

REPORT TO BURLINGTON CITY
COUNCIL ON THE
COMPREHENSIVE CODE
ENFORCEMENT PROGRAM

BY THE SPECIAL COMMITTEE ON QUALITY OF LIFE &
CODE ENFORCEMENT

NOVEMBER 18, 2004

REPORT TO BURLINGTON CITY COUNCIL ON THE
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 - 2. Draft FY 05 Budget Resolution Report to City Council, dated September 8, 2004. Submitted by Gene Bergman, Interim Director

November 18, 2004

**REPORT TO BURLINGTON CITY COUNCIL ON THE
COMPREHENSIVE CODE ENFORCEMENT PROGRAM
BY THE SPECIAL COMMITTEE ON
QUALITY OF LIFE AND CODE ENFORCEMENT**

City Councilors Phil Fiermonte (Chair), Ian Carleton, Bill Keogh and Joan Shannon

I INTRODUCTION

The Burlington City Council charged the Community Development and Neighborhood Revitalization Committee, expanded to include Councilor Keogh, and referred to as the Special Committee on Quality of Life and Code Enforcement (Committee) to review the City's Comprehensive Code Enforcement Program (Code). This charge came in three forms. First, the City Council priority setting process established Code as one of its annual priorities. Second, a resolution on June 14, 2004 directed the committee to hold "a series of public meetings to determine whether the Code Enforcement Office is properly implementing the City's quality of life and minimum housing policies." Finally, as part of the FY 2005 Budget adoption the City Council gave particular attention to reporting back on the Code efforts. The budget resolution called for a report on a) the review of the Code Office information technology, b) staff deployment, c) allotment of staff time among minimum housing, quality of life and problem property assignments, d) re-inspection strategies, and, e) consumer response systems.

The time period of the Committee's review coincided with the final months of service of Ray O'Connor, the first Code Enforcement Director, and five months of the tenure of Eugene Bergman as interim Code Enforcement Director. The Committee also met with Mayor Peter Clavelle and other members of his administration.

This report, while informed by the Committee's overall review, is also directed to the comments received from the public and staff both before the full City Council and the Committee.

The Committee held meetings on July 21 and August 18 where members of the public were invited to speak. Additionally, a number of the persons spoke at the public forum at the May 24 City Council meeting. Public comments were also received on early drafts of this report.

II MANDATE OF THE CODE ENFORCEMENT OFFICE

The Code Enforcement Office actively enforces 13 different code areas for the City of Burlington. The main responsibility of the office is the enforcement of minimum housing standards and zoning ordinances and permits conditions. The office notifies landlords of noise violations at their properties in order to allow for our enforcement. The office is designated as

the enforcement agency for the signs in the greenbelt ordinance. Code Enforcement Officers are designated Deputy Health Officers and issue health orders pursuant to ordinance (emission of smoke), and state law. The office enforces the City's pesticide notification law; the Housing Code Enforcement Case Manager is also the Health Policy Specialist and staff to the Board of Health.

In addition, by agreement with the Department of Public Works, the office administers and enforces the Vacant & Dangerous Building ordinances, enforces the anti-littering/dumping laws, and aids in the removal of trash in rights-of-way & public property. The office assists DPW in enforcing trash hauler license violations related to early morning pick up (noise). By agreement with the Department of Parks & Recreation, the office enforces the Charter provisions related to weeds and growths in the "parkings" (greenbelts) and, pursuant to City Code, enforces against illegal dumping in City parklands. By authorization of the Police Department, Code Officers issue parking tickets for yard parking. The office works with the interdepartmental "Green Team," coordinated by CEDO, in the enforcement of the anti-graffiti ordinance.

Code and Charter references: Burlington City Code of Ordinances, Chapters 8 (Art. III) 14 (14-4, 14-5, 14-6, 14-21), 17 (17-9), 18 (18-20), 20 (20-55), 21 (21-5, 21-13, 21-17, 21-29) and 27 (27-2, 27-4), City Charter Sections 211 and 212.

III HISTORY OF THE CODE ENFORCEMENT OFFICE

The City has had landlord regulations since the early 1960's which were refined in the 1970's. The basic framework for what we call the minimum housing program was put in place in 1986 and has been amended on several occasions since. The Department of Public works for many years administered the Minimum Housing Enforcement Program. By the mid-1990's the City recognized the need for greater coordination across departments in the enforcement of codes. Public Works, Fire, Planning and Zoning Departments each had enforcement responsibilities. The Police Department had moved to a community policing model. Also a stronger voice was coming from residents for more effective enforcement of existing codes, especially as they relate to the quality of life in the neighborhoods.

The result was the creation of the Comprehensive Code Enforcement Office. The new office was based upon the view that enforcement of the city ordinances would be more effectively handled if there was a coordinated approach; one office would be responsible for working with the multiple city offices, and facilitating the resolution of multiple code issues. A history of the office follows:

- November 1998 (FY 1999) the City hired its first Comprehensive Code Enforcement Officer. The newly created position reported to the Mayor but did not have staff. On September 11, 2000 Burlington City Council amended sections of the Minimum Housing Ordinance, effective date December 1, 2000. Total Staff: 1.
- In the FY 2000 a budget of \$296,340 was authorized. The office staff consisted of the Director, Zoning Compliance Officer - a part time zoning enforcement position moved

out of Planning and Zoning and reclassified as full time, three inspectors - moved from the DPW minimum housing program and a temporary staff position. Minimum Housing fees were raised from \$25 to \$38. Total Staff: 5 full-time; 1 temporary.

- The FY2001 Budget was increased to \$297,120. Office staffing included the Director, Zoning Compliance Officer, three inspectors, and a temporary clerical position. Total Staff: 5 full-time; 1 temporary.
- The FY2002 budget was increased to \$477,000. Office staffing included the Director, Zoning Compliance Officer, the addition of two inspectors to bring the number to five, and a half time Policy Administrator position was added to the existing half time position working with the Board of Health. The Minimum Housing Fee was raised from \$38 to \$50. With more full-time staff the reliance on temporary help was reduced. Total Staff: 7.5.
- In FY2003 the opening budget was \$519,690 and later was amended to \$576,880. Office staffing included the Director, Zoning Compliance Officer, five inspectors, a full-time Policy Administrator, one clerical position. The Board of Health Budget merged with Code Enforcement. Total Staff: 9.
- The FY 2004 Budget grew to \$638,380. Office staffing level was increased to 10 FTE's with one additional clerical position added above the FY2003 level. The Minimum Housing fee was increased to \$75 for all but owner occupied duplexes. Total Staff: 10.
- The FY 2005 approved Budget is \$715,040. Staffing level of 11 FTE's is as follows: the Director, Zoning Compliance Officer, five Inspectors, a Policy Administrator, two administrative positions and one additional inspection staff member (Assistant Zoning Enforcement Specialist) was added. Total Staff: 11.

Multiple city offices are actively involved in the enforcement of the City Code of Ordinances: the work of the Code Office, the Fire department handles housing inspections as they relate to the fire code, building codes are enforced by Public Works, and the Attorney's Office has staff assigned to handle the violations arising from the work of these other offices.

The FY 2005, or current year, budget for Code Office is \$715,040; however, additional city funds are expended in these other departments. A more complete picture of the expenditures on these efforts is presented when we acknowledge the closely related activities of staff in other departments. As an example, the table below includes an estimate of the budget for closely related work conducted out of the Fire and City Attorney Departments. This example illustrates that over \$132,000 in additional spending on these activities is budgeted outside the Code Office. Add to this the Public Works Inspection Division and it is clear that the City's commitment to code enforcement in its broad interpretation is substantial.

Funding for Code Enforcement and Related Operations

	FY 2004 Budget	FY 2005 Budget
<u>Revenues:</u>		
Minimum Housing Fee	\$ 400,000	\$ 620,000
Other Code Fines & Fees	52,000	95,040
Court Fines (70% of Attorney budget)	59,500	59,500
General Fund Revenues	206,700	72,850
Revenues	\$ 718,200	\$ 847,390
 <u>Expenditures:</u>		
Code Enforcement Operating Budget	481,900	559,270
Fire Code 33% Fire Marshall	18,550	19,450
33% Assistant Fire Marshall	15,550	16,100
33% Fire Inspector	13,750	13,800
Legal Costs 70% of One Attorney	41,600	43,850
Benefits Code, Fire, & Attorney Share	146,850	194,920
Expenditures	\$ 718,200	\$ 847,390

IV ACTIVITY LEVELS FOR THE CODE ENFORCEMENT OFFICE

A memorandum from Interim Code Enforcement Director Gene Bergman responding to the request for information in the FY 2005 budget resolution is attached to this report. We present some key points of that memorandum here.

Staff Activity

- 6 people (5 inspectors and 1 case manager) area assigned to enforcement of minimum housing, health, littering/dumping, greenbelt signs, graffiti, and vacant building. Minimum housing takes up the vast majority of their time.
- 2 people are assigned full-time to zoning compliance and enforcement.
- Additional staff time is concerned with management and control, and administrative support. Action has been taken to hire the additional administrative position approved in the FY 2005 budget.
- The office, since July, has been developing a comprehensive scheduling strategy. Management review and oversight of the work of the inspectors has increased. Changes have been made to the scheduling of staff to better accommodate walk-in and telephone inquiries. Weekly patrols to supplement scheduled inspections have been resumed. AMANDA data entry and reporting have improved.

Historical Inspection Activity

The following activities were reported by the former Director in the City Annual Reports:

<u>Fiscal Year</u>	<u>Housing Safety Inspections</u>	<u>Responses to Complaints</u>
2003	2,000	more than 1,500
2002	1,400	more than 1,500
2001	1,400	more than 1,500
2000	1,087	more than 1,500

August Inspection Activity

The Bergman memorandum presents the following activity summary for the month of August 2004.

Minimum Housing

Routine inspections: 77 buildings with 288 units; re-inspected properties: 3 buildings with 16 units.

Orders to correct: 34 properties with 109 units

Certificates of Compliance: 10 properties with 23 units
Results still under review: 39 properties with 171 units

Complaint inspections: 44 conducted with 13 having violations confirmed and orders issued; 4 violations resolved and 27 still open

Zoning Compliance

66 compliance memos; 35 Certificates of Occupancy, 6 temporary Certificates of Occupancy, 20 site visits and inspections, 15 new complaints received, 13 Affidavits for Enforcement prepared for referral.

Activity Levels Required to Meet Ordinance Standards

The Standards

Section 18-19 of the City Code of Ordinances sets two standards for the inspection cycle for minimum housing purposes:

Three-year cycle for non-owner occupied properties
Five-year cycle for owner occupied properties

Additionally, there is a two-year cycle invoked if an owner is non-compliant with aspects of the ordinances. For this analysis we will consider units out of compliance as non-routine and not included in the cycle calculation.

Assumptions

Total number of units - based upon the minimum housing fees received in recent years we will use 8,150 as the number of units covered by the ordinance.

Number of units per year - conservatively, if all are non-owner occupied and thus on the three-year cycle 2,717 units (8150/3) would have to be inspected per year.

Number of inspectors - five

Number of inspector weeks per year - 45 each or a total of 225
(52 weeks less an estimate of an average of 7 weeks for vacation, holidays, sick, etc.)

Inspection Activity Required for Routine Inspection Cycle

Number of routine inspections per week per inspector required to meet the three-year cycle - 12 (2,717/225)

The Zoning and Quality of Life sections of the City Ordinances, unlike minimum housing, do not contain any guidance with regards to inspection cycles.

V INFORMATION TECHNOLOGY AND CODE ENFORCEMENT

In the fall of 2001, the City began the process to acquire a single land data management software solution, a system that would integrate Assessing and other land records systems such that the City had one unified land information system.

Due to the specific nature of assessing as it relates to the production of the City grand list, it was understood that in order to accomplish this goal, Burlington would require two computer systems that would be integrated; a Computer Assisted Mass Appraisal (CAMA) System and a system to handle the remaining departments, i.e., Planning and Zoning, Code Enforcement and DPW inspections, etc. The City strove to answer the integration question through the acquisition of two systems that would be configured to work together as one.

The City ultimately chose the company CSDC with their AMANDA product for Planning and Zoning, Code Enforcement, and DPW Inspections (etc.) and Patriot Property's with their ASSESSPRO product for the Computer Assisted Mass Appraisal.

The installation of AMANDA happened in early 2003 and the Code and other offices started using it in July of that year.

In order to help assure the success of the project it was deemed critical to have each department have representation on the acquisition and implementation team; Public Works chose Ned Holt, Planning and Zoning chose Jay Appleton, Code Enforcement chose Kathleen Butler and the City Assessor John Vickery and Assistant City Treasurer Karen Wingate were on the team as well. The assignment to the team was a department head decision.

The AMANDA system is a highly flexible system. In some ways it is a sophisticated template from which we define and run our business needs. The decision to purchase AMANDA over other products was made precisely as a result of this flexibility; AMANDA allows each department to operate according to its own unique requirements, allowing each department to conduct its business as our charter requires and at the same time work or 'integrate' this information with the other city departments that are interrelated. Each department therefore defined, and built into AMANDA, its own specific business needs.

Mayor Clavelle requested an evaluation of information technology in Code Office and the work began in March, 2004. The evaluation arose as a result of concerns in some quarters with how well the City's new Code Office application software was meeting the policy-making, managerial and operational requirement of the important city function. A comprehensive Final Report entitled "Evaluation of Information Technology in the Code Enforcement" was submitted to the City on July 8th, authored by Sheldon Cohen, President of Systems Consulting, Inc. This report was distributed to the City Council on July 12, 2004.

The report recognizes the enormous accomplishment on the part of city employees and puts forth a series of recommendations that help focus and guide the City to making full use of the systems capabilities, particularly as they relate to the Code Office.

In brief summary, the recommendations fall into the following categories:

1. Refine, improve, and fully utilize current functionality
 - a. Create Standard Operating Procedures for the use of AMANDA
 - b. Improve web site information on the Code Office
 - c. Code Office management should fully utilize the reporting and analytical capacities of the system
2. Communication & Training
 - a. Ongoing formal communication for the Implementation Team
 - b. Additional training on AMANDA for Code inspectors
 - c. Training for new Code Enforcement Officer (yet to be hired)
3. Future Enhancements
 - a. Strategize enhancements carefully

With these recommendations in mind, the City in the summer of 2004, has more fully partnered with the company that provided this product, CSDC, to assist in implementing an on-

line tool for communicating, tracking, resolving and documenting issues associated with the functionality we currently have. Additionally, after this report was produced, the City engaged a professional trainer to provide additional training for all end users, including Code Inspectors, and higher level system administration.

The strategy undertaken by the CAO office is 1) stabilize the current functionality, 2) bring on-line other City Departments, and 3) add functionality. Regarding the expansion or adding functionality, the City has been primarily looking at Mobile Inspections and a CSDC product called Request for Service. Request for Service is a complaint tracking module that has the potential of streamlining citizen inquiry. Both of these enhancements will be more actively pursued in the fall of 2004. It is noted that a key technical member of the AMANDA implementation team recently left city employment setting back the progress on installation of additional functionalities.

VI BROAD THEMES FROM THE PUBLIC COMMENTS

During the public meetings held in May, July and August of 2004, the Committee found the following broad themes expressed in a variety of ways by the public:

- There is strong support from the community for the code effort
 - Majority of speakers said the efforts need to be strengthened
 - Strengthen the professional standards (knowledge of codes, etc.) of the Code Office.
- The Committee heard a desire to have the code effort balance
 - Minimum housing inspections
 - Quality of life enforcement
 - Zoning enforcement
- Acknowledge and build upon neighborhood alliances, such as neighborhood walks.
- Tenant organizations stated that there should be more focus on minimum housing inspections less on quality of life because minimum housing fees are the primary source of funding for the office.
- Landlords were concerned with uneven enforcement, inability to access reports, "heavy handedness," and tenants not held responsible for creating code violations.
- Residents and resident organizations recognized some progress and successes, but also said there is a lack of consistency in enforcement and generally reported a backlog of work for the department is unmanageable, calls and complaints often go unanswered.

- Maintain and improve the burden of revenue support to the beneficiaries/service demand.
- Request for easier access to and understanding of the codes under the jurisdiction of the Code Office.
- High praise for the work by Ray O'Connor in establishing the program through his tenure.
- Several members of the public spoke in favor of the concept of more citizen oversight through a commission charged to review and oversee code activities.

VII FINDINGS

As may be expected from a review of any enforcement program, the Committee received comments ranging across a spectrum of praise, support and critique. The Committee makes the following findings based upon the comments of the public and its own review of the current status of the Code Enforcement Office.

Finding One: The Committee finds that the administration, through the assignment of Attorney Gene Bergman to the position of Interim Director, has effectively provided the leadership to continue and improve the operations of the Code Office.

Finding Two: The Committee finds that data management of the activities of the Code Office are incomplete for the period before July 1, 2004, thus the Committee is unable to determine if the level of inspections has been adequate to meet any goals that may be set by the ordinance or is responsive to the demands of the minimum housing, zoning or quality of life objectives of the program.

Finding Three: The Committee finds the level of minimum housing inspections for the month of August, if sustained, is adequate to substantially meet the inspection goals identified by the previous director (240 to 320/per month).

Finding Four: Given the high level of resident concern, the history of inadequate data collection prior to July 2004, and the acknowledged back log of zoning and quality of life cases, the Committee finds that the staffing levels dedicated to zoning enforcement and quality of life cases has been inadequate.

Finding Five: The Committee finds that the addition of one zoning inspector and one administrative position, completed as of this report, will improve the capacity of the office to respond to zoning enforcement and quality of life cases.

Finding Six: The Committee finds that while generally received well the Code Office has a ways to go to gain the full confidence and trust of tenants, landlords and general public. The

majority of public comments gave high praise and gratitude for the work done by Ray O'Connor and present staff.

Finding Seven: The Committee finds a need for attention to a balanced and informed application of enforcement and improved communication by the Code Office with neighbors, landlords, tenants and the general public.

Finding Eight: The Committee finds that the Interim Director has employed a uniform checklist for use by the inspectors and is performing site visits with inspectors to monitor quality control.

Finding Nine: The Committee finds that alliances, such as the neighborhood walks, established through the office work with residents and resident organizations continue to be a significant part of and a valuable resource to the Code effort and, thus, should be acknowledged and built upon.

Finding Ten: The Committee finds that, as reported by staff, the use of the AMANDA database system, while not currently used to its full capabilities, is improving the recording of current staff activity and the tracking of these activities. A report by City staff on technology review of the code office was given to the City Council on July 12.

Finding Eleven: The Committee finds that the relationship between the Code Office and the Police, Public Works, Fire and Parks & Recreation Department's approach to quality of life violations requires further clarification to avoid duplication of effort or inappropriate extension of the mission across the departments.

Finding Twelve: The Committee finds that with the increase of the fee to \$75 per unit per year the minimum housing fee revenues are estimated to be \$620,000 per year and make up approximately 86 percent of the revenues of the Code Office while the field staff consists of five inspectors principally dedicated to minimum housing and two inspectors devoted principally to zoning and quality of life.

Finding Thirteen: The Committee finds that the composition of the City's neighborhoods with a high percentage of rental properties and a large student and related population imposes high demands for minimum housing, zoning and quality of life enforcement activities.

Finding Fourteen: The Committee finds that Section 18-30 of the Code of Ordinances states that the Apartment Registration Fee "shall be in an amount determined by and dedicated solely to the cost of providing rental housing inspection services, clerical, administrative and mediation support services for the Housing Board of Review and landlord/tenant resource services."

VIII RECOMMENDATIONS

The Committee makes the following recommendations to the City Council.

1. Acknowledging the significant results achieved up to this point, the Committee recommends the Code Office continue to develop more consistent level of compliance and enforcement of the city ordinances and a more citizen friendly demeanor of the office. This should include customer service training of staff and improved use of technology for complaint tracking.
2. The City Council should review the options for more citizen oversight of the code efforts including, but necessarily limited to, ongoing City Council Committee oversight, and the development of a new, or incorporation into the scope of oversight of an existing, citizen advisory board or commission. The City Council, by resolution, referred this matter to this committee which, in turn, intends to revisit the matter of citizen oversight following the issuance of this report.
3. In order to improve the communication among the Department Head, the Mayor, and the City Council, the Committee recommends that the Mayor be requested to provide a report to the City Council every three months for the next 18 months and every six months thereafter on the activities of the Code Office.
4. The Committee recommends the Code Office maintain an aggressive inspection program for minimum housing standards. While not overlooking properties with dangerous conditions or requiring extraordinary time commitments by staff, this should include regular inspections and re-inspections.
5. The Committee recommends that the Mayor and City Council continue to review sources of funding, increasing where possible the proportion of funding derived from the fines and penalties generated from violations. The Code Office should align service demands and responses in reasonable proportion to revenue sources. The committee recommends a report to the City Council from the CAO on the progress of this matter within the scope of recommendation 3 above.
6. The Committee recommends that the City Council charge the Community Development Committee with reviewing the scope of the mandate of the Code Program and recommend amendments as necessary.
7. The Committee recommends that memoranda of understanding be developed outlining the relationships and boundaries among and between the Departments of Code Enforcement, Police, Fire, Public Works and Parks & Recreation regarding the enforcement of city and related codes. The committee recommends a report to the City Council from the Code Enforcement Director on the progress of this matter within the scope of recommendation 3 above.
8. The Committee recommends the Code Office within available funding increase the training of the Code Director and staff in code contents and enforcement strategies and approaches.

9. The Committee recommends that the Code Office or other responsible departments adopt the following benchmarks for improvements to the AMANDA system:
- Improve the complaint confirmation process. Create and implement a communication tool that confirms through written or electronic response receipt of the complaint, and outlines the process for how the complaint will be resolved. This should be in place by November 30, 2004.
 - Evaluate and report on the feasibility of the module Request for Service. (This is a routing and tracking complaint module.) The evaluation period should begin six weeks after the assignment of AMANDA support and be completed 120 day hence.
 - Improve overall reporting for the department. Prepare a list of the required reports, discuss the content and format with the CAO, the CD committee, the Mayor, and the technical staff. Have these reports written and able to be produced no later than May 15, 2005.
 - Evaluate and report on the feasibility of mobile inspections. The evaluation period should begin six weeks after the assignment of AMANDA support and be completed 90 day hence.
 - Continue to refine the rental registration data collection and billing process. Report to the CD Committee no later that 90 days on these improvements.
10. The Committee recommends the Mayor and City Council continue to work with the University of Vermont and other educational institutions to increase the commitment to, and responsibility for, responsible student behavior and providing an annual financial contribution to the cost of operating an effective Code Office.

The Committee stands ready to discuss these recommendations at the pleasure of the full City Council.

Support Staff for Committee Review: Brian Pine, Eugene Bergman, Karen Wingate, and Brendan S. Keleher

ATTACHMENT - A

City of Burlington, Vermont, An
Evaluation of Information Technology in
Code Enforcement, dated July 8, 2004.

By Systems Consulting Group, Inc.

**CITY OF BURLINGTON,
VERMONT**

**AN EVALUATION OF
INFORMATION TECHNOLOGY IN
CODE ENFORCEMENT**

July 8, 2004

**Submitted by:
Systems Consulting Group, Inc.
P.O. Box 2404
Flemington, NJ 08822**

July 8, 2004

Brendan S. Keleher
Chief Administrative Officer
City Hall
149 Church Street
Burlington, VT 05401

Dear Mr. Keleher:

Systems Consulting Group, Inc. is pleased to present this *Evaluation of Information Technology in Code Enforcement* (the *Code IT Evaluation*) to the City of Burlington.

In particular, we wish to thank the City's employees and others who have contributed significantly to this effort.

Thank you for the opportunity to have been of service to the City of Burlington.

Very truly yours,

Sheldon S. Cohen
President

EXECUTIVE SUMMARY

This *Evaluation of Information Technology in Code Enforcement* (the *Code IT Evaluation*) began in March, 2004 at the request of Mayor Peter Clavelle and under the direction of Chief Administrative Officer Brendan S. Keleher. It arose as a result of concern in some quarters with how well the City of Burlington's new Code Enforcement application software was meeting the policy-making, managerial and operational requirements of this important function of City government.

During 2002 and 2003, Burlington had focused on procuring and implementing a new, integrated set of land-records and mass-appraisal application software to replace the archaic, departmental, standalone systems which had been in use in four, key City agencies: Code Enforcement, Building, Planning and Zoning, and Assessing. This comprehensive, systematic effort recognized the fundamental interdependence of these agencies in their work every day and the significant gains which Burlington ought to be able to gain through effective deployment of information technology (IT) both in (a) providing improved service to the City's customers and (b) achieving greater efficiency and economy in City government.

From the very beginning, Burlington's key departmental users in Code Enforcement, Building, Planning and Zoning, and Assessing were the driving force in this effort.

- Their functional requirements formed the core of the Request for Proposals (RFP) which went to prospective vendors.
- This team carried out an exhaustive evaluation of proposals received, culminating in the execution of a comprehensive weighted-factor evaluation which structured Burlington's fair and open choice of a vendor.

The team recommended the award of this contract to the proposal which included Patriot Properties, Inc. of Lynn, Massachusetts as the prime contractor and supplier of the computer-assisted mass appraisal (CAMA) application software and CSDC Systems, Inc. of Mississauga, Ontario, Canada as the subcontractor for land-records applications. City Council voted on August 12, 2002 to authorize, fund and execute this contract.

As important as anything else, the core departmental team has borne direct responsibility throughout the implementation of the new system. This began with a series of project-management meetings occurring roughly monthly with the City's vendors, starting in November, 2002 and extending through October, 2003. These meetings were critical in guiding the execution of the City's workplan and making timely adjustments, both by Burlington's staff and its vendors, in the course of the implementation.

CSDC's AMANDA product forms the core of the land-records environment used primarily by Code Enforcement, Building, and Planning and Zoning. Unlike most commercial off-the-shelf software (known generally by the acronym of "COTS"), AMANDA is not a fixed, inflexible release-level product. Instead, it provides the user-jurisdiction like Burlington with a core architecture and set of tools, which then enable the agency to customize its entire business process and workflow. This essential characteristic was one of the key elements which Burlington's users discerned very clearly during the two rounds of vendors' demonstrations that constituted an important part of the City's evaluation of vendors' proposals. Indeed, Burlington's users were well informed and insightful in making the deliberate trade-off between (a) a fixed, release-level product which might have been easier to implement and deploy initially and (b) AMANDA, which required substantially

more work to implement but provided Burlington with enormous flexibility in meeting its functional requirements both in the initial implementation and for the longer term.

The Code Enforcement system went into production in Code Enforcement in June, 2003. Enhancements and training have continued since that time on a regular basis as needs articulated by the City's staff or other customers have been evaluated and addressed within the limits of the City's human and fiscal resources.

The findings and recommendations which this *Code IT Evaluation* presents are derived from a comprehensive assessment of the City's *functional requirements*--what Burlington does now or expects to be doing in the foreseeable future related to its Code Enforcement function. One must look at the full range of the City's Code Enforcement function as a whole, not in separate parts. This view should be based on the concept of *functional integration*--how the Code Enforcement function occurs primarily in the Code Enforcement Department but also how other City agencies such as the Law Department, Fire Department or Corporation Counsel, could also benefit from use of AMANDA. Indeed, there was positive, universal recognition of this interdependence among the City's staff and other officials during the interviews associated with this *Code IT Evaluation*.

Moreover, the requirements of Burlington's Code Enforcement function are shaped largely by the City's character, including (among other things) its serving as home to the University of Vermont (UVM), the age of its housing stock, the relatively large percentage of multi-family residential structures (about 2,700 registered properties with approximately 8,700 apartments) and its status as a regional commercial center. If Burlington were a young community or without the

demands for housing presented by its University-related population, the entire nature of its requirements in Code Enforcement would be very different and much less challenging.

In the course of this engagement, the consulting team met on numerous occasions with various groups and individuals from every agency in the City involved in the Code Enforcement function, interviewing 10 personnel in the designated City agencies (see Appendix A). This process resulted in full and frank discussion. All aspects of this *Code IT Evaluation* have been reviewed and discussed thoroughly with Burlington's IT Task Force and officials.

Most important, Burlington has an exceptionally capable and dedicated group of employees in Code Enforcement and related agencies. Although the City has much work to do in implementing the recommendations of this *Code IT Evaluation*, Burlington's staff has shown a high level of interest in (a) continuing to find ways in which the application of IT in Code Enforcement can support their work better and (b) making the effort required to implement change.

Ultimately, the goal of this *Code IT Evaluation* is to help the City of Burlington find ways to maintain and enhance the quality of its community.

The paragraphs which follow in this Executive Summary present key findings and recommendations of this *Code IT Evaluation*.

1. ***The key conclusion of this Code IT Evaluation is that Burlington's implementation of the AMANDA system in Code Enforcement has produced an outstanding application system which has already provided great benefit for Code Enforcement and related agencies. Particularly considering the fact that this system was developed by the City's own staff in Code Enforcement and the Clerk/Treasurer's Office, and that it has been in production for only one year, this is a remarkable accomplishment.***

This ***Code IT Evaluation*** makes many recommendations which (a) build on the strong foundation which the first year's implementation of the AMANDA system has provided and (b) continue to gain further benefit for Burlington from AMANDA both in Code Enforcement and the full range of related City agencies.

2. Before embarking on further enhancement of the AMANDA system in Code Enforcement, Burlington needs to be sure that this system's existing capabilities are being used fully and properly. This has not been the case thus far, for instance, in the areas of workload analysis, agency-wide productivity reporting and effectiveness reporting.
3. The Code Enforcement IT Task Force which was organized in connection with this ***Code IT Evaluation***, must continue to meet at least monthly and play the key role in (a) establishing priorities among proposed enhancements to the AMANDA system in Code Enforcement and (b) evaluating the actual progress being made.

4. In this connection, the IT Task Force must take a careful and deliberate approach to evaluating the current list of more than 120 enhancements and then setting a clear set of short- and long-term priorities, including not more than roughly 30 such items, recognizing the constraints on human resources in the City.
5. Burlington should focus on customer service as the bedrock of enhancing the timeliness, quality and efficiency of its Code Enforcement function. Among the key actions which the City ought to take here is making vastly improved use of Code Enforcement's Web site in a way which meets benchmarks of best practice.
6. Code Enforcement must review and redefine standard operating procedures for its use of the AMANDA system This is a prerequisite to further training and expanded use of the system.
7. Training of personnel in Code Enforcement in the AMANDA system has been done at a significant level. At the same time, additional training, focused on the use of the system by Code Enforcement's inspectors, needs to be continued with periodic refresher courses.
8. Management needs to make active use of both (a) the many standard reports included in the AMANDA product and (b) the extensive—virtually unlimited—analytical and reporting capabilities which Burlington's implementation of AMANDA provides.

9. The new Chief Code Enforcement Officer must undertake a period of concentrated training in the AMANDA system during his/her first two weeks on duty in Burlington. AMANDA is now a critical part of the managerial, supervisory and operational environment in Code Enforcement and the Chief must develop facility with AMANDA as soon as possible in order to be effective as this critical agency's manager.
10. Mobile technology offers intriguing possibilities for improving both customer service and productivity of the staff. However, this must be considered by the IT Task Force with the other enhancements in Code Enforcement's IT environment.
11. Burlington is a largely mature community which does not foresee any particular changes in its environment over the next several years that would be expected to have a major influence on its Code Enforcement function. This, of course, is always subject to change as a result of action by the State or U.S. Government.
12. The implementation of the recommendations of this *Code IT Evaluation* rests with the City itself. Burlington must address with discipline and consistency the recommendations which this *Code IT Evaluation* presents in order to gain the greatest benefit possible from their implementation. The City must resist the many day-to-day distractions which have the potential to draw attention and energy from the implementation of these recommendations.

13. Where this *Code IT Evaluation* offers observations which may sound critical, this is not intended in any way as an adverse reflection on the knowledge, skill, ability or commitment of Burlington's staff, elected or appointed officials. Their dedication to the City has been apparent throughout this engagement.

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I. BACKGROUND.

A. Introduction.

This *Evaluation of Information Technology in Code Enforcement* (the *Code IT Evaluation*) began in March, 2004 at the request of Mayor Peter Clavelle and under the direction of Chief Administrative Officer (CAO) Brendan S. Keleher. It arose as a result of concern in some quarters with how well the City of Burlington's new Code Enforcement application software was meeting the policy-making, managerial and operational requirements of this important function of City government.

At the beginning of this effort, the CAO appointed a Code Enforcement IT Task Force (the IT Task Force), including a cross-section of City personnel involved in this function:

- Raymond O'Connor, Chief Code Enforcement Officer
- Kathleen Butler, Health Policy Case Manager
- Atty. Gene Bergman, Law Department
- Karen Wingate, Assistant Treasurer
- Harry Snyder, Director of Human Resources
- Joan Carter, Data Analyst

At its first meeting on March 31, 2004, the IT Task Force adopted the mission statement which follows:

The goal of the Code Enforcement IT Task Force is to assess the state of the AMANDA system's integration into the Code Enforcement work processes, prioritize needs for improvements, identify all resources available and develop a plan for implementing the improvements.

During 2002 and 2003, Burlington had focused on procuring and implementing a new, integrated set of land-records and mass-appraisal application software to replace the archaic, departmental, standalone systems which had been in use in four, key City agencies: Code Enforcement, Building, Planning and Zoning, and Assessing. In undertaking this comprehensive, systematic effort, Burlington recognized the fundamental interdependence of these agencies in their work every day and the significant gains which the City ought to be able to achieve through effective deployment of information technology (IT) both in (a) providing improved service to the City's customers and (b) achieving greater efficiency and economy in City government.

From the very beginning, Burlington's key departmental users in Code Enforcement, Building, Planning and Zoning, and Assessing were the driving force in this effort.

- Their functional requirements formed the core of the Request for Proposals (RFP) which went to prospective vendors.
- This team carried out an exhaustive evaluation of proposals received, culminating in (a) the execution of a comprehensive weighted-factor evaluation which structured Burlington's fair and open choice of a vendor and (b) the negotiation of a rigorous, performance-based contract.
- The core departmental team bore direct responsibility throughout the implementation of the new system. This began with a series of project-management meetings occurring roughly monthly with the City's vendors, starting in November, 2002 and extending through October, 2003. These meetings were critical in guiding the execution of the City's workplan and making timely adjustments, both by Burlington's staff and its vendors, in the course of the implementation.

The Request for Proposals (RFP) for a Computer-assisted Mass Appraisal (CAMA) and Land Records System was distributed to vendors on October 15, 2002. Proposals were received from three of the top vendors in New England and the United States on January 3, 2002. Following the careful and deliberate technical and cost evaluation of proposals, including multiple demonstrations by vendors, the team recommended award of this contract. The winning proposal included Patriot Properties, Inc. of Lynn, Massachusetts as the prime contractor and supplier of the Computer-assisted Mass Appraisal (CAMA) application software, known as AssessPro. CSDC Systems, Inc. of Mississauga, Ontario, Canada was the subcontractor for Land Records applications, using its suite of products known as AMANDA. City Council voted on August 12, 2002 to authorize, fund and execute this contract, and the contract was signed on October 9, 2002.

The findings and recommendations which this *Code IT Evaluation* presents are derived from a comprehensive assessment of the City's *functional requirements*--what Burlington does now or expects to be doing in the foreseeable future related to its Code Enforcement function. One must look at the full range of the City's Code Enforcement function as a whole, not in separate parts. This view should be based on the concept of *functional integration*--how the Code Enforcement function occurs primarily in the Code Enforcement Department but also how other City agencies such as the Law, Fire or Police Departments could also benefit from related use of AMANDA for this function. Indeed, there was positive, universal recognition of this interdependence among the City's staff and other officials during the interviews associated with this *Code IT Evaluation*.

Moreover, the requirements of Code Enforcement in Burlington are shaped largely by the City's character, including (among other things) its serving as home to the University of Vermont

(UVM), the age of its housing stock, the relatively large percentage of multi-family residential structures (about 2,700 registered with the City with approximately 8,700 apartments) and its status as a regional commercial center. If Burlington were a young community or without the demands for housing presented by its University-related population, the entire nature of its requirements in Code Enforcement likely would be very different.

In the course of this engagement, the consultant interviewed 10 individuals from every agency in the City involved in the Code Enforcement function (see Appendix A). This process resulted in full and frank discussion.

B. Code Enforcement's Specific Role and Responsibilities.

Code Enforcement's primary representative throughout the procurement and implementation of the AMANDA system was Kathleen Butler. (Ms. Butler's formal title is Health Policy Case Manager but this *Code IT Evaluation* uses the same working title as Code Enforcement's Web site, Policy Analyst.) Her key responsibilities were to:

- Represent Code Enforcement during the needs assessment and procurement. This included, among other things, participating in the needs assessment, reviewing the draft of the Request for Proposals (RFP) and taking part in the evaluation of vendors' proposals.
- Participate as the lead person for Code Enforcement in all activities related to the implementation of the AMANDA system. The implementation effort for the team, including Code Enforcement, involved many tasks such as (a) monthly meetings over the first 11 months following award of the contract, (b) hands-on activities such as the testing of

actual cases from Code Enforcement's files to be sure that the system was meeting the City's requirements as intended and (c) the scheduling of significant training for the staff in Code Enforcement.

From the beginning of this process, the City recognized that the new system needed to meet the wide and complex range of functional requirements which Code Enforcement presented, potentially involving such things as:

- Receiving complaints from the public.
- Processing the initiation of inspections by Code Enforcement's staff.
- Scheduling of inspections.
- Enabling the entire staff in Code Enforcement to make direct use of the system on a secure basis for their own input and inquiry.
- Contacting owners or tenants, often multiple times for a single complaint or violation.
- Visiting the site of the subject-property, often on multiple occasions.
- Preparing for judicial proceedings.
- Acting on the decisions of the judicial proceedings.
- Administering the annual Rental Registration process.
- Providing managers and supervisors with the ability to generate analyses and reports they needed to fulfill their responsibilities.
- Reporting to the Mayor, City Council and CAO either on a regular or *ad hoc* basis.
- Sharing information with other City departments with related responsibilities, particularly Law and Fire.

Essential to meeting these requirements has been the recognition that virtually all parts of what Code Enforcement does are interrelated. From the intake of a complaint or initiation of an inspection, the system must provide seamless, secure integration of all data.

In addition, various processes in Code Enforcement are subject to calendars of elapsed time mandated for the most part by law or regulation promulgated either by the City or State.

As well, fiscal constraints which faced Burlington also required that the City make difficult choices in setting priorities among capabilities in Code Enforcement which could affect both the City Government itself and its customers. For example, CSDC had originally included as options in its proposal its product known as AMANDA Mobile. This would enable the City's inspectors to have portable computing devices to provide capabilities while on site in the field such as (a) direct input of findings or (b) lookup of laws and regulations. Similarly, CSDC offers the ability for property owners or tenants to use the Internet to inquire about the status of violations on their own property. Code Enforcement was very clear about its interest in implementing these capabilities but the City's budgetary constraints in Phase I did not allow this.

C. The Context of the *Code IT Evaluation*.

The main goal of this *Code IT Evaluation* has been to present Burlington with a clear set of findings and recommendations to follow in maximizing the value of its investment in information technology (IT) in support of the Code Enforcement function. This recognizes both the central role of the Code Enforcement Department and the potential benefit to the City overall from the full use of the AMANDA system and information from it by the Law Department, Fire, the

Corporation Counsel, Police and others. This builds most directly on enhancing the AMANDA system but also looks to related issues such as organizational dynamics and training.

It is important to make certain observations about the organization and scope of this *Code IT Evaluation*.

- It applies the widely recognized principle of *benchmarking*. This looks at how the deployment of IT in Burlington's Code Enforcement function compares with *best practice* among similar local governments in the United States. This use of benchmarking, likewise, draws upon the experience of the consultant in more than 150 local governments in New England and across the United States.
- It addresses the concept of *strategic positioning*. This looks at whether Burlington has been taking actions which establish the foundation for the deployment of IT in Code Enforcement that give the City the ability, as far as one may reasonably predict, to meet its functional requirements for the longer term. Strategic positioning also considers, among other things, the ability of the IT resources in which the City has invested to meet changes which may occur in Burlington's Code Enforcement environment by way of internal policy decisions (e.g., action of the City Council) or external requirements (e.g., the impact of statutory, regulatory or judicial decisions at the State or federal levels).
- It references the City's plan for *phased implementation* of the new CAMA/Land Records system, which from its very beginning had recognized the need to deploy applications of higher priority in Phase I and lesser priority in Phase II.

- It uses the phrase “*Version 1.0*” to refer to the initial deployment of the Code Enforcement system in its first year in production, beginning around the end of June, 2003 and extending to the current time.

It is also important to emphasize that, where this *Code IT Evaluation* offers observations which may sound critical, this is not intended in any way as an adverse reflection on the knowledge, skill, ability or commitment of the City’s staff, elected or appointed officials. Their dedication to the City has been apparent throughout this engagement.

Most important, this *Code IT Evaluation* tries as far as possible to present the affirmative. Clearly, some significant issues with IT in Code Enforcement remain, as the *Code IT Evaluation* reports. However, Burlington’s Code Enforcement function, as it is supported by IT, will grow in quality only to the extent that the City’s focus is on what can be done to make things better without belaboring challenges which the City may have faced in the past.

II. DEVELOPMENT OF THE CODE-ENFORCEMENT SYSTEM.

Before addressing the specifics of the evaluation of IT in Code Enforcement, it is important to review how this system was developed both with respect to the product deployed—CSDC’s AMANDA—and the process followed in this development.

A. Understanding AMANDA.

CSDC’s AMANDA product forms the core of the land-records environment used primarily by Code Enforcement, Building, and Planning and Zoning.

AMANDA is a very unusual product in the world of what is generally referred to as “commercial-off-the-shelf software,” also known by the acronym of COTS.

Specifically, most products of this kind are distributed on a strict release-level basis with new releases provided every year or so (there may be minor updates otherwise from time to time). However, the customer (like Burlington) usually has little or no ability to make any change whatsoever in the application system beyond, for example, the use of a limited number of (usually around 10) user-defined fields. Moreover, new capabilities which the customer may wish to have are limited generally to what the vendor may decide to include in its next annual release.

AMANDA is not a fixed, inflexible release-level product. Instead, it provides the user-jurisdiction like Burlington with a core architecture and set of tools, which then enables the agency to customize its entire business process and workflow. This essential characteristic was one of the key elements which Burlington’s users discerned very clearly during the two rounds of vendors’

demonstrations that constituted an important part of the City's evaluation of vendors' proposals. Indeed, Burlington's users were well informed and insightful in making the deliberate trade-off between (a) a fixed, release-level product which might have been easier to implement and deploy initially and (b) AMANDA, which required substantially more work to implement but provided Burlington with enormous flexibility in meeting its functional requirements both in the initial implementation and for the longer term.

In contrast, AMANDA takes a very different approach. It provides a framework consisting of three major components:

- **People**--which combines in one place data on all persons involved in any way in an interaction with the City. This could include, for example, an applicant for a permit or other City approval, an owner, tenant, contractor, architect or complainant.
- **Property**--which creates a single master record for each parcel or improvement. In Burlington's case, the Property folder was populated with information from the City's CAMA system in order to assure as far as possible consistency in the use of this information.
- **Folders**--which enable the customer like Burlington to create a set of customized environments for each function and subfunction in which it is involved on a day-to-day basis. Code Enforcement in Burlington, for example, has developed 24 folders which address such activities as Rental Registration, Routine Inspections, Property Standards and Environmental Violations. Similarly, there are eight folders for Building and 11 folders for Zoning.

In addition, AMANDA integrates Sybase's SQL-based InfoMaker product for complex reporting and forms design with these three components of the framework.

While AMANDA's framework is managed and distributed on a release-level basis, it is also linked to an expansive set of development tools and capabilities which enable the customer to design and build its own highly customized applications.

Further, user-jurisdictions like Burlington have complete ability to make virtually unlimited changes in their applications whenever needed without any intervention by the vendor (here, CSDC). This is a unique power which almost no one else in the world of local-government application software provides in nearly the same way.

AMANDA's power then comes from linking *all* of these components throughout the system. If one were to inquire about a particular property by address, one would be able to see all contacts which the City had had with that parcel whether this originated in Code Enforcement, Building or Planning and Zoning. Thus, Building or Planning and Zoning could see, in its consideration of an application for a permit or other action by the City, whether there was a current or past action involving Code Enforcement with that same property or owner.

B. Development of the Code Enforcement Application.

The development of the Code Enforcement application began with the needs assessment which occurred as part of the development of the RFP for the CAMA/Land Records system. The needs assessment took place in during the Summer and Fall of 2001 and the CAMA/Land Records

RFP was released in October 15, 2001. It included dozens of line items and narrative queries detailing particular functional requirements for Code Enforcement.

After the City Council's authorization of the contract and appropriation of funds on August 12, 2002, the staff began a series of implementation meetings occurring roughly monthly with the City's vendors, starting in November, 2002 and extending through October, 2003. These meetings were critical in guiding the execution of the City's workplan and making timely adjustments, both by Burlington's staff and its vendors, in the course of the implementation.

These meetings were also critical in addressing the interdependence among these core agencies in their deployment of AMANDA. The core departments as a group had to make several decisions by consensus about the overall design of Burlington's deployment of the AMANDA system. The group was fully aware that some of these decisions might be advantageous to certain departments in some ways but involve compromise for others.

Code Enforcement, represented by its Policy Analyst, was one of four core departments participating in these sessions with the Assessor, Building, and Planning and Zoning. Each meeting had a detailed agenda (often about 10 to 15 pages or longer) with detailed minutes. The typical meeting took most of a full day with roughly half of the time focused on the CAMA system and the other half on Land Records (Code Enforcement, Building, and Planning and Zoning).

A few, key elements were also part of the group's approach to the development of the AMANDA system not only for Code Enforcement but also for Building as well as Planning and Zoning:

- ***Interdependence among all user-departments in the City*** was recognized as one of the foundation stones of the enterprise-wide Land Records system in Burlington. The nature of the AMANDA system, for example, is that the People and Property folders grow as each individual City department has any kind of contact with a person or parcel.

Likewise, when any authorized user calls up a person or property, they are able to see almost every contact which any City user-agency has had with that same person or property, regardless of who the originating agency was (except those protected by law such as allegations of Code Enforcement violations not yet proved). This overcomes the classic problem in local government of the Code Enforcement inspector going to a site on Wednesday and not knowing that the Building Inspector was there on Tuesday or the Fire Marshall on Monday, no less that an application is pending in Planning and Zoning.

- All parties understood from the outset that the use of the AMANDA system ultimately would be expanded to other City departments as part of its Phase II implementation. Indeed, this occurred first in early 2004 when the Fire Department used the Property folder from AMANDA to populate its incident system as part of the implementation of its new Computer-aided Dispatch (CAD) and Records systems. This notion of ***leveraging*** the value of the AMANDA system had been part of the City's strategic plan for the CAMA/Land Records project from the very beginning. Moreover, with the exception of possible additional seats or training, Burlington ought to see no additional expense since this expansion could be done by the City's staff. The use of AMANDA with the Fire CAD/Records system, for example, had no vendor-related

cost whatsoever, instead involving only the indirect cost of the City's Data Analyst and Battalion Chief to work together for a few days on the conversion.

In addition to Fire, other City departments who were seen as potential users of AMANDA either directly as part of the Code Enforcement function or with other subsystems included the Law Department, CEDO and Police.

- Burlington knew from the vendor's original proposal to the City that there were additional technologies that could be of potentially significant benefit to Code Enforcement and other departments. Among others, these included:
 - *AMANDA Mobile*, which would enable the City's Code Enforcement, Building, Fire or other inspectors to have portable computing devices to provide capabilities while on site in the field such as (a) viewing previous information on the same property or owner, (b) inputting findings directly or (c) looking up laws and regulations.
 - *eNtraprise*, CSDC's product for Web-based access to a variety of information in AMANDA on such things as the status of Code Enforcement or other inspections. As an example, this would enable property owners or tenants to inquire about the status of violations on their own property.

Code Enforcement was very clear about its interest in implementing AMANDA Mobile but the City's budgetary constraints in Phase I did not allow this.

- Burlington's staff understood from the outset that it needed to have its Phase I implementation in good shape before it could proceed with Phase II. The staff could see the dramatic change in their working environment which implementing AMANDA would bring and knew that the new system had to reach a reasonably high level of performance before any significant new tasks could be undertaken.

The AMANDA system went into production in Code Enforcement at the end of June, 2003. Enhancements and training have continued since that time on a regular basis as needs articulated by the City's staff or other customers have been evaluated and addressed within the limits of the City's human and fiscal resources.

III. EVALUATING IT IN BURLINGTON'S CODE ENFORCEMENT FUNCTION.

The evaluation of IT in Code Enforcement is framed by the goals for this function. As a general proposition, these may be stated as follows:

- Ensuring that the Code Enforcement process is, and is perceived as, accessible, easily understandable, fair, efficient, timely, flexible and helpful.
- Protecting the public, City, property owners and tenants through consistent application of laws and regulations.
- Maximizing the efficient and effective use of physical, technical, human and informational resources in support of the Code Enforcement function.
- Matching expectations with reasonable and realistic performance standards.
- Establishing a system of continual evaluation, leading to regular enhancement in how IT can support the Code Enforcement function.

This chapter aggregates the information obtained in the course of this engagement, organizing findings and recommendations by subject, e.g., organizational dynamics, customer service or enhancements to applications. In this connection, it is important to note that *all of these subjects are interrelated in how they affect the role of IT Burlington's Code Enforcement function*. One cannot, for example, discuss IT and customer service without at the same time considering the impact on customer service of organizational dynamics.

In several places, this *Code IT Evaluation* uses the phrase (or something similar) "maximize value from its investment in IT in Code Enforcement." This is not intended simply as a financial proposition. Instead, at its core it is meant to *emphasize how IT can enhance service*

in the Code Enforcement function as a key part of the City's role and responsibility in assuring public health, safety and welfare.

Each section of this chapter begins with a summary, which compares Burlington's current process with the national benchmark for best practice in each subject-area. An overview, findings and recommendations are presented thereafter.

A. ORGANIZATIONAL DYNAMICS.

Function	Benchmark for Best Practice	Burlington's Current Practice
Organizational Dynamics	IT in Code Enforcement benefits from active, affirmative, committed and visible City and departmental leadership, departmental unity and departmental consensus.	The City Administration has been active and visible in its commitment to IT in Code Enforcement. Code Enforcement Department needs to establish a stronger organizational foundation for continued progress with IT.

1. Overview.

Organizational issues, as much as or more than technical issues, tend to have the greatest impact on the effective and efficient use of information technology in local government. This may be stated fairly as the universal consensus of students and scholars of management and IT over the last several decades.

Thus, this *Code IT Evaluation* begins with an examination of the organizational dynamics which are central to Burlington's ability to maximize value from its investment in IT in Code Enforcement. This is, in fact, the prerequisite to full and open discussion of IT in Code Enforcement.

2. Findings and Recommendations.

- a. Burlington needs to pursue a clear, deliberate strategy for strengthening the organizational foundation required to enhance the role of IT in Code Enforcement.*

This *Code IT Evaluation* recommends that Burlington take the actions which follow to address the organizational issues in Code Enforcement which affect the deployment of IT.

- (1) Provide the new Chief with a full evaluation of these issues at the very beginning of his/her tenure.
- (2) Have a key group of City staff—including the CAO, Code Enforcement Chief, HR Director and Assistant Treasurer—meet as soon as possible after the new Chief's appointment to formulate a specific strategy for addressing the full range of organizational issues in the Code Enforcement Department.
- (3) Engage an independent consultant with specific experience in these same kinds of issues in local government to assist the City at all stages in the formulation of this strategy and its implementation.
- (4) Involve every employee in Code Enforcement, not just managers or supervisors, in the new organizational process.
- (5) Evaluate at least monthly how effectively the organizational strategy appears to be working.
- (6) Revise the strategy as appropriate from time to time, following a philosophy of continuous improvement.

b. The IT Task Force should continue to meet at least monthly until key IT-related issues in Code Enforcement have been resolved.

The continuing, active role of the IT Task Force recognizes the interdepartmental nature of the Code Enforcement function. This *Code IT Evaluation* recommends that:

- (1) The IT Task Force reconvene after the new Chief has been at work for approximately one month in order to provide an opportunity for that person to gain at least an initial working knowledge of the AMANDA system in Code Enforcement.

- (2) The IT Task Force meet at least monthly with a written agenda and recorded minutes of its meetings, both of which should be provided to the Mayor and CAO.

B. CUSTOMER SERVICE.

Function	Benchmark for Best Practice	Burlington's Current Practice
Customer Service	Deployment of IT in Code Enforcement provides seamless integration throughout this function, achieving a high level of support for the City's staff internally and timely information for customers, producing a high level of customer satisfaction. Code Enforcement uses IT, particularly through its Web site, to provide a full range of information, including forms and documents, to its customers. IT is used to evaluate customer service on a periodic basis, based on performance standards. Continuous, active managerial and supervisory oversight of customer service.	AMANDA system provides seamless integration throughout all processes. No use yet of the system to evaluate customer satisfaction. General information and FAQ's are available on the City's Web site but no other downloadable forms or documents. Managerial and supervisory reports are available but have not been used actively. No continuous, active managerial and supervisory oversight or evaluation of customer service, based on performance standards.

1. Overview.

Code Enforcement is a quintessentially customer-driven function in Burlington as it is in local government generally: it is focused on the owners, tenants or abutters of a property as the City's customers, individually or collectively.

Moreover, customer service in Code Enforcement has both *internal* and *external* dimensions. The *internal* dimension regards how well Code Enforcement is doing its job as this regards the dependence of other City agencies on its work. For instance, the Law Department relies on Code Enforcement to be collecting and making available detailed information that the Law Department can then use to support enforcement and prosecution of Code Enforcement violations. Absent this complete factual basis, processed through the AMANDA system, the Law Department could be hindered in its work.

The *external* dimension looks at how well Code Enforcement is able to use IT in its interaction with its customers among the public. This may range from the intake of a telephone call from an owner or tenant to subsequent conversations, site visits or even prosecutions.

This *Code IT Evaluation*'s consideration of IT in customer service also considers the concepts of *benchmarking* and *best practices*. Professional organizations in local government, such as the International City/County Management Association (ICMA), have been doing benchmarking of the Code Enforcement function for many years. Certain local governments, such as Sunnyvale, California, have been recognized for many years as leaders nationally in the application of benchmarking in customer service in Code Enforcement (as well as other functions).

2. Findings and Recommendations.

- a. *The IT Task Force, among its various tasks, should focus specifically on how the City should enhance its use of the AMANDA system and other applications of IT to support customer service in Code Enforcement.*

The AMANDA system as currently implemented provides a broad range of functionality related to customer service in Code Enforcement.

To date, most of the effort in supporting customer service in Code Enforcement has concentrated on AMANDA's Request for Service (RFS) subsystem. RFS has been helpful in launching the City's efforts in this direction and providing a much more robust and well integrated working environment than anything that Code Enforcement had previously. However, Code Enforcement also has found that RFS needs enhancement in its framework as provided by CSDC.

Following review by the IT Task Force, Burlington should work with CSDC to identify the details of these enhancements and work with CSDC to assure as far as possible that they are included in the next release of AMANDA.

b. Burlington needs to enhance use of its Web site to support customer service in Code Enforcement.

In 2004, how well Burlington uses its Web site to support customer service in Code Enforcement requires specific consideration for several reasons.

- The extent of households in Burlington with access to the Internet, known as penetration, probably is in the range of 85 to 90 per cent, based on the City's demographics.¹ Thus, the ability of Burlington's residents and other customers (such as non-resident property owners) to access the Code Enforcement's Web site and obtain information related to the Code Enforcement function is very high.
- Use of the Code Enforcement's Web site is the fastest, most flexible and most cost-effective way for Burlington to keep its customers abreast of any changes or new information which could be helpful to them in the Code Enforcement function.
- The productivity of Code Enforcement's staff should be able to be improved relatively significantly. This self-service on the part of Code Enforcement's customers ought to reduce the number of telephone calls and in-person visits which

¹On this subject see "E-Governance in Local Government: Managing the Organization and Delivering Citizen Services Online," Interim Report of the Task Force on E-Governance (Washington, D.C.: International City/County Management Association, December, 2002)

the staff now needs to process. These calls and visits, in their nature, interrupt the flow of the rest of the work which the staff does every day.

Benchmarking presents the best way to evaluate Code Enforcement's current Web site. From this review, one finds several elements which are lacking today, including among others:

- (1) ***Depth and breadth.*** Code Enforcement's Web site provides limited information about this function. It does not include, for instance, any forms related to Code Enforcement which customers themselves can view or complete and then submit to the City. These forms should include such things as:
 - (a) A checklist for each type of owner- or tenant-initiated action which the customer can complete, with required fields indicated, and be printed by the customer for submission to the City. One suggestion from the staff in Code Enforcement was the Zoning Compliance Requirements Form.
 - (b) A full set of informational forms about Code Enforcement's activities. Each customer should then be able to download any form they may need.
 - (c) Checklists for compliance related to several of the most common kinds of violations found in Burlington.
- (2) ***Ease of use.*** This begins with trying to find Code Enforcement's Web pages, which are not listed anywhere on the roster of departments on this part of the City's Web site. Today, a customer would need to know that Code Enforcement was a part of the Department of Public Works in order to find this information.

- (3) ***Performance Data.*** Burlington should use the Web site for Code Enforcement to report various data related to the performance of this function. This could range from the results of the annual survey of customer satisfaction to workload or timeliness of response to calls or complaints. This can be particularly important where the Code Enforcement function has been the subject of recent public con-troversy.
- (4) ***Links to other City agencies or resources.*** The Web pages for Code Enforcement today do not provide any immediate link to other City agencies which customers may wish to reach. This would include in particular Building, Planning and Zoning, and the Assessor. Likewise, no link is present to provide access to ordinances or regulations which may affect Code Enforcement.
- (5) ***Links to other State or other Non-local Resources.*** Code Enforcement's Web site should enable the user to link directly to information from the State, such as laws or regulations related to Code Enforcement, or national professional organizations in this field.
- (6) ***EMail to Code Enforcement Staff.*** The user should be able to EMail the City's Code Enforcement staff directly from the Web site in order to enhance communication with customers.
- (7) ***Code Enforcement Processes.*** An easy-to-understand flow chart of the most commonly used Code Enforcement processes in the City would help customers to understand how each process works and what time lines may be involved.

Table I summarizes how Burlington's use of its Web site with respect to the Code Enforcement function compares with standard benchmarks for this function in local government across the United States.

TABLE I
CURRENT USE OF THE CITY'S WEB SITE FOR CODE ENFORCEMENT

Customer Forms	Info Forms	City Rules/ Regs	Link City Depts	FAQ's	Flow Charts	City Performance Data	Intergov. Links	EMail to Staff
No	No	No	No	Yes	No	No	No	No

- d. Burlington should use IT to carry out an annual survey to evaluate customer satisfaction with its Code Enforcement function.*

Surveys can offer substantial guidance on where Burlington should be focusing its attention and resources to improve customer satisfaction with its delivery of Code Enforcement services.

For several decades, the benchmark of best practice has suggested that local governments should undertake a periodic (usually annual) evaluation of customer satisfaction with services. The annual survey should be done every January and include all persons who were customers of Code Enforcement in the preceding calendar year. This would provide timely feedback to Burlington regarding the performance of Code Enforcement, enabling the results of the survey to be incorporated into the City's budgetary decision-making for the coming fiscal year.

The threshold issue, of course, is that one does not often become a voluntary customer of Code Enforcement except (for example) in the case of a tenant who is reporting a condition which a landlord has refused to remedy.

The initial survey will provide the baseline for Burlington. The key to using the survey productively will be to assure that:

- (1) It is designed well, seeking information which will in fact provide important guidance to the City regarding the Code Enforcement function.
- (2) Everything feasible is done, such as reminders by mail, to maximize the rate of response.
- (3) The analysis is careful and complete.
- (4) The findings of the survey are incorporated into the City's policy-making, management and operation of the Code Enforcement function, supported through the budgetary process.

The AMANDA system has information on all people with whom the City had contact over the previous calendar year. Thus, except for the direct cost of mailing and the indirect cost of staff time in the preparation and analysis of the survey, there should be no other costs related to this process. In order to minimize its cost and help to assure its independence, this kind of survey could be carried out (a) in cooperation with a class from a local college or university, (b) by a committee of residents of the City with expertise in survey research or (c) by a combination. The Code Enforcement IT Task Force should represent the City actively throughout this effort.

Establishing a performance standard for the Code Enforcement function is an important part of the survey process. For example, in its Building Inspections element, Sunnyvale, California states in its Program Outcome Measures: "An overall customer satisfaction rating of 85% is achieved." Indeed, Sunnyvale even provides maps on its Web site of responses by geographic area of the municipality as well as demographics.

Sunnyvale also takes an interesting approach in having its key elected and appointed officials involved in its annual surveys. One of its program outcome measures states, for example, that 85% of the members of City Council and Commissions supported by Community Development rate the quality of development review process as meeting expectations.

C. ADMINISTRATION AND MANAGEMENT.

Function	Benchmark for Best Practice	Burlington's Current Practice
Administration and Management	Deployment of IT supports unified administration, management and coordination of the Code Enforcement function among all related agencies on an on-going basis. Management and supervisors use the system to do regular analysis and evaluation of delivery of services.	AMANDA inherently provides unified administration, management and coordination of the Code Enforcement function through its structure of People, Property and folders. Management and supervisors have not used AMANDA's capabilities on any regular basis to do analysis and evaluation of delivery of services.

1. Overview.

This section considers how the City uses IT to support management and supervision of the delivery of services related to the Code Enforcement function.

2. Findings and Recommendations.

a. Burlington should be making more active use of the managerial and supervisory capabilities which AMANDA provides.

These capabilities, which have not been used nearly to their potential, come in several forms.

- (1) AMANDA includes more than 40 standard reports related to such activities as workload analysis, scheduling and reporting of inspections.
- (2) AMANDA has its own report wizard, proprietary to CSDC, which enables non-technical end-users, such as the managerial and supervisory personnel in Code Enforcement, to formulate their own *ad hoc* queries using an easy point-and-click approach.

- (3) AMANDA also incorporates InfoMaker, a mature (now in Release 9.0) product authored by the internationally renowned business-software vendor, Sybase, for the formulation of complex reports. The Policy Analyst in Code Enforcement and the City's Data Analyst have received extensive training in InfoMaker and have authored several reports now in production in Code Enforcement.

Burlington ought to take several actions to make the best use possible of AMANDA's capabilities in Code Enforcement's management and supervision.

- (1) Train the new Chief in the full range of these capabilities in AMANDA as now implemented. Where the Chief will be one of the two, key personnel in Code Enforcement using these capabilities, he/she must first have solid grounding in and first-hand experience with what AMANDA can, or cannot, do currently in order to contribute knowledgeably to this effort.
- (2) After the Chief has been trained and has had at least a month of experience with AMANDA as now implemented, the IT Task Force should meet and focus specifically on how AMANDA can provide the best possible support for management and supervision in Code Enforcement. This may involve actions by the City ranging from additional training to enhancement of the AMANDA system.
- (3) Burlington, through the CAO's Office, should monitor the actual use of AMANDA in the managerial and supervisory activities of Code Enforcement.
- (4) The IT Task Force should report monthly through December, 2004 in writing to the Mayor, Council and CAO on plans and progress made in this area.

D. APPLICATION SYSTEMS.

Function	Benchmark for Best Practice	Burlington's Current Practice
Application Systems	Integrated system for all Code Enforcement activities from initiation to completion including all contacts related to any person or parcel of real property in the City. Includes agency-level and functional security. Ability for other City agencies or officials to see or use this information on a secure basis. Read-only access to the City's CAMA system to obtain parcel-based data. Integration of GIS and digital media.	AMANDA inherently provides integration of all Code Enforcement activities from initiation to completion including all contacts related to any person or parcel of real property in the City. Includes agency-level and functional security. Ability for other City agencies or officials to see or use this information on a secure basis. Only one staff member in Code Enforcement now has access to the City's CAMA system. Has integration of GIS and digital media.

1. Overview.

This section addresses enhancements which Burlington ought to make to AMANDA as currently deployed to support Code Enforcement. The enhancements recommended here are limited as far as possible to those not addressed elsewhere in this *Code IT Evaluation*.

While any complex application system like this is always susceptible to enhancement, *Burlington's implementation of the AMANDA system in Code Enforcement has been outstanding and has already produced great benefits for Code Enforcement.* Particularly considering the fact that this system was developed by the City's own staff in Code Enforcement and the Clerk/Treasurer's Office (the Policy Analyst and Data Analyst), this is a remarkable accomplishment. Indeed, many commercial developers would have reason to envy the quality of system which Burlington itself has developed. Similarly, the number and type of enhancements which the IT Task Force has identified and which this *Code IT Evaluation* recommends should not be taken in any way of the outstanding system which the City's staff has produced. What it does reflect is both (a) the

newness of Code Enforcement's experience with the system, which has been in production for only one year and (b) the limited staff resources which the City has had to apply to the development of this system.

2. Findings and Recommendations.

- a. Before embarking on further enhancement of the AMANDA system in Code Enforcement, Burlington needs to be sure that this system's existing capabilities are being used fully and properly.*

Experience thus far has varied widely among the staff in Code Enforcement with some personnel (particularly the Policy Analyst, Code Enforcement Administrator and one of the inspectors) using the system actively on a daily basis while most of the inspectors have not yet become active users.

With only nine personnel in Code Enforcement, the City's Data Analyst should meet with each one individually in order to determine (1) what capabilities of the AMANDA system they are or are *not* now using regularly and (2), where an employee may not be using AMANDA regularly, the reasons for this, e.g., lack of training in specific capabilities of AMANDA or functional limitations in AMANDA as deployed which make it difficult to use or do not meet end-users' functional requirements.

This diagnostic effort should be done on a regular basis as part of an "annual physical." This can be an important way to assure that: (1) the system is meeting end-users' needs; (2) training is occurring which has actual, day-to-day benefit to end-

users; and (3) enhancements being evaluated by the IT Task Force in fact respond to the real-world priorities of the user-community.

- b. After completing the previous recommendation, the Code Enforcement IT Task Force should meet again around 30 to 60 days after the new Chief has been at work in order to review the list of enhancements previously identified and then set priorities.***

The IT Task Force met three times on March 31, April 12 and May 7, 2004 for the purpose of (1) creating its mission statement and (2) compiling a comprehensive list of more than 120 prospective enhancements to the Version 1.0 AMANDA system.

The IT Task Force has aggregated this list into 11 subsets of potential enhancements:

- Reporting.
- City-wide Management.
- Code Enforcement Departmental Management.
- Training.
- Application Modifications: Internal.
- Application Modifications: External.
- Application Enhancements: Internal.
- Application Enhancements: External.
- Access: Internal.
- Access: External.
- Interdepartmental Collaboration and Support.

The IT Task Force needs to reduce the current list of approximately 120 enhancements to a much more realistic number—for example, 20 short-term enhancements and 10 long-term enhancements. This will also depend on the relative resources required to complete each enhancement. The format which the IT Task Force has been using will also need to be amended in order to show the ranking of the level of resources required for each enhancement, e.g., high, medium or low.

This enhancement of the AMANDA system is a work in progress. With the new Chief's arrival, the IT Task Force has a few, key tasks to complete, once the new Chief has a good, working knowledge of the AMANDA implementation:

- (1) Reviewing the list in its most recent version.
- (2) Making whatever changes to the list the IT Task Force may deem appropriate.
- (3) Organizing the list into (a) short-term and (b) long-term items.
- (4) Establishing priorities among the short-term and long-term items.
- (5) Identifying the hours which the City's Data Analyst has available on a monthly basis to devote specifically to the development, testing and implementation of these enhancements, considering her other duties for the City.
- (6) Deciding what proportion of her time the Data Analyst should be spending on various priorities, e.g., how much time now on high-priority, short-term items versus high-priority, long-term items.
- (7) Developing a time line and estimated completion date for each item on the list.

The IT Task Force must feel completely free to revise this list either in small or large ways from time to time as circumstances may warrant. The enhancement list must be dynamic as is the context of City government.

In order to meet this responsibility, the IT Task Force should be meeting monthly and, as mentioned previously in this *Code IT Evaluation*, providing a monthly report in writing to the Mayor, City Council and CAO through December, 2004. This will keep the City's leadership and all of the IT Task Force's members current on progress which is being made, expectations for deliverables, and revisions which may need to be made in the enhancement list, including its timetable.

c. Burlington needs to address the issue of input of inspectors' reports.

The question of how Code Enforcement should be doing the input of inspectors reports has been one of the major areas of controversy in the implementation of the AMANDA system.

Today, Code Enforcement has no uniform approach to this process: some inspectors are inputting their own reports while the support staff does the input of reports for other inspectors.

There have long been two schools of thought on this subject. One suggests having each inspector do all of the input of their findings for each inspection into the system (here, AMANDA) themselves.

The other proposes that this is not the best possible use of the inspectors' time and that work would proceed more efficiently and effectively if the support staff were doing all of the input of inspectors' reports.

This is the same kind of question as police departments have faced for the last several decades in how they manage the input of officers' incident reports.

There is no "right" or "wrong" approach here. Each local government like Burlington must decide which model will work better in each of its respective departments. Further, it may be that certain inspectors are more comfortable and more productive using one approach while others prefer the second way.

Burlington should do further research before coming to a conclusion on this subject.

- (1) The City should wait a few months longer to see how the current approach works, once the staff has more experience with it and the new Chief can make his/her own observations about this process.
- (2) The deployment of AMANDA Mobile may change the nature of this process significantly. Burlington ought to discuss this latter possibility in detail with CSDC and other AMANDA users who have also deployed AMANDA Mobile for Code Enforcement.

d. Burlington must establish a consistent policy on the use of notes in AMANDA.

Code Enforcement has a fundamentally important, outstanding issue regarding whether notes to file should be kept (1) in the Notes folder or (2) by using the Comments tab in AMANDA. This is fundamental to the day-to-day use of the system.

The IT Task Force should review this with the end-users in Code Enforcement (and possibly other departments), come to consensus and then document this in the user manual. The respective advantages or disadvantages of each approach should be weighed carefully. As one example, using the Comments tab is reported to have the advantage of automatically sorting all comments by date.

With this model, one staff member has suggested the possibility of using the Description area to record the original call and then the related Comment tab for all subsequent contacts with the property.

e. Burlington should address the subject of consolidating inspectors' calendars with CSDC.

AMANDA does not now include a function which consolidates the schedules of all of Code Enforcement's (or any other user-agency's) inspectors in one view. This has been a sensitive issue in Code Enforcement since its old FileMaker system did have this capability.

Burlington has already brought this to CSDC's attention as a function which would strengthen AMANDA in the marketplace and enhance its use for current customers. However, at this time, CSDC has not made a firm commitment to including this function in its next general release, which would be distributed in early 2005.

The City should continue to lobby CSDC on this issue in cooperation with other users who have a similar, specific need for it.

f. AMANDA needs to be able to launch access to attachments directly from the Property folder.

Attachments include such things as photographs of violations (e.g., vehicles parked illegally) and documents related to Code Enforcement.

Currently, the end-user must leave the Property folder and launch attachments separately.

As Code Enforcement and other agencies involved with it become more active users of attachments over time, the need for and value of this functionality to Burlington will continue to increase.

Like the last item on inspectors' calendars, this is something which Burlington will need to address with CSDC.

- g. All of Burlington's personnel involved in the Code Enforcement function should have appropriate, secure access to the City's Computer-assisted Mass Appraisal (CAMA) system as soon as possible.*

The CAMA system functions as Burlington's land-records repository, housing a host of detail on every parcel in the City, whether improved or unimproved.

The benchmark of best practice suggests that:

- Every person involved officially in the Code Enforcement function have appropriate, secure, read-only access to parts of the CAMA system.
- With this access, these persons be able to view or print out property record cards or whatever other information they may need from the CAMA system to have in their hands as they do their work. Every Code Enforcement inspector, for instance, should first review and then take the property-record card with them into the field for their inspections. (Mobile systems now available enable this data to be downloaded to computing devices for use in the field or accessed by wireless communications.)

An important, potential benefit for the City in its use of the CAMA system's data in the Code Enforcement function involves the concept of "washing", which refers to the use of this information by the City's staff, as described in the previous paragraph. Washing can be invaluable in helping to assure that the City has the latest and best information on its inventory of property, obtained by the staff's experience with each parcel and its improvements in the field. The Assessor must still maintain his statu-

torily mandated control over the updating of this information; however, the information which Code Enforcement's personnel may be able to provide can enhance this process substantially.

A key prerequisite here is that the City's users in Code Enforcement be trained sufficiently to be able to use the CAMA system (1) as they need in their respective functions and (2) without creating an additional burden of support on the City's Assessing or Clerk/Treasurer's staff.

h. Burlington should be using a design standard for its parameter-driven reports.

This design standard would have reports, no matter who the expected user-population might be, follow the same parameter-driven design in order to ease their use by the City's personnel whether the Mayor's Office, CAO, Chief Code Enforcement Officer or others. Typical parameters for these kinds of reports include such things as date range, activity/violation types or specific personnel involved.

i. Burlington needs to create its own user-documentation for the AMANDA system.

The nature of AMANDA, as this *Code IT Evaluation* has observed from the beginning, is that it is a completely customized environment for each customer-organization. This, then, means that each site is unique and that, unlike traditional COTS software packages, off-the-shelf user manuals simply don't apply.

As a result, Burlington now should document the day-to-day procedures for its own end-users' use of the AMANDA system.

This process should involve primarily the end-users themselves working with the Policy Analyst and Data Analyst. Providing and maintaining this documentation on line would help to assure its easy access and updating for all users.

It also often occurs that the process of preparing this kind of documentation may reveal areas of enhancement, based on the input of all of the parties involved in the development of the documentation.

This same effort may also disclose operational issues which may require concerted attention. One person, for example, observed an on-going problem with the input of duplicate records for the same persons in the People folder. This kind of issue can often be resolved through a combination of training of end-users and more active managerial or supervisory oversight. (Most of the issues with previously existing duplicate records in the People folder arose from the conversion of the system formerly used by Building: the City had been aware that this would be the case and has been trying to eliminate these duplicate records as quickly as possible.) AMANDA does have a "replace by" function to help eliminate these duplicate records.

- j. Explicit help text should be added to assist users in understanding the work flow among screens.***

AMANDA, as implemented in Burlington today, does enforce specific business rules regarding work flow among series of related screens.

However, concern was expressed in the interviews for this *Code IT Evaluation* that the system today does not provide explanatory help text, should an end-user not be sure where they are in a process or how to proceed next.

This issue should be reviewed with the full staff in Code Enforcement and brought to the IT Task Force to address among its range of as a priorities.

- k. The written “Guideline Checklist of Property Standards for Rental Properties” and what appears related to this in the AMANDA system should be brought into complete conformity.***

Keeping differences, however small they may be, between these sets of information can only cause confusion and inconsistency in this part of the Code Enforcement proces

- l. The Housing Board of Review is a good candidate for inclusion as part of the Phase II AMANDA implementation.***

This Board would like to be able (1) to have information readily available regarding such things as housing inspections and violations and also (2) undertake related tasks such as tracking appeals of its decisions.

- m. The Law Department should be provided with access to information on parking violations maintained by Code Enforcement.***

Personnel in the Law Department do not now have any way to know what information Code Enforcement may have on parking violations.

The Data Analyst should work with the Law Department and Code Enforcement to see: (1) how this access can be provided and (2) what other ways can be found to integrate the parking-related work of these two offices as completely as possible.

- n. The City's Code Enforcement agencies should have secure, real-time access to view or search the agendas, minutes, regulations or documents of the others.***

This would enable them to do *ad hoc* research of an issue or get up-to-date information without physically having to visit another office or interrupt their colleagues by making a telephone call.

At some point, Burlington should consider implementing a Document Management application, as Arvada, Colorado (www.ci.arvada.co.us) has done, in order to provide both (a) the highest level of security for these documents and (b) the best enterprise-wide search capability.

- o. Code Enforcement should be using GIS actively.***

The City has made a substantial investment in GIS over the last several years. Burlington's GIS uses the industry-leading ArcInfo product v. 8.3 from Environmental

Sciences Research Institute (ESRI) with ESRI's ArcView for desktop users. The City also has digital orthophotography. As well, the current fiber-optic communications network provides suitable transport for GIS-based information. In addition, the City has a highly skilled person in Planning and Zoning who has strong professional background and education (a Master's in GIS from the University of Vermont) although this person has other significant, on-going duties in Planning and Zoning.

The AMANDA system as implemented in Burlington since January, 2004 integrates a GIS product known as OnXSpatial. It provides a very easy-to-use desktop interface which can facilitate various *ad hoc* queries and analyses.

Code Enforcement has not yet made any significant application of GIS to support its work for the City.

Burlington should talk with CSDC about how its other customers are using OnXSpatial in Code Enforcement and what ideas CSDC may have for its application with Code Enforcement in Burlington. Otherwise, the application of this product in Burlington is limited only by the City's imagination and resources.

The IT Task Force should work with Code Enforcement in identifying these prospective applications of GIS and what would be involved in their implementation. Having completed this part of its work, the IT Task force will then need to consider and rank these applications of GIS with other priorities for Code Enforcement.

- p. Burlington should provide secure, remote access for the Corporation Counsel and one Assistant Corporation Counsel to the Code Enforcement system, as well as AMANDA generally and the CAMA system.*

As a prerequisite, both of these persons would need to be trained in AMANDA and the CAMA system as if they were City employees. This will both (1) facilitate their own use and (2) minimize the calls for support to City Hall which would otherwise be necessary. Burlington will also need to be sure that appropriate security is in place for this remote access.

- q. The system should have an easy-to-use, on-line form for end-users to use in submitting requests for enhancements.*

These requests, like all others, would then go to the IT Task Force for its review and consideration among priorities.

E. RENTAL REGISTRATION.

Function	Benchmark for Best Practice	Burlington's Current Practice
Rental Registration	Well designed process which makes (1) completion of required information by customers and (2) processing of returns by the City, including follow-up and prosecution of delinquents, as fast and easy as possible.	Now completing first year of implementation with the AMANDA system, which generally has functioned well but has also revealed the need for enhancements in various parts of the process to facilitate completion by customers and full processing by the City.

1. Overview.

Code Enforcement has primary responsibility for the City's Rental Registration process, which includes about 2,700 registrations by owners, covering roughly 8,700 rental units in the City. The Law Department also becomes involved in the processing and prosecution of delinquent owners.

As stated by the former Chief in his interview for this *Code IT Evaluation*, Code Enforcement has tried to inspect about 2,000 of Burlington's 8,700 rental units per year on a proactive basis. In effect, this policy should achieve the inspection of every rental unit in the City once every four to five years. He also observed that this actually often totaled about 4,000 to 5,000 visits per year among these roughly 2,000 units where the inspection of units often could involve multiple visits.

2. Findings and Recommendations.

- a. *Burlington should build on the sound foundation it has established in the first year's implementation to enhance the Rental Registration application in AMANDA.*

The City's personnel involved in the development of the Rental Registration system in AMANDA have done an excellent job in its Version 1.0 implementation. This provides a strong foundation for the enhancements which this *Code IT Evaluation* recommends.

As one example, in each future year the City will be able to send each registrant-customer a form which includes all of their information from the previous year. This should accomplish two important customer- and productivity-based improvements: (1) customers should find it much easier to update and complete the annual rental-registration form; and (2) the City's staff in Code Enforcement should find the time required to review and input the current rental-registration information greatly reduced. As an educated guess, *this could very well drop the staff time for Code Enforcement's personnel in the processing of annual Rental Registration returns by as much as 50 per cent or more.* This would reduce the roughly two person-months of labor now involved in inputting these returns (at a rate of approximately 50 per day) to one.

Further development of the Rental Registration subsystem should also assist in the prosecution of owners who continue to refuse to pay after having received their delinquent notices, bringing additional revenue to the City on a recurring, annual basis (Rental Registration billed \$608,887 in fees in 2004).

Burlington's IT Task Force should now review the enhancements which follow as part of its priority-setting for Code Enforcement.

- (1) Definitions of key words and phrases should be included on the Rental Registration form which is sent to owners. Personnel reported that there were several calls from owners this year who did not understand exactly the information which Code Enforcement was seeking.
- (2) The Rental Registration form needs to have an explicit instruction informing the owner that they are required to complete *all* blanks. The staff reported that there appeared to be areas on the form left blank simply because some owners did not know that they had to complete this information.
- (3) Using the mailmerge function with AMANDA would greatly facilitate the preparation of delinquent notices for Rental Registration. The Law Department now must rekey the owners' information for every delinquent account into its own system, not AMANDA, in order to complete this process. Using the mailmerge with AMANDA would save relatively significant time for the Law Department and would take very little time for the Data Analyst to develop and implement.

F. LAW DEPARTMENT.

Function	Benchmark for Best Practice	Burlington's Current Practice
Law Department	Tight integration of all related capabilities between Law and Code Enforcement. High level of functionality to enhance enforcement and prosecution. Security appropriate to nature of responsibilities in consideration of public-records laws. Access to related systems such as CAMA. Staff is well trained.	Law Department's use of the AMANDA system with Code Enforcement has been planned from the beginning as a Phase II application. Law staff has not yet been trained on existing capabilities in AMANDA which it could be using without its own specialized applications having been developed. No access yet to CAMA system.

1. Overview.

The Law Department's main role in the City's Code Enforcement function is to enforce and prosecute violations. The Law Department has one attorney assigned to the prosecution of Code Enforcement matters. A second attorney becomes involved in certain of these matters such as some appeals. In addition, a paralegal supports the attorneys in their work related to Code Enforcement and has other responsibilities.

From the outset of this procurement and implementation, the Law Department was planned as a Phase II user with other City agencies such as Fire and Police. Thus, no specific work has been done yet to meet the Law Department's functional requirements.

2. Findings and Recommendations.

- a. The Law Department should be trained now in the use of existing capabilities of the AMANDA system as deployed for Code Enforcement.*

The interviews for this *Code It Evaluation* revealed that the Law Department could be benefitting today from being able to use AMANDA for various queries which arise on an *ad hoc* basis in the course of its work. For example, the Paralegal could be making regular use of AMANDA now even without implementation of anything particular to the Law Department. A fairly small amount of additional training would enable her to do her own queries about properties or owners without having to call and interrupt the City's staff in Code Enforcement or other departments as she must do now.

The City's Data Analyst should meet jointly with the Policy Analyst in Code Enforcement and personnel from the Law Department to identify which information and functionality may be of greatest benefit today to the Law Department. A training program should then be designed to provide the two, key personnel in the Law Department with training sufficient for them to be self-sufficient in their work for Code Enforcement.

- b. The development of new applications for the Law Department needs to recognize the particular nature of its work.*

The Law Department's efficiency and effectiveness in this area depend largely on the work which Code Enforcement does. The main issues for the Law Department in its use of IT and its related dependence on Code Enforcement as its primary source of information are:

- The detail of information which Code Enforcement gathers and maintains;
- The integrity and reliability of this information;
- Its completeness, complying in all respects with the requirements of the judicial system, whether civil or criminal, which the Law Department must meet; and
- The ability of the system to maintain the time frames by which the Law Department must abide in its prosecutions.

The key issue which both the Chief Code Enforcement Officer and the City Attorney raised in their separate interviews was the ability of the AMANDA system to provide the findings required by the City Attorney to prosecute violations. This has two, essential components:

- Training Code Enforcement's inspectors not only in exactly what information they need to be collecting and reporting to support prosecution but also in more complete skills in use of the AMANDA system to support the input and maintenance of this information; and
- Enhancing AMANDA to make its use for these purposes by all personnel, both in Code Enforcement and the City Attorney's Office, faster and easier.

In order for the new system to meet the Law Department's requirements, Burlington should follow several principles in its development and implementation.

- (1) The complex environment of fact and prosecution in which the Law Department works will require that it be involved extremely closely with Code Enforcement and the City's Data Analyst in designing and developing applications to support its needs. This likely will involve both (a) the enhancement of existing applications now in production in Code Enforcement and (b) the development of new applications, forms and reports specific to the Law Department's needs in prosecution.
- (2) Burlington should use multiple, real-world test cases from the Law Department's files as part of the development of its applications in the same way as it did for Code Enforcement, Building, and Planning and Zoning. This is a common approach to the development of these kinds of applications; it proved very valuable to the other agencies and should have similar benefit for the Law Department.
- (3) The Law Department's efficiency and effectiveness in Code Enforcement would be aided the more complete the record which AMANDA could maintain. Obviously, this is stated as a general proposition but it is important for Burlington to keep this in mind as it proceeds with enhancements of AMANDA. As the Law Department has also observed, almost all of this information is discoverable public record.
- (4) Security must be an ever-present consideration.

(5) All attachments should be identified by date and time.

c. The Law Department should be provided immediately with read-only access to and training in the use of the CAMA system.

This is a no-cost action which should help to support the Law Department's work not only with Code Enforcement but also potentially with other parts of their responsibilities. About one day of training should provide end-users in the Law Department with sufficient knowledge and skill to learn how to use the CAMA system for these purposes independently.

d. Burlington should provide a small amount of hardware to support the work of the Law Department in Code Enforcement.

The procurement of this hardware is intended to help the Law Department achieve its highest possible level of efficiency and effectiveness in its support of Code Enforcement. These purchases would also likely have more widespread application in other work of the Law Department.

(1) The Law Department could make very good use of a color laser printer such as the Hewlett-Packard 2550, which is now available at a list price of \$499. This would enable the Law Department to print all attachments in color as well as black and white, strengthening the impact of its notices to alleged violators and the effectiveness of its prosecutions.

(2) A document scanner would enable the Law Department to import digitally various documents, photographs or other material.

G. MOBILE TECHNOLOGY.

Function	Benchmark for Best Practice	Burlington's Current Practice
Mobile Technology	Mobile technology appropriate to the functional requirements of the organization is in place, fully integrated with the rest of the enterprise's IT environment without placing significant, on-going demand for technical support. Security is implemented appropriate to the nature of the work and information.	Use of the AMANDA Mobile product with Code Enforcement has been planned from the beginning as a Phase II application. Investigation of issues in its deployment have been discussed with CSDC and departments but no appropriation has been sought.

1. Overview.

Mobile technology has been used in Code Enforcement around the United States and Canada for several years. CSDC has an established product, known as AMANDA Mobile, which it offers for this purpose.

Burlington's approach from the very beginning of the procurement and implementation of the CAMA/Land Records system has been to focus in Phase I on establishing the base of the new environment for the core departments. While AMANDA Mobile was offered as an option in the original procurement, Burlington did not have the fiscal resources, human resources or organizational prerequisites in place to proceed with it in Phase I.

Since then, the City has discussed the implementation of AMANDA Mobile with CSDC from time to time.

2. **Findings and Recommendations.**

- a. *Burlington should not proceed with the implementation of AMANDA Mobile until organizational prerequisites have been addressed and AMANDA otherwise is serving Code Enforcement at a high level.*

Successful implementation of this kind of mobile technology requires total readiness on the part of the organization. This involves both (1) the active role which managers and supervisors must play in leading this change and (2) the ability of the organization to digest this major change in how people do their work.

The new Chief and the City's CAO will need to determine, in consultation with the IT Task Force, when Code Enforcement is ready to make this change successfully. This should also include, among other things, the cultural survey recommended previously in this *Code IT Evaluation* in the section on Organizational Dynamics.

As a second precondition, the IT Task Force should be charged with finding that the deployment of AMANDA in Code Enforcement has otherwise reached the point of being stable and servicing the end-user community in Code Enforcement at a high level.

- b. *The IT Task Force will need to consider the deployment of AMANDA Mobile among all other needs and priorities in Code Enforcement.*

For example, should the Law Department's applications be substantially completed before Burlington begins the process of deploying AMANDA Mobile? Which is the

higher priority and what kinds of resources, especially in terms of the time of the City's Data Analyst, will be required?

c. Burlington should begin its deployment of AMANDA Mobile with a prototype.

This prototype would involve only one or two inspectors before proceeding with full rollout of this technology for Code Enforcement. It would also help in this prototype if one inspector had relatively substantial comfort with IT but the other was less experienced.

As one example, Burlington has had discussions with CSDC about the respective advantages and disadvantages of different mobile-computing platforms. The prototype would give the City the opportunity to do its own evaluation of these platforms before investing further in this component of the AMANDA Mobile solution.

The prototype provides the kind of industry-standard, real-world testing which is always advised in this kind of situation in order to identify what may need to be done (1) to make the product as serviceable as possible for the City's staff and (2) to manage it most efficiently and effectively.

d. The deployment of mobile technology in Code Enforcement may also prove to have broader value to other City agencies.

Departments such as Building and Fire are obvious candidates for their own implementation of AMANDA Mobile.

Knowledge which is gained in the deployment in Code Enforcement should be readily transferable to the City's planning for and implementation of AMANDA Mobile in other agencies.

H. TRAINING.

Function	Benchmark for Best Practice	Burlington's Current Practice
Training	Staff is well trained in the full range of IT-related capabilities which each person, respectively, needs to have mastered. Training is provided both in the initial implementation of new capabilities and on an on-going basis as individual skill levels grow, needs change or new products, versions, releases or enhancements are deployed.	Training has been provided in stages, focusing first on the Policy Analyst in her role as project leader for Code Enforcement and the Chief. The Code Enforcement Administrator then followed. More recent training has been provided to inspectors on an individual and group basis. Training has occurred on a need-driven basis as functional requirements have dictated and organizational readiness has allowed.

1. Overview.

Training is the single most critical element of success in any organization's use of IT.

This is the conclusion of research among various kinds of organizations, including local governments, over the last 20 years.²

This section reviews the training in the AMANDA system which has taken place to date and makes recommendations for what Burlington should do to assure that appropriate training for all of the staff in Code Enforcement and related City agencies occurs as needed in the future.

²John Scoggins, "Training: The Key to Efficient Use of Computer Technology," Government Finance (Washington, D.C.: Government Finance Officers Association, September, 1981).

2. Findings and Recommendations.

a. *Burlington should continue to emphasize training for all users of the Code Enforcement functionality in AMANDA.*

The nature of AMANDA, as this *Code IT Evaluation* discussed near its beginning, was that training for Code Enforcement initially needed to focus on building the skills of the Policy Analyst in order for her to be able to participate fully, efficiently and effectively in the development of the new system. The Policy Analyst was a dedicated participant in this training as reflected in the overall quality of the Version 1.0 implementation of AMANDA in Code Enforcement, which she produced with the City's Data Analyst.

Training occurred next for Code Enforcement's Chief and the Code Enforcement Administrator. Thereafter, training began to be provided for the Zoning Enforcement Officer and inspectors.

Burlington needs to take several actions to assure that appropriate training is provided for all personnel in the Code Enforcement functionality of AMANDA both now and over the longer term.

- (1) The new Chief must be trained as soon as possible--during their first two weeks on duty--in the full range of the AMANDA system's capabilities. This person should be using AMANDA every day on an active basis in order to manage this Department efficiently and effectively.

- (2) The City's Data Analyst should conduct an individual review of the knowledge and skill in AMANDA of each member of the staff in Code Enforcement. This review serves two very important purposes. First, it provides a real-life diagnostic analysis of exactly what kind of training program the City should be providing for each person to strengthen their knowledge, skill, comfort and use of AMANDA. Second, inevitably in this kind of session the end-user will articulate their satisfaction or dissatisfaction with particular aspects of a product like AMANDA and often make valuable suggestions about enhancements which could improve its ease of use of value otherwise to Burlington.
- (3) As new subsystems related to AMANDA (such as AMANDA Mobile) are procured and implemented or as new versions or releases of AMANDA arrive, Burlington should have a clear, written plan for providing appropriate training in these products to all users both in Code Enforcement and other City user-agencies.
- (4) As Burlington expands the use of AMANDA by other City departments such as Fire, Law, CEDO or Police, training will need to be a central component of this deployment.

IV. INVESTMENT.

This *Code IT Evaluation* makes only a few recommendations for immediate investment. These are relatively modest and address current situations which are independent of other decisions which may be made later as a result, for example, of recommendations from the IT Task Force. This would pertain in particular to such larger-dollar items as AMANDA Mobile or CSDC's eNtrprise product for Internet access. Table II presents the estimated cost of the items recommended for Burlington's immediate consideration.

TABLE II
RECOMMENDATIONS FOR INVESTMENT

Item	One-Time	Annual
Law Department: Color Laser Printer	\$499	\$150
Law Department: Scanner	499	100
Corporation Counsel's Access	150	60
Code Enforcement Cultural Climate Survey	9,500	0
TOTAL INVESTMENT	\$10,648	\$310

V. CONCLUSION.

This *Code IT Evaluation* has tried to provide a comprehensive view of the recent implementation of information technology in Burlington's Code Enforcement function, focusing on the AMANDA system.

One may draw two conclusions about this experience.

- Burlington has made outstanding progress in a relatively short time in developing a complex application system which addresses many of Code Enforcement's functional requirements and provides a sound foundation for the future.
- A range of enhancements both in AMANDA and Code Enforcement's other applications of information technology could serve Burlington well in improving not only customer service but also the efficiency and effectiveness of this function throughout all City agencies it involves.

Burlington's most difficult task is maintaining discipline in the implementation of the recommendations of this Code IT Evaluation. The City has much work to do in addressing the findings and recommendations of this *Code IT Evaluation*. The challenge to Burlington's elected and appointed leadership, as well as its staff, is to make well informed, sound decisions which continue progress in the support for Code Enforcement which IT can provide.

VI. APPENDICES.

APPENDIX A
INTERVIEWEES

Appendix A

Interviewees

Agency	Individual	Title
Clerk/Treasurer	Brendan Keleher	Chief Administrative Officer
	Karen Wingate	Assistant Treasurer
	Joan Carter	Data Analyst
Code Enforcement	Raymond O'Connor	Chief Code Enforcement Officer
	Kathleen Butler	Health Policy Case Manager
	Gloria Allen	Code Enforcement Administrator
	Justin Thibeault	Intern
Corporation Counsel	Kimberlee Sturtevant	Assistant City Attorney
Law Department	Atty. Gene Bergman	Assistant City Attorney
	Lisa Jones	Paralegal

ATTACHMENT - B

Draft FY 05 Budget Resolution Report to
City Council, dated September 8, 2004.
Submitted by Gene Bergman, Interim
Director

EUGENE BERGMAN
Interim Director
865-5382

KATHLEEN BUTLER
Assistant Director
865-7510

JEANNE FRANCIS
Zoning Specialist
865-7544

GLORIA ALLEN
Code Enforcement Administrator
863-0442



CODE ENFORCEMENT OFFICE

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Code Enforcement Inspectors

GEORGE COUTRAYER
652-4235
MATTHEW PERRY
864-2156
FRANCES POLITI
865-7565
DONALD ROBEAR
865-7563
JOHN RYAN
865-7525

Assistant Zoning Specialist
TIM AHONEN
652-4222

To: City Council Expanded Community Development Committee
From: Gene Bergman, Interim Director
Date: September 8, 2004
Re: Draft FY 05 Budget Resolution Report

The resolution adopting the budget for FY '05 asks for a report by the new Code Enforcement Office director within 60 days of hiring on the following areas: information technology, staff deployment, allotment of time among minimum housing, quality of life, and problem properties, reinspection strategies, and consumer response systems. This memorandum responds to this request for the first two months of the fiscal year for all but information technology which is addressed by Chief Administrative Officer Keleher in a separate report.

Staff deployment

The Code Enforcement Office actively enforces 13 different code areas for the City. We employ five (5) minimum housing/deputy health officers, 1 zoning specialist and 1 assistant zoning specialist, 1 case management/ health policy specialist, 2 administrators, and one director.

The prime function of the minimum housing inspectors (MHIs) is to inspect rental housing pursuant to Chapter 18 of the Burlington Code of Ordinances and enforce its provisions. Each MHI is assigned a district that corresponds to a Police Department district.

These MHIs also perform health inspections of properties as requested by the Vermont Department of Health and as discovered or reported to the office; they also enforce the provisions of BCO Chapter 17 (including the City's pesticide notification law, BCO § 17-9), BCO § 21-17 (emission of smoke), and state law.

In addition, these inspectors enforce the Signs in the greenbelt ordinance, BCO § 21-5, and by agreement with the Department of Public Works, enforce the Vacant & Dangerous Building ordinances, Chapter 8, Art. III and the anti-littering/dumping laws found in BCO §§ 14-5, 14-6, 14-21, 27-2, 27-4. Officers may also be called on to assist DPW in enforcing trash hauler license violations related to early morning pick up (noise), pursuant to BCO §§ 14-4, 21-13.

By agreement with the Department of Parks & Recreation, these officers enforce the Charter provisions, §§ 211, 212, related to weeds and growths in the “parkings” (greenbelts) and, pursuant to BCO § 14-21, enforce against illegal dumping in City parklands. By authorization of the Police Department, these officers issue parking tickets for yard parking under Chapter 20, Art. VI and § 20-55, in addition to enforcing the yard parking provisions of the minimum housing code. These officers also do anti-graffiti field observations as part of an interdepartmental “Green Team” in furtherance of the City’s anti-graffiti ordinance, BCO § 21-29.

As the above responsibilities indicate, MHIs engage in enforcement activities that fall within the categories of “quality of life” and “problem properties.” To the extent possible, our office attempts to fit these two enforcement categories under the rubric of “minimum housing” and this is often possible when dealing with littering/illegal dumping and rental housing health issues.

The zoning specialist and assistant enforce the zoning ordinances and permits conditions (Appendix A). This includes issuing Certificates of Occupancy (Final and Temporary), responding to requests for CO reports, determining compliance with zoning permit conditions and zoning ordinances, investigating complaints of violations and issuing Notices of Violation when complaints are verified, participating in appeals before the Development Review Board and Environmental Court, issuing tickets and participating in ticket hearings at the Vermont Judicial Bureau. By authorization of the Police Department and Code Office policy, the zoning compliance officer may issue parking tickets for parking violations under Chapter 20, Art. VI and § 20-55 as it relates to zoning based parking violations. The zoning specialist also participates in the management of the assistant and the administrators.

The case management/health policy specialist participates in the management of the daily MHI workload, performs administrative functions related to the flow of paperwork by the non-zoning officers and participates in the management of the administrators, and is staff to the Board of Health.

The administrators schedule inspections, answer phone calls, input registration and other data, and process inspection reports and other documents (Certificates of Compliance, Final and Temporary Certificates of Occupancy, owner notifications, rental registrations, etc.).

Assessment of time allocation, reinspection strategies, and consumer response systems

The resolution asks for an assessment of the allotment of time among minimum housing, quality of life, and problem properties, reinspection strategies, and consumer response systems.

Time assessment

Because of the priorities set forth below, I do not have hard figures on the allocation of staff time among minimum housing, “quality of life,” and problem properties. As noted above, the use of the categories “quality of life” and “problem properties” does not neatly fit the job classifications of the office and the record keeping system. Depending on the person referring to quality of life and problem properties, the terms can refer to properties that have had (1) a long history of non-compliance with zoning requirements, (2) a present condition of trash and parking violations, (3) persistent trash or parking problems, (4) behavior issues (predominantly but not necessarily criminal in nature) of the occupants over a significant period of time, or (5) severe behavior issue over a brief period of time. Basically, the allocation of office resources reflects the above stated deployments.

6 people (5 inspectors and 1 case manager) are charged with enforcement of minimum housing, health, littering/dumping, greenbelt signs, graffiti, and vacant buildings. The vast majority of the time is spent on minimum housing with the second areas of concentration being trash issues and health orders not directly attributable to minimum housing.

The 1 zoning compliance officer and assistant compliance officer spend all of their time on zoning compliance and enforcement. The bulk of the assistant's time is spent on compliance checks with a significant portion of the time dedicated to field compliance inspections. The hiring of a second administrator will hopefully allow for the reallocation of the assistant's time to more field enforcement work, thereby increasing the level and timeliness of enforcement activity. The bulk of the compliance officer's time is being spent on enforcement investigation, determination, and case preparation for referral to the attorney; a significant amount of time is dedicated to review of the assistant's compliance activities and the determination of compliance.

Reinspection strategies

It is unclear exactly what the resolution meant by "reinspection strategies." The office uses the term reinspection to mean the reinspection of properties that are under minimum housing order to correct deficiencies found at a prior inspection. The inspection of properties not under order is termed "routine" inspections. The inspection of properties complained about is termed "complaint" inspections. Currently our street patrols, which cover whole areas of the city and deal with exterior conditions like trash and parking, are not termed "inspections" but are recorded in AMANDA; a street patrol may result in an order, which would result in an "inspection" being recorded and in turn would result in a reinspection being scheduled sometime after the compliance date has passed. Health inspections are dealt with in a similar fashion to minimum housing inspections but are cataloged separately. Zoning inspections are also a separate category.

The office did not have as of July 1, 2004 a comprehensive scheduling strategy to accommodate the need to do routine minimum housing inspections in the timeframe set by the ordinance, make timely reinspections of properties under order, conduct regular street patrols and the follow up that often results, and make timely inspections on complaints. In conjunction with the hiring of a new administrator on September 13th (discussed below), the development of such a strategy will move off of the initial discussion phase.

As an adjunct to a scheduling strategy, I and the case manager are doing a comprehensive review of inspector work over the course of a month's activity. This activity, in addition to being a necessary management tool in-and-of-itself, should also be incorporated into the scheduling strategy and allow us to make timely reinspections of properties.

The development of a strategy for improving the timeliness of zoning compliance and enforcement efforts is also taking place. A protocol for enforcement, which was not enacted as of July 1, has been reviewed modified and should be adopted by September 15. A process for handling compliance activities is also being finalized. The hiring of the assistant compliance specialist and soon-to-be added administrator along with the new protocol and process should allow for a more effective and time sensitive compliance and enforcement effort. I also believe that after an adequate implementation period passes, a review of zoning compliance and enforcement activities would be appropriate; this review, in my assessment, would best be conducted as part of the FY 06 Budget development and adoption process.

Consumer response systems

This area has been identified by councilors and the public as a major area of improvement that is needed. Much improvement has been made in terms of staff responses to calls and walk-ins through staffing adjustments discussed below. There is still a need for enhancements to be made to AMANDA which will allow for an improved tracking system for complaints and items of interest to the public; it is hoped that these enhancements will be made in October 2004. Finally, a major renovation of the office website is needed. There is no in-office capacity to make these changes and guidance has been requested from central administration as to how to accomplish this task. No timeframe is available at this point in time.

July 2004 Activity

My initial steps as Interim Director were to understand the issues facing the office and each of the individuals in it.

The key initial critical issue, as identified by former director O'Connor and all other MH officers and administrators, was the lack of scheduling of routine MH inspections.¹ Scheduling was reenergized through the reallocation of important zoning related administrative work from administrator Allen to newly brought on Assistant Zoning Specialist Ahonen, the reallocation of data entry through the hiring of a temporary administrator to do MH tasks related to filing and the input of MH registration information that had not been put into AMANDA after being received on and after the April 1, 2004 deadline, and improved communication and coverage related to customer service, primarily phone and walk-in coverage. I believe this is reflected in the figures for August activity cited below.² In addition, the reallocation of work to the new people has allowed the administrator to process inspection reports and orders in a timelier manner. As a result a backlog of reports and orders has been reduced; as of September 2, 2004, the oldest order in line to be mailed is dated 2 days from the date the paperwork was delivered to the administrator. This is, in addition to the changes made, a credit to the good work and diligence of Ms. Allen.

The second major issue to resolve was the large number (I have no count but it appeared to be well over a thousand) of registration forms that were not input into AMANDA after the forms were received. Included in this task is the gathering of required information that owners had not submitted on the forms. Information gathering requires calls to owners to get the missing information (contact

¹ Routine inspections are conducted on units that have gone beyond the inspection cycle set forth in BCO § 18-19. Scheduling requires identification of units needing inspections, contacts with owners, scheduling of owners and inspectors within the notice provisions of city and state law, and a court-action system (getting search warrants) for non-responsive owners. The office administrator is primarily responsible under the system in place at the time of my arrival for the scheduling function. It is my assessment that there was a breakdown in the system of setting up routine inspections sometime in the past year.

² *Records of activity in AMANDA for the period prior to August, 2004 should be seen as reflecting only a partial picture of the activity of the office.* This is because not all activity was recorded or recorded in the correct location, a result of a number of factors, the most important in my assessment being the newness of the system and the need to work out "bugs" in the implementation, the need for additional staff training, and the time to overcome staff resistance to a changed system. The records from August should more accurately reflect the activity of the staff.

numbers, names of agents, numbers of units, etc.). The failure to input the forms was in my assessment due to the work demands placed on existing staff and the insufficiency of the administrative staffing level (1) to accommodate this work within the context of all the other demands of the office.

Significantly, the budget approved by the Council included an additional administrative position. I acted to resolve this issue through the hiring of a temporary administrator. She has been hired and is working through the pile of unrecorded forms; as of September 1, 2004 there are still 603 forms to process; I do not know how many units these forms involve and given the number of forms and the competing demands, I have decided not to request a count.³ In addition, the temporary administrator input and filed a backlog of miscellaneous zoning, housing, and other forms into AMANDA and the hard-copy street files.

The third major issue to resolve was the insufficiency of administrative staff support given the level of administrative work required by the office (customer service by phone and walk-ins, scheduling complaint and routine inspections and reinspections, processing inspection reports and orders, inputting complaint and contact information into AMANDA, mailings, payroll, purchasing, etc.). On August 13, 2004, Shirley Gilman of the Police Department was hired, to start on September 13 (to enable the PD to deal with the transition).

In addition, the management of staff was revitalized. Weekly street patrols by MH inspectors were reinstated. Having all work recorded in the AMANDA system was emphasized as a job requirement, training on the use of the system was accelerated (is ongoing by the office's AMANDA rep), and officers are doing more of the work on the system to get out their reports and orders. This has resulted in reports and orders being sent to owners in a timelier manner. Daily schedules were adjusted to allow officers the time to respond to complaints and attend scheduled routine inspections and complete orders, tickets, and other activity paperwork. AMANDA reports are being used to review inspectors' work and make sure that open cases are finished; this is still a significant management issue as the number of open cases indicates.

Furthermore, customer service was reemphasized. First, we initiated better coordination with DPW customer service staff at the initial point of entry for walk-ins. Second, we revised the staffing of the phone to ensure full coverage during all hours of the work day for all days of the week; these actions resulted in the improvement in the response time to calls, walk-ins, complaints, and requests for case status.

Relationships with the Parks & Recreation and Public Works departments with regard to right-of-way/greenbelt cleanup were formalized in a memorandum of understanding. A more formal arrangement with DPW is also being worked on to address the noise made by trash haulers during hours outside those allowed by their solid waste licenses. The enforcement of the greenbelt sign ordinance

³ 7792 rental units are currently recorded as registered by our office. This number does not capture all of the city's rental properties at this point in time. This is because not all of the registration applications we have received are entered into AMANDA, not all owners have registered their units, and not all properties have been fully or correctly entered into the system. This issue is being addressed, as noted in the activity report below. The office receives regular reports by the Vermont State Housing Authority and the Burlington Housing Authority pursuant to Memoranda of Understandings. According to the reports 189 units are subject to Federal Housing Quality Standards inspections by VSH inspectors and 1660 are subject to the FHQS inspections by the BHA. Under the MOUs with these agencies, these units have a reduced priority standing with the Code Office that reflects the inspections done by these agencies. *Please note that you cannot subtract these units from the total number of units to determine the number of units that have a higher priority to inspect because of the issue with the number of currently recorded registered rental units noted above.*

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was begun on July 15, with the direction to inspectors that warnings be given to have those persons without permits apply for them within 30 days.

In addition to the work noted above and the daily director management activity (personnel issues, budget matters, advice, etc), I have or have taken responsibility for a number of substantive activities as part of the effort to improve the performance of the office, including: responding to requests for extensions and requests for equivalencies related to minimum housing orders (general requests and smoke detector specific requests), drafting policies and protocols related to minimum housing (extension granting policy, administrative interpretation of code), vacant building ordinance compliance, and noise violation landlord notification. Unfortunately, the timeliness of my performance of these substantive tasks is not what I would like but is based on the need to do all the other activities noted. -Furthermore, I continue to do litigation support for the minimum housing program (search warrants and civil and criminal prosecution).

August 1-31, 2004 Activity

The activity noted above continues. What follows is a description of the field activity of the office in August.

MHIs spend the bulk of their time on housing inspections and related activities. In the month of August, 2004, according to AMANDA reporting, officers conducted routine inspections on 77 properties containing 288 units. Inspectors reinspected 3 properties containing 16 units. Please note that a target number of between 240 and 320 routine inspections was set under the former director. *The sustainability of this level of inspections must still be evaluated and is dependent on the systematic improvement in the scheduling of all types of inspections, the ongoing management of inspectors' workload, and the complexity of cases—which includes the number of cases going to court.*

The results of the routine inspections and reinspections are as follows. Orders to correct deficiencies were issued to owners of 34 properties containing 109 units. 10 properties containing 23 units had no violations and Certificates of Compliance were issued. There are 39 properties containing 171 units for which management must review the status of the inspector activity because AMANDA indicates that they are “open” (an “open” case can mean that no violation was found but was not entered into AMANDA or was entered incorrectly, a violation was found but not entered or entered correctly, or investigation or assessment is continuing). We are meeting with individual inspectors to review these open cases. In addition to the orders issued, 2 tickets for violations of minimum housing standards were issued. We do not have a count of the number of warning tickets or verbal warnings issued.

Inspectors also conducted 44 complaint inspections. Of these 13 had violations confirmed and orders issued, 4 had their violations confirmed and resolved, and 27 are “open.”

There were also 2 properties that were inspected under the health officer authority and, as a result, one emergency health order was issued and one regular health order was issued; both orders were processed through the Board of Health as required by state law. One case is continuing.

The number of rental housing compliance requests answered is not available at this point in time; there is no current ability in AMANDA to get this information in a report form; an enhancement must be made to make this information query-able. These requests come from attorneys involved in property sales.

Inspectors and I were also involved in legal proceedings in August. One minimum housing non-compliance case in District Court was settled and a \$2,000 payment was paid to the City. Four Vermont Municipal Complaint tickets (civil) were adjudicated in Vermont Judicial Bureau (one has been continued).

As Code Enforcement Officers, these MHI officers engaged in weekly 2 hour street patrols⁴ in their districts. Warnings for illegal parking, illegal dumping, and unpermitted greenbelt signs were issued.⁵ I am pursuing the improvement of the quantification of these patrols; much activity does not fit neatly into the categories captured in AMANDA at this point in the development of the system.

The 2 zoning compliance officers did the following during the month of August: 66 compliance memos, 35 Final Certificates of Occupancy, 6 Temporary Certificates of Occupancy, 20 site visits and inspections, and the receipt of 15 new complaints. 13 affidavits for enforcement action were prepared and documentation is being assembled for referral to the City Attorney responsible for Zoning Enforcement; 1 affidavit with the documentation has been referred to the attorney. These officers worked on 16 old files. 6 meetings with property owners or attorneys not associated with the above numbers were held. Compliance officer Francis also attended weekly Planning & Zoning Department staff meetings, the Development Review Board's meetings,

⁴ Based on the inspector's work load or scheduled time off, not all inspectors performed street patrols each week of the month.

⁵ Street patrols

Week of August 4th street patrols: patrolled parts of Hill, Central City, New North End. Issued warnings and tickets for illegal parking and garbage/illegal dumping (i.e. mattress, couches), gave warnings on greenbelt/sidewalk signs without permits, and referred graffiti sites to the 1st Response Team.

Week of August 11th street patrols: patrolled parts of the South End, Central City, Old North End, Hill, and New North End. Got property owners to remove illegal dumpings and referred others to DPW for removal, issued warnings for greenbelt/sidewalk signs without permits, made graffiti referrals to 1st Response, had car owners remove illegal parked cars and issued orders to have owners remove unregistered cars per ordinance, investigated health issue related to trash, large holes on property and mice infestation.

Week of August 18th street patrols: patrolled Central City. Contacted owners about trash in front of properties and on greenbelt, issued warnings for greenbelt/sidewalk signs without permits, referred graffiti to owner for removal.

Week of August 25th street patrols: patrolled Central City, New North End. Issued warnings on trash and furniture on greenbelts and greenbelt/sidewalk signs without permits, made referrals for graffiti, looked for evidence of rental properties that are not registered.