – Daytime – 20 stories – Rehab."

DOB closed these complaints pursuant to a request from 311 that departments close aged complaints in advance of a software upgrade. DOB management stated that it reviewed some of the 2,075 complaints before closing them.

OIG identified a number of reasons for DOB's large backlog of overdue complaints and low overall on-time complaint response rate. These reasons fall into three general categories: insufficient human and technological resources, poor prioritization, and lack of performance monitoring.

1. Insufficient Human and Technological Resources

Some bureau supervisors told OIG that they did not have enough staff to respond expeditiously to complaints. We attempted to determine the number of DOB inspectors employed in the 12 bureaus that conduct complaint-based inspections, but could not do so because DOB does not track positions by bureau. According to the Department, inspector positions may be shifted between bureaus and there has never been an "operational need" to track historical staffing levels. In addition, DOB explained that, depending on demand, inspectors conduct permit, periodic, or complaint-based inspections. Figure 12 illustrates the total number of inspector positions budgeted in DOB from 2008 through 2017. The total fell from a high of 249 in 2008 to a low of 173 in 2012, and rose to 199 in 2017.

Figure 12: DOB Full-Time Equivalent Inspector Positions 2008-2017
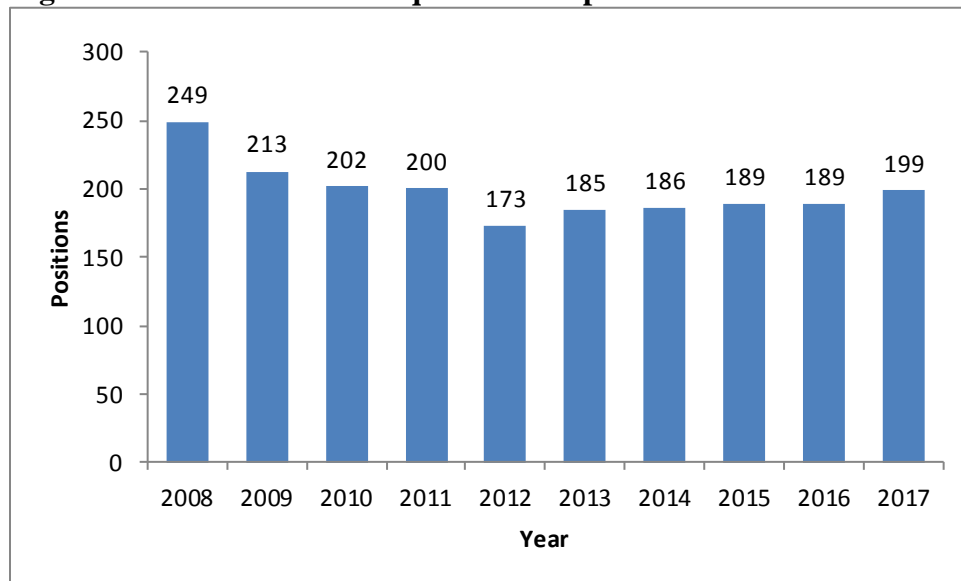
Source: Chicago Budget System

Some supervisors cited a dearth of inspectional and clerical staff to explain why their operations were not running efficiently. They stated that without sufficient inspectional staff, bureaus could not address complaints in a timely manner. Only three bureaus—Conservation/Code Enforcement, Vacant Property/Demolition, and Refrigeration—are equipped with laptops or mobile phones that interface with CSR, allowing supervisors and inspectors to review, assign, track, and complete complaint inspections electronically. Personnel in the other nine technical bureaus must use paper forms to review, assign, and record complaint-based inspection results,

which must then be manually entered into a computer upon an inspector's return to the office. Without sufficient clerical staff to enter inspection data into CSR and Hansen 7, supervisors and inspectors enter data themselves, which is a poor use of their time and expertise.

DOB management agreed that bureaus were understaffed, and noted that a previous commissioner's intent to "right-size" the number of inspectors per bureau was never implemented. Department management stated further that it had completed staffing analyses for three bureaus (Elevators, Ventilation, and Boilers), but OIG found that these analyses focused on the number of inspectors needed to conduct annual, permit, and license inspections, not complaint-based inspections.

2.   Poor Prioritization

The majority of bureau supervisors stated that DOB management had not provided guidance on how to review complaints or assign the most serious complaint-based inspections. OIG found that the bureaus have developed a variety of methods for handling complaints, and that not all these methods provide reasonable assurance that the highest priority complaints are promptly addressed. For example, one supervisor stated that their bureau addresses its sizeable complaint backlog by contacting the complainants listed on the oldest complaints to determine if the complaints are still valid. This often results in the complaint being closed as "no cause"—i.e., the condition no longer exists. The supervisor expressed frustration with the backlog, and said they only open their complaint queue in CSR every few months because the bureau is so far behind already. The same supervisor explained to OIG that they print open complaints, place them in a stack on their desks, and instruct inspectors to pick up and process a complaint when they have time. A different supervisor explained that despite an expectation that they respond to complaints within 72 hours, they only check CSR once a week for new complaints. Another supervisor explained that they review open complaints on a daily basis and undertake a triage process to prioritize inspections.

Supervisors described various methods used to judge whether a complaint identifies an emergency requiring immediate attention. DOB management told OIG that it considers aldermanic complaints to be a priority, and two supervisors said they prioritize complaints received from aldermen. According to DOB, the criteria for emergencies are not documented; however, certain phrases such as "no heat" in winter or an obvious danger to vulnerable populations, such as children and the elderly, should prompt an immediate inspection. 311 may categorize some types of complaints as "urgent" or "emergency" in CSR, but DOB bureau supervisors make the final determination about which complaints qualify as emergencies.[19] DOB management expressed confidence that 311 would alert a DOB supervisor on call in the event of an emergency.

In addition, some DOB supervisors said that the flex questions used for 311 complaint intake did not yield sufficient information for them to effectively evaluate the nature and seriousness of some complaints. Although 311 originally developed the flex questions with input from the

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[19] 311 staff told OIG that 311 operators are instructed not to change the priority label of a complaint to "emergency." If an operator receives a complaint that may be an emergency, they should escalate the complaint to their supervisor. The supervisor may then make the decision to label it "emergency" or "urgent." The relevant department may also determine the complaint is an emergency and change the priority label in CSR.

Department, DOB management has not consistently requested that supervisors help develop more effective questions. DOB management and supervisors expressed concern that because some callers may make frivolous complaints that do not warrant DOB's attention, it is important that 311 gather all relevant information.[20]

OIG also found that complaint-based inspections are not the highest priority inspection type for all DOB bureaus. Different bureaus set different priorities depending on the volume of inspections they are required to perform, the number of complaints they receive, and available staff. At the direction of DOB management, the majority of technical bureaus now prioritize inspections related to revenue-generating permits.[21] Because they receive the most complaints, the Conservation/Code Enforcement Bureau and Vacant Property/Demolition Bureau focus primarily on complaint response.

3. Lack of Performance Monitoring

According to the U.S. Government Accountability Office, agencies should establish methods to monitor performance over time.[22] Effective performance monitoring systems rely on "accurate, timely, and useful data" to provide management with tools to detect and correct problems in an agency's operations.[23] Agencies should implement effective data collection policies to ensure that management receives high-quality data.[24] As noted above, most DOB bureaus lack mobile technology for processing complaint-based inspection data and therefore must transfer handwritten information from paper forms into CSR and Hansen 7. This process introduces more opportunity for errors. Moreover, DOB management has not set requirements for how quickly complaint-outcome data must be entered into CSR or how the data should be reviewed for accuracy. Until Department management resolves these issues, DOB does not have reasonable assurance that the data in the 311 YTD report is complete, and cannot reliably assess its bureaus's diligence in responding to complaints.

OIG found that, to the extent DOB management monitors bureaus's complaint-response performance, it relies on a flawed report. To begin, the 311 YTD report contains data only for completed complaints; it omits important information about overdue open complaints. 311 staff told OIG that they encouraged departments to use additional performance reports, including open-complaint reports, to gain a more robust understanding of their operations and make more informed decisions about how to allocate their resources. By relying primarily on the 311 YTD

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[20] For example, DOB management posited that a tenant might call 311 and complain that their air conditioner is leaking as a way to get "revenge" on their landlord for not fixing the problem. However, a leaking air conditioner is not an issue DOB can resolve and, thus, DOB would presumably not send an inspector to the property in this situation.

[21] DOB charges fees for permit applications. According to DOB management, these fees are designed to cover the costs of rough and final inspections. There is no fee for a complaint-based inspection.

[22] U.S. Government Accountability Office, *Standards for Internal Control in the Federal Government* (GAO-14-704G), September 2014, OV2.04, accessed January 31, 2018, http://www.gao.gov/assets/670/665712.pdf.

[23] U.S. Government Accountability Office, *Managing for Results: Data-Driven Performance Reviews Show Promise But Agencies Should Explore How to Involve Other Relevant Agencies* (GAO-13-228), February 2013, 21, accessed January 31, 2018, http://www.gao.gov/assets/660/652426.pdf.

[24] U.S. Government Accountability Office, *Federal Information System Controls Audit Manual (FISCAM)* (GAO-09-232G), 336, February 2009, 1.2 Nature of Information System Controls, accessed January 31, 2018, https://www.gao.gov/assets/80/77142.pdf.

report, DOB management did not avail itself of performance data that would have allowed it to identify overdue open complaints describing serious life and safety hazards.

Furthermore, the 311 YTD report measured the difference between the date a complaint was opened and the date the outcome was entered into CSR, not the date a bureau actually addressed the complaint. In spite of CSR allowing users to backdate the completion date, interviews with DOB staff revealed that users do not always take advantage of this feature to accurately reflect the completion date.

As of September 2017, moreover, the 311 YTD report did not include PPA/SIP complaints, although the PPA/SIP Bureau began conducting complaint-based inspections in February 2017. The 311 YTD report Department-wide totals also included two complaint types—"Strategic Task Force-DOB" and "Task Force-CPD"—which DOB management said are synonymous and represent an internal referral from CPD, not a public complaint. Therefore, DOB management did not consider these as complaint types that technical bureaus were required to address. Nonetheless, they are included in the 311 YTD report Department-wide total.

Finally, the 311 YTD report did not include information on the outcome of a complaint,[25] nor state how long it had been open. DOB management stated that the 311 YTD report (which is automatically delivered to DOB management in PDF format on a weekly basis) was a generic report that 311 developed around 2004, and that DOB has not evaluated its usefulness or consulted with 311 regarding other performance reports that may prove more useful.

Recommendation:

OIG recommends that DOB take the following actions to improve its complaint response.

1. Immediately identify and address any overdue open emergency complaints.

2. Conduct a staffing analysis to determine how many inspectors and support staff each bureau needs to manage its workload effectively and respond promptly to complaints. This analysis should take into consideration how increasing the use of in-the-field technology could reduce the need for manual data entry.

3. Define and document the highest priority complaint types for each bureau, then develop guidance and provide training to bureau supervisors on the best methods of identifying and processing these complaints to ensure their prompt treatment.

4. Work with bureau supervisors and 311 staff to draft and implement flex questions that will elicit the information bureaus need to identify the most serious complaints.

5. Work with the Office of Budget and Management to obtain the technology necessary for all inspectors to enter complaint outcome and inspection information electronically from the field.

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[25] There are various possible complaint outcomes. For example, if an inspector cannot gain entry to a property, DOB may close the complaint with a "no entry" outcome and undertake no further investigation. A complaint may also be closed with the outcome "transferred" to another bureau, or the outcome "no cause" if DOB determines that the situation described in the complaint does not exist.

6. Develop policies and procedures to standardize the data entry process, including standards for how quickly complaint outcomes must be entered, and for how and when supervisors will review entered data for completeness and accuracy.

7. Work with 311 to obtain reports that are optimal for reaching decisions about operational performance, including decisions on appropriate staffing levels to address the volume of complaints in each bureau. At a minimum, DOB's complaint performance monitoring reports should include (a) the number of overdue open complaints; (b) the date a complaint was actually addressed (as opposed to the date it was entered in CSR); (c) data on complaint outcome and how long complaints remained open; and (d) data on PPA/SIP complaints. The reports should also be revised to exclude any complaint types for which DOB is not responsible.

Management Response:

1. *"DOB has reviewed the June 27, 2017 311 spreadsheet referenced in the report as open urgent/emergency. DOB has completed the follow up on all of the previously open plumbing, iron, electrical, refrigeration, ventilation, PPA/SIP, conservation, elevator, vacant property/demolition and garage complaints and expects to complete the open new construction complaints by March 7, 2018.*

   "DOB does note that the designation of a call as an 'emergency' in the 311-system was a determination made by the 311 operator based on the caller's assessment of the matter in question. The department followed up with 311 on these designations and they agreed that this determination should be made at the department level and not by their operators. They have informed all operators that they are not to make this designation. DOB supervising inspectors will review the 311 referrals upon receipt and will triage each, making a professional assessment of what should be deemed an emergency and immediate danger based upon their subject matter expertise in their profession. The triage process will prioritize referrals which are deemed to impact public safety. DOB supervising inspectors will review 311 referrals as part of their daily work duties.

   "DOB further notes that it has added inspector positions respectively in the following recent budget years: 10 in 2017 and 1 in 2018.

   "DOB also notes that a 2015 change in State law had the unintended consequence of impacting DOB's ability to hire plumbing inspectors. DOB and LCGA immediately undertook efforts to seek an amendment to the State law but the State process unfortunately took approximately 6 months to correct. Once the State law was corrected, DOB was able to hire 6 plumbing inspectors in 2017 and will be hiring an additional 4 in 2018 which will enable the department to respond to plumbing related 311 referrals in a timely manner and to make staffing adjustments based on volume and the triage assessment.

2. *"DOB is continuously reviewing staffing levels and engaging in discussions with OBM each budgeting year on operational needs. As part of this on-going review of staffing*

levels with OBM, DOB will include its 311 referral volume and response time data with OBM.

"As stated in item 1, DOB further notes that it has added inspector positions respectively in the following recent budget years: 10 in 2017 and 1 in 2018. DOB is also committed to working with DHR to ensure that any and all inspector vacancies that occur are filled in a timely manner.

"DOB remains committed to providing an inspection staff that is flexible and able to reallocate resources to address the changing seasonal needs of City residents and businesses.

"DOB is also pleased to note that it began extended hours inspections on March 1, 2018. These extended hours, currently including early evenings on weekdays and early mornings on Saturday, will allow for DOB to reduce the response time for inspection for permit, licensing and 311 referral inspections.

"As of October 1, 2017, all field inspectors have an electronic inspection report device in the field which will enable them to close out their assigned 311 inspections in real time once access is granted to the 311-system by 311. Further, completion dates will then accurately reflect the date of the actual investigation in the 311-system as opposed to a back-office data entry processing date in the 311-system.

"DOB has been informed by DOIT that the new 311-system scheduled to be implemented in 2019 will link the in-field devices directly to the 311-system.

3. *"DOB met with all bureau chiefs and supervisors on February 26, 2018 to refine protocols for the routing and prioritization of 311 referrals. DOB further memorialized the protocols via an email to staff on February 28, 2018. DOB is committed to meeting with all bureau chiefs and supervisors quarterly to monitor and if needed refine the protocols and solicit further feedback and suggestions.*

4. *"In addition to meeting with all bureau chiefs and supervisors on February 26, 2018, DOB will continue to work with the bureaus and 311 to refine flex questions to elicit the most useful information to allow for the routing and prioritization of 311 referrals. DOB is committed to meeting with all bureau chiefs and supervisors quarterly to monitor and if needed refine the flex questions and solicit further feedback and suggestions.*

"DOB is currently working with 311 to redefine the new construction flex question regarding 'work without or contrary to a permit' to ensure that these 311 referrals are not automatically routed to the new construction bureau but rather will be referred by 311 to the appropriate DOB bureaus – such as plumbing, electrical, demolition, etc. This will in turn reduce the time to investigate.

"DOB will further review the flex questions with its bureaus and 311 on a periodic basis throughout the year and will revise questions if needed and add new questions if needed.

5. *"DOB is committed to leveraging technology to ensure that inspector time is dedicated to in-field work as opposed to back-office administrative work. To that end, DOB is pleased to report that as of October 1, 2017 all field inspectors have an electronic inspection report device in the field which will enable them to close out their assigned 311 inspections in real time once access is granted to the 311-system by 311. Further, investigation dates will then accurately reflect the date of the actual investigation in the 311-system as opposed to a back-office data entry processing date in the 311-system.*

   "DOB has been informed by DOIT that the new 311-system scheduled to be implemented in 2019 will link the in-field devices directly to the 311-system.

6. *"DOB met with all bureau chiefs and supervisors on February 26, 2018 to refine protocols for the routing and prioritization of 311 referrals. DOB further memorialized the protocols via an email to staff on February 28, 2018. DOB is committed to meeting with all bureau chiefs and supervisors quarterly to monitor and if needed refine the protocols and solicit further feedback and suggestions.*

   "As of October 1, 2017, all field inspectors have an electronic inspection report device in the field will which enable them to close out their assigned 311 inspections in real time once access is granted to the 311-system by 311. Investigation dates in the DOB system will then accurately reflect the date of the actual investigation in the 311-system as opposed to a back-office data entry processing date in the 311-system.

   "DOB will continue to review reports on a periodic basis throughout the year to monitor progress and make any adjustments accordingly. DOB is committed to meeting with all bureau chiefs and supervisors quarterly to monitor and if needed refine the reports and solicit further feedback and suggestions.

7. *"DOB will continue to work with our bureaus and 311 to better refine the available reports and to develop new reports.*

   "DOB also agrees that the 311 reports regarding DOB actions should reflect the date of the actual DOB investigation as opposed to the date the investigation results are entered into the 311-system. Citing the date of actual DOB investigation will accurately reflect the response time to a 311 referral and address many of the response time concerns raised in the OIG audit.

   "As previously noted, as of October 1, 2017, all field inspectors have an electronic inspection report device in the field that will enable them to close out their assigned 311 inspections in real time once access is granted to the 311-system by 311. DOB has been informed by DOIT that the new 311-system scheduled to be implemented in 2019 will link the in-field devices directly to the 311-system.

"In addition to the 311 reports, DOB will continue to review its own internal reports on a periodic basis throughout the year to monitor progress and make any adjustments accordingly.

"DOB further notes that it takes all 311 referrals from the public very seriously. DOB also notes that more than one-half of 311 referrals result in a finding of 'No Cause.' This may be because the landlord-tenant or respective neighbors have remedied the issue or the property owner or contractor has come into compliance, all of which are good resolutions. There are also instances where the caller subsequently declines entry to an inspector in which case we lack legal authority to enter absent a warrant."

Finding 2: DOB set complaint response deadlines that do not comply with the MCC.

OIG reviewed the complaint response deadlines for each complaint type in the 311 YTD report and found that 6, or 33.3%, of the 18 deadlines exceeded the 21-day deadline prescribed by the MCC, thereby placing the Department in violation of a legal standard intended to prevent lengthy delays in responding to dangerous conditions.

MCC § 13-8-060 requires the Commissioner of DOB to "cause an investigation to be made of all complaints… no more than 21 days following receipt of any complaint." The 21-day requirement was established in 1981 to address "lengthy delays between the filing of complaints… and the actual City inspections," which resulted in "further deterioration of buildings and… conditions which may endanger the health and safety of residents."[26]

Despite this legal requirement, each bureau within DOB has set its own complaint response deadlines. Figure 13 shows the deadline for each complaint type, ranked from longest to shortest. The first six complaint types exceed the MCC 21-day deadline.

Figure 13: DOB Complaint Response Deadlines by Type, Sorted by Length

Bureau	Complaint Type	Complaint Code	Deadline (days)
Vacant Property/Demolition	Garage Demo Inspection	BGD	90
Vacant Property/Demolition	Vacant/Abandoned Building	BBK	60
Conservation/Code Enforcement	Building Violation	BBA	45
Electrical	Electrical Violation	BBE	30
New Construction	No Building Permit & Construction Violation	BBD	30
Plumbing	Plumbing Violation	BBC	30
Boiler	Boiler Violation	BBB	21
Construction Equipment	Crane Operator License	CRANEOPE	21
Construction Equipment	Heavy Construction Equipment	BCE	21
Electrical	Electrical Sign Inspection	ELECTRIC	21
Elevators	Elevator Violation	BBH	21
Iron	Structural Violation	BBI	21
Refrigeration	Air Conditioning/Refrigeration Violation	BBG	21
Ventilation	Furnace Violation	BBP	21
Ventilation	Ventilation Violation	BBJ	21
PPA/SIP	Building Public Facility Violation	BBF	15
Conservation/Code Enforcement	Porch Inspection	BPI	7
Conservation/Code Enforcement	No Heat	BHA	3

Source: OIG analysis of CSR data.

DOB management stated that it annually evaluates the complaint response deadline for each complaint type, taking into account bureau workload, Department staffing, average completion time, and supervisor recommendations. However, DOB had not documented how and when it conducted such reviews, and could not provide evidence of when the last such evaluation occurred or when the next would occur. OIG's analysis of CSR data revealed that DOB had not updated any of the complaint response deadline since at least 2008.

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[26] Journal of the Proceedings of the City Council of Chicago, June 26, 1981, at 6426.

In addition, DOB management expressed uncertainty regarding what constitutes an "investigation" under the MCC. Department management initially told OIG that it considers the term "investigation" to be synonymous with the term "inspection." Later, management suggested that the "investigation" provision required DOB to look into a complaint within 21 days of receipt to determine if an inspection was warranted, and that, in any case, the MCC is "very outdated" and does not take into account DOB's current operations or resources.

Recommendation:

DOB should revise its complaint response deadlines to comply with the 21-day maximum deadline prescribed by the MCC. Alternatively, the Department could seek an amendment changing the deadline provision, or replacing it with language granting DOB the power and duty to establish deadlines via departmental rule. Any changes to the MCC, however, should heed the original intent of the ordinance—namely, to prevent "lengthy delays" in complaint responses causing "further deterioration" of hazardous conditions "which may endanger the health and safety of residents and neighbors."

Management Response:

"DOB notes that the 21-day investigation language was enacted in June of 1981. DOB will work with the Law Dept. on appropriate language to submit for the 2019 Management Ordinance which will maintain the spirit of the law that investigations be conducted in a timely manner consistent with public health and safety."

Finding 3: Information regarding building code violations on the City's Data Portal and DOB's web page did not provide users with a property's complete violation history or present data in a user-friendly manner.

OIG found that DOB does not provide complete or user-friendly public data on building violations and related complaints. We discuss violation and complaint data in turn.

1.   Publicly Available Building Violation Information

As described in the Background section above, DOB provides public access to building violation information through the Chicago Data Portal Building Violations dataset and the DOB Warehouse (see Figure 8). OIG reviewed these resources and found that they did not provide a property's full violation history and were not user-friendly. As a result, DOB supervisors are regularly required to depart from their principal duties and engage in the time-intensive task of researching a property's violation history in response to a public request.

OIG randomly selected 4 addresses associated with a total of 17 inspections, comparing the related information on the Data Portal and the Warehouse to assess whether and how easily a member of the public could find a property's complete violation history. OIG then compared the publicly available information to the information in DOB's internal database, Hansen 7. According to DOB, the Data Portal's Building Violation data set and the Warehouse should contain the same information, because they both pull data from Hansen 7. However, OIG discovered inconsistencies between the two public resources. For example, Figure 14 shows eight inspections—four original inspections and four follow-up inspections (i.e., re-inspections following violations found in the original inspections)—conducted at a property on South Commercial Avenue. One inspection listed in Hansen 7 appeared on neither the Warehouse nor the Data Portal, and an additional four inspections appeared on the Warehouse but not the Data Portal.

Figure 14: Comparison of Inspection Data Available on the Warehouse and Data Portal

Hansen 7 Inspection Number		Included in DOB Warehouse?	Included in Data Portal?
Original Inspection	Follow-Up Inspection		
12364057	-	Yes	*No*
-	12364058	Yes	Yes
11971616	-	Yes	*No*
-	11971617	Yes	*No*
11621053	-	Yes	Yes
-	11621054	*No*	*No*
9927142	-	Yes	*No*
-	9927143	Yes	Yes

Source: Created by OIG from Hansen 7, Warehouse, and Data Portal on January 11, 2018.

Figures 15 and 16 are screenshots of the Warehouse and Data Portal records for this property.

Figure 15: Warehouse Screenshot

https://webapps1.cityofchicago.org/buildingviolations/violations/addressinfo.html

INSPECTIONS

INSP #	INSPECTION DATE	STATUS	TYPE DESCRIPTION
12364058	12/20/2017	PASSED	CONSERVATION COMPLAINT INSPECT
12364057	11/16/2017	FAILED	CONSERVATION COMPLAINT INSPECT
11971617	06/30/2017	CLOSED	CONSERVATION COMPLAINT INSPECT
11971616	07/28/2016	FAILED	CONSERVATION COMPLAINT INSPECT
11621053	06/30/2015	FAILED	CONSERVATION COMPLAINT INSPECT
9927143	05/05/2011	CLOSED	CONSERVATION COMPLAINT INSPECT
9927142	04/28/2010	FAILED	CONSERVATION COMPLAINT INSPECT

VIOLATIONS

CONSERVATION COMPLAINT INSPECT # 11621053

VIOLATIONS	BUILDING CODE CITATION	VIOLATION DETAILS
CN198019	File building registration statement with Building Dept. (13-10-030, 13-10-040)	Register building for 1990 thru 2015.
CN196029	Post name, address, and telephone of owner, owner's agent for managing, controlling or collecting rents, and any other person managing or controlling building conspicuously where accessible or visible to public way. (13-12-030)	Post ownership on building.
CN079014	Failed to maintain garage in sound condition and repair. (13-196-530, 13-196-641)	Garage South exterior wall buckling out,parapet wall loose brick [submit permit to reset bricks].
CN190019	Arrange for inspection of premises. (13-12-100)	No entry to 2nd flr.Apartments.

CONSERVATION COMPLAINT INSPECT # 9927142

VIOLATIONS	BUILDING CODE CITATION	VIOLATION DETAILS
CN073044	Failed to maintain exterior door hardware in good condition and repair. (13-196-550(d), 13-196-641)	9654 and 9656 front door unsecured, lock broken
CN131036	Provide self-closing device for screen door. (13-196-560 B)	missing
CN197079	Repair or replace defective or out of service smoke detectors and operate continuously. (13-196-130, 13-196-140)	detector beeping
NC2011	Performed or allowed work to be performed without submitting plans prepared, signed and sealed by a licensed architect or registered structural engineer for approval and without obtaining a permit to perform the work. (13-32-010, 13-32-040, 13-40-020, 13-12-050)	submit plan and permit for all related work to authorize alterations to 1st and / or to 2nd floor ,or restore the building to the original state
NC2071	Remove work performed without permit and restore building or site to original construction. (13-32-130, 13-32-290)	remove all partitions and fixtures(including electric and plumbing installed on 1st and or 2nd floor without a permit

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Source: OIG screenshot taken on January 11, 2018.

Figure 16: Data Portal Screenshot

Source: OIG screenshot taken on January 11, 2018. There are additional columns and rows that do not fit in the screenshot.

OIG discovered four reasons for the discrepancies shown in Figure 14. First, when DOB assigns the status "failed" to an inspection, Hansen 7 automatically creates a follow-up inspection number, but the new inspection number does not appear on the Data Portal or Warehouse until the re-inspection is completed. That is why, for example, follow-up inspection 11621054 appears only in Hansen 7, not on the Warehouse or Data Portal. DOIT stated that this is by design—inspections are posted publicly only once there is an outcome to report.

Second, the Data Portal only shows the inspection record related to the most recent status of a violation. When a violation status is updated (e.g., from "open" to "complied" after a follow-up inspection), the most recent inspection record replaces the previous record on the Data Portal.[27] For example, inspection 9927142 recorded several "open" violations, resulting in a "failed" status. After a follow-up inspection (9927143) found the issues had been corrected, the original inspection number (9927142) disappeared from the Data Portal and the same violations appeared under "closed" inspection 9927143, assigned the status "complied."[28] As a result, a Data Portal user can learn the nature of the "complied" violations by reading the "Violation Description" column text, but cannot access information related to the original inspection that identified the violations, such as the inspection or inspector numbers.

Third, OIG learned that records of inspections assigned certain statuses appear on the Warehouse but not the Data Portal. For example, inspections involving violations designated as "ADMCLOSE"—a code DOB applies to violations written in error—are available only on the

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[27] OIG did find one instance where the Data Portal did not replace a "failed" inspection with the results of the subsequent follow-up inspection (inspections 11842021 and 11842022). DOIT attributed this to "strange data" preventing the system from recognizing that the violations were the same.

[28] Likewise, follow-up inspection 1161054 (still pending on January 11, 2018) will replace inspection 11621053 on the Data Portal when it has been completed.

Warehouse. In the example above, the violations associated with inspection 11971617 were coded as ADMCLOSE. Thus, a Data Portal user investigating that property would not learn that the original inspection (11971616) ever took place. DOB could not explain why ADMCLOSE violations appear on the Warehouse but not the Data Portal. In addition, OIG discovered that if a property receives more than one demolition inspection related to a court hearing, the Data Portal only displays the results of the first inspection. DOIT did not know whether this was by design or by accident.

Finally, the DOB Warehouse does not include information about corrected violations, making it impossible for users to fully understand a property's violation and inspection history. For example, the details of the violations observed during inspection 9927142, shown at the bottom of Figure 15, do not appear in the entry for inspection 9927143, which found those violations had been corrected. When a user clicks on the hyperlink for inspection 9927143, shown in the top part of Figure 15, the system returns only the words "No Violation for Inspection 9927143." Because the Warehouse does not inform users that 9927143 was a follow-up to 9927142, a member of the public cannot tell that the violations listed under inspection 9927142 have been corrected. Consequently, the public cannot rely on the Warehouse to provide a complete history of a property's inspections and violations. According to DOIT, the Warehouse previously displayed a property's complete inspection and violation history, including the "complied" status of corrected violations, but, "a few years back," a mayoral fellow changed the site to its current state. By failing to show that violations such as those listed above under inspection 9927142 have subsequently been corrected, the Warehouse misinforms users.

According to DOB, the Data Portal and the Warehouse serve different purposes. The Warehouse, which preceded the Data Portal, is meant to display open violations and make City data more transparent (although, as demonstrated in this Finding, it actually obfuscates the true inspection and violation history of a property). The Data Portal is meant to provide bulk data for users to download and manipulate.[29] Yet, DOB staff expressed concern that the information on the Data Portal was inaccurate and the Data Portal was not user-friendly, positing that this is why DOB supervisors regularly receive phone calls from people who cannot determine whether a property's violations are open or closed. The supervisors must then spend time researching a property's violation history instead of managing their operations. DOIT staff raised similar concerns stating that the Warehouse is difficult to understand and potentially misleading because it does not clearly convey whether open violations have been addressed.

Moreover, the lack of user instructions on the Warehouse and the Data Portal exacerbates the confusion regarding building violation information. The Warehouse includes the disclaimer that "the City of Chicago makes no warranty, representation or guarantee as to the content, sequence, accuracy, timeliness or completeness of any of the database information provided herein."[30] The

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[29] Executive Order 2012-2, which established the Data Portal, adds that, "timely online publication of public data will empower Chicago's residents by providing them with information necessary to participate in government in a meaningful manner." City of Chicago, Office of the City Clerk, "Executive Orders: Executive Order 2012-2 (Open Data Policy)," accessed December 26, 2017, http://www.chicityclerk.com/legislation-records/journals-and-reports/executive-orders.

[30] City of Chicago, Department of Buildings, "Building Violations: Building Violations User Agreement," accessed December 26, 2017,
https://www.cityofchicago.org/city/en/depts/bldgs/provdrs/inspect/svcs/building_violationsonline.html.

Warehouse informs users that "information on inspections and violations reflect conditions found by the inspector,"[31] and that if DOB has "inspection and/or violation history for a particular building address, a search will return a report with applicable permit, inspection and/or violation data"[32] As demonstrated above, however, the Warehouse neither provides users with a property's violation history nor explains that violation descriptions are removed once an issue has been addressed. Similarly, the Data Portal cautions users that building violation information is "historical in nature and should not be relied upon for real estate transactions" and "does not necessarily reflect the current condition of the building or property."[33] Yet, there are no instructions explaining to users that the statuses of observed violations are updated with the outcomes of the most recent inspections, that some inspection types do not transfer to the Data Portal, and that pending follow-up inspections are not displayed. DOB acknowledged that the Data Portal and the Warehouse lack instructions adequately explaining how to use the websites and cataloging what data each site includes.

2.   Complaint Tracking

As described in the Background section of this report, the 311 Service Tracker and the 311 Request web pages provide public access to the status of 311 complaints. OIG found that, while both web pages provide information on whether a complaint is open or closed, neither provides a clear picture of the relationship between complaint information and building violation data, nor do they inform users whether the conditions reported in a complaint have been corrected.

The 311 Service Tracker requires a user to enter an SR number to search for a complaint. Thus, this web page appears designed only to serve the complainant, assuming they retained the SR number. The page provides little information about the substance of the complaint or the outcome of any inspections. For example, in Figure 17 below, it appears that SR #17-06618543 alleged a building violation, was assigned to an inspector, and then "Processed for Hearing." But it does not show what the alleged violation was, whether it was corrected, or what information a member of the public could use to find the violation on the Data Portal or Warehouse. Although complaint-based inspections originate from 311 complaints, neither the Data Portal nor the Warehouse includes the SR numbers for complaint-based inspections.

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[31] City of Chicago, Department of Buildings, "Building Violations: Disclaimer—Please Read," accessed December 26, 2017, https://www.cityofchicago.org/city/en/depts/bldgs/provdrs/inspect/svcs/building_violationsonline.html.
[32] City of Chicago, Department of Buildings, "Building Violations," accessed December 26, 2017, https://www.cityofchicago.org/city/en/depts/bldgs/provdrs/inspect/svcs/building_violationsonline.html.
[33] City of Chicago, Chicago Data Portal, "Building Violations," accessed December 26, 2017, https://data.cityofchicago.org/Buildings/Building-Violations/22u3-xenr/data.

Figure 17: Service Tracker Screenshot of SR 17-06618543

Source: OIG screenshot taken on January 8, 2018.

Given the limitations of the Service Tracker, users are better served by the 311 Request web page. A search of that page will return several records, each with an SR number, a brief description of the complaint (e.g., "mold inside hallways and apartments"), and its status (e.g., "Processed for Hearing"). While this is more information than provided by the 311 Service Tracker, it similarly fails to inform users of any inspections or violations that may have resulted from particular 311 complaints.

Recommendation:

DOB management should consider changing the Data Portal and Warehouse web pages to improve transparency and user friendliness.

1. In the short term, DOB should work with DOIT to post information on the Data Portal and the Warehouse explaining to users what information is and is not available, and informing them where to go to find the omitted information.

2. In the long term, DOB should reassess what building violation information it makes available and whether that information meets the needs of users. Specifically,

    a. DOB should determine whether providing a property's full violation history (as opposed to replacing inspection records as new records are created), SR numbers, and pending follow-up inspections on the Data Portal and the Warehouse would provide users with more meaningful information.

    b. DOB should consider whether providing all inspection outcomes on the Data Portal, including ADMCLOSE and demolition inspections, would better serve the public's interest in full access to building violation data.

Regarding the best method for achieving these changes, DOIT stated that DOB is ultimately the business owner of the data, and welcomed the Department's feedback regarding ways to make building violation data more user-friendly. DOIT further stated that it welcomes any suggestions concerning what additional data sets should be made publicly available, as well as any reports identifying inaccuracies on the Data Portal. DOIT acknowledged that the Warehouse has been the subject of numerous complaints because the data is difficult to understand and the web page does not provide an easy method to determine whether a complaint is open or closed. To address these concerns, DOIT is working to develop a new version of the Warehouse. OIG encourages DOB to consult with DOIT to ensure that any updates to the Warehouse maximize the benefit to public stakeholders.

By providing more information—both in the form of instructions and actual data—DOB will improve the transparency of public building data and provide users a more robust understanding of property violation histories. Furthermore, providing this additional information may limit the number of calls on this topic routed to DOB management, thereby allowing Department leadership to devote more time to their principal tasks and responsibilities.

Management Response:

1. *"DOB will work with the Law Dept. and DoIT on enhancing the explanatory language on the various public data systems and cross-referencing of the various data systems.*

   "DOB notes that the Data Portal will be a primary source for viewing the current status of a violation whereas the Warehouse will be a primary source for historical data on permits, inspections and violations. Both serve as an important public resource.

   "DOB notes that various public stakeholders have a difference of opinion as to what data items should be included and for how long for historical purposes and that any historical data systems require a balance of stakeholder interests.

2. *"DOB will continue to work with the Law Dept. and DoIT on the various data systems and data points and to provide further clarity and cross-referencing for public users of the system.*

   "DOB notes that the Data Portal will be a primary source for viewing the current status of a violation whereas the Warehouse will be a primary source for historical data on permits, inspections and violations. Both serve as an important public resource.

"DOB notes that various public stakeholders have a difference of opinion as to what data items should be included and for how long for historical purposes and that any historical data systems require a balance of stakeholder interests.

"DOB further notes that we have been informed by DoIT that they are already working on enhancements to the Data Portal and the Warehouse to make the search options more user-friendly and DoIT hopes to have those enhancements implemented in the Summer of 2018.

3. *"DOB will continue to work with the Law Dept. and DoIT on the various data systems and data points.*

"DOB notes that various public stakeholders have a difference of opinion as to what data items should be included and for how long for historical purposes and that any historical data systems require a balance of stakeholder interests."

V.   APPENDIX A: DOB BUREAU RESPONSIBILITIES

Bureau	Inspection Elements
Boilers	The Boiler bureau conducts inspections of pressurized elements such as boilers, tanks, and hot water heaters.
Conservation	The Conservation bureau serves as a "catch all" bureau that conducts inspections related to the general maintenance and deterioration of existing, occupied buildings. This involves inspections of base building components such as masonry, walls, entryways, windows, structural elements such as floors, smoke and carbon monoxide detectors, and general maintenance concerns.
Construction Equipment	The Construction Equipment ("Cranes") bureau inspects and enforces the condition, operation, safety, and maintenance of heavy construction equipment on construction sites.
Electrical	The Electrical bureau enforces the safe installation of electrical wiring and equipment in accordance with the Chicago Electrical Code. The bureau also collaborates with the Department of Business Affairs and Consumer Protection (BACP) to conduct inspections of electrical signs, and with CPD on the Strategic Inspections Task Force.
Elevators	The Elevator bureau regulates the installation, repair, renovation, or removal of elevators and other conveying devices (such as escalators).
Iron	The Iron bureau conducts inspections of exposed metal, such as water tanks, fire escapes, handrails, sign supports, and exposed metal porches on multi-unit buildings.
New Construction	The New Construction bureau focuses on code compliance during new construction, particularly on architectural and carpentry elements. The bureau also collaborates with CPD on the Strategic Inspections Task Force.
Plumbing	The Plumbing bureau conducts inspections of water systems in buildings, including system fixtures and hot water heaters. The bureau also collaborates with CPD on the Strategic Inspections Task Force.
PPA/SIP	The PPA/SIP bureau conducts inspections in collaboration with BACP to ensure that buildings requiring Certificates of Occupancy are safe to be occupied. For example, this could include ensuring that a building has a sufficient number of exits, meets stairway requirements, and is free of obstructions.
Refrigeration	The Refrigeration bureau conducts inspections of code-required refrigerators and air conditioners such as walk-in coolers, meat packing plants, and ammonia plants.
Vacant Property/Demolition	The Vacant Property/Demolition bureau receives and responds to vacant/abandoned and garage complaints, as well as conducts Court-ordered re-inspections. Garage complaints relate to issues with residential garages. Vacant building complaints relate to buildings that are not occupied.
Ventilation	The Ventilation bureau conducts inspections of mechanical ventilation systems in buildings (for example, ventilation hoods in restaurants and systems in buildings like nursing homes and schools). The bureau also collaborates with CPD on the Strategic Inspections Task Force.

Source: DOB website and interviews with DOB staff.

VI.   APPENDIX B: TOTAL ANNUAL COMPLAINTS RECEIVED PER BUREAU

The table below shows complaints received per year by each of the 12 bureaus that conduct complaint-based inspections. Totals for 2017 reflect complaints received through October 3, 2017. The data excludes "duplicate" complaints—i.e., complaints of the same type for the same address that are received within a particular period of time. For example, a "No Heat" complaint for a given address received within 60 days of another such complaint will be labeled "duplicate," whereas the same complaint received on the 61st day will be registered as a new complaint. The data also excludes two complaint types—"Strategic Task Force-DOB" and "Task Force-CPD"—that DOB management said represent internal referrals from CPD (not public complaints), and thus are not required to be addressed in the same manner as public complaints. The data includes "311 Information Only Call" and "A Citizen Comment" complaint types because they represent service requests from the public. Finally, Plumbing Bureau totals include one Electrical Sign Inspection complaint incorrectly assigned to the bureau in 2015.

Bureau	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2000-2016 Grand Total	2000-2016 Annual Average	2017 Jan 1-Oct 3
Boiler	49	39	41	46	29	51	54	57	36	1,785	3,347	2,568	2,223	2,609	2,891	2,668	2,327	20,820	1,225	786
Conservation/Code Enforcement	36,854	38,266	34,847	34,434	35,596	35,685	34,293	36,885	39,276	32,803	28,277	27,992	23,146	23,651	24,514	24,662	24,850	536,031	31,531	16,930
Construction Equipment	4	4	3	9	15	32	44	40	58	25	31	27	28	22	27	32	28	429	25	25
Electrical	2,104	2,243	2,431	2,519	2,701	3,595	3,582	3,760	3,582	3,297	2,936	3,273	2,819	2,667	2,435	2,325	2,317	48,586	2,858	1,544
Elevator	661	780	826	886	996	968	886	809	750	724	515	674	615	587	627	657	579	12,540	738	481
Iron	99	148	115	117	152	111	140	169	119	171	165	213	142	103	84	83	110	2,241	132	74
New Construction	5,329	6,661	7,002	7,487	8,293	8,511	8,939	7,622	5,459	6,451	5,306	5,462	5,477	5,347	5,079	5,059	5,825	109,309	6,430	4,618
Plumbing	1,255	1,352	1,668	2,617	3,825	5,472	6,119	7,284	7,209	6,387	5,082	5,451	4,528	4,405	4,418	4,428	3,954	75,454	4,438	2,501
PPA/SIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Refrigeration	23	28	35	21	7	67	82	40	35	38	20	42	78	84	77	38	44	759	45	29
Vacant Property/Demolition	8,237	8,215	7,011	5,912	5,718	8,187	13,893	15,988	16,015	16,734	14,883	17,333	15,423	13,167	10,294	9,271	8,264	194,545	11,444	6,149
Ventilation	923	915	837	871	1,040	1,243	1,179	1,318	1,302	1,438	1,655	1,483	1,276	1,344	1,619	1,507	1,638	21,588	1,270	834
Grand Total	55,538	58,651	54,816	54,919	58,372	63,922	69,211	73,972	73,841	69,853	62,217	64,518	55,755	53,986	52,065	50,730	49,936	1,022,302	60,135	34,030

Source: OIG analysis of CSR data.

CITY OF CHICAGO OFFICE OF INSPECTOR GENERAL

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