Performance Audit

DEPARTMENT of PUBLIC SAFETY

BUREAU of BUILDING INSPECTION

Report by the
Office of City Controller

MICHAEL E. LAMB
CITY CONTROLLER

Douglas W. Anderson, Deputy Controller

Anabell Kinney, Management Auditor

Gloria Novak, Assistant Management Auditor

William Vanselow, Performance Auditor

November 2011

November 17, 2011

To the Honorables: Mayor Luke Ravenstahl and
Members of Pittsburgh City Council:

The Office of City Controller is pleased to present this Performance Audit of *Department of Public Safety Bureau of Building Inspection* conducted pursuant to the Controller's powers under Section 404(c) of the Pittsburgh Home Rule Charter.   This audit assesses Bureau compliance with previous audit recommendations, re-examines complaint abatement effectiveness and assesses the impact of decentralized adjudication in district justice courts on Bureau operations.

EXECUTIVE SUMMARY

The Bureau of Building Inspection regulates the construction, demolition and occupancy of all buildings and structures within the City of Pittsburgh. The Bureau reviews, approves and issues all permits required by code for new construction and for the repair, alteration or addition to all buildings and structures. Bureau inspectors ensure compliance with various City codes and ordinances.

Findings and Recommendations

Compliance with Previous Audit Recommendations

Finding: Since the previous audit, BBI has made progress in upgrading its technological capabilities and improving its plan review process.

Finding: The Bureau is in the process of upgrading all BBI functions with Accela Software. Accela will permit interface with other City departments such as Public Works.

Electronic Permit Processing

Finding: On line permitting will be a feature of BBI's new permit system. The Accela software Citizen Access module will allow on line permitting for small jobs. Big projects such as new construction will continue to require approval by Bureau Plan Examiners or a qualified Third Party Agency before a permit can be issued.

Building Plan Review

Finding: BBI will require an upfront down payment for building plan reviews. This will reduce the number of speculators who submit building plans then decide not to proceed with the project.

<u>Staffing</u>

Finding: Pittsburgh BBI operates with a smaller budget than the cities of Buffalo, Cincinnati, St. Louis and Cleveland and with less total staff than Buffalo and Cleveland. Pittsburgh BBI has more budgeted inspectors than Cincinnati but less than Buffalo and Cleveland.

<u>Code Enforcement</u>

City Code Complaints

Finding: The Mayor 311 Service Center does not have updated property information from Allegheny County. October 2008 was the last time 311 received updated information.

Finding: Inspectors identified some complaints that are transferred over from the 311 service center have nothing typed in the location of the complaint or the 10 digit block numbers are typed in wrong on the complaint.

Finding: Having to search for property owner information through a variety of venues is an inefficient use of code inspector time and resources.

Recommendation: BBI administration should stress to City Administration the importance of accurate property ownership information in the 311 Center. Efforts should be made to have Allegheny County send updated property ownership information to 311 on a regular basis.

<u>Mobile Data Terminals (MDTs)</u>

Finding: MDTs allow inspectors to send complaint information electronically from the field. This greatly increases efficiency by eliminating the inspectors need to write up reports at a later time and allows more time in the field.

Finding: Mobile Data Terminals reduce the time to get a violation notice sent out.

Finding: The MDT software also provides a 'tickler system' that automatically notifies the inspector when a re-inspection of the property is due.

Current MDT Software

Finding: Code inspectors are using Code Enforcement software, an interim application developed by City Computer Information Systems and a private Information Technology company. According to BBI, the software has ongoing flaws which have not successfully been resolved.

Finding: Problems with Code Enforcement software include the inability to perform queries (only built in reports can be created), the inability to sort duplicate complaints and glitches that delay complaint transmission from 311 to BBI Code Inspectors.

Recommendation: BBI administration must insist that CIS develop a software application that will identify future malfunctions in a timely manner. Timely problem identification and resolution will prevent large complaint backlogs.

Recommendation: Before it is fully operative, BBI must ensure that Accela is customized to meet all of the Bureau enforcement needs.

2010 City Code Complaint Data

Finding: Code Enforcement software currently used by BBI City code inspectors provides fields for assignment date and due date but no field for complaint abated date. Without an abated date, the auditors could not determine complaint abatement time.

Finding: Code Enforcement software cannot eliminate or flag duplicate entries. A duplicate is defined as more than one complaint entry where all data fields are the same. Duplicate entries inflate the number of complaints and qualify any performance analysis.

Recommendation: Accela software must be customized to flag duplicate complaint entries so the duplicates can be readily eliminated from data analysis.

Resolved or Abated Complaints

Finding: The great majority (82.40%) of complaints made in 2010 were completed, i.e., the problem was abated; case was closed because no violations were found or the case was sent to the district justice for adjudication.

Finding: The next highest complaint category status (14.3%) was Re: Inspection Scheduled, i.e., the property was scheduled to be inspected again.

Recommendation: BBI should add "date abated", "date to district justice" and "appeal date" fields to the new Accela software database. These fields would better describe the status of each complaint as it progresses through the abatement process.

Finding: Weeds and debris top the list of code complaints, accounting for 77.7% of complaints made in 2010.

Finding: The 19th ward (Beechview, Brookline and part of Mt. Washington) had the most city code complaints (750) followed by the 13th ward (Homewood and Larimer) with 721 complaints.

Finding: The number of complaints does not indicate the actual number of properties with code violations. Neighborhoods with active community organizations and active citizens will have more involvement with the Mayor 311 Center than areas with less community involvement.

City Code Enforcement Field Offices

Finding: Auditors were told that very few residents ever came into the police station to file a complaint. The Inspector noted that residents like to remain anonymous when filing a report and prefer calling the 311 service center.

Finding: Zone 3 police station is located in the 18th ward but the inspector assigned to the Zone 3 field office does not enforce violations in that ward.

Finding: Walk in complaints about properties located in the 18th ward must be written on a complaint form that is taken to downtown BBI offices to be logged in.

Recommendation: BBI should reconsider the usefulness of the field offices before adding more of them in other areas. At the very least, the assigned inspector should also have responsibility for the ward that the field office is located in and have the ability to log in all walk in complaints.

2010 Building Code Complaints

Microsoft Access software is used by Building Code inspectors.

Finding: Almost 72% of the inspector complaints were residential after the duplicate entries were eliminated**.**

Finding: Demolition had almost 12% and commercial had 10% of complaints. All the rest made up 6% of the complaints.

Finding: The number of demolition complaints dropped from 768 to 501 (34%) after duplicates were taken out. Mostly due to number of different people seeing the same building on a street that they thought needed condemned.

Finding: Once the type of complaint is put into the database, it is not updated if reassigned to a different inspector or category. This could cause confusion on what proper building inspector should handle this case: Commercial, Residential, Demolition, Etc.

Finding: Duplicate entries are not always identified and are sometimes listed as separate complaints. This would affect the statistics in Tables 6.

Finding: Nearly twenty percent of the entries in the Building Inspector database were duplicate entries, i.e., complaints about the same violation at the property address.

Finding: The majority of the complaints in 2010 were resolved or abated. Eliminating the duplicate reports (20%), 70% of the complaints in 2010 were resolved.

Recommendation: BBI administrators must insist that Building Inspectors update the complaint database in a timely manner and consistently identify duplicate complaints.

Resolved or Abated Complaints

Finding: Three code complaints were included in the 2010 building complaint database.

Finding: Complaints about buildings needing demolition take longer to resolve because of the steps involved in obtaining a demolition.

Finding: The 19th ward (Beechview, Brookline and part of Mt. Washington) had the most building complaints (433) followed by the 20th ward (West End, Sheriden and Elliott) with 302 complaints.

Adjudication in Local District Justice Offices

Finding: Property owners have more time to abate the problem before the hearing date. If the violation is abated before the hearing, the complaint is dismissed at the hearing.

Finding: Code inspectors are assigned multiple city wards and must file unabated complaints in the district justice office that has jurisdiction over each ward. Seven of the eight City code inspectors must attend hearings in two district justice offices.

Finding: Taking a case to court is discretionary. An inspector can turn the case to the district justice or give the property owner more time to comply.

Continuances

Finding: The 2010 district justice court schedules support inspectors' allegations of excessive continuances. Nearly half of the hearings scheduled by district justices were continuances. Out of 2,281 court dates, 1,052 (or 46% of the total) were continuances.

Finding: The ward with the most court cases, the 20th ward, did not have the most complaints. The 20th ward had 278 court cases, 302 building complaints and 462 city code complaints.

Code Inspector and Building Inspector District Court Appearances

Finding: The need to attend Housing Court in two district justice offices does not appear to significantly reduce code inspector field time. In 2010, the number of court appearances per City code inspector ranged from 31 to 11. At the high end, 31 court appearances is less than 3 times a month. At the low end, 11 court appearances is less than one per month.

Finding: Attending Housing Court in multiple district justice offices does not appear to significantly impact building inspector field time. In 2010, the total number of court appearances per building inspector ranged from 1 to 39. One inspector had 39 court appearances and 4 inspectors only had 1 court day all year.

Building Permit Issuance Time

Finding: In 2010, the average commercial building permit issuance time did meet the 30 day or less benchmark and significantly improved since 2007.

Finding: In 2010, commercial building permits average issuance time was 24.41 days. This was a 29.65 average day decrease from the data that was collected for 2007 permits. In 2007, the average time was 54.06 days. Residential building permits saw an average time decrease from 6.49 days in 2007 to under one day in 2010.

CONCLUSION: Recurring software glitches and outdated property ownership information are hampering BBI code inspector effectiveness. A fully operational, integrated and upgraded software system with accurate data will increase the effectiveness of Bureau operations.

We are pleased that the Bureau of Building Inspection agrees with the audit findings and recommendations.

Sincerely,

Michael E. Lamb
City Controller

INTRODUCTION

This performance audit of the Department of Public Safety Bureau of Building Inspection (BBI) was conducted pursuant to section 404(c) of the Pittsburgh Home Rule Charter. An audit of BBI released in December 2008 assessed Bureau turnaround time for issuing residential and commercial permits, turnaround time for abating complaints and licensing and bonding requirements for contractors. This audit assesses Bureau compliance with previous audit recommendations, re-examines complaint abatement effectiveness and assesses the impact of decentralized adjudication in district justice courts on Bureau operations.

OVERVIEW

According to its webpage, the Bureau of Building Inspection regulates the construction, demolition and occupancy of all buildings and structures within the City of Pittsburgh. The Bureau reviews, approves and issues all permits required by code for new construction and for the repair, alteration or addition to all buildings and structures and ensures compliance with various City codes and ordinances. Its primary mission is to provide safety and a better quality of living to City residents through three major kinds of enforcement: Building Codes, the Pittsburgh Code of Ordinances and Business Licensing requirements.

Building Codes

The Pennsylvania Construction Code Act (Act 45 of 1999) established a Uniform Construction Code (UCC) to insure safe, healthy and sanitary construction throughout the state. In 2004, the Pennsylvania Department of Labor and Industry required all municipalities in the Commonwealth to implement the UCC regulations. The regulations have been updated numerous times with International Code Council (ICC) standards.

BBI building inspectors inspect and approve all new construction, building remodeling and improvements for compliance with code requirements. The following codes, as amended by the City, are currently in effect for all work in the City of Pittsburgh: the International Building Code (2009), the International Property Maintenance Code (2006), the International Mechanical Code (2009), the International Fuel Gas Code (2009), the International Residential Code (2009), and the National Electric Code, (2008). Building inspectors monitor construction and renovation work after a permit is filed with BBI and respond to complaints from the public. Property owners can be cited and taken to court for noncompliance.

Pittsburgh Code of Ordinances

BBI monitors and ensures compliance with City Code Titles IX (Zoning) and X (Buildings). Property owners can be cited for problems such as weeds, debris and abandoned vehicles on private property and badly cracked sidewalks. Abandoned vehicles on streets and animal control issues, while code violations, are handled by other City departments. Code violations are ordinance specific and punishable by a fine.

Business Licensing

BBI issues licenses for various types of contractors, activities such as parades and trade fairs and public gathering venues such as pool halls and movie theaters.

Bureau Organization

BBI has 75 budgeted positions divided into several divisions under the administration of the Chief and the assistant Chiefs of Building Construction and of Code Enforcement. As of June 10, 2011 the Bureau had 10 vacancies: Chief, Business Technology Analyst, Project Chief, Senior Inspector 1, Clerical Assistant 2, Clerical Assistant 1 and 4 vacant Code Inspector positions.

1 The Code Enforcement Division has 10 code inspectors and is overseen by a field operations manager. Code enforcement monitors and ensures compliance with various City codes and ordinances.
2 The Demolition Division includes one senior inspector and two code inspectors overseen by the demolition manager.
3 The Electrical Division has seven electrical inspectors and a project chief. This division is responsible for electrical building code inspections of new and old buildings.
4 The New Construction and Enforcement Division is budgeted for 22 senior inspectors and three project chiefs. This section handles all Occupancy, Building, HVAC, Land Operation and Sign Permits along with Rental Certifications and all complaints regarding building and occupancy violations.
5 The Engineering Section includes four plan examiners. This core service is responsible for the review and approval of construction drawings and specifications and issuance of permits for all phases of construction.
6 The Fire Prevention Division includes three fire prevention inspectors and one plan examiner. This division replaces the fire prevention section of the Fire Department that was eliminated some years ago.
7 The Clerical Division includes 11 clerical assistants supervised by the chief clerk. This section includes Licensing and Permit and is responsible for the daily management and coordination of all the divisions of the Bureau along with daily processing, reporting and fee collecting.

METHODOLOGY

Auditors had a meeting with the administrative personnel at BBI to get a perspective on how the Bureau functions and any improvements or changes since the last audit in 2008. The staff members at the meeting included the Acting Chief, Assistant Chief of Code Enforcement and Field Operations Manager. During the meeting many issues were discussed which included BBI's computer software programs, staffing levels, district magistrate rulings, permit application process and code complaint files. The auditors requested the following information after the meeting:

1. Organizational chart of BBI
2. List of building permits required by state
3. 2009 and 2010 neighborhood sweeps and number of violations by sweep
4. Sample of district justice hearing results
5. Code enforcement software report samples and lost capabilities
6. Number of plan reviews and permits issued in 2010
7. List of cities that use Accela computer software
8. List of code inspectors by ward and district justices
9. Where inspector training is done and at what cost to the City

In addition the auditors later met with the Field Operations Manager to see a Code Enforcement software demonstration and also a MDT demonstration with an inspector who handles complaints out in the field. The auditors visited the BBI field office in Zone 3 Police Station to discuss field operations procedures.

At a subsequent meeting with BBI the following topics were discussed: Code Enforcement software reliability, permit application process, building complaint process and district justice adjudication. Other information requested included the following: building inspector ward and district judge assignments, 2010 building violations/inspections database, district justice housing court schedules.

Databases for 2010 building complaints and 2010 City code complaints were sorted for complaint frequency by City ward. Code complaints are entered into Code Enforcement software, an interim application developed by City Computer Information Systems and a private Information Technology company. BBI converted Code Enforcement complaint data into an Excel spreadsheet format for the auditors. The building code complaints were in Access database format. The 2010 district justice court schedules were converted to Excel spreadsheet format and analyzed for inspector court appearance frequency and cases per City ward. The auditors calculated average permit issuance times for building permits issued in 2010 from data provided by BBI in Excel spreadsheet format.

SCOPE

  Audit scope is 2010 for code and building inspection data and court data and 2011 for BBI staff comparison.

OBJECTIVES

1. To assess code and building complaint abatement effectiveness.

2. To assess compliance with previous audit recommendations.

3. To assess Bureau staffing levels.

4. To assess complaints by ward and type of complaint.

5. To assess the impact of decentralized adjudication in district justice courts on Bureau operations.

6. To assess building permit issuance effectiveness.

7. To make recommendations for improvement.

FINDINGS AND RECOMMENDATIONS

Compliance with Previous Audit Recommendations

Finding: Since the previous audit, BBI has made progress in upgrading its technological capabilities and improving its plan review process.

Finding: The Bureau is in the process of upgrading all BBI functions with Accela Software. Accela will permit interface with other City departments such as Public Works.

According to its website, Accela is a Web-based application that allows information to be shared across departments and provides "a complete solution for automating critical tasks associate with permitting, code enforcement, community development and planning, inspections, licensing and case management, asset and resource management and more". Accela is used by many cities, including Cleveland and Columbus Ohio and Baltimore Maryland.

Electronic Permit Processing

The auditors recommended BBI continue to upgrade its on-line capabilities to include the ability to process initial applications, small permits and payments.

Finding: On line permitting will be a feature of BBI's new permit system. The Accela software Citizen Access module will allow on line permitting for small jobs. Big projects such as new construction will continue to require approval by Bureau Plan Examiners or a qualified Third Party Agency before a permit can be issued.

Building Plan Review

The auditors recommended changes in BBI's building plan review process.

Finding: BBI will require an upfront down payment for building plan reviews. This will reduce the number of speculators who submit building plans then decide not to proceed with the project.

Staffing

The City of Pittsburgh operates its Bureau of Building Inspection with a staff of 75 to approve permits, conduct inspections, and perform clerical duties. The previous audit found that the Bureau of Building Inspection operates with a smaller staff and budget than those of selected mid-Atlantic cities.

Finding: Pittsburgh BBI operates with a smaller budget than the cities of Buffalo, Cincinnati, St. Louis and Cleveland and with less total staff than Buffalo and Cleveland. Pittsburgh BBI has more budgeted inspectors than Cincinnati but less than Buffalo and Cleveland.

TABLE 1

City	2011 Staff	2011 Insp.	2011 Dept. Budget	2010 Pop.	Housing Units/2010	Occupied Units	Vacant Units	% Vacant Units
COMPARISON of CITY BBI STAFFING LEVELS, BUDGETS, POPULATION AND HOUSING UNITS								
Pittsburgh	75	45	$3,240,541	305,704	156,165	136,217	19,948	12.8
Buffalo	76	51	$4,894,228	261,310	133,444	112,536	20,908	15.7
Cincinnati	68	29	$4,557,380	296,943	161,095	133,420	27,675	17.2
Saint Louis	49	n/a	$3,512,986	319,294	176,002	142,057	33,945	19.3
Cleveland	90	69	$4,255,609	396,815	207,536	167,490	40,046	19.3

* Population & Housing data taken from 2010 US Census Bureau
* Staffing & Departmental Funding taken from 2011 Budget Documents

Code Enforcement

City Code Complaints

Since 2009, BBI Code Enforcement Inspectors have been using Mobile Data Terminals (MDTs) to receive and process complaints. These hand held computers facilitate the flow of information between field inspectors, BBI managers and the 311 Center.

Complaints received by the 311 Center or from BBI are downloaded into a File Server that forwards the complaint information to the MDT of the appropriate inspector. Complaint information is received in a Case History format that includes fields for date entered, location/address, address description, neighborhood, ward, complaint description and owner name and owner address.

Finding: The 311 Service Center does not have updated property information from Allegheny County. October 2008 was the last time 311 received updated information.

Finding: Inspectors identified that some complaints that are transferred over from the 311 service center have nothing typed in the location of the complaint or the 10 digit block numbers are typed in wrong on the complaint. This is very time consuming for the inspector to try to find the correct property.

To ensure that the violation notice is sent to the rightful property owner, the inspector must verify the property owner name and address. This is done by accessing the Allegheny County Property Assessment website or using other resources used for owner searches such as County Department of Court records and Social Security death index. The death index is used for properties that have a very old last sale date.

Finding: Having to search for property owner information through a variety of venues is an inefficient use of code inspector time and resources.

RECOMMENDATION No. 1:

BBI administration should stress to City Administration the importance of accurate property ownership information in the 311 Center. Efforts should be made to have Allegheny County send updated property ownership information to 311 on a regular basis.

After the property owner name and address are verified, the MDT is updated by the inspector and an initial inspection is done to confirm the violation. If the violation is confirmed, the updated Case History information is sent electronically to the Field Operations Manager who forwards the information to a staff typist. The typist proofs/edits the entered information and sends out a violation notice to the property owner. The property owner is typically given 30 days to comply. If the problem still exists at the time of re-inspection, the inspector can extend the compliance period or the case is sent to the local district justice for resolution.

Finding: MDTs allow inspectors to send complaint information electronically from the field. This greatly increases efficiency by eliminating the inspectors need to write up reports at a later time and allows more time in the field.

Finding: Mobile Data Terminals reduce the time to get a violation notice sent out.

Finding: The MDT software also provides a 'tickler system' that automatically notifies the inspector when a re-inspection of the property is due.

Current MDT Software

Finding: Code inspectors are using Code Enforcement software, an interim application developed by City Computer Information Systems and a private Information Technology company. According to BBI, the software has ongoing flaws which have not successfully been resolved.

Finding: Problems with Code Enforcement software include the inability to perform queries (only built in reports can be created), the inability to sort duplicate complaints and glitches that delay complaint transmission from 311 to BBI Code Inspectors.

Three software malfunctions from October 2010 to May 3, 2011 prevented calls to 311 from being timely transferred to Code Inspector MDTs. The May 2011 malfunction resulted in a backlog of 496 complaints.

RECOMMENDATION No. 2:

BBI administration must insist that CIS develop a software application that will identify future malfunctions in a timely manner. Timely problem identification and resolution will prevent large complaint backlogs.

Code inspectors that use the MDTs also cite problems with Code Enforcement software. The daily inspection itinerary print out is organized by most current cases, regardless of the geographic location of the complaint. For example, going to a property in Brookline after an inspection in Squirrel Hill then back east to Shadyside is inefficient.

RECOMMENDATION No. 3:

Before it is fully operative, BBI must ensure that Accela is customized to meet all of the Bureau enforcement needs.

2010 Code Complaint Data

Finding: Code Enforcement software currently used by BBI code inspectors provides fields for assignment date and due date but no field for complaint abated date. Without an abated date, the auditors could not determine complaint abatement time.

Finding: Code Enforcement software cannot eliminate or flag duplicate entries. A duplicate is defined as more than one complaint entry where all data fields are the same. Duplicate entries inflate the number of complaints and qualify any performance analysis.

RECOMMENDATION No. 4:

Accela software must be customized to flag duplicate complaint entries so the duplicates can be readily eliminated from data analysis.

The auditors were unable to determine complaint abatement time or readily eliminate duplicate complaint entries. The complaint "location" field contains both street number and street address. Manually sorting on this field through 8000+ entries to eliminate duplicate entries was not feasible. The complaint data results must be qualified with an unknown number of duplicate entries.

2010 City Code Complaint Results

       Code Enforcement uses the following data fields: Log Number, MSC Number, Inspector, Assignment Date, Location, BBI Status, Type, Due Date, Ward, Block/Lot, Zoning and Comments. The auditors sorted the 2010 Code Complaint database by Status, Ward and (Complaint) Type.

       The following table shows the status of 2010 code complaints as of July 7, 2011.

TABLE 2

STATUS OF 2010 CODE COMPLAINTS		
COMPLAINT STATUS	**NUMBER**	**PERCENT**
Completed	6,672	82.40%
Inspection in Process	97	1.20%
New Complaint	49	0.61%
Notice Written	61	0.75%
Re: Inspection in Progress	60	0.74%
Re: Inspection Scheduled	1,158	14.3%
TOTAL	**8,097**	**100%**

Finding: The great majority (82.40%) of complaints made in 2010 were completed, i.e., the problem was abated; case was closed because no violations were found or the case was sent to the district justice for adjudication.

Finding: The next highest complaint category status (14.3%) was Re: Inspection Scheduled, i.e., the property was scheduled to be inspected again.

       BBI Administrators believe that an abatement date does not capture the complexity of each complaint and the amount of work involved. For example, locating property owners can be time consuming and district justices can issue multiple continuances on the same case. Continuances give the property owner more time to abate the problem.

RECOMMENDATION No. 5:

       BBI should add "date abated", "date to district justice" and "appeal date" fields to the new Accela software database. These fields would better describe the status of each complaint as it progresses through the abatement process.

Code Complaints by Complaint Type

Finding: Weeds and debris top the list of code complaints, accounting for 77.7% of complaints made in 2010.

TABLE 3

2010 CODE COMPLAINTS BY TYPE		
TYPE OF COMPLAINT	**NUMBER OF COMPLAINTS**	**(%) PERCENTAGE**
Building	19	0.23%
Weeds/Vacant Lot	3	0.04%
Couch on porch	57	0.70%
Dumping	262	3.24%
Graffiti	47	0.58%
Junk Vehicles	77	0.95%
Mechanical Devices	4	0.05%
Miscellaneous	266	3.29%
Sidewalk (needs repair)	438	5.41%
Towing License	2	0.02%
Weeds	631	7.79%
Weeds/Debris	6,291	77.70%
TOTAL	**8,097**	**100.00%**

City Code Complaints by City Ward

Finding: The 19th ward (Beechview, Brookline and part of Mt. Washington) had the most city code complaints (750) followed by the 13th ward (Homewood and Larimer) with 721 complaints.

Finding: The number of complaints does not indicate the actual number of properties with code violations. Neighborhoods with active community organizations and active citizens will have more involvement with the Mayor 311 Center than areas with less community involvement.

TABLE 4

2010 CITY CODE COMPLAINTS BY WARD		
WARD	**NUMBER OF COMPLAINTS**	**(%) PERCENTAGE**
1st	43	0.53%
2nd	28	0.35%
3rd	77	0.95%
4th	532	6.57%
5th	264	3.26%
6th	83	1.03%
7th	56	0.69%
8th	130	1.61%
9th	163	2.01%
10th	231	2.85%
11th	202	2.49%
12th	465	5.74%
13th	721	8.90%
14th	241	2.98%
15th	563	6.95%
16th	432	5.34%
17th	210	2.59%
18th	471	5.82%
19th	750	9.26%
20th	462	5.71%
21st	174	2.15%
22nd	31	0.38%
23rd	61	0.75%
24th	167	2.06%
25th	142	1.75%
26th	248	3.06%
27th	308	3.80%
28th	145	1.79%
29th	304	3.75%
30th	235	2.90%
31st	53	0.65%
32nd	105	1.30%
TOTAL	**8,097**	**100.00%**

Code Enforcement Field Offices

BBI has field offices in Zone 3 and Zone 5 police stations where a code inspector is available two mornings each week. This was set up so residents had easy access to speak with inspectors face to face about property problems in their neighborhood. Rather than wait on the phone, not knowing if there complaint would ever get resolved. The auditors visited the field office in Zone 3 police station.

There is no direct public access to the code inspector. Because of security concerns, visitors must identify themselves and the purpose of their visit, get Police permission to enter and be escorted by an officer to the Code Inspector upstairs office.

Finding: Auditors were told that very few residents every came into the police station to file a complaint. The Inspector noted that residents like to remain anonymous when filing a report and prefer calling the 311 service center.

Finding: Zone 3 police station is located in the 18th ward but the inspector assigned to the Zone 3 field office does not enforce violations in that ward.

The inspector assigned to the Zone 3 field office currently inspects complaints in the 7th, 14th, 16th, 17th and 19th wards. Only the 16th and 17th wards (South Side and Arlington) are covered by Zone 3 police and are located adjacent to the 18th ward.

Finding: Walk in complaints about properties located in the 18th ward must be written on a complaint form that is taken to downtown BBI offices to be logged in.

RECOMMENDATION No. 6:

BBI should reconsider the usefulness of the field offices before adding more of them in other areas. At the very least, the assigned inspector should also have responsibility for the ward that the field office is located in and have the ability to log in all walk in complaints.

Building Code Complaints

BBI receives numerous complaints throughout the year for building code violations. These complaints are broken down into different categories. The majority of the complaints are either residential or commercial. These usually include any physical damage to structure of the property that could cause dangerous conditions. Some examples include damage to a roof or broken windows. Complaints are also called in when there is no visible evidence of an occupancy certificate or permit when renovations or additions to the structure are being done.

Another category is fire complaints, which include inoperable sprinkler systems, fire pumps, and fire extinguishers. The other categories are electrical, HVAC installation or maintenance hazards and demolition requests for old vacant properties. It is the inspector's job to go out and look at these complaints and make sure that the work being done complies with the

Commonwealth of Pennsylvania statewide building code generally known as the Uniform Construction Code (UCC).
Complaint Process

Like City Code complaints, Building Inspection complaints are received from a number of sources, including the 311 service center. Complaints received at BBI are typed and downloaded into a Microsoft access database and sent to BBI's project chief manager for review. Once approved for an inspection, a print out of the complaint is given to the proper inspector assigned to the complainant's ward. These print outs are a checklist/log of each step of the complaint process until it is resolved or abated. Each time an inspector action is taken on the complaint, the checklist is handed in the office and a new one prints out a when the next step in the processed is required.

Once the complaint is approved by the project chief and the inspector has their checklist, they must verify the address and property owner's name using the same methods discussed in the code inspectors section. After the address and property owner name is verified, an inspection is done to confirm the violation. If the violation is confirmed, a letter is sent out to the property owner. The property owner is typically given 30 days to comply. If the problem still exists at the time of re-inspection, the inspector can extend the compliance period or send the case is sent to the local district justice.

Complaint Type and Status

The auditors received the 2010 Microsoft access building complaint database in Microsoft excel format. The database consisted of 5,227 building complaints from the year 2010. The database listed the date the complaint was entered, ward, street address, inspector, type of complaint, initial inspection, complaint status, and abatement date. Table 5 shows what type of building code complaints were filed in 2010. Table 6 shows the status of each complaint in 2010.

TABLE 5

2010 BUILDING CODE COMPLAINTS				
Type of Complaint	# of Complaints	(%) Percentage	# of Unduplicated Complaints	(%) Percentage
Commercial	459	8.78%	420	10.00%
Demolition	768	14.70%	501	11.93%
Electrical	146	2.79%	141	3.36%
HVAC	13	0.25%	13	.31%
Fire Prevention	126	2.41%	122	2.90%
Residential	3,705	70.88%	2,993	71.28%
Code enforcement	4	0.08%	4	.10%
Unspecified/ sent to BBI employees	6	0.11%	5	.12%
TOTAL	5,227	100%	4,199	100%

Finding: Almost 72% of the inspector complaints were residential after the duplicate entries were eliminated**.**

Finding: Demolition had almost 12% and commercial had 10% of complaints. All the rest made up 6% of the complaints.

Finding: The number of demolition complaints dropped from 768 to 501 (34%) after duplicates were taken out. Mostly due to number of different people seeing the same building on a street that they thought needed condemned.

Finding: Once the type of complaint is put into the database, it is not updated if reassigned to a different inspector or category. This could cause confusion on what proper building inspector should handle this case: Commercial, Residential, Demolition, Etc.

Finding: Duplicate entries are not always identified and are sometimes listed as separate complaints. This would affect the statistics in Tables 6.

RECOMMENDATION No. 6:

BBI administrators must insist that Building Inspectors update the complaint database in a timely manner and consistently identify duplicate complaints.

TABLE 6

2010 BUILDING CODE COMPLAINT STATUS		
COMPLAINT STATUS	**NUMBER IN DATABASE**	**(%) PERCENTAGE**
Action Pending	145	2.77%
Dead End	11	0.21%
Duplicates	1,028	19.67%
In court	1	0.02%
Initially Inspected	159	3.04%
Legal Filed	2	0.04%
Notice Written	940	17.98%
Resolved /Abated	2,939	56.23%
Sent to DPW	1	0.02%
Vacant and secure	1	0.02%
TOTAL	**5,227**	**100%**

Finding: Nearly twenty percent of the entries in the Building Inspector database were duplicate entries, i.e., complaints about the same violation at the property address.

Finding: The majority of the complaints in 2010 were resolved or abated. Eliminating the duplicate reports (20%), 70% of the complaints in 2010 were resolved.

Duplicates

Sometimes when complaints are called into the 311 service center they are already on file from a previous caller. The inspector determines this by printing out these complaints and checking them against building complaint database to see if they were already posted. If they are already posted, they mark the status as duplicate and move onto the next case. Complaints are only marked as duplicate entries when two or more of the same complaint types are filed against the same property. Complaints about the same property for different violations, e.g., fire and HVAC, are treated as separate complaints.

Resolved or Abated Complaints

The auditors then analyzed the resolved or abated complaints to compare the amount of time it took them to get this job completed. Table 7 shows the type of complaints that were received in 2010 and that ended being resolved or abated. Also listed is the total number of calendar days needed to abate the problem and the average time (in calendar days) needed to resolve the complaints.

TABLE 7

2010 BUILDING CODE COMPLAINTS RECEIVED THAT WERE ABATED OR RESOLVED			
TYPE OF COMPLAINT	**# OF COMPLAINTS**	**TOTAL ABATED TIME IN DAYS**	**AVERAGE DAYS TO ABATE OR RESOLVE COMPLAINT**
Commercial	338	17,483	52
Demolition	266	29,823	112
Electrical	113	8,730	77
HVAC	13	304	23
Fire Prevention	103	7,662	74
Residential	2,099	131,552	63
Code enforcement	3	273	91
Unspecified/ sent to BBI employees	4	100	9
TOTAL	**2,939**	**195,297**	**529**

Finding: Three code complaints were included in the 2010 building complaint database.

Finding: Complaints about buildings needing demolition take longer to resolve because of the steps involved in obtaining a demolition.
Building Code Complaints by City Ward

Finding: The 19th ward (Beechview, Brookline and part of Mt. Washington) had the most building complaints (433) followed by the 20th ward (West End, Sheriden and Elliott) with 302 complaints.

TABLE 8

WARD	NUMBER OF COMPLAINTS	(%) PERCENTAGE
2010 BUILDING COMPLAINTS BY WARD		
1st	62	1.48%
2nd	64	1.52%
3rd	34	0.81%
4th	146	3.48%
5th	105	2.50%
6th	66	1.57%
7th	61	1.45%
8th	116	2.76%
9th	121	2.88%
10th	184	4.38%
11th	130	3.10%
12th	146	3.48%
13th	133	3.17%
14th	217	5.17%
15th	219	5.22%
16th	182	4.33%
17th	155	3.69%
18th	182	4.33%
19th	433	10.31%
20th	302	7.19%
21st	32	0.76%
22nd	33	0.79%
23rd	53	1.26%
24th	57	1.36%
25th	83	1.98%
26th	186	4.43%
27th	187	4.45%
28th	102	2.43%
29th	163	3.89%
30th	119	2.83%
31st	39	0.93%
32nd	87	2.07%
TOTAL	**4,199**	**100.0%**

Adjudication in Local District Justice Offices

In 1968, City Housing Court was established as a specialized court with one appointed magistrate who was familiar with City Ordinances assigned to the Court. The Court's purpose was to providing consistent enforcement of City Codes and remedy inconsistent adjudication by local magistrates. Multiple City magistrates later were appointed by the Mayor to hear specific categories of violations. Housing Court became part of Pittsburgh Magistrates Court (PMC).

In 2002, PMC became part of the State judicial system. Instead of appointed City Magistrates, rotating district justices presided over Housing Court at its downtown location. In 2008, the majority of City Code and Building Code violations were once again assigned to local district justices. Electrical code violations, demolition, Fire Code violations and HVAC cases are the only BBI complaints now heard in downtown Pittsburgh Municipal Court.

On local housing court days, district justices preside over BBI complaints, animal control complaints and environmental services complaints. Housing Court days are set by each District justice. District justices send Housing Court schedules to BBI where the schedules are distributed to the appropriate inspector. The schedules include defendant name, docket #, violation address, ward, violations, inspector, judge and time.

Finding: Property owners have more time to abate the problem before the hearing date. If the violation is abated before the hearing, the complaint is dismissed at the hearing.

Finding: Code inspectors are assigned multiple city wards and must file unabated complaints in the district justice office that has jurisdiction over each ward. Seven of the eight City code inspectors must attend hearings in two district justice offices.

Finding: Taking a case to court is discretionary. An inspector can turn the case to the district justice or give the property owner more time to comply.

Continuances

The auditors were told that inspectors are sometimes hesitant to take cases to court because the district judges grant a large number of continuances. A continuance gives the property owner more time to comply and a later court date is scheduled. Continuances result in additional court appearances by the inspector on the same case.

Finding: The 2010 district justice court schedules support inspectors' allegations of excessive continuances. Nearly half of the hearings scheduled by district justices were continuances. Out of 2,281 court dates, 1,052 (or 46% of the total) were continuances.

Court Cases by Ward

The auditors combined all 2010 district justice Housing Court schedules sent to BBI to determine the number of City Code and Building Code cases scheduled. Table 9 shows the number of court code cases per City ward.

TABLE 9

2010 CODE AND BUILDING COURT CASES BY WARD				
WARD	**CASES**		**WARD**	**CASES**
1st	28		18th	85
2nd	22		19th	144
3rd	17		20th	278
4th	57		21st	46
5th	68		22nd	34
6th	53		23rd	20
7th	29		24th	29
8th	29		25th	16
9th	86		26th	181
10th	72		27th	113
11th	98		28th	72
12th	90		29th	53
13th	99		30th	41
14th	57		31st	13
15th	132		32nd	23
16th	101		Not listed	13
17th	82		**TOTAL**	2,281

Finding: The ward with the most court cases, the 20th ward, did not have the most complaints. The 20th ward had 278 court cases, 302 building complaints and 462 city code complaints.

Code Inspector and Building Inspector District Court Appearances

Finding: The need to attend Housing Court in two district justice offices does not appear to significantly reduce code inspector field time. In 2010, the number of court appearances per City code inspector ranged from 31 to 11. At the high end, 31 court appearances is less than 3 times a month. At the low end, 11 court appearances is less than one per month.

TABLE 10

Inspector	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	# of appearances a year
2010 CITY CODE INSPECTOR DISTRICT JUSTICE COURT APPEARANCES BY MONTH													
A	0	1	1	0	2	2	0	1	1	1	1	1	11
B	2	0	1	0	2	1	2	0	1	1	1	0	11
C	0	0	2	0	1	3	2	1	2	3	2	2	18
D	1	1	0	1	2	2	2	2	2	4	2	3	22
E	2	3	1	0	1	1	1	3	3	4	4	1	24
F	2	1	3	1	3	2	3	2	2	3	3	2	27
G	4	2	2	1	2	4	2	2	2	3	2	3	29
H	5	2	4	1	1	3	2	2	4	1	2	4	31
TOTAL	16	10	14	4	14	18	14	13	17	20	17	16	173

Finding: Attending Housing Court in multiple district justice offices does not appear to significantly impact building inspector field time. In 2010, the total number of court appearances per building inspector ranged from 1 to 39. One inspector had 39 court appearances and 4 inspectors only had 1 court day all year.

TABLE 11

FREQUENCY DISTRIBUTION OF 2010 BUILDING CODE INSPECTORS DISTRICT JUSTICE COURT APPEARANCES	
NUMBER of INSPECTORS	**NUMBER of COURT APPEARANCES**
4	1
10	2 to 5
5	6 to 10
4	11 to 15
4	16 to 20
5	21 to 25
0	26 to 30
1	31
0	32 to 36
1	37
1	39

A table showing the 2010 Building Inspector District Justice court appearance by month can be found in the Appendix.

Building Permit Process

Building permits are required prior to the construction, enlargement, alteration, or repair of any building or structure in the City of Pittsburgh. BBI issues two types of building permits: residential and commercial permits. For example, a residential permit would be needed for the construction of a deck or swimming in a resident's back yard. A Commercial permit would be needed for the construction of a hotel, restaurant, bar or similar structure used for business purposes.

Applicants for seeking a building permit first must go to the counter at City Planning Zoning Division located next to BBI. Before a permit can be issued, the Zoning Division must ensure that the proposed use and occupancy of the property complies with current zoning regulations. The application fee is $25.00. For residential permits that involve home repairs or remodeling, the contractor applicant must be licensed by the State; for new residential construction, the contractor applicant must show that they are licensed by the City of Pittsburgh. No licenses are required if the work is being performed by the owner and occupier of a one or two family dwelling and no employees are used. All applications must be made by the owner or contractor. All applications for commercial permits require a general contractor who is licensed with the City of Pittsburgh. After zoning approval, the permit application is sent over to the BBI permit counter.

BBI permit counter staff determines whether the project requires a building permit, occupancy permit, or both. BBI engineers determine whether any or all of the following additional permits are needed: HVAC, electrical, plumbing, sprinkler or fire alarm.

If only an occupancy permit is needed, the applicant goes straight to the BBI cashier and pays for the permit. Any problems with the building must be remedied before an occupancy permit is issued. If the project requires a building or building with occupancy permit, the project building plans must be submitted to BBI engineers for review and approval before construction can begin.

When the plans are approved for Code compliance, the project is issued a building permit. Every permit is assigned to an inspector. The customer contracts the inspector when each phase of the project is ready for inspection. When construction is complete and in compliance with all code requirements, the BBI inspector signs off on the building permit. After the inspector signs off, an occupancy certificate, if needed, is issued. The occupancy certificate indicates that the work complies with code and zoning regulations.

Previous Audit Findings

The previous audit used benchmarks set by the Act 47 overseer to assess permit issuing times. Benchmarks stated that residential permits should be processed within 15 days and commercial permits within 30 days from date of application. In 2007 average issuance time for commercial alarm, hood and sign permits were under 30 days. Average sprinkler permit issuance times of 33.93 days were close. Average residential building, electric and HVAC times were well under 15 days. Average commercial electric and HVAC permits were well under 30 days but the average commercial building permit issuance time was a high 54.06 days.

The auditors calculated average permit issuance times for 2010. BBI no longer separates commercial and residential HVAC, sprinkler, alarm, demolition and sign permits in its database. Table 12 shows the type of permits that were issued in 2010 and average number of days it took to issue them.
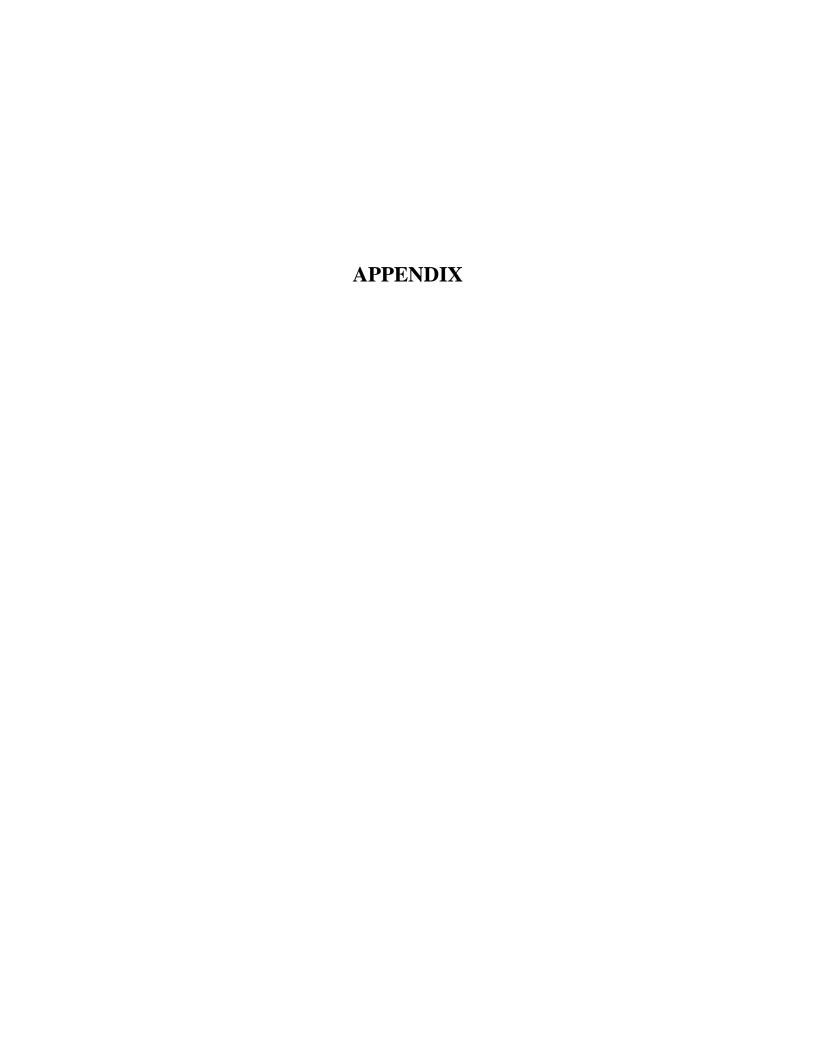
TABLE 12

PERMITS ISSUED IN 2010			
TYPE OF PERMIT	**# OF PERMITS**	**ISSUANCE TIME IN DAYS**	**AVERAGE DAYS**
Commercial Building	911	22,243	24.41
Residential Building	1,890	8,957	0.14
Commercial Electrical	1,475	1,141	0.77
Residential Electrical	2,384	327	0.14
HVAC	674	1,772	1.74
Sprinkler	458	9,827	21.46
Alarm	314	8,219	26.18
Demolition	147	4,136	28.13
Sign	200	437	21.85
TOTAL	**8,453**	**57,059**	**6.75**

Finding: In 2010, the average commercial building permit time did meet the 30 day or less benchmark and significantly improved since 2007.

Finding: In 2010, commercial building permits average issuance time was 24.41 days. This was a 29.65 average day decrease from the data that was collected for 2007 permits. In 2007, the average time was 54.06 days. Residential building permits saw an average time decrease from 6.49 days in 2007 to under one day in 2010.

CONCLUSION: Recurring software glitches and outdated property ownership information are hampering BBI code inspector effectiveness. A fully operational, integrated and upgraded software system with accurate data will increase the effectiveness of Bureau operations.

APPENDIX

2010 Building Inspectors Court Appearances by Month												
Inspector	**Jan**	**Feb**	**Mar**	**April**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**# of appearances a year**
A	2	0	2	0	1	2	0	0	1	0	0	0	8
B	0	0	0	0	0	0	0	0	1	1	1	1	4
D	0	2	3	0	2	1	0	3	3	2	5	1	22
E	2	0	3	0	0	2	0	3	3	1	0	2	16
F	0	0	0	1	0	0	0	0	0	0	1	0	2
G	1	0	0	0	0	0	1	0	1	4	2	0	9
H	0	0	0	0	0	0	1	1	0	1	1	1	5
J	2	0	2	1	1	1	2	1	3	3	2	2	20
L	2	3	1	1	1	2	1	1	2	3	1	3	21
N	0	1	1	0	0	0	0	0	0	0	0	0	2
O	0	0	0	0	0	0	0	0	0	1	0	1	2
P	0	0	1	0	0	1	0	0	0	0	0	0	2
Q	1	0	0	1	0	0	2	0	0	0	0	0	4
R	0	0	1	1	2	2	1	1	0	4	1	2	15
S	0	0	0	0	0	0	0	0	1	1	0	0	2
T	1	0	0	0	0	0	0	0	1	1	1	0	4
U	5	0	1	0	2	3	1	2	2	3	1	2	22
V	2	1	1	0	2	2	0	4	0	2	1	2	17
W	3	2	3	2	2	3	3	4	6	4	3	2	37
X	2	1	1	1	2	1	1	1	2	1	1	1	15
Y	0	0	1	0	0	1	0	0	3	1	1	0	7
A1	0	1	0	0	0	0	0	0	0	0	0	0	1
B1	1	0	0	0	0	0	0	0	0	0	0	0	1
C1	1	1	2	0	2	2	0	1	2	3	0	1	15
D1	3	1	4	0	4	5	2	5	3	5	4	3	39
E1	0	0	1	1	0	0	1	0	0	1	0	1	5
F1	0	0	0	0	0	0	0	0	0	0	0	1	1
G1	0	0	0	0	1	0	0	0	0	0	0	0	1
I1	3	0	1	1	2	5	3	1	2	5	2	6	31
J1	3	2	3	0	4	2	0	2	2	3	1	3	25
K1	3	0	2	1	3	3	1	0	1	1	0	1	16
L1	1	0	1	0	1	1	1	0	1	1	0	1	8
O1	2	2	2	0	1	1	1	1	1	0	1	1	13
P1	4	0	5	0	2	4	1	3	2	0	1	1	23
Q1	1	1	0	0	0	2	0	0	2	0	2	0	8
TOTALS	**45**	**18**	**42**	**11**	**35**	**46**	**23**	**34**	**45**	**52**	**33**	**39**	**423**