

June 5, 2003

The Honorable Bill Purcell, Mayor
Mr. Terry Cobb, Director
Department of Codes Administration
Metropolitan Government of Nashville and
Davidson County
700 2nd Avenue South
Nashville, TN 37210

Report of Internal Audit Section

Dear Mayor Purcell and Mr. Cobb:

We have recently completed a performance audit of the Department of Codes Administration. According to the *Government Auditing Standards* issued by the Comptroller General of the United States, “a performance audit is an objective and systematic examination of evidence for the purpose of providing an independent assessment of the performance of a government organization, program, activity, or function in order to provide information to improve public accountability and facilitate decision making by parties with responsibility to oversee or initiate corrective action.” A performance audit is different than a financial statement audit, which is limited to auditing financial statements and controls, without reviewing operations and performance. In performing this audit, we retained Maximus to work under our direction. Their final report dated June 5, 2003, *Performance Audit of Department of Codes Administration*, accompanies this letter and is hereby submitted to you.

Codes is responsible for promoting public safety, public service and economic and community development by administering and enforcing building regulatory codes, property standard codes, and zoning codes. Building plans are reviewed for compliance with zoning, electrical, plumbing, gas, and urban forestry requirements; building permits are issued; and construction and other work sites are inspected for compliance with applicable codes. Existing properties are inspected for property standards compliance. Codes licenses individual electrical, plumbing, and gas contractors, and Codes provides staff services to the zoning and appeals boards. Certain costs are recovered through customer charges for building, electrical, plumbing, and gas permit fees and for appeals and licenses. The primary divisions of Codes are Inspections, Zoning, and Administrative Services, which is responsible for financial, human resources, and other administrative support to the department. Codes has a total of 99 budgeted positions for fiscal year 2003. Budgeted revenue is \$6,497,000. Codes has a total expenditure budget of 6,683,707, including \$5,419,938 for personnel. Additional background information is included in Chapter 1 of the Maximus report.

Objectives, Scope, and Methodology

The primary objectives of this performance audit were as follows:

- Review all major aspects of Codes operations, including assessing the efficiency and effectiveness of operations and the effectiveness of systems and controls in place to manage and communicate the results of operations.
- Compare Codes operations and key performance measures to industry best practices and to selected peers.
- Assess the overall management of the Codes Department, including organizational structure, fee setting, customer service, and information technology.
- Determine the implementation status of past audit recommendations.
- Assess compliance with applicable laws, regulations, and policies.
- Develop findings and recommendations for any areas where performance could be improved.

Because an audit of the Planning Department and a review of the development process are underway, the scope of this work excluded certain aspects of the Codes plan review process that will be evaluated in more detail in conjunction with the other audit work in process. This audit focused primarily on Codes' fiscal year 2002 and 2003 financial transactions and performance and on the processes in place during the audit. Certain analyses required the consideration of financial results, performance, and operations outside of that time period.

The methodology employed throughout this audit was one of objectively reviewing various forms of documentation, including written policies and procedures, financial information, and various other forms of data, reports, and information maintained by Codes and other Metro departments. Management, administrative, and operational personnel, as well as personnel from other Metro departments and other stakeholders, were interviewed, and various aspects of Codes operations were directly observed. Data obtained from the various sources were analyzed, and various aspects of performance, cost, and practices were compared to those of peers and to best practices.

We performed the audit procedures in accordance with generally accepted government auditing standards.

Findings and Recommendations

The Maximus report addresses Codes operations and the resulting findings and recommendations in detail. Following is an overview of some of the more significant findings and recommendations included in their report.

1. Efficiencies could be gained in the trades (electrical, plumbing, and gas) inspection areas by capturing and analyzing work activity in more detail, automating the inspection reporting process, and phasing in cross-trained, multi-disciplinary inspectors to conduct final inspections. Codes is currently evaluating software packages that include remote reporting capabilities, and it is recommended that they purchase laptop computers or other electronic devices to use those capabilities. The cost is estimated at \$60,800, and remote reporting could ultimately result in time savings approximating two inspectors' workloads. The use of multi-disciplinary inspectors could ultimately result in time savings approximating seven inspectors' workloads. These efficiencies could result in deferring the need for additional staff as demand increases or in resources being reallocated as needs and priorities change.

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2. Similar to trades inspectors, opportunities to enhance efficiency and effectiveness were also identified in the property standards inspection area. Recommendations to purchase laptops costing approximately \$32,300 and to transfer two customer service representatives from another Codes division would reduce the amount of time property standards inspectors spend in the office writing reports, preparing environmental case files, and making contact with customers regarding cases. Additionally, Codes should begin recording, prioritizing, and tracking properties with potential Codes violations as inspectors notice them while travelling to investigate other calls, then arrange for formal flex team inspections of these properties.
3. It is also recommended that Property Standards be elevated to a “division” status within Codes to give appropriate recognition to the visibility and importance of this operation, to align the operation in the manner in which it is currently functioning, and to more evenly distribute the span of control within the Codes Department.
4. The audit found that there was a backlog of property demolitions and found that there was not a comprehensive receivable tracking system for demolition costs to be collected from property owners. Once Codes has exhausted other options and follows the procedures to condemn a structure for demolition, the demolition should be handled by a department more closely aligned with that task. Additionally, it is recommended that demolitions be accounted for in a separate fund, where the collection of demolition costs recovered would be deposited. Finally, funding of \$519,000 is recommended to address the backlog of demolitions and to provide the resources needed to establish the separate fund for demolitions.
5. In reviewing whether inspection and plan review costs were being recovered, it was determined that the Fire Marshall’s costs were not being included in total costs. A fee analysis is recommended to better align fees to cover related costs and to recover approximately \$600,000 of cost currently not included in the fee structure.
6. Although Codes is imaging most current documents, it would take up to ten years for Codes to image historic documents with existing resources. Funding of \$280,400 is recommended to have the historic files scanned into Codes’ document imaging system, which would also allow two customer service representatives to be reassigned to Property Standards, where there is a need for additional support to allow inspectors more time in the field.

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Detailed explanations of the above findings and the related recommendations, as well as several other findings and recommendations, are included in the Maximus report. A summary of each recommendation and the related fiscal impact can be found in Chapter 10 of the Maximus report. In addition to Maximus' work, Internal Audit staff reviewed procedures and controls surrounding financial and other operations and discussed issues of lesser significance noted with management.

Management's response to the audit recommendations is attached to this report.

We greatly appreciate the cooperation and help provided by all Codes staff.

This report is intended for the information of the management of the Metropolitan Government of Nashville and Davidson County. This restriction is not intended to limit the distribution of this report, which is a matter of public record.

Internal Audit Section

Kim McDoniel
Internal Audit Manager

Copy: Karl F. Dean, Director of Law
David L. Manning, Director of Finance
Eugene Nolan, Associate Director of Finance
Metropolitan Council Audit Committee
Richard V. Norment, Director of County Audit
KPMG, Independent Public Accountant

June 5, 2003

Ms. Kim McDoniel
Department of Finance
Internal Audit Division
222 Third Avenue North, Suite 401
Nashville, TN 37201

Re: Performance Audit

Dear Ms. McDoniel

The Department of Codes Administration is pleased to have received the performance audit report, recently completed by Maximus.

We have reviewed the report and are in basic agreement with its findings. We look forward to implementing its recommendations.

Sincerely,

Terrence L. Cobb
Director
Department of Codes Administration

**PERFORMANCE AUDIT FINAL REPORT
DEPARTMENT OF CODES ADMINISTRATION
June 5, 2003**

**Metropolitan Government of Nashville and Davidson County,
Tennessee**

I. INTRODUCTION AND EXECUTIVE SUMMARY

This section of the report presents a summary of issues and recommendations developed by the project team regarding operations, organization, management systems and staffing of the Nashville and Davidson County (Metro) Codes Administration Department.

The scope of services included in this performance audit of the Department of Codes Administration included extensive interviews, data collection, observation of work practices, as well as customer and “peer city” surveys. Further, the project team conducted three focus group interviews during which interested and involved community members were provided a forum for the expression of strengths and improvement opportunities for various operating aspects of the Department. Specifically, the study included a review and analysis of the following elements:

- A review of all previous audit recommendations and studies performed in the Department to determine their appropriateness and the degree to which they have been implemented.
- An assessment of the appropriateness of current staffing levels as compared to comparable departments, and the methods of measuring employee performance and efficiency for each significant operation within each division.
- An assessment of the operating effectiveness of the current organizational structure.

- An assessment of the overall customer service in the Department, and an evaluation of the effectiveness of customer service feedback mechanisms which are currently in place.
- The appropriateness of educational and certification requirements for inspection staff, and the effectiveness of the overall organizational structure.
- Current operating effectiveness and costs of providing the significant services of each division.
- An evaluation of the effectiveness of establishing fees and projecting and monitoring revenue.
- An assessment of the controls over revenue by determining and testing procedures in place surrounding cash collections and other revenue monitoring.
- A determination of whether the contractor debit account at Codes Administration is operating effectively and efficiently.
- A determination of how fees are established and reviewed for appropriateness.
- The degree to which Department management maintains an awareness of, and utilizes, available grants and other funding sources.
- The adequacy of information technology systems, and their abilities to provide reliable and useful information to generate meaningful management reports, and how these compare to state-of-the-art systems available to support similar operations.
- A determination of the adequacy of support for the information systems, their integration with other Metro systems and other agencies, and a determination of the adequacy of the controls surrounding these systems.
- An assessment of the scheduling of all inspections to determine whether they are scheduled rationally and efficiently.
- An assessment of the Department's responsiveness to neighborhood and community group concerns.
- An assessment of the cost recovery systems in place for services provided by Codes Administration that are not legally on Metro's property or rights of way.

- A determination of which significant regulatory requirements with which the Department must comply, and what controls and procedures are in place to ensure compliance.
- A determination of the controls in place to enforce developer and individual compliance with Metro regulations and requirements, and the methods in place to correct deficiencies.
- A determination of whether timely and useful status reports are being submitted to the administration and/or council on a regular basis.
- An assessment of the adequacy and compliance with employee safety programs in place.
- A determination of the effectiveness with which Codes Administration and other Metro departments coordinate among divisions for efficient and effective operations and customer service and in their coordination with State agencies.

It should be noted that the issues surrounding the “One Stop Shop” and Metro’s overall development review processes will be further evaluated in conjunction with the ongoing Planning Department performance audit. The issues and recommendations regarding the planning and development functions will be addressed in that report.

The following information provides an overview of services provided by the Department of Codes Administration, as well as summary level budgetary and organizational profiles.

DEPARTMENT OVERVIEW

The Codes Administration Department is responsible for the protection of safety, health, welfare and property of the citizens of Nashville-Davidson County by administering and enforcing the building regulatory codes through plan review, issuance of permits, and periodic inspection of new and existing construction. Further, the Department is responsible for the enforcement of Metro’s Property Standards Codes

which outline minimum property standards for all existing properties, and the enforcement of Metro's Zoning Code. Divisional overviews of the three divisions of the department are provided in the following paragraphs:

Administrative Services Division

The Division is responsible for cash receipts and processing, budgeting for the department, human resource liaison activities with Metro Human Resources, civil service investigations, interviewing and hiring, purchasing, and serving in the role of advisor to the Department Director regarding fiscal, personnel, administrative and operational matters. The Division is comprised of three personnel, however, it should be noted that the Department Director's Administrative Assistant assists this Division in certain administrative services and is therefore presented in the charts below as being assigned to the Administrative Services Division. The Division also has the primary responsibility for administering Metro's contractor licensing and registration requirements, including contractor licensing and renewals for "Trades" (mechanical, plumbing, and electrical) contractors doing business in Davidson County and administering Metro's contractor licensing data base. The Division serves as support for the Mechanical Board, Plumbing and Electrical Examinations, and Appeals Boards.

Inspections Division

The Inspections Division is responsible for the provision of building, plumbing, electrical, mechanical/gas and property standards inspections in accordance with Metro Codes and those of the Southern Building Congress Code International (SBCCI). The Division also reviews plans submitted by permit applicants, and makes required changes to these plans and enforces the conformance to Metro Codes and specifications. Further,

the Inspections Division, through the Property Standards Unit, is responsible for maintenance of lien properties and coordination with Metro Legal regarding various pertinent details of these properties, as well as the maintenance of historical files and the scanning and imaging of these files. The Division is comprised of 69 positions, of which 68 are currently filled. Note that this figure includes the Inspections Division Assistant Director, who also serves as the Department's emergency management coordinator. This position is not included in the charts below.

Zoning Division

The Zoning Division primary responsibility is for the interpretation, administration and enforcement of the Metro Zoning Code. This code includes Metro's landscaping, buffering, and tree replacement requirements. The Division is also responsible for the review and issuance of zoning permits applications, informing the public regarding the zoning code and maintaining current and permanent records relating to the adoption, amendment, administration and enforcement of the zoning code. The Division also supports the activities of the Board of Zoning Appeals (BZA) and enforces the actions of that Board, and reviews plans submitted by applicants to determine which of Metro's various agencies are required to review plans prior to permit issuance. The Administrative Services Unit of this Division is responsible for the archiving and imaging of historical files of the Department. The Zoning Division is comprised of 19 positions, all of which are currently filled. It should be noted that, although the 19 positions include that of the Zoning Administrator, the charts below pertaining to the Zoning Division do not include this position which oversees the activities, operations and budgets of the Division.

The budget for the Codes Administration Department includes that of the Administration of the Department, Building, Plumbing, Electrical, Mechanical/Gas Inspections as well as the Property Standards, Plans Review and Urban Forestry functions. The total FY 2003 budget for the Department is \$6,683,707, which is approximately 2.7% less than the \$6,869,279 budgeted in FY 2002. This is primarily due to a \$420,672 decrease in “Internal Service Fees”, which are transfers to other Metro departments for internal services rendered. Disregarding this charge, the FY2003 budget represents a 2.3% increase over the FY2002 funding level. The breakdowns of the FY 2002 and FY2003 budgets are as follows:

Operating Expense	FY2002	FY2003
Personal Services	\$5,184,458	\$5,419,938
Other Services	\$1,489,246	\$1,070,969
Other Expense	\$195,575	\$192,800
Total	\$6,869,279	\$6,683,707

Budgeted revenues for FY2002 were \$6,164,550, and for FY2003 were \$6,497,000.

ORGANIZATION

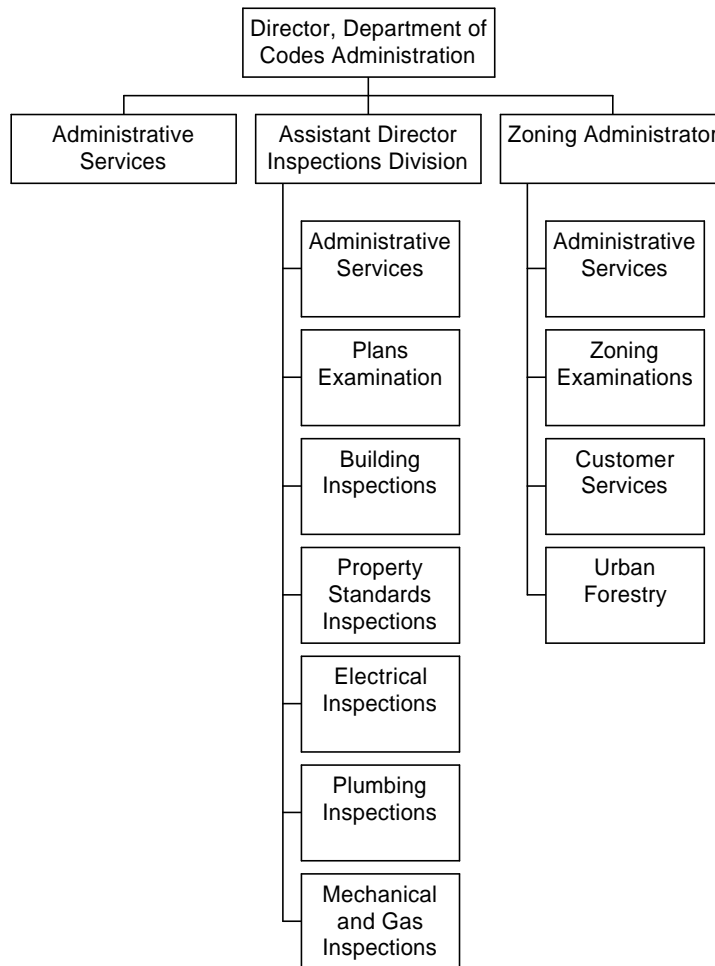
The organization charts presented below represent a summary-level depiction of the project team’s understanding of the relationships among the various functions within the Department of Codes Administration. Detailed summaries of positions and activities applicable to each of the functional divisions and units within these divisions are presented in Attachment C.

Note that, included in the current organization charts below there are three units referred to as having “Administrative Services” titles. The project team has reflected in

these charts the unit titles related during interviews, yet these organizational groupings perform customer service and clerical functions which are, although similar in some manners, sufficiently different to warrant their retention in the organizations to which they are currently parts of. The specific functions performed within these units are presented in the Service Assessment attachment to this report.

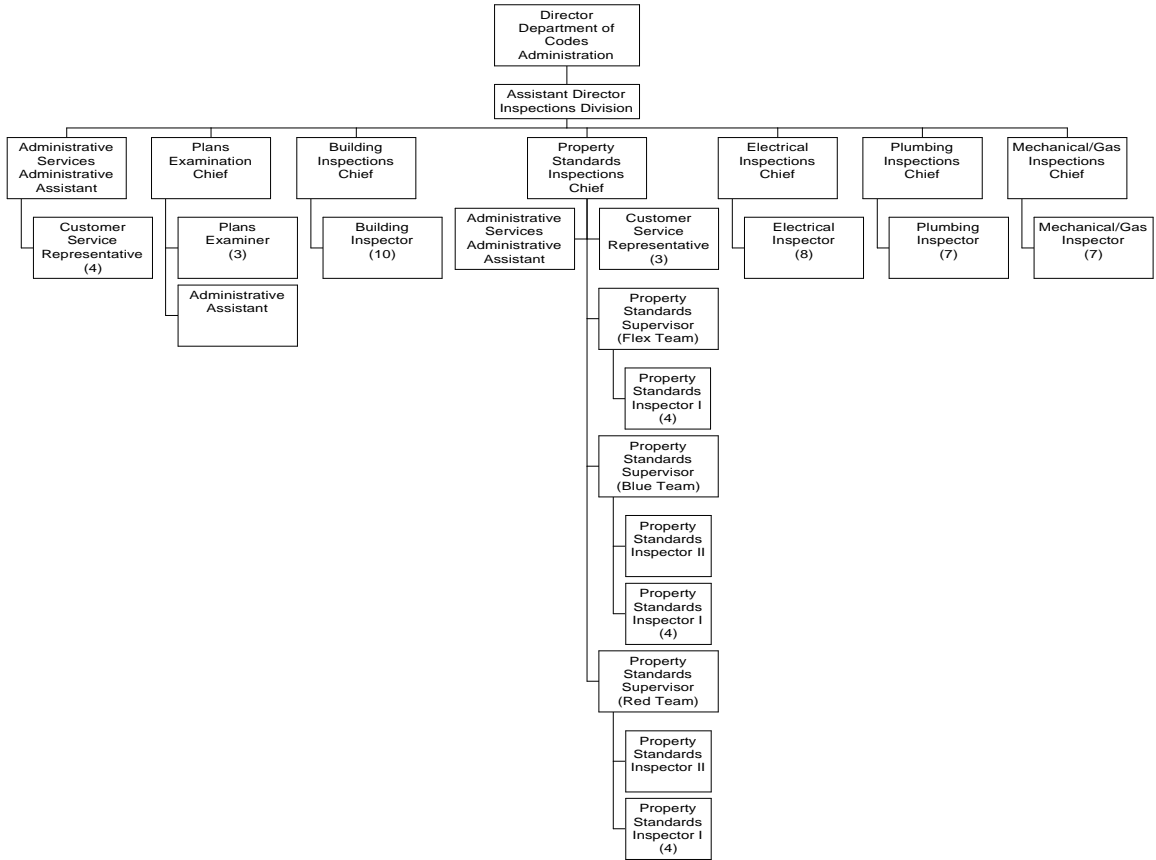
DEPARTMENT OF CODES ADMINISTRATION
Current Organization

Nashville-Davidson County, Tennessee



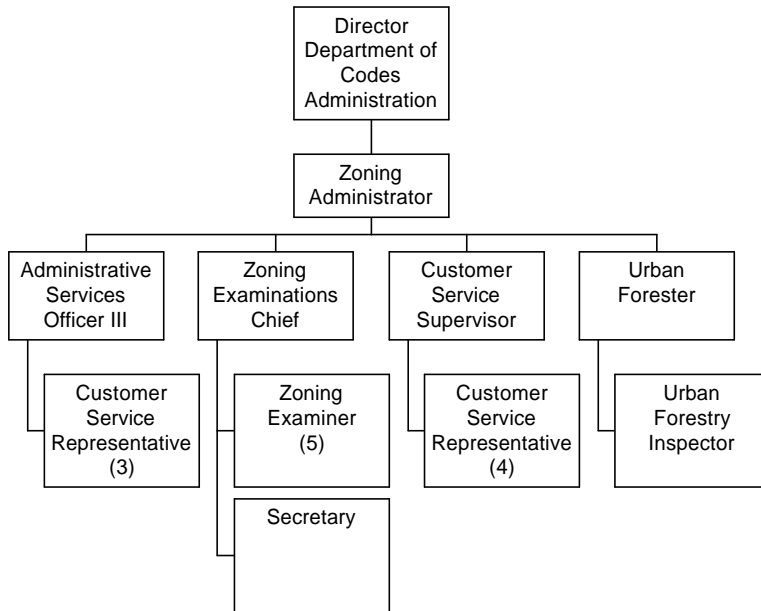
METRO NASHVILLE DEPARTMENT OF CODES ADMINISTRATION
Performance Audit Final Report: June 5, 2003

DEPARTMENT OF CODES ADMINISTRATION
INSPECTIONS DIVISION
 Nashville-Davidson County, Tennessee



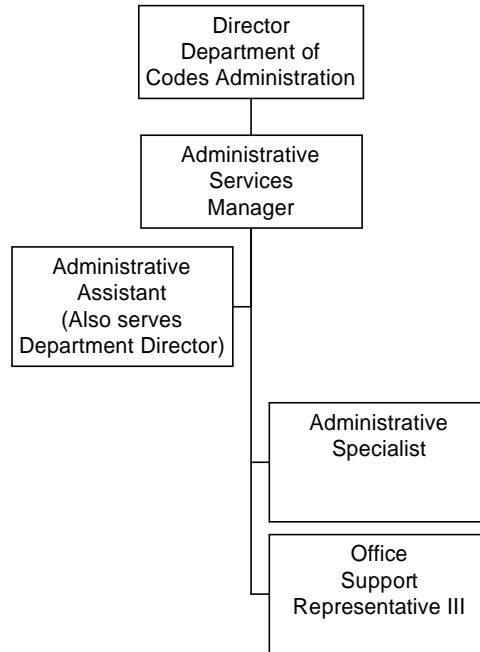
**DEPARTMENT OF CODES ADMINISTRATION
ZONING DIVISION**

Nashville-Davidson County, Tennessee



**DEPARTMENT OF CODES ADMINISTRATION
DIVISION OF ADMINISTRATIVE SERVICES**

Nashville-Davidson County, Tennessee



This report has been organized into separate sections for each of the operating units, with a separate section for the discussion of issues with general application to the operations of the Department, and a separate chapter relating to service costs and fees. Additionally, Chapters I and II summarize the results of the customer survey and peer community survey, respectively.

Before presenting the improvement opportunities throughout this report, it is important to note that the project team found a number of positive features and recent developments within the Codes Administration Department. These include:

- A recent increased focus in the enforcement of property standards codes violations. Although there are, by all accounts, many violations which have yet to be addressed, the increased focus on abating these violations is commendable, and has already had an impact both visually, through the observations of the project team, and perceptually, through focus group discussions held by the MAXIMUS project team.
- The availability and use of progressive methods of processing permits. The Department now receives and processes a large volume of permit applications via facsimile, and also has established a “debit account” for large-volume users.
- The ongoing search for a replacement for the Department’s information system which processes applications, tracks permits and inspections, and other related activities of the component divisions.
- The professionalism and dedication of staff. The project team noted a high degree of professionalism as well as focus on customer service and dedication to work efforts both during interviews with individual staff members as well as in “ride-alongs” with individual Inspectors.
- The recent initiative to create and publish a brochure which outlines the programs and other financial assistance available to homeowners who are issued orders to rehabilitate their homes.

The report begins with a summary of the results of the customer survey which the project team conducted.

II. SUMMARY OF CUSTOMER SURVEY RESULTS

II. SUMMARY OF THE CUSTOMER SURVEY RESULTS

As part of its management review, the MAXIMUS project team conducted a survey of customers in the Codes Administration and Planning Department. This chapter of the report presents a summary and highlights of the findings resulting from a review and analysis of the data. The results of the survey were used by the project team primarily in the support for our own observations and field work, with any recommendations included in the applicable chapters of this report. A copy of the forms utilized, as well as the tabulated results, is presented as an attachment to this report.

The first section describes the survey methodology and response rates.

CUSTOMER SURVEY DESIGN AND METHODOLOGY

The customer survey was distributed to a sample of customers that have used Codes Administration or Planning Department services in the recent past. There were three different surveys mailed to five hundred (500) customers. These surveys were distributed in the following manner: Codes (308), Zoning (66), and Planning (126). (Note that the Planning survey results will be presented and analyzed in a separate report). Sample sizes were determined by utilizing Department-provided data regarding the identities of contractors who are licensed to perform work in Metro. Based on these data, which indicated that there were 3,502 distinct contractor identities, MAXIMUS calculated that a statistically valid sample size, representative of the total population of licensed contractors, was approximately 500. MAXIMUS created the sample by assigning each customer a number and using a random number generator to choose the participants. It should be noted that twenty-four (24) total surveys within the group of five hundred were undeliverable.

The following table reflects the numbers of surveys distributed and the response rates:

Customer Survey Response Rates

Survey	Number Distributed	Number Returned	Response Rate
Plan Review, Permitting and Inspections	308	96	31%
Zoning Enforcement	66	10	15%
Planning	126	37	29%
Total	500	143	29%

As noted above, a separate report will be issued on the Planning Department, and that report will address the survey results related to Planning.

The next section presents survey response highlights of the Plan Review, Permitting and Inspections functions.

SUMMARY OF RESPONSES FOR THE PLAN REVIEW, PERMITTING AND INSPECTIONS FUNCTIONS

The following subsections contain specific analysis of customer responses in the Plan Review, Permitting and Inspections functions. The responses of an individual customer are of limited value. It is the pattern of responses that provides meaningful results. To identify those patterns, the project team plotted the distribution of responses to each statement and overall. Analysis of these questions is grouped by subject categories.

1. CUSTOMERS OVERALL GAVE POSITIVE RESPONSES TO SURVEY QUESTIONS.

There were two survey questions that asked respondents to give opinions regarding counter staff helpfulness. The response from customers to survey questions was highly positive. Both questions received more positive than negative feedback. The

negative feedback averaged about six percent, which is very low. The following points highlight these positive responses:

- “When submitting an application, I have found the staff at the counter to be responsive and helpful.” Seventy nine percent (79%) of respondents found the counter staff to be responsive and helpful during application submission. Six percent (6%) expressed neutrality. Only nine percent (9%) disagreed with the statement, “When submitting an application, I have found the staff at the counter to be responsive and helpful.” Five percent (5%) did not express an opinion.
- “Staff were helpful in assisting me understand the requirements of obtaining a permit in Nashville.” Seventy seven percent (77%) of respondents felt the staff was helpful in assisting with the explanation of permit requirements. Four percent (4%) did not feel strongly about the issue, expressing neutrality; nine percent (9%) disagreed with the statement, and nine percent (9%) did not express an opinion.

The next question dealt with the helpfulness of handout information.

2. **HANDOUT INFORMATION WAS FOUND TO BE HELPFUL AND INFORMATIVE.**

“Permit handouts were helpful and informative.” Fifty four percent (54%) of customers gave positive feedback about department permit handouts. Only four percent (4%) of respondents were not pleased with the handout information. It should be noted that 40 responses, or about 42%, expressed either neutral comments or no opinion, indicating that handout information may not be highly visible or noteworthy to the extent that it is noticed.

3. **THE REVIEW PROCESS DOES HAVE A DEFINITIVE POSITIVE SIDE, ALTHOUGH RESPONDENTS TENDED TO VIEW “PROCESSES” LESS FAVORABLY THAN THE EMPLOYEES PERFORMING THEM.**

The survey asked six questions of respondents that dealt with plan reviews and the staff who conduct them. Highlights of these responses are provided in the points below:

- *“Plan checks are complete and accurate; problems did not surface later which should have surfaced during the plan check.”* Forty eight percent (48%) of respondents felt that plan checks are complete and accurate without problems surfacing after the fact, while a minimal four percent (4%) felt the opposite. Nine percent (9%) were neutral on this issue and thirty nine percent (39%) expressed no opinion.
- *“I did not have to wait an excessive amount of time to find out if my original submittal was complete or needed more information.”* Only eleven percent (11%) of customers thought that the wait time to find out about application completion was excessive. Fifty two percent (52%) felt that the wait time was acceptable, while eight percent (8%) felt neutral and a relatively large group (28%) did not comment.
- *“Within the constraints of the City's codes, staff conducting the plan checks were practical in applying regulations.”* Fifty four percent (54%) of customers felt that those conducting the plan checks were practical in applying regulations. Only six percent (6%) disagreed with the statement. On the neutral side, seven percent (7%) had no strong feelings about the issue and thirty three percent (33%) expressed no opinion.
- *“Staff conducting plan checks were fair in dealing with my permit application.”* Customers were pleased with the staff conducting the permit application reviews. Fifty four percent (54%) of respondents thought that the review staff were fair. Only three percent (3%) disagreed, while nine percent (9%) were neutral. Thirty four percent (34%) expressed no opinion on the issue.
- *“Department staff were accessible when I needed help in resolving problems.”* Similarly, customers were very pleased with the plan review staff accessibility. An overwhelming sixty three percent (63%) of customer respondents thought that the staff were accessible for help when needed. Fourteen percent (14%) of responses were neutral. Nine percent (9%) disagreed and fifteen percent (15%) expressed no opinion.
- *“The time it took to approve plans was reasonable.”* Respondents were relatively inexperienced in the time it took to approve plans. Thirty seven percent (37%) agreed with the statement, “The time it took to approve plans was reasonable”, compared to the forty percent (40%) who expressed no opinion. Only eight percent (8%) disagreed and fifteen percent (15%) felt neutral.

It is noteworthy that, although responses were generally positive for all questions, respondents appeared to have judged the processes somewhat less favorably than the

employees performing them. For example, questions 6, 7 and 8, dealing specifically with respondents' opinions of the helpfulness of staff, reflected a positive (i.e., "Strongly Agree" or "Agree", response) rate of 56.3%. However, questions 4, 5 and 9, which dealt with timeliness, accuracy and turnaround times for plan checks, reflected a positive response rate of 45.8%.

4. INSPECTIONS STAFF AND PROCESSES WERE JUDGED BY RESPONDENTS TO BE EXCEPTIONALLY KNOWLEDGEABLE, HELPFUL AND TIMELY.

Five questions in the survey dealt with inspections processes and staff. It should be noted that these five questions, taken in total, reflected the highest positive scores, defined as "Strongly Agree", and "Agree" responses, of any in the grouping of survey questions. Specifically, 83.5% of all responses to these five questions were defined as "positive" in this manner.

The following points provide highlights of these responses:

- *"Inspectors were timely in responding to my request for inspections."* A majority of respondents were positive (74%) about the inspectors' timely responses to inspection requests. Fifteen percent (15%) were neutral. The rest of the breakdown showed nine percent (9%) disagreeing with the statement and two percent (2%) expressing no opinion.
- *"Inspectors were courteous when conducting inspections."* Eighty seven percent (87%) of respondents found the staff to be courteous when conducting inspections, while six percent (6%) did not have a positive response. One percent (1%) had no opinion, while another six percent (6%) were neutral.
- *"Inspectors were knowledgeable in conducting inspections."* Eighty seven percent (87%) of respondents found the staff to be knowledgeable in conducting inspections, while four percent (4%) did not have a positive response. Nine percent (9%) were neutral.
- *"When inspectors found a problem they were clear in explaining what I had to do to correct it."* Respondents were positive when asked opinions

regarding inspections staff ability to explain corrective actions. Specifically, eighty three percent (83%) agreed with this statement. Only three percent (3%) disagreed. Ten percent (10%) felt neutral about this facet of customer service, and four percent (4%) expressed no opinion.

- “*Inspection staff were fair in conducting inspections.*” A large majority of the respondents (89%) found the inspection staff to be fair in conducting inspections. Only three percent (3%) disagreed. Eight percent (8%) were neutral.

In summary, respondents expressed highly positive opinions regarding staff helpfulness and courtesy in performing duties related to plan review, permitting and inspections. The next section of the chapter provides a summary of survey results for the zoning enforcement functions of the Department.

SUMMARY OF RESPONSES FOR THE ZONING ENFORCEMENT FUNCTIONS

The following subsection contains specific analysis of customer responses in the Zoning functions. It should be noted that, although 66 surveys were distributed, only 10 were returned, resulting in a response rate of approximately 15%. Given the relatively low response rate, the following analysis reflects numbers of responses, rather than percentages, as was the convention in the above analysis. Otherwise, the same type of analysis from the previous section applies to the following section.

1. CUSTOMERS GAVE POSITIVE RESPONSES TO SURVEY QUESTIONS.

There were two survey questions that asked respondents to give opinions regarding counter staff helpfulness. The response from customers to survey questions was highly positive. Both questions received more positive than negative feedback. The negative feedback averaged fifteen percent, but it is important to keep in mind that these numbers are far too broad to make assumptions.

- “When submitting an application, I have found the staff at the counter to be responsive and helpful.” Seven (7) of the respondents found the counter staff to be responsive and helpful during application submission. One (1) was neutral, and two (2) disagreed.
- “Staff were helpful in assisting me understand the requirements of obtaining zoning or a zoning variance in Nashville.” Seven (7) of the respondents felt the staff were helpful in assisting with the explanation of zoning requirements. Two (2) did not feel strongly about the issue, expressing neutrality; one (1) respondent disagreed with the statement.

2. THE HANDOUT INFORMATION WAS FOUND TO BE HELPFUL AND INFORMATIVE.

“Permit handouts were helpful and informative.” Four (4) of the customers gave positive feedback about department permit handouts. Three (3) were neutral and did not have any strong feelings in either direction. Two (2) of the respondents were not pleased with the handout information and one (1) did not have an opinion. Four (4) of the respondents were either neutral or had no opinion regarding the handouts which might suggest, as in the plan review, permitting and inspections functions, that the handouts are not particularly visible or significant.

3. THE REVIEW PROCESS HAS GARNERED MIXED OPINIONS.

The survey asked six questions of respondents that dealt with zoning / variance application reviews and the staff conducting them. Highlights of these responses are provided in the points below:

- “Zoning / variance application reviews are complete and accurate; problems did not surface later that should have surfaced during the review.” Four (4) of the respondents felt that the zoning/variance application reviews are complete and accurate without problems surfacing after the fact, while another (4) felt the opposite. One (1) respondent was neutral on this issue and another expressed no opinion.

- *“I did not have to wait an excessive amount of time to find out if my original submittal was complete or needed more information.”* Three (3) of the customers thought that the wait time to find out about application completion was excessive. Four (4) felt that the wait time was acceptable, while three (3) felt neutral.
- *“Within the constraints of the City's zoning ordinance, staff conducting the zoning / variance reviews were practical in applying regulations.”* Five (5) customers felt that those conducting the zoning/variance reviews were practical in applying regulations. Four (4) disagreed with this statement. On the neutral side, one (1) respondent had no strong feelings about the issue.
- *“Staff conducting zoning / variance reviews were fair in dealing with my permit application.”* Customers were not overwhelmingly pleased with the staff conducting the permit application reviews, with four (4) stating that the review staff were fair. Three (3) disagreed, while two (2) felt neutral and one (1) had no opinion.
- *“Codes Administration staff was accessible when I needed help in resolving problems.”* Customers had very mixed opinions about the Codes Administration staff accessibility. Two (2) of the customer respondents thought that the staff were accessible for help when needed. Four (4) of the responses were neutral, another two (2) disagreed and the remaining two (2) had no opinion.
- *“The time it took to approve plans was reasonable.”* Respondents were fairly even about the time it took to approve plans. Four (4) agreed while four (4) disagreed with the statement. The remaining two (2) were neutral.

The responses to the processes and staff are not overwhelming in either direction, which inhibits making definitive conclusions.

4. EXAMINATIONS STAFF AND PROCESSES DID NOT GET AN OVERWHELMING RESPONSE EITHER NEGATIVE OR POSITIVE.

Five questions in the survey dealt with zoning examination processes and staff. It should be noted that again there is no significant trend emerging in these answers.

- *“Inspectors were timely in responding to my request for zoning / variance information.”* Three (3) of the respondents agreed, three (3) were neutral and another three (3) had no opinion. The remaining respondent disagreed.

- *“Staff were courteous when conducting zoning / variance inspections.”* Four (4) of the respondents found the staff to be courteous when conducting zoning/variance inspections, while one (1) did not have a positive response. Three (3) were neutral and two (2) had no opinion.
- *“Staff were knowledgeable in conducting zoning / variance inspections.”* Five (5) of the respondents found the staff to be knowledgeable in conducting zoning/variance inspections while four (4) did not have a positive response. One (1) respondent was neutral.
- *“When staff found a problem during a zoning / variance inspection, they were clear in explaining what I had to do to correct it.”* The staff got a positive response about explaining to those with problems during an inspection how to correct the problem – three (3) customers agreed with this statement, and no respondent disagreed. Three (3) felt neutral about the statement and four (4) did not answer.
- *“Staff were fair in conducting zoning / variance inspections.”* Five (5) respondents found the inspection staff to be fair in conducting inspections. Only one (1) disagreed, while two (2) were neutral. Similarly, two (2) had no opinion.

A significant number of respondents (approximately half or more) expressed either neutral or no opinion for this section of statements. It is again important to note that due to the low number of respondents these findings are not statistically significant, although the results generally supported both the project team’s observations and the opinions expressed during the focus group session.

III. SUMMARY OF PEER COMMUNITY SURVEY RESULTS

**METROPOLITAN NASHVILLE AND DAVIDSON COUNTY
PEER COMMUNITY SURVEY
RESPONSE SUMMARY**

INTRODUCTION

In conjunction with our engagement to conduct a performance audit of the Codes Administration and Planning Departments of the Metropolitan Government of Nashville and Davidson County (Metro), MAXIMUS conducted a survey of similar communities. This survey was performed to provide an additional perspective on staffing levels, service volume and work processes which may require further review in this study. Additionally, this comparative survey will aid in the comparison of Metro's delivery of services to those of comparable communities.

To facilitate the collection of relevant common data to be used in this study, a one page survey document was developed to collect, summarize and report for each of the following areas:

- Construction Plan Review, Permitting and Inspections
- Zoning, Property Standards and Nuisance Code Enforcement
- Planning

Note that this summary contains the results of the responses for the first of the two functions listed above. The survey of the selected communities' planning functions will be provided in the Planning Department report being completed by MAXIMUS under separate cover.

How the Comparative Analysis was Conducted:

The MAXIMUS project team, working in conjunction with Metro, developed a list of eight (8) communities typically used by Metro in conducting economic and other

comparisons. As of the date of this summary, only five of the above communities (Austin, Indianapolis, Norfolk, Louisville and Jacksonville) had responded to the survey in whole or in part. Profile data for Nashville and the five responding communities are included in the table below :

Location	Population	Area (sq. mi.)
Norfolk, Virginia	234,000	221
Indianapolis, Indiana	731,327	362
Austin, Texas	329,892	256
Jacksonville, Florida	750,000	841
Louisville, Kentucky	693,604	63
Nashville-Davidson County, Tennessee	565,352	502

Once the communities were selected, the project team developed a series of survey instruments for distribution. The focus of the survey instrument was staffing mix, volume, work process and level of financial resources.

In the sections that follow, a brief summary of the categories contained in each survey instrument utilized is discussed. The tabular results of all survey responses are provided in Attachment F of this report.

NUMBER OF STAFF

The following data present analyses of the staffing components of each of the surveyed communities.

Staffing Observations - Construction Plan Review, Permitting and Inspections (ATTACHMENT F-1)

A total of 5 communities responded with data in this area. The average staffing, excluding Nashville, for personnel providing direct services was 43 employees. The lowest level of staffing was in Indianapolis with 15 employees. Jacksonville had the

highest with 76 employees. By comparison, Metro Codes Administration has a total of 52 direct service employees.

Highlights of a review of the personnel and staffing data include the following:

- Of the five responding communities, two of these (Indianapolis and Austin) utilize combination, or multi-disciplinary, inspectors to some degree.
- The ratios of direct staff to support personnel varies from a low of 2.3 to 1 in Jacksonville, to a high of 5.0 to 1 in Indianapolis. It is interesting to note that Nashville's ratio, however, is higher than any of the peer communities, at 5.8 to 1, indicating that support staffing is "leaner" in the Department of Codes Administration than in these five communities.
- The ratios of inspections staff (direct and support personnel) per 10,000 population indicates that Nashville is within the mid-range of survey respondents (1.08 per 10,000), although results varied relatively widely. Indianapolis has the fewest inspections staff per 10,000 population, with 0.25, and Austin has the greatest number with 1.76. Other ratios include Louisville, with 1.01 per 10,000; Norfolk, with 1.37; and Jacksonville, with 1.45.

Staffing Observations - Zoning, Property Standards and Nuisance Code Enforcement (ATTACHMENT F-2)

A total of 3 communities responded with data for this function. The lowest level of direct staffing was in Indianapolis with 16 employees. Louisville had highest level of staffing with 36 employees. Support staff for this function were reported as 6 for Norfolk, 2 for Indianapolis and 4 for Louisville. By comparison, Nashville had 17 direct service staff and 4 support staff.

WORK VOLUME

Work Volume – Observations - Construction Plan Review, Permitting and Inspections (ATTACHMENT F-1)

(A) Permits

This area of our survey instrument quantifies the volume of permits issued for the communities. Based on the responses received, the average number of permits issued by the 5 responding communities was 42,721. The community with the highest number of permits was Jacksonville, with 86,570. Norfolk had the lowest number of permits issued, with 12,635. Nashville had a total of 44,242 permits issued.

Highlights of a review of the plan review volumes reported include the following:

- Numbers of plans reviewed by reported numbers of Plans Review personnel varied widely in the three communities reporting plan review volumes (Indianapolis and Louisville did not provide these numbers; in the case of Indianapolis, plan review is actually performed by the State of Indiana under State law), with Austin reporting only 292 plans reviewed per Plans Reviewer, and Jacksonville reporting 2,557 per Plans Reviewer.
- Nashville's Plans Examiners reviewed a total of 1,109 plans, on average, in FY2002, which is in the mid-range of the reported results.

(B) Inspections

This area of our survey instrument quantifies the volume of inspections performed by the communities included in our survey. Based on the responses received, the average number of inspections performed by the 5 responding communities was 105,132. The community with the highest number of inspections was Jacksonville with 233,613. Indianapolis had the lowest number of inspections with 28,303. Nashville had a total of 107,225 inspections.

Highlights from a review of the inspections workloads in the survey communities include the following:

- Inspections performed per inspections staff member on an annual basis varied from a low of 1,545 per employee in Norfolk, to a high of 3,281 in Austin.
- Nashville’s Codes Administration Inspectors averaged 2,104 inspections per Inspections staff member, which is in the mid-range of the survey results. (It must be noted that this is only an aggregate number for overall workload volume comparison purposes. The project team is attempting to provide an overall view of workload metrics, and recognizes that the ratios do not have significance in and of themselves.)
- Each of Nashville’s Codes Administration Department’s 32 “trades inspectors” (i.e., plumbing, mechanical/gas, electrical and building) cover approximately 15.7 square miles of area on average. In Indianapolis, which utilizes combination inspectors, this average is 24.1 square miles per “trades inspector”. In Jacksonville, this figure is 15.7 square miles per trades inspector (which is the same figure for Nashville). In Norfolk, the figure is 13.8 and in Austin, it is 10.7 square miles per trades inspector. Louisville had 1.54 square miles per “trades inspector”. This is due to their small size (63 total square miles) of area covered by this community.

Work Volume – Zoning, Property Standards and Nuisance Code Enforcement (ATTACHMENT F-2)

(A) Inspections

This area of our survey instrument quantifies the volume of inspections performed by the communities included in our survey. Responses were received from a total of 3 of the 8 communities. The average number of inspections performed was 33,985. Of the reporting communities, Louisville had the highest number of inspections with 69,620 with Norfolk having the lowest at 14,335. By comparison, Nashville had a total of 29,281 inspections in this area.

(B) Cases

This areas of the survey instrument quantifies the volume of cases processed by each of the communities. Responses were received from a total of 3 of the 8 communities.

The average cases reported was 3,782. Indianapolis had the highest with 4,460 cases. Louisville had the low with 353 cases. Nashville has 3,153 cases reported.

BUDGET AND REVENUE DATA

Budget and Revenue Data – Observations - Construction Plan Review, Permitting and Inspections (ATTACHMENT F-1)

Total Budget and Fee Revenues for Codes Administration

Although responses were received from 5 of the 8 communities included in our survey, only 4 of the 5 responses received provided data in this area. Based on the 4 responses received, the average budget for Codes Administration was \$5,636,177. The community with the highest budget for this area was Jacksonville with \$7,925,360. Norfolk had the lowest budget of \$2,019,349. By comparison, the total Metro Codes Administration budget for FY 2002 was \$6,164,000. Highlights from the analysis of these figures include the following:

- Responses were received from 5 of the 8 communities included in our survey. Based on the 5 responses received, the average fees collected was \$ 4,702,759. The community with the highest fees collected was Austin with \$ 9,000,000. Norfolk had the lowest fees collected, which totaled \$ 1,271,767.
- Percentages of department budgets recovered through fees displayed wide variations between locations. The average fee recovery rate for all 5 respondents was 87%. Austin had the highest recovery rate at 98% with Norfolk having the lowest at 63%. Nashville collects 97% of its Codes budget through fees charged.

- Budgetary figures for each of the survey respondents displayed similar ratios as compared to the population served. In this regard, the following figures represent the total budgetary amounts per population of the respective cities:
 - Norfolk, VA \$ 8.63 per person
 - Jacksonville, FL \$10.57 per person
 - **Nashville, TN \$11.82 per person**
 - Austin, TX \$12.73 per person
 - Louisville, KY \$ 4.90 per person

(Indianapolis, IN did not respond to the request for budgetary data).

Budget vs Actual Revenue Data – Zoning, Property Standards and Nuisance Code Enforcement (ATTACHMENT F-2)

(A) Total Budget for Property Standards

Responses to this inquiry were received from a total of 3 of the 8 communities included in the survey. The average revenue budget of the 3 responding communities was \$1,817,932. Louisville had the highest at \$2,290,550 with Indianapolis having the lowest at \$1,752,752. By comparison, Nashville’s budget for this function is \$1,791,097.

B) Total Fees Collected for Codes Administration

Responses to this inquiry were received from a total of 2 of the 8 communities included in the survey. Neither of the 2 responses received provided data in this area.

WORK PROCESS

Work Process - Observations - Construction Plan Review, Permitting and Inspections (ATTACHMENT F-1)

(A) Average time for residential plan review

Responses were received from a total of only 3 of the 8 communities included in the survey. Based on the 3 responses received, the average time for a residential plan review was 5.7 days. Metro Nashville does not routinely review plans for residential

properties. Metro performs complimentary reviews of one and two family residences over 5,000 square feet in size or having three or more stories. A sample of the plan review logs of the Department indicate that total review time - including queued wait time, which was not provided by other cities - was 22 days.

(B) Average time for complex plan review (Industrial/Commercial)

Although responses were received from 5 of the 8 communities included in our survey, only 4 of the 5 responses received provided data in this area. Based on the 4 responses received, the average time frame for the completion of this activity was 11.8 days. The community with the highest turn around time for this activity was Austin with 21 days. Jacksonville had the lowest turn around time with 10 days for this activity. Based on a sample of work activity data in Nashville, the average turnaround time was 12.4 days, which is well within benchmark standards (the project team typically experiences 21 to 30 business days within well-managed communities) as well as averages for this survey (which indicate between 12 and 14 days).

(C) Extent of Technology Used

Although Norfolk and Austin reported no significant use of technology in their Permitting and Inspections functions, other jurisdictions have made strides in this area. For example, Jacksonville and Indianapolis utilize laptops in the field in order to update inspection results, and Louisville utilizes hand-held devices, which have been deemed more convenient for personnel. Note that the project team has recommended similar technology upgrades in the Metro Codes Administration Department in a later chapter.

Work Process - Observations - Zoning, Property Standards and Nuisance Code Enforcement (ATTACHMENT F-2)

(A) Average time for initial complaint inspection

Responses were received from a total of 3 of the 8 communities included in the survey. Based on the responses received, the average timeframe for the completion of this activity was 2.6 days.

(B) Average time to achieve compliance (up to point of court action)

Responses were received from a total of 2 of the 8 communities included in the survey. Based on the limited number of responses received at this time, and the unavailability of Nashville data, comparisons are of limited value. However, the averages of the two respondents indicates that code-related cases are handled within 90 days.

IV. INSPECTIONS AND PLAN REVIEW

The Inspections Division is responsible for the provision of building, plumbing, electrical, mechanical/gas and property standards inspections in accordance with Metro Codes and those of SBCCI. The Division also reviews plans submitted by permit applicants, and makes required changes to these plans and enforces the conformance to Metro Codes and specifications. Further, the Inspections Division, through the Property Standards Unit, is responsible for maintenance of lien properties and coordination with Metro Legal regarding various pertinent details of these properties, as well as the maintenance of historical files and the scanning and imaging of these files. (Note that the discussion and analysis of the Property Standards Unit is included as a separate chapter in this report). The Building Inspection Division also inspects for compliance with Metro's Energy Code and Accessibility Code. The Division is comprised of 69 positions, of which 68 are currently filled. Note that this figure includes the Inspections Division Assistant Director, who also serves as the Department's emergency management coordinator.

The following are issues relating to the project team's interviews, observations and data collection in the Inspections Division.

1. **THE INSPECTIONS DIVISION SHOULD IMPLEMENT CHANGES IN THE REPORTING OF WORK EFFORT TO ASSIST IN THE ESTABLISHMENT OF PERFORMANCE STANDARDS AND TO ENSURE ACCOUNTABILITY FOR TIME EXPENDED BY INSPECTORS.**

Observations by the project team indicate that, although Inspectors document the "event" of an inspection, whether electrical, mechanical, plumbing, building, etc., there is no record of time expended in the accomplishment of these tasks. The project team's

analysis of records indicates wide disparities in the numbers of inspections per Inspector, yet there is no tracking mechanism to explain what may be legitimate differences in production due to extraordinary travel times or volume of communications with builders/contractors, etc.

The project team collected data from 2000 through 2002 which provided statistics regarding numbers of inspections per Inspector for Electrical, Mechanical, Plumbing and Building inspections. For each year, there were significant disparities in workload volumes for Inspectors who had been employed for the full 12 months of the respective years. For example, for 2002 for specific Inspectors, these volumes varied from low to high for the following disciplines:

**Comparison of Low and High Numbers of Inspections per Inspector
Metro Nashville and Davidson County Codes Administration Department
Inspections Division**

Discipline	Low Inspections	High Inspections	Variance
Electrical	2,238	3,112	39%
Mechanical/Gas	2,725	3,862	42%
Plumbing	2,929	4,322	48%
Building	2,462	3,393	38%

As can be seen from the data presented above, there are large variances between the workload volumes of specific Inspectors, even within the same disciplines. These variances may be easily, and reasonably, explained, however data do not exist to assist in the analysis.

The lack of accountability for workload volumes inhibits the establishment of performance measures in the Department. For example, interviews indicate that Inspectors currently are not held accountable for the accomplishment of an average level of 12 to 15 stops per day because there are mitigating factors in the accomplishment of

this productivity level. This is a reasonable factor, however with no targeted productivity levels, there is no basis on which to assess the performance of specific Inspectors other than qualitative feedback from contractors, or the random “ride-along” by a supervisor. These are not, however, reliable assessments of a longer-term nature of an Inspector’s performance.

The solution to this lack of accountability is to require Inspectors to document arrival and departure times for various types of inspections (e.g., rough in, progress, final, etc.). In conjunction with a monthly analysis of the odometer readings in assigned vehicles, these data should provide managers with reliable and meaningful reflections of performance by specific Inspectors.

Recommendation: Begin the accumulation of arrival and departure times for the various categories of inspection, by Inspector. These data should be analyzed each month to determine variances between Inspectors for time expended on various types of inspections, with explanations required for variances outside established tolerance ranges. Unexplained or persistent variances from norms may indicate low productivity or the need for focused training to standardize the approaches taken in inspections among Inspectors.

The next issue discusses the potential for increasing the numbers of inspections per Inspector in the “trades” functions.

2. **GIVEN THAT RECENT STATISTICS FOR THE NUMBERS OF “TRADES” INSPECTIONS INDICATE THAT INSPECTORS ARE AVERAGING AT THE LOW END OF BENCHMARK STANDARDS, THE DIVISION SHOULD IMPLEMENT METHODS TO INCREASE PRODUCTIVITY WITH THE SAME STAFFING LEVELS.**

As noted in the comparison of inspections operations to best management practices, inspections volumes are on the low end of normal as they compare to benchmark standards. In analyzing the figures in the table below, it should be noted that the benchmark for well-managed inspections functions indicate that Inspectors will

accomplish approximately 12 to 15 “stops” per day, although the figures below reflect the numbers of “inspections”. There may be multiple inspections performed during each stop made by an Inspector, particularly within new subdivisions and other areas in which there is clustered development and construction. Although the project team did not have access to the numbers of “stops” made by Codes Administration Inspectors, it should be noted that the averages in the tables reflect higher numbers than would have been the case if the number of stops had been available. The actual degree of difference in the two figures is unknown.

To restate these figures, the following represent the average numbers of inspections per Inspector for each of the trades groups for 2002:

**Average Numbers of Daily Inspections per Inspector
Metro Nashville and Davidson County Codes Administration Department
Inspections Division**

Discipline	Average Daily Inspections
Electrical	15.1 *
Plumbing	17.3 *
Building	11.5
Mechanical/Gas	13.2

* - Figure for average electrical inspections is annualized based on 9 months of data. Figure for average plumbing inspections is annualized based on 11 months of data. These two groups’ 2002 information was incomplete due to unknown reasons on the part of the Department. This may indicate a need for more stringent data input and/or collection procedures, however it is clear from this omission that the data are not analyzed routinely in order to make meaningful management decisions within each of the functional areas.

The Department generally adheres to its stated service level objective which is to provide next day inspections when receiving the request by 3:00 p.m. Therefore, the Department is not experiencing troublesome “backlogs” of inspections requests to which it cannot respond in a timely manner. The project team raises the issue here as to whether

there are methods of increasing the productivity of Inspectors in order to forestall increasing staff in the future as inspections workloads continue to increase.

One potential method of increasing the productivity of inspectors is in equipping each with a laptop computer or other electronic handheld device which would be utilized to input inspections activities and results in the field. This would eliminate the need to manually record these results in the field and subsequently to travel back to the Howard School Complex at the end of each day to re-enter these results electronically. The experience of the project team in accompanying Inspectors on their daily inspections routes indicates that Inspectors typically return to the office between 45 minutes and 1 hour prior to the end of the working day in order to re-enter these results and to retrieve messages and return phone calls.

Another potential improvement in enhancing Inspector productivity, and in reducing office “downtime”, is in equipping each with a cellular telephone in order to receive messages from the office regarding inspections requests which are in close proximity to locations in which Inspectors are currently conducting work. These phones could also be utilized to communicate with contractors in the field. However, prior to the institution of the practice of allowing cellular phone use in the field, it is imperative that the Department adopt appropriate policies and procedures regarding their use. These policies should address the prohibition of cell phone use while driving, the need to “block” the Inspectors’ cell numbers from contractors, as well as potentially other issues.

A final potential improvement in work methods is in allowing Inspectors to transmit these results via on-line capability from their individual homes and/or satellite offices located in various locations within Metro. Inspections results could thus be

transmitted electronically (eliminating the duplication of this work task in the office) and inspections for the following day could be retrieved electronically, as entered by Customer Service Representatives in the office, greatly reducing the need for Inspectors to travel to and from the office.

As noted above, there is a potentially avoidable “downtime” period of between 45 minutes and 1 hour each day, as Inspectors return to the office from their respective geographic areas in order to perform various administrative duties. Some of these duties are unavoidable, even with the advent of electronic uploading and downloading of inspections results and requests. However, with an additional 30 minutes of inspections time available at the end of each day, the project team believes that an additional inspection may be possible each day. This belief is based upon the calculation that 14 inspections are being accomplished currently within approximately 7 hours, on average. With another half-hour available, an additional inspection is possible, increasing productivity by approximately 7% within the trades functions, with a potential greater increase in the Property Standards Unit.

Recommendation: Metro should equip the trades inspectors either with laptop computers or palm devices. The estimated capital cost is \$60,800, with an estimated pay-back in cost avoidance within two years.

There are currently 32 Inspectors in trades functions. At a cost of approximately \$1,900 per laptop computer, this equates to a \$60,800 capital investment, which could be amortized over a 3 year economic life. This equates to an annual equivalent cost of about \$20,270. If project team estimates are accurate, the provision of laptops to inspectors could allow an additional inspection each day, which, with 32 “trades” inspectors, equates to an additional 6,400 inspections annually. This equates to approximately 2

Inspectors' annual workloads, which will forestall the addition of at least this number of staff in the immediate future. Assuming an annual total compensation of \$47,500 per Inspector (assuming a \$38,000 annual salary plus 25% benefits), plus an equivalent annual cost of \$3,000 for an assigned vehicle, this equates to an approximate net cost avoidance of about \$60,460 for the first two years.

Recommendation: It is also recommended that trades inspectors be provided cellular telephones for field use in order to enhance communications with contractors and others. The project team estimates that these phones may be procured for approximately \$75 per unit, with an additional \$80 per month for 1,200 minutes of airtime, per unit, in airtime costs. This equates to approximately \$30,700 in recurring annual airtime expenses, and a one time cost of approximately \$2,400 for hardware expenses.

It should be noted that the Department has recognized the needs in these areas, and is already considering enhancing the functionality of its management systems. Further, each of the four vendors which are being evaluated for provision of new software systems will accommodate the recommended management system improvements made above by the project team. In Attachment A to this report, the project team summarizes recommended capabilities of the new system, as well as recommended periodic reporting capabilities to enhance the ability of managers of the Department in assessing productivity of Inspectors as well as effectiveness of operations.

Related to the individual productivity of Inspectors is the potential for the overall increase for the Division in the numbers of inspections conducted on an average basis.

In the next issue, the project team analyzes the relatively low number of inspections per permit within the Inspections Division.

3. **ANALYSIS OF THE RELATIVELY LOW NUMBERS OF INSPECTIONS PERFORMED PER PERMIT INDICATES THAT THERE ARE VARYING METHODS OF WORK ACTIVITY REPORTING BETWEEN GROUPS IN THE INSPECTIONS DIVISION.**

As noted in the comparison of Metro Codes Administration performance against “best practices”, data for 2001 indicated that there were only 2.3 inspections performed for the “average” permit. Although this number is relatively low in the experience of the project team, further analysis indicates that workload reporting methods are a primary cause of this apparent deficiency.

Subsequent analysis of the numbers of permits and inspections yielded the following data:

**Ratios of Inspections per Permit for Trades Inspections Groups
Metro Nashville and Davidson County Codes Administration Department
Inspections Division**

Group	1999	2000	2001	2002
Electrical	1.45	1.47	1.45	1.58
Plumbing	3.67	3.64	3.38	3.41
Building	2.86	2.55	2.90	2.93
Mech./Gas	1.90	2.14	2.18	2.14
Total	2.27	2.24	2.27	2.34

A review of the data in the table above indicates wide variability between groups in the numbers of inspections per permit, but strong consistency in these ratios between years for the same unit. This indicates that workload reporting has remained constant within the various groups, however, there is some variation in the methods of reporting inspections. To determine the potential causes of this variability, the project team conducted a random sample of permits over the years 2001 and 2002 to determine the numbers of inspections which occurred for these selected permits. It became quickly apparent in the conduct of the sample that the Electrical Inspections group reports the

occurrence of a single inspection at sites for which there may be two, three or more permits taken out at a construction site. This appears to be the case, as well, for the Mechanical/Gas and Building Inspections groups. However, the Plumbing Inspections group will, in cases for which multiple permits have been issued for a site, report the occurrence of multiple inspections. This accounts in large measure for the relatively high ratios of inspections in the Plumbing Inspections group in the table above.

Another contributing factor to the relatively low numbers of inspections per permit issued is the fact that the Codes Administration Department issues a separate service release permit as services are approved for “turn on”.

Finally, it was evident during the sample of inspections activity that there is an unknown percentage of permits for which no inspections activity ever occurs. There are numerous reasons for this, including the possibility that actual work is never initiated by the contractor, or that contractors actually complete work for which no inspections are actually performed. The failure to begin work for which a permit has been obtained is not an unusual occurrence for any jurisdiction. The completion of work for which no inspections activity has occurred is more problematic, however, the current information system does not allow the identification of either of these permit types so that they may be either purged from the system or pursued as a violation of procedure. Currently, it is left to individual Inspectors to identify these permits as time allows.

Recommendation: The project team strongly recommends that the Inspections Division standardize the methods by which workload activity is captured by groups within the Division.

Interviews with Division management indicate that the primary focus of attention is, rightly, upon the degree to which inspections occur on a timely basis, and further, that

they are performed in a quality manner. This, however, misses an opportunity to both establish valid and valuable performance measures, and to enable managers to evaluate performance against these measures consistently between groups. Further, the project team recommends that the Department include in its requirements for a new management information system, the capability to identify the “aging” of permits. For example, the Inspections Division management should have access to monthly reports which identify permits for which no activity has occurred within 30, 60, 90 and 120 days, and should “flag” permits which are within 30 days of expiration, at which time the permit holder should be contacted to determine intent to commence construction.

The project team analyzes the potential for transitioning to the use of multi-disciplinary, or “combination” inspectors to further increase productivity in the next issue.

4. THE CODES ADMINISTRATION DEPARTMENT COULD BENEFIT FROM THE TRAINING AND USE OF MULTI-DISCIPLINARY, OR “COMBINATION” INSPECTORS FOR COMPLETING FINAL INSPECTIONS.

Interviews with management and staff indicate that the use of combination inspectors has been attempted in the past, with reportedly poor results, both from the construction community and from Inspectors themselves. These poor results are reportedly due to the beliefs on the parts of builders and contractors that assigned inspectors should be fully knowledgeable in their trades, and should be fully dedicated to a specific discipline (i.e., plumbing, electrical) if they are to have the authority to reject contractor work on the basis of poor workmanship and/or non-compliance with codes.

Although this is not an unreasonable observation on the parts of contractors, the project team has experienced many jurisdictions that have successfully implemented the use of Combination Inspectors, and believes that these objections can be overcome in time, and with the proper training of current and future inspectors. For example, the project team has recent experience with the successful use of combination inspectors in Knox County, Tennessee; Baton Rouge, Louisiana; Wichita, Kansas; Birmingham, Alabama; Columbia, South Carolina; and Snohomish County, Washington.

The issue raised here is not, then, whether to immediately begin the cross-training of current inspectors to assume multi-disciplinary responsibilities, but whether other, more limited options are feasible prior to a full-scale transition to complete cross-training.

In the experience of the project team, both in ride-alongs with Metro Inspectors and in other jurisdictions, the completion of a final inspection is typically the least likely to result in rejection, with most issues and concerns on the parts of specific trades inspectors having already been voiced and addressed by builders and sub-contractors. In Metro's Codes Administration Department, final inspections comprised 43.1% of more than 97,000 total inspections in 2002. (It should be noted that, for typical projects which involve new construction, additions of service and for major renovations, final inspections will represent approximately one-third or less of the total numbers of inspections on a project. However, there are numerous projects which require only a final inspection. Examples would include changes of existing service or installation of low voltage service for, for example, a smoke detector.)

The project team conducted an analysis of 2002 workload volumes to determine the numbers of Inspectors which would be required if Combination Inspectors were utilized for final inspections only. The following table presents the results of this analysis:

**Calculation of Potential Staff Reductions
through Transition to Combination Inspectors
For Final Inspections
Metro Nashville and Davidson County Codes Administration Department
Inspections Division**

Element	Number
Total numbers of inspections performed (Note that Electrical and Plumbing inspections figures have been “annualized” to compensate for missing data. Therefore, these figures represent 12-month equivalent data)	
Electrical = 29,873 Plumbing = 29,295 Building = 30,127 Gas/Mechanical = 17,930	107,225
Total “Final” inspections	46,321
Total “Non-Final” inspections	60,904
Rate per Inspector per Day (calculated from available data – see previous issue for breakdown by discipline)	13.7
Number of Inspectors needed for “Non-Final” inspections (calculated at current demonstrated rates per Inspector)	
Electrical = 4.7 Plumbing = 5.1 Building = 7.4 Gas/Mechanical = 2.5	19.7
Number of “final” inspections necessary per year if current final inspections levels were reduced by a factor of 3 (i.e., one-third the current level of finals performed – as noted in the text, this is a conservative estimate, given that final inspections represent about 43% of 2002 total inspections.)	15,440
Number of Multi-disciplinary Inspectors necessary for “reduced” number of inspections, assuming 13 possible finals per day.	5.4
Total number of current Inspectors (Trades only)	32
Total number of Inspectors necessary if final inspections performed by Multi-disciplinary Inspectors	25.0
Total potential reduction in Inspections staff through transition to Multi-disciplinary Inspectors for Final Inspections Only	7.0

Recommendation: Consider the transition to a process whereby routine inspections continue to be conducted by Inspectors focused upon specific disciplines, however begin the training and utilization of Multi-disciplinary Inspectors for all final inspections. This would have the equivalent impact of enabling the reassignment of seven inspectors.

With the assumption that there are approximately 3 instances in which Inspectors from the various trades groups make final inspections for the same structure (an

assumption incorporated into the calculation presented in the table above), the Department could decrease overall staffing by 7 Inspectors through making a transition to the use of Multi-disciplinary Inspectors for final inspections. Assuming an average salary of \$38,000, with a benefits rate of 25%, this equates to a potential cost savings of approximately \$332,500 annually, assuming these Inspectors are not required for other areas or to meet increased demand.

The next issue discusses the number of demolitions which have been accomplished in the Department.

5. THE DEPARTMENT SHOULD BE ALLOCATED FUNDING FOR THE ACCOMPLISHMENT OF A SUFFICIENT NUMBER OF STRUCTURE DEMOLITIONS TO ENSURE THAT “BACKLOGS” DO NOT CONTINUE TO INCREASE. FURTHER, METRO SHOULD ENSURE THAT ALL DEMOLITIONS BE COORDINATED AND ACCOMPLISHED BY A SINGLE DEPARTMENT.

The project team’s interviews and data collection efforts indicate that there are reportedly 117 “backlogged” cases of demolition orders which have not been fulfilled to date. Further, the Codes Administration Department has failed to expend its allocation for this purpose over the past four years.

For the past two years, the Codes Administration Department has been allocated a total of \$124,000 for the purpose of demolishing structures which have been designated for destruction. Prior to these two years, the Department was allocated \$266,496 in 2000, and \$422,185 in 1999. This equates to a total of \$936,681, of which \$550,157, or 59% of the total allocation has been expended for this purpose.

Discussions with Department management indicate that demolitions have, within the past several years, not taken place until the end of the fiscal year. This may have

been due to various factors, however it appears that one of these factors was simply deferral of the demolition decision by Division management. Another factor in the backlog of demolitions is that in Fiscal 2001 the Department needed to transfer funds from the demolition account to Metro's indirect cost account to cover such items as information technology support, financial support, human resources, etc. The Department has also had to transfer funds for other operational purposes.

Recommendation: The Department should discontinue the use of demolition funds for operational purposes. Further, these demolitions should occur throughout the course of the fiscal year, as opposed to the practice of the recent past, when they appear to have occurred within the last several months. Metro should also consider establishing, as other jurisdictions have done, a special revenue fund, funded initially with capital dollars. As liens are collected, these funds should be deposited into the special revenue fund. The administration of this fund should be removed from the responsibility of the Codes Administration Department and given to a Metro Department whose mission more closely matches this responsibility. This recommendation would require appropriate seed money to establish the fund and to accelerate elimination of the current backlog. This would be approximately \$517,000.

To assist the Department in this recommendation, however, it will be necessary to provide additional funds for demolitions. It is therefore recommended that the Codes Administration Department be allocated an additional \$117,140 for this purpose in order to work through the current backlog of 117 demolitions, and to ensure that current demolitions are accomplished within a reasonable timeframe. This assumes that the Department will receive an additional \$13,311 annually (included in the calculated amount stated above) to ensure that there is no contribution to the current backlog of 117 demolition orders, and further assumes that the current backlog will be eliminated over a 5 year period. These dollar amounts are based on the calculations provided in the table on the next page:

Calculation of Demolition Funds Required

Element	Number
Dollar value of demolitions expended over past 4 years	\$550,157
Number of demolitions accomplished over past 4 years	124
Average expended per demolition over past 4 years	\$4,437
Average number of demolitions possible with current funding amount (\$124,000) at average cost per demolition	28
Average number of demolitions accomplished over past 4 years	31
Deficit of demolitions possible with current funding compared to past 4 year average (i.e., contribution to backlog if current funding is maintained)	(3)
Additional amount necessary to ensure no contribution to backlog (i.e., 3 X \$4,437)	\$13,311
Current backlog of demolitions	117
Amount necessary to eliminate current backlog of demolitions (i.e., 117 X \$4,437)	\$519,129

The next issue analyzes the work reporting and performance establishment methods of the Plans Review Unit of Inspections.

6. THE PLANS REVIEW UNIT SHOULD ESTABLISH, AND REPORT, SERVICE LEVELS RELATING TO PLANS REVIEW TURNAROUND TIMES.

The project team conducted a random sample of plans review turnaround times within the Inspections Division's Plans Review Unit and found that these turnaround times are well within typical norms for this function. Specifically, MAXIMUS randomly selected 20 residential and 30 commercial plans reviews, and determined that residential plans reviews were completed within 22.6 days, on average, with commercial plans being completed within 12.8 days. These results, although performed on a limited sample, do not indicate problems in this area. This is especially true given the relatively large number of plans reviewed by each Examiner (i.e., 1,109 per year – see Best Management Practices document, in the attachments to this report). The data received during the course of the peer community survey (the results of which have been presented in a

previous chapter) indicate that some communities may have significantly shorter turnaround times for plans review. Jacksonville, for example, reports that its plans review personnel accomplish residential plans reviews within 3 to 5 days, and Norfolk reports that it accomplishes residential plans reviews within 1.8 days. There may be many reasons for these relatively short turnaround times, including the high percentage of “master plans” which have been previously approved and utilized by contractors in new construction. Further, respondents may have reported turnaround times which simply reflect the number of hours actually expended in the plan review itself, as opposed to the length of time from receipt of a customer’s plans till completion of final review and notification of the customer, as has been reported for comparative purposes in Nashville’s Codes Administration Department above.

The primary concern of the project team is the lack of establishment of service levels, and the absence of any reporting related to this activity. Although it is recognized that many factors influence the timeliness of plans reviews, including delays experienced in external departments over which Codes has limited control, the customer is given no real guidance in this regard. This absence of guidance is a “gap” in an otherwise efficient and apparently cost-effective, level of service to the customer. Further, the lack of reporting of plans review turnaround times does not provide a level of accountability for performance to which other units in the Division are held.

Recommendation: Establish turnaround time targets for plans review, and report these times monthly. Failure to establish and report these measures results in a lower level of customer service than is possible, and further, fails to both hold the unit accountable for high levels of performance, and to assist in identifying potential “bottlenecks” in the system.

V. PROPERTY STANDARDS UNIT

The Property Standards Unit currently is an organizational component of the Inspections Division. As noted in the Inspections Division chapter, the Property Standards Unit is responsible for enforcement of the Property Standards Code through investigation of code-related complaints as well as, on occasion, proactive investigations. It is also responsible for maintenance of lien properties and coordination with Metro Legal regarding various pertinent details of these properties, as well as the maintenance of historical files and the scanning and imaging of these files.

MAXIMUS presents its findings and recommendations regarding the Property Standards Unit in a separate chapter from those of the Inspections Division due to the numbers and types of issues in this unit, and because, as will be discussed below, the project team recommends that the Unit be separated from the Inspections Division as a new Division of the Department.

The first issue analyzes the volume of “Special Handling” cases, and their impact upon Unit workloads.

1. **ALTHOUGH INITIAL INTERVIEWS INDICATED THAT THE VOLUME OF “SPECIAL HANDLING” CASES IMPEDES THE ABILITY OF PROPERTY STANDARDS INSPECTORS TO COMPLETE THEIR INVESTIGATIONS OF ROUTINE CASES IN THEIR RESPECTIVE ZONES, FURTHER ANALYSIS DOES NOT SUPPORT THIS CONTENTION.**

Interviews with some of the personnel in the Codes Administration Department indicated that there are large volumes of “Special Handling” cases for which Property Standards Inspectors must respond within 48 hours of receipt. These cases, from elected officials and community groups, are designated as “Special Handling” only in the avenue

with which they arrive at the attention of the Codes Administration, and the progress of the investigation of these cases is monitored by the Director's Administrative Assistant, giving these cases not only higher priority, but increased visibility as well.

The project team analyzed the degree to which "Special Handling" cases were impeding the ability of the various Inspectors in completing investigations on routine cases, and concluded that the volume of these cases does not, in itself, constitute a severe restraining factor in completing routine work on these routine cases.

To illustrate this fact, the project team collected the following data relating to the respective volumes of cases designated as "Special Handling" and routine from August, 2000 through January, 2003, a period of 30 months:

**Comparison of Special Handling and Routine Cases
Nashville and Davidson County Codes Administration Department
Property Standards Division**

Case Source/Nature	No. Cases Opened	No. Cases Closed	Percent Closed
Total Special Handling Cases	2,213	1,913	86.4%
Total Routine Cases	24,929	18,112	72.7%
Total All Cases	27,142	20,025	73.8%

As can be seen in the table above, Special Handling cases accounted for approximately 8.2% of all opened cases during the noted time period, and represented about 74 cases per month, and 4.4 per month per Inspector, or slightly more than one every four to five business days. Additionally, the percentage of special handling cases closed is not disproportionate to the percentage of special handling cases opened. Therefore, the actual number of Special Handling cases is not believed by the project team to be a significant impediment to the accomplishment of required work volumes.

The project team did, however, note during “ride-alongs”, that Inspectors drive by many “routine” code violations in order to ensure the investigation of Special Handling cases within 48 hours. It is understandable with the high degree of importance placed upon the timely investigation of these reported violations, that non-life-safety violations would be given lesser priority. However, it is equally true that the project team noted that these violations were not documented for later investigation by Inspectors, but rather were passed by with only mental notation made of their existence.

Recommendation: The project team believes that any changes in procedures in the Property Standards Unit should not be based strictly upon the case loads generated through the Special Handling process. The project team does, however, make recommendations below regarding improvements in technology which should increase the “field time” of Inspectors, thereby increasing the numbers of inspections per Inspector. Prior to the institution of technological improvements, however, the project team recommends that Property Standards Inspectors begin the formal notation of code violations observed in the field which, due to the time restrictions for investigating Special Handling cases, are not immediately investigated. As these violations are entered into the Division’s database of code violations, they should be proactively investigated at such time that the volume of potential violations in a particular geographic area warrant the assignment of an Inspector.

Apart from the issue of whether Property Standards Inspectors’ productivity is impacted by the volume of Special Handling cases is the project team’s observation that these Inspectors are expending inordinate amounts of their typical days in the execution of administrative functions. The next issue discusses this factor.

2. **PROPERTY STANDARDS INSPECTORS COULD MAXIMIZE THEIR UTILIZATION IN THE FIELD THROUGH SPECIFIC TECHNOLOGICAL AND MANAGEMENT SYSTEM IMPROVEMENTS.**

Metro Nashville-Davidson County has recently elevated its focus on property standards violations in recognition of the importance of this issue with neighborhoods and neighborhood associations. This has led to an increased level of importance in the

handling of “Special Handling” cases within a specified time period (i.e., 48 hours), and has also reportedly increased the number of general, routine complaints as well. This elevated workload has caused a perceived need to increase the number of staff required, however the project team raises the issue here as to whether there are ways to increase the productivity of existing Property Standards Inspectors in order to increase the number of inspections which are accomplished with existing resources.

The project team conducted extensive interviews, ride-alongs and observations within the Property Standards Unit of the Inspections Division. In addition, we obtained numerous comments in this regard during focus group meetings. Our observations and findings in this area include the following:

- Inspectors are accomplishing relatively low numbers of inspections. Data indicate that Inspectors average 2,104 inspections per year, as compared to the project team’s experience, which indicates that 2,500 to 2,800 annually are benchmarks of “best practice”. (The figure of 2,104 inspections per Inspector reflects the 29,281 total inspections accomplished by the Unit, accomplished through the efforts of 17 Inspectors during a total of 167 “Inspector months”, yielding an average of 175.3 inspections per Inspector per month. Multiplying by 12 months yields a total of 2,104 inspections per Inspector per year.)
- Inspectors are expending extremely large amounts of time in the office documenting inspection findings and making calls to complainants and violators, as well as building cases for presentation in Environmental Court. Observations indicate that these Inspectors typically spend the first 3 to 3.5 hours in the office conducting these activities prior to work in the field.
- Although the actual volume of “Special Handling” cases is not, in itself, causing an inordinate increase in the workloads of Inspectors on a daily basis, these Inspectors are bypassing many code violations in order to ensure compliance with the 48 hour rule for investigating these types of complaints. (See discussion above).
- Inspectors are spending most of each Wednesday afternoon in Environmental Court.

In considering the fact that only approximately 22 hours of each 40 hour work week are expended in actual field investigations, Property Standards Inspectors are accomplishing a relatively large number of inspections per average hour. The project team's typical experience in this area indicates that this type of inspector expends between 30 and 35 hours in the field each week, with approximately one hour spent in the office each day. Therefore, accounting for the relatively large number of hours in non-inspection time, Property Standards Inspectors accomplish the equivalent of about 3,033 inspections per year if the average inspector were to spend 32.5 hours in the field rather than the current 22.

The question then is not whether existing Inspectors are accomplishing adequate productivity levels, but rather:

1. Are there ways to increase the productive hours available for each Inspector?
2. Would the increase in the number of inspections accomplished per Inspector be adequate to accomplish all necessary inspections in Metro if these productivity measures were employed?

In answer to the first of these questions, the project team believes that the primary impediment to accomplishing a reasonable number of inspections per day is the inordinate amount of time spent in the office documenting cases. This primarily occurs in the morning hours. In answer to the second question, it is not possible to know whether the accomplishment of a reasonable number of inspections per Inspector would result in a satisfactory level of service to Metro, primarily because it is not possible to know the exact number of violations which need to be abated. The project team has conducted ride-alongs with Inspectors in this area, and has observed numerous violations

which were bypassed because there were higher priorities elsewhere. Therefore, it is highly likely that, even with “normal”, benchmark levels of productivity, there would be some number of violations which would be left unabated.

Recommendation: There are clear resource needs in the area of Property Standards, given the level of importance placed upon this function by Metro. The project team therefore believes that Codes Administration should take a multi-tiered approach to ensuring that Metro properties are within an acceptable range of code compliance. This includes the following:

- The Property Standards Unit should be allocated two additional Customer Service Representatives. These positions would be responsible for making contact with complainants to ensure that they are aware of the status of investigations. Further, they would be responsible for the assembly of case files for presentation at Environmental Court, filing of case files, answering phones and recording complaints. The project team recommends the outsourcing of the electronic imaging of historical files in a separate recommendation. There are presently two Customer Service Representatives engaged in this activity who could be transferred into this function, once the outsourcing has been implemented. The “addition” of two Customer Service Representative here does not, therefore, represent an incremental cost to the Department.
- The Unit should purchase laptop computers or other electronic devices for all Property Standards Inspectors in order to facilitate the documentation of inspection results in the field. This will allow Inspectors to input results while at the inspection site, thereby minimizing the “downtime” each morning in re-transcribing manual inspections notes into the Unit’s electronic database. The project team has assumed a unit cost of approximately \$1,900 per laptop computer, the use of which could be amortized over a three-year period. Therefore, for 17 Property Standards Inspectors, this equates to a capital cost of approximately \$32,300.
- The Property Standards Unit should formally establish and employ a system of priority for each complaint type. This priority system should ensure that Inspectors not only meet established productivity benchmarks, but should additionally ensure that work activities are focused upon those inspections with the highest priorities. At a minimum, the priority system should assign the highest priority to life safety issues related to structural integrity, with property safety and neighborhood aesthetics, respectively, assigned next priority.

Finally, should the above recommendations not produce productivity improvements in accordance with benchmark standards for each Inspector (i.e., minimum of 2,500 inspections per Inspector per year) within 6 to 12 months of initiation, the Unit should then investigate the feasibility of adding an additional inspections team to conduct targeted neighborhood “sweeps”. The Department currently has a “Flex Team” that conducts such sweeps in conjunction with the Mayor’s Office of Neighborhoods’ Neighborhood Response Team program. The additional sweep team could either work in conjunction with that program or target areas identified by the Department as warranting particular attention. Given the recommendations that would ultimately reduce the numbers of trades inspectors needed, any additional inspectors added in this area would be cost neutral.

The next issue analyzes the role of Property Standards Inspectors in assisting homeowners in funding directed repairs.

3. PROPERTY STANDARDS INSPECTORS SHOULD ENSURE THAT HOMEOWNERS RECEIVE DIRECTIONS ON ACQUIRING ASSISTANCE FOR ACCOMPLISHING DIRECTED REPAIRS.

Interviews in the Property Standards Unit indicate that, although there have been recent steps taken to assist homeowners in acquiring information in finding funding assistance for directed repairs of code violations, these have not been “institutionalized” through modifications in standard operating procedures of the unit. Specifically, the Codes Administration Department has proactively worked with the Metro Development and Housing Agency (MDHA) in redesigning and updating that Department’s brochure relating to “Housing Rehabilitation Assistance Programs”, and has worked successfully with MDHA in referring homeowners to that agency.

The project team commends the Department in these recent efforts, however, interviews indicate that the information is disseminated to potential recipients only as dire conditions exist, and as citizens inquire about funding sources. In part, the dissemination of information on a selected basis by Property Standards Inspectors is a conscious effort

on the part of the Department to act only as a code “enforcement” agency as opposed to an agency whose objective is to assist citizens in abating the noted violations. This reluctance is understandable in that the Department desires to stay within its stated mission, but still leaves a customer service “gap” in that citizens who may be eligible for assistance may not receive it unless they request it.

Recommendation: The Codes Administration Department should, as standard policy and procedure, forward all homeowner inspection profiles requiring structural modifications to MDHA and provide each homeowner with information about eligibility for financial assistance for low interest loans, deferred payment loans, historic loans, and emergency repairs.

The next issue analyzes the optimal organizational placement of the Property Standards Unit of the Inspections Division.

4. THE CODES ADMINISTRATION DEPARTMENT SHOULD CREATE A SEPARATE DIVISION FOR THE FUNCTION OF PROPERTY STANDARDS.

The functions of handling, processing and inspecting property standards codes complaints and violations have assumed a much higher degree of awareness and focus in Metro within the past two years. This increase focus has led to a greater level of concern and involvement on the parts of citizens and Department staff. Currently, the function of Property Standards is organizationally placed within the Inspections Division as a sub-unit. Further, the processing of “Special Handling” calls, the monitoring of their progress, and the communication with “customers” on these cases is handled within the Department Director’s office, and not in the Property Standards Unit itself.

For these reasons, and others, the project team analyzed the appropriate placement of the Property Standards function within the Department using an organizational model utilized successfully within many jurisdictions across the country, as an aide in focusing

upon the pertinent issues in the organizational decision process. The results of this analytical model are presented in the table on the following pages.

In summary, the project team believes that the Department should remove the sub-unit of Property Standards from the Inspections Division and place it under a Chief Property Standards Officer reporting to the Department Director. Highlights of the analysis contained within the table include the following:

- Given that the Property Standards function has received increased focus over the past two years, the placement at a sub-unit level within Inspections does not provide the status, visibility and authority commensurate with this focus. For this reason, primarily, the transfer of the function to the Zoning Division was discarded as a potential organizational option.
- The functions performed within Property Standards are dissimilar to those of other functions in the Inspections Division, and do not offer the Assistant Director of the Division any flexibility of assignment.
- Transfer of the Property Standards function out of the Inspections Division has the effect of abating to some degree the inequity in the relative spans of control of the three Divisions of the Department. Currently, the Inspections Division Assistant Director has 68 direct and indirect reporting staff, the Zoning Administrator has 18, and the Administrative Services Manager has 3. Transfer of the Property Standards function out of the Inspections Division would reduce that Division's Assistant Director's direct and indirect span of control from 68 to 50. This remains the largest division in the Department, however the spans of control are equated to a greater degree through the creation of this separate organizational division.

Recommendation: For the reasons stated in the table on the following pages, and summarized above, the project team recommends that the Department create a fourth division by removing the Property Standards unit from the Division of Inspections, with the Chief Property Standards Officer reporting directly to the Department Director. This position would exist as a Division Manager level position; Metro will need to conduct a compensation analysis to determine whether the change in organizational responsibility would require some additional costs.

The following table provides details regarding the analysis of the appropriate organizational placement of the Property Standards function of the Department. Following this analysis in the table, the project team provides a recommended organization chart which depicts the reporting relationships through the creation of a separate Division of Property Standards.

**Analysis of Optimal Organizational Placement of the
Property Standards Function
Metro Department of Codes Administration**

Factor	Items for Consideration	Metro Codes Administration Property Standards Discussion
1. Organizational Placement of Function		
? Has the expertise of management been considered in the placement of this function within this organization?	? Is there a more optimal placement for this function within the current organization or Dept., given the expertise of other managers? ? Would this function benefit from the related expertise of managers outside this current organization or Dept.?	The organizational placement of the Property Standards unit, currently located within the Inspections Division, would not appear to benefit to any greater degree from the expertise of any other Metro organization outside the Department. However, neither does the Inspections Division Assistant Director appear to possess any specific background and experience in the housing and zoning codes area. The Zoning Administrator does have specific expertise in the enforcement of zoning codes, however, and therefore the Zoning Division is a potential candidate for optimal placement.
? Are similar functions grouped together within the organization?	? Is this function directly related to the organization's mission? Does this function's mission more closely match another organization's mission	The Property Standards unit's function appears to directly relate both to the Zoning Division's as well as the Inspections Division's mission, as there are elements of each within Property Standards.

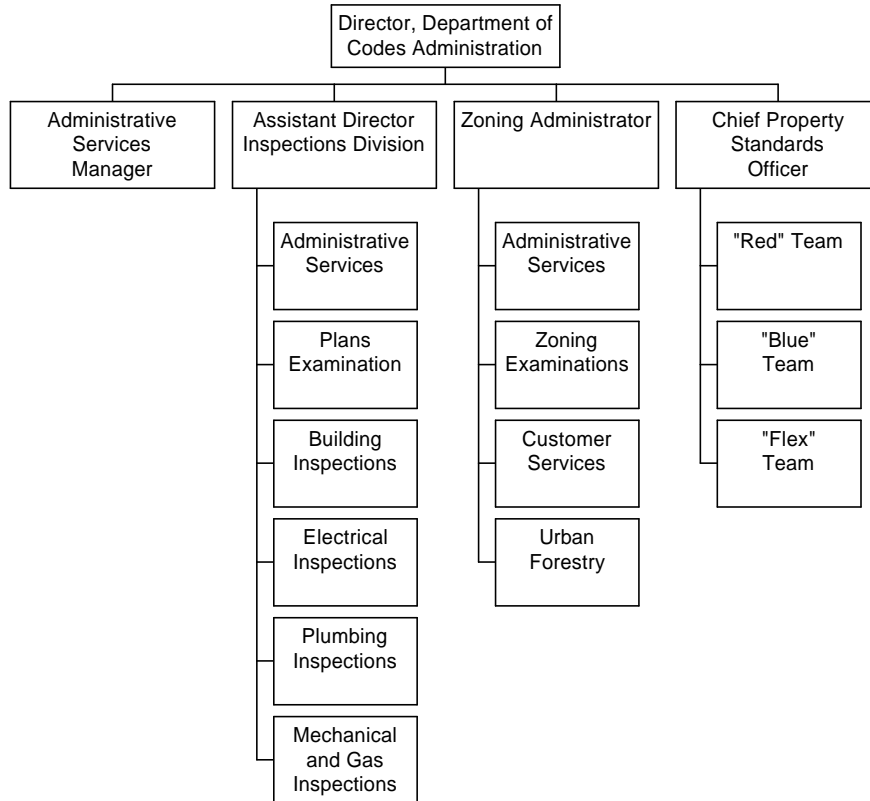
Factor	Items for Consideration	Metro Codes Administration Property Standards Discussion
	<p style="text-align: center;">outside this Dept./agency?</p> <p>? Does the placement of this function within this organization foster flexibility of managers to reallocate personnel and/or equipment resources between functional units?</p> <p>? Does this function rely upon a shared information database with other functions in this organization?</p> <p>? Do the tasks/objectives of one group in the organization cause conflicts of interests with another? Would these conflicts be eliminated through transfer of the function outside the group?</p>	<p>Expertise of Property Standards Inspectors is unique to that function, and as such, does not offer the flexibility of assigning these Inspectors to other functions within Zoning or Inspections Divisions, nor vice versa.</p> <p>The inspections of complaints related to property standards generates a database unique to that unit, and shares only peripherally with other divisions in the Department.</p> <p>There are no conflicts of interest to be considered in the organizational placement of Property Standards within the Inspections or Zoning Divisions, however, neither do there appear to be any “synergies”.</p>
<p>? Is the Division Head able to manage the number of functions within the organization?</p>	<p>? Does the addition (retention) of this function in the organization diminish the Division Head’s focus and attention to other, more complex or pressing functions or issues?</p> <p>? Is the geographical dispersion of functions inhibiting effective communication, focus or accountability by the Division Head with this function?</p>	<p>Although it is unclear whether the presence of the Property Standards function within the Inspections Division deflects the Asst. Director’s focus from more pressing concerns (Property Standards issues have assumed a relatively high level of focus Department-wide in the past two years), the nature of concerns within Property Standards are different from those of routine trades inspections, which are the primary focus of other functions within the Division.</p> <p>Geographical dispersion does not appear to inhibit communications within the function of Property Standards. Accountability for productivity and standardization of effort are issues in the Division, and</p>

Factor	Items for Consideration	Metro Codes Administration Property Standards Discussion
		have been addressed within other sections of this report, but are not considered issues to be addressed in the context of optimal organizational placement.
? Priority of Organizational Placement	? Does the placement of this function in the organization reflect the desire of top management to increase the visibility of the function, either temporarily or on a permanent basis?	The function of enforcement of property standards within Metro has assumed a relatively high level of focus within the past two years. The placement of the Property Standards function as a sub-unit within the Inspections Division does not appear to give the function the organizational status, authority and visibility which has been placed upon it.
2. Number of Managers in the Organization		
? Ability to assign and manage work of subordinates	? Does the placement of this manager in the organization add value in the assignment of work to subordinates beyond that which could be attained through a more centralized approach? ? Would the ability to evaluate staff performance in this function be compromised through the absence of this managerial position? ? Would the organization be able to ensure proper accountability for the accomplishment of work if this managerial position were eliminated?	The Property Standards Inspections Chief does not appear to be impeded in the assignment of work to subordinates as a result of organizational placement within the Inspections Division, as it is an autonomous Unit. Although the ability of the Property Standards Inspections Chief to evaluate staff is not compromised through placement within the Inspections Division, the function of assigning and monitoring the execution of "Special Handling" cases is not handled by the Chief, but rather through the Department Director's office. This factor does inhibit the Chief position's ability to effectively evaluate staff. The Property Standards function requires direct oversight by a position dedicated to its effective

Factor	Items for Consideration	Metro Codes Administration Property Standards Discussion
		operation. Eliminating this position is not under consideration in this analysis.
3. Span of Control of Managers		
<p>? Ability to manage number and type of functions</p> <p>? Ability to manage number and type of positions in the organization</p>	<p>? Is the number of sub-functions under the Division Manager reasonable given the complexity and similarity of tasks and skill requirements?</p> <p>? Is the number of employees under the Division Manager reasonable given the complexity and similarity of tasks and skill requirements?</p> <p>? Is the span of control reasonable given the geographical dispersion of functions under the Division Manager?</p> <p>? Are the requirements of the Division Manager markedly greater/less than others in the organization?</p>	<p>There appear to be no issues related to the numbers of functions under the Inspections Division Asst. Director. In addition to Property Standards, the position is responsible for plans review and “trades” inspections for electrical, plumbing, building and mechanical/gas.</p> <p>Although the complexity of the skills required for each of the functions under the responsibility of the Inspections Division Asst. Director does not pose a concern in the ability to manage the various functions, neither do they relate to each other in terms of similarity.</p> <p>The span of control for the Asst. Director over Inspections is 7 direct positions and an additional 57 employees as indirect reports. This is not considered to be excessive given the complexity of tasks involved.</p> <p>Although the span of control for the Inspections Division Asst. Director is not unusual for this set of functions, its span of control noted above (i.e., 7 direct and 61 indirect) compares to the Zoning Administrator’s 4 direct reports and 14 indirect reports. Additionally, the Administrative Services Manager has a direct span of control of 3, and is placed organizationally at the same level.</p>

DEPARTMENT OF CODES ADMINISTRATION
Recommended Organization

Nashville-Davidson County, Tennessee



VI. ZONING DIVISION

The Zoning Division primary responsibility is for the interpretation, administration and enforcement of the Metro Zoning Code. This code includes Metro's landscaping, buffering, and tree replacement requirements. The Division is also responsible for the review and issuance of zoning permits applications, informing the public regarding the zoning code and maintaining current and permanent records relating to the adoption, amendment, administration and enforcement of the zoning code. The Division also supports the activities of the Board of Zoning Appeals (BZA) and enforces the actions of that Board, and reviews plans submitted by applicants to determine which of Metro's various agencies are required to review plans prior to permit issuance. The Administrative Services Unit of this Division is responsible for the archiving and imaging of historical files of the Department. The Zoning Division is comprised of 19 positions, all of which are currently filled.

The following issue discusses the impediments to optimum customer service in the Department.

1. CUSTOMER SERVICE IS IMPEDED BY A VARIETY OF FACTORS IN THE DEVELOPMENT REVIEW PROCESS.

Observations and interviews indicate that permit applicants are required to transport plans to multiple sites within Metro to obtain permits in certain cases. Codes Administration has worked with other departments which are commonly consulted in the plans review and permitting processes by allocating space for plans reviewers from Water Services and the Fire Marshal within the same proximate area. However, this is viewed by the project team to be only a preliminary and partial "fix" to the problem, as, in

addition to the remote locations of several other Metro Departments and agencies involved in the permitting and plan review process, there is no coordinated overall approach to project review and approval, inspection and enforcement. As noted above, Water Services and the Fire Marshal have plans review personnel co-located with Codes Administration. However, there are multiple departments and agencies which are a part of the overall development review process which are not located in proximity to these departments. This issue will be addressed in more detail as part of the more extensive review of Metro's Development review process, being conducted as part of the Planning Department audit. A sample of these includes the following:

- Planning
- Public Works
- MDHA
- Historical Commission
- Health Department
- ADA Compliance Office

Beyond the logistical considerations in viewing the development review process from the viewpoint of the customer are the limitations imposed by the current physical configuration of the work space, and the relative lack of informational materials to the applicant which describe the process.

Recommendation: A workflow analysis including other departments and agencies which are involved in the plans review and permitting process will be investigated more thoroughly in conjunction with the Planning Department audit. However, there are some improvements that the project team recommends in the interim which will improve customer service. This includes the provision by Codes Administration Department of a more user-friendly environment for the applicant through placement of brochures describing the development review process in the waiting area. Further, the Department should post signs which inform the applicant of the steps he or she will be required to follow in acquiring specific permit types. Finally, the Department should post signs informing applicants that they should visit a Customer Service Representative prior to seeing a Zoning Examiner if their contractor license has expired.

The next issue discusses the feasibility of decreasing the numbers of staff attending the Board of Zoning Appeals meetings on a regular basis.

2. THE ZONING DIVISION SHOULD DECREASE THE NUMBERS OF STAFF ATTENDING BOARD OF ZONING APPEALS (BZA) MEETINGS ON A ROUTINE BASIS.

Interviews indicate that several staff members attend BZA meetings who are seldom required to offer opinions or technical advice to the BZA. The project team raises the issue of whether these staff members could be more productively utilized in other capacities during these bi-monthly meeting time periods.

The BZA meets on the first and third Thursdays of each month, with each meeting starting at 1:00 p.m. and lasting varying time periods, but often into the evening hours. Interviews indicate that the following positions attend each of these meetings:

- Board Secretary (Customer Service Supervisor in Zoning Division of Codes Admin.)
- Zoning Examiner
- Zoning Division Director
- Zoning Examinations Supervisor
- Urban Forester

Of the above positions, there is a clear requirement for the attendance of the Board Secretary who is responsible for the recording of the minutes. However, the project team's experience indicates that several other of the positions are not required on a continuous basis throughout the meetings. Interviews indicate that the Zoning Division Director and Zoning Examinations Supervisor are only sporadically requested to offer opinions during the meetings. The Urban Forester, although sometimes called upon to issue an opinion or clarification of a particular issue, could accomplish this in a written opinion prior to the meeting unless called upon for specific cases. Finally, the Zoning

Examiner creates the visual presentation package and narrates this presentation, however, this could be done by either the Zoning Division Director or Zoning Examinations Supervisor, depending upon which of the positions attends the meeting.

The attendance at this bi-monthly meeting of five positions on a routine basis represents a significant investment in time, opportunity cost and dollar expenditure. Further, the project team understands that, on those occasions on which meetings extend past normal business hours, non-exempt employees receive compensatory time, which may result in an even greater effective cost to the Department.

Recommendation: Restrict the attendance at BZA meetings to the Board Secretary and either the Zoning Examinations Supervisor or Zoning Division Director. The Urban Forester should provide written opinions and/or clarification of issues as they are required. The Zoning Examiner's effort should be restricted to compiling presentation materials, with either the Zoning Division Director or Zoning Examinations Supervisor conducting the presentation.

The next issue analyzes the security procedures related to the file room.

3 THE DIVISION SHOULD TAKE STEPS TO PROVIDE ENHANCED SECURITY OVER ACCESS TO THE MAP AND PARCEL FILE ROOM.

In conducting on site activities, the project team noted that file room security is somewhat relaxed. Although employees must know and input a code to enter the room, the code is generally known and, in fact, was provided to the project team staff.

This issue was noted in the report issued by the Internal Audit Section in 1999, and was partially addressed by the Department in instituting the keyless, code-entry system. However, it is apparent that security over entry into the file room has diminished over time, and procedures should be altered to proactively prevent recurrences of file losses such as those noted in the 1999 report.

Recommendation: Provide keyless access codes only to Codes Administration employees requiring frequent access to the file room. Further, this code should be changed at regular intervals to minimize the potential for unauthorized entry.

VII. ADMINISTRATIVE SERVICES DIVISION

The Administrative Services Division is responsible for cash receipts and processing, budgeting for the department, human resource liaison activities with Metro Human Resources, civil service investigations, interviewing and hiring, purchasing, and serving in the role of advisor to the Department Director regarding fiscal, personnel, administrative and operational matters. The Division is comprised of three personnel, however, it should be noted that the Department Director's Administrative Assistant assists this Division in certain administrative services.

The project team noted one issue in the Division of Administrative Services, relating to the adequacy of controls over revenues received from liens. This issue is discussed below.

1. REVENUE CONTROLS SHOULD BE MODIFIED AS THEY RELATE TO COLLECTION OF LIENS ON PROPERTIES DESIGNATED FOR DEMOLITION.

Responsibility for the collection of revenues generated from the enforcement of liens placed on the property of demolished structures rests within the Administrative Services Division of the Department of Code Administration. In addition to performing the administrative functions associated with the operation of this Department, this Division is also responsible for maintaining administrative and accounting controls over revenue and cash collection activities.

An audit performed by the Internal Audit Section in April 1999 contained a recommendation that the Administrative Services Division, in conjunction with the Metro Legal Department, implement the use of more aggressive collection efforts to collect revenue resulting from the enforcement of outstanding liens.

The audit performed by Internal Audit disclosed the existence of approximately 420 liens totaling over \$1.1 million dollars for the recovery of cost associated with the demolition of abandon properties. Since 1999 there has been one suit (Oct. 2001) to enforce collection of cost incurred from the demolition of structures. A second suit is planned for May, 2003. In all suits, the recovery amount includes demolition cost, legal fees, interest and court cost.

In response to this finding and the corresponding recommendation, Division management engaged the assistance of the Metro Legal Division in pursuing the legal remedies necessary for the collection of liens. Activities performed by Metro Legal and Division personnel in connection with the enforcement/collection of these liens are as follows:

Collection Activities Performed by Metro Legal Personnel:

- Review of case for legal options
- Initiate suit for recovery
- Selling of property

Collection Activities Performed by Administrative Services Division:

- Locate property owners.
- Execute formal repayment agreements.
- Receive payments.
- Maintain accounting of amounts due and payment for each by case for which payment arrangements have been made.
- Prepare required documentation for deposit
- Make deposit of fund to Metro bank account

Although Metro Legal and the Administrative Services Division of Codes Administration are both involved in the handling of cases resulting from liens, it appears that there is no accounting of the population of open beginning cases, current year additions and deletions and end of the year inventory of cases from year to year. As a

result of this condition, it is possible that liens, representing revenue to the Division, could bypass the enforcement process due to the lack of proper control over the inventory of cases carried forward to subsequent periods. This condition could result in the expiration of the statute of limitations for claims of this nature.

This condition is evidenced by the fact that the April 1999 audit performed by the Metro Internal Audit Department noted 420 outstanding liens totaling \$1.1 million. An accounting of the population and status of the lien cases currently on hand disclosed the following:

Status of Cases - Oct. 2001

Summary:

Number of Cases:	69
Total Original Lien Amount of all properties:	\$286,360.29
Total Original Lien Amount paid, being paid, and or owned by Metro:	\$219,361.25
Total Original Lien Amount not collectible:	\$30,530.92
Total Original Lien Amount pending trial:	\$36,468.12

Planned Cases - May 2003

SUMMARY

Number of Cases:	74
37 liens that will be sued on.	\$214,540.37
37 liens excluded from suit.	\$181,492.53
Total 74 Liens	\$396,032.90

Based on the totals for both cases and dollars in the 2001 and 2003 case inventory, it appears that the number of cases (420) and dollar value of liens (\$ 1.1 million) resulting from the 1999 audit had not all been properly collected and accounted for in the liens reported in subsequent periods.

Recommendation: The project team is aware that a central data base is being developed and maintained to serve as the source of the inventory of lien cases carried forward from year to year. In addition to identifying the beginning

population of cases and corresponding lien amounts at the beginning of the year, this database should also provide an accounting for liens added, deleted and balance remaining at the end of the year. Deleted liens should also identify the nature of the deletion (i.e. payment arrangement, sale of property, uncollectible etc.). It is further recommended that this database be maintained within the Administrative Services Division.

VIII. CODES ADMINISTRATION SERVICE COST ASSESSMENT

The objective of this portion of the management audit was to compare the revenues received from fees for services with the full costs of services provided and assess whether the revenues received were covering the full costs of services provided and whether the current fee structure is adequate and equitable.

Projected Revenues

The study team reviewed the revenues received in Fiscal Year 2001-2002, the revenues received for the first six months of Fiscal Year 2002-2003 and the department's projection of revenues by category for the remainder of this fiscal year and concurs with the department's projection. The total revenue projection for this fiscal year is \$6,220,600. The department's projection of revenues for Fiscal Year 2002-2003 is provided by the following table.

Fiscal Year 2002-2003 Revenue Projection		
(In Dollars)		
	Fiscal Year	Fiscal Year
	2001-2002	2002-2003
Service Areas	Actual Revenues	Projected Revenues
Permits:		
Building Permits	4,217,445	3,942,000
Electrical Permits	734,382	706,000
Plumbing Permits	460,714	437,000
Gas/Mechanical Permits	406,278	365,000
Subtotal Permits	5,818,819	5,450,000
Appeals and Contractor Licenses:		
Building Appeals	5,850	7,500
Electrical Appeals & Licenses	86,212	55,000
Plumbing Appeals & Licenses	55,840	47,500
Gas/Mechanical Appeals & Licenses	48,380	45,000
Zoning Appeals	132,147	132,500

Subtotal Appeals	328,429	287,500
Other Revenue:		
Plans Examination	378,794	385,000
Arborist Licenses	275	300
Code Enforcement	180,678	85,000
Building Permit Data	3,123	3,000
FHA-VA Inspections	2,911	3,300
Abandoned Vehicles	4,340	6,500
Subtotal Other Revenues	570,121	483,100
Total Annual Revenue	6,717,369	6,220,600

In order to make a detailed cost comparison, the revenues in the previous table were regrouped by major permit categories. Most of the Property Standards fees cannot be cost based because the department has little control over the revenues received. In this area of codes enforcement, it is not possible to achieve full cost recovery. Consequently, both the revenues and resulting costs of these services are being subtracting from the total revenues and costs for the comparison made in this study. The following table provides the revenues regrouped by the major fee categories for which the full costs will be derived.

Fiscal Year 2002-2003 Revenue Projection Grouped by Major Category	
(In Dollars)	
	Projected Revenue
Building Code	
Building Permits	3,942,000
Building Appeals	7,500
Zoning Appeals	132,500
Arborist Licenses	300
Building Permit Data	3,000
Building Code Subtotal	4,085,300
Electrical Code	
Electrical Permits	706,000
Electrical Contractor Licenses and Appeals	55,000
Electrical Code Subtotal	761,000
Plumbing Code	
Plumbing Permits	437,000

Plumbing Contractor Licenses and Appeals	47,500
Plumbing Code Subtotal	484,500
Mechanical/Gas Code	
Mechanical/Gas Permits	365,000
Mechanical/Gas Contractor Licenses and Appeals	45,000
Mechanical/Gas Code Subtotal	410,000
Plans Examination	385,000
Property Standards	
Code Enforcement	85,000
FHA-VA Inspections	3,300
Abandoned Vehicles	6,500
Property Standards Subtotal	94,800
Total Annual Projected Revenue	6,220,600

It should be noted that the total revenues projected for the year are \$285,400 less than the \$6,506,000 initially budgeted for the year.

Projected Costs

As was the case with revenues, the study team reviewed the departmental actual costs for Fiscal Year 2001-2002 and the first six months of Fiscal year 2002-2003 and found the projected departmental costs for the remainder of the fiscal year to be a reasonable projection. Consequently, those costs were used as the basis for calculations in this study. Those costs total \$6,341,683 and are \$107,819 less than the budgeted costs of \$6,449,502. MAXIMUS has just developed the Nashville and Davidson County full cost indirect cost allocation plan, which includes a city/county indirect cost allocation of \$915,073 to Codes Administration. Adding the indirect cost to the projected departmental cost of \$6,341,683 results in a departmental full cost of \$7,256,756. The Fire Marshal's Office also provides plan reviews and fire safety inspections conducted in conjunction

with the issuance of permits for multifamily and commercial construction. The full costs of these services also merit consideration in the development of fees for services.

The Building, Electrical, Plumbing, Mechanical/Gas and Plans Examination divisions provide services that match the major permit revenue areas previously provided. Therefore, their costs do not require redistribution. The Codes Administration Director's Office, the Zoning Administration and the Property Standards Division costs, however, require redistribution into the major permit categories. The redistribution of the costs of those organizational elements is presented in Attachment B of this report.

Fire Marshal's Office

The Fire Marshal's Office provides fire safety plan reviews in conjunction with the issuance of commercial and multi-family building permits and fire safety inspections before the certificates of use are provided. No fees are charged by the Fire Marshal's Office for this service although Nashville/Davidson County does incur substantial costs. Our understanding is that five members of the Fire Marshal's Office are dedicated to providing plan reviews and a total of 12 field inspections may spend as much as 70% of their time providing permit related fire safety inspections. When supervisory and administrative support are included, it is possible that as many as 15 full time equivalent positions can be involved with permit related activities. A study of the Fire Marshal's Office was not included in the scope of this project. Consequently, the full costs of Fire Marshal's Office services related to building permits were not determined.

Summary of Costs

The following table provides a summary of costs related to the major Codes Administration fee areas.

METRO NASHVILLE DEPARTMENT OF CODES ADMINISTRATION
Performance Audit Final Report: June 5, 2003

Summary of Codes Administration Cost Allocation						
(In Dollars)						
					Plans	Non Fee
	Building	Electrical	Plumbing	Mech/Gas	Exam	Related
Division Salary & Wages	596,040	430,680	384,578	316,650	270,804	-
Division Fringe Benefits	154,470	117,822	93,114	79,494	57,896	-
Codes Administration Costs	269,745	196,545	172,948	172,948	112,632	13,108
Division City/County Indirect Costs	135,677	94,059	83,493	83,493	61,846	-
Zoning Costs	1,183,533	179,830	111,308	92,961	-	-
Property Standards Costs	259,591	-	-	-	-	1,531,506
Total Cost	2,599,056	1,018,936	845,441	745,546	503,178	1,544,614

Cost/Revenue Summary

The following table provides a cost/revenue summary of the department's major fee areas as well as non-fee related activities. The table shows that the general fund is projected to subsidize Property Standards Division activities by \$1,449,799 in Fiscal Year 2002-2003.

Cost/Revenue Summary			
(In Dollars)			
			Projected
	Projected	Projected	Fiscal Year
	Fiscal Year	Fiscal Year	2002-2003
	2002-2003	2002-2003	Surplus
Major Fee Areas	Costs	Revenues	(Subsidy)
Building	2,599,056	4,085,300	1,486,244
Plans Examination	503,178	385,000	(118,178)
Electrical	1,018,936	761,000	(257,936)
Plumbing	845,441	484,500	(360,941)
Mechanical/Gas	745,546	410,000	(335,546)
Non-Fee Related Activities	1,544,599	94,800	(1,449,799)
Total	7,256,756	6,220,600	(1,036,156)

The following table provides a cost/revenue summary of the department's major fee areas without inclusion of non-fee related activities.

Cost-Revenue Summary			
(In Dollars)			
	Projected	Projected	Projected
	Fiscal Year	Fiscal Year	Fiscal Year
	2002-2003	2002-2003	2002-2003
	2002-2003	2002-2003	Surplus
Major Fee Areas	Costs	Revenues	(Subsidy)
Building	2,599,056	4,085,300	1,486,244
Plans Examination	503,178	385,000	(118,178)
Electrical	1,018,936	761,000	(257,936)
Plumbing	845,441	484,500	(360,941)
Mechanical/Gas	745,546	410,000	(335,546)
	5,712,157	6,125,800	413,643

The above table indicates that, without consideration of non-fee related service areas, the general fund is projected to receive a \$413,643 surplus from fee related services for Fiscal Year 2002-2003. What this table does not take into consideration, however, are the costs associated with plan reviews and fire safety inspections made by the Fire Marshal's Office. The costs of those activities were not determined in this study. If one assumes 15 full time equivalent positions to be involved in those activities at the same average full cost per position as for the positions in the Property Standards Division, the total cost of their work would be \$1,168,107. If this cost were applied to the building permits, it would reduce the building surplus to \$318,137 and result in the general fund subsidizing permit related Codes Administration activities by \$754,464 rather than receiving a surplus of \$413,643. The building permit surplus is even further reduced to \$199,959 if plans examinations and building permits are considered as a single category. Regardless of this consideration, it is evident that the general fund is subsidizing all the trade permits.

Fee Structure Considerations

In considering the fee structure for Codes Administration, it should be understood that the scope of this study was limited to an overall assessment of the revenues and costs for fee related services rather than determining the full cost fees for specific services. If this had been a detailed user fee cost of service analysis, further consideration would have been given to as many as 50 different service categories to include residential and non-residential services; new construction as well as addition, repair and alteration services; and fees for individual services such as demolition; garage; water, sewer, electrical and gas connection; electrical and non-electrical sign; service change; and low voltage permits. Still, within the overall assessment of revenues and costs for the major service categories, there are several fee structure issues that merit consideration. These are as follows:

- Fees for Codes Administration services have not been increased in over 12 years. The increase in cost due to inflation would provide a sufficient basis for fee increases even if significant departmental efficiencies have been achieved since the last fee increase.
- If consideration is given to the costs of Fire Marshal Office services in conjunction with Codes Administration services for permits, the general fund is subsidizing permitting operations by between \$500,000 and \$1,000,000, which justifies fee increases for Codes Administration fees or a separate fee for Fire Marshal services.
- The fees for building permits are currently sufficient to cover the costs associated with the issuance and inspections for building permits, zoning work and appeals associated with building permits, the deficit for plans examination fees and the work done by the Fire Marshal's Office.
- The fees for electrical, plumbing and mechanical/gas permits are not sufficient to cover the cost of service for those permits. The following table provides the potential impact of increasing the fees for those services to 90% of full costs based on an estimated cost for Fire Marshal's Office

services. Increases beyond 90% of full costs might not be prudent since the cost for Fire Marshal's Office services is based on a very rough estimate.

Cost-Revenue Summary					
(In Dollars)					
	Projected	Projected	Projected	Projected	Increased
	Fiscal Year	Fiscal Year	Fiscal Year	Revenues	Revenues
	2002-2003	2002-2003	2002-2003	with 90%	with 90%
	Costs	Revenues	Surplus	Trade Permit	Trade Permit
Major Fee Areas			(Subsidy)	Cost Recovery	Cost Recovery
Building	2,599,056	4,085,300	1,486,244	4,085,300	-
Plans Examination	503,178	385,000	(118,178)	385,000	-
Electrical	1,018,936	761,000	(257,936)	917,042	156,042
Plumbing	845,441	484,500	(360,941)	760,897	276,397
Mechanical/Gas	745,546	410,000	(335,546)	670,991	260,991
Fire Marshal's Office (Estimated)	1,168,107	-	(1,168,107)	-	-
Total	6,880,264	6,125,800	(754,464)	6,819,230	693,430

- The fee structure for electrical, plumbing and mechanical/gas permits is difficult to administer. Electrical fees are based on such items as voltage, outlets, horsepower, kilowatts, and amperes. Plumbing fees are based on systems, devices, equipment and fixtures. Mechanical/gas fees are based on fixtures, equipment, appliances, outlets, kilowatts and Btuh.
- The \$25 zoning fee charged for all building permits does not allow for the varying range in the costs of zoning services since the larger and more higher dollar valuation construction projects require more zoning work than the smaller and lower dollar valuation construction projects.
- No reinspection fee is being charged for building permit inspections although reinspection fees are being charged for code violations found in electrical, plumbing and mechanical/gas permit inspections.
- The \$25 reinspection fee charged for trade reinspection appears low compared with the costs of reinspections determined in studies for other jurisdictions.
- The current cap of \$500 for plan examinations with dollar valuations above \$380,000 appears low since projects with higher dollar valuations usually require more plans examination work.
- The fees for special use permits and variances going before the Board of Zoning Appeals appear low. The current fees are \$100 for the simplest zoning appeal and \$200 for variances for projects less than \$200,000. The

costs of services for these type permits have ranged from \$300 to \$400 in many of our previous user fee studies.

- The current fee structure for variances adds one tenth of a percent of the project dollar valuation for dollar valuations in excess of \$200,000. The Zoning Administrator stated that there is not much difference in the zoning work requirement for higher dollar valuation projects.

Recommendations

The following recommendations are made regarding Codes Administration fees.

- **Include the cost of services for the Fire Marshal's Office in support of plans examination and fire safety inspections as a cost for determining the full cost fees for Codes Administration.**
- **Modify the current fee structure for building permits to eliminate the \$25 fixed fee for zoning permits and allow the cost of zoning permit services to be captured by a slightly increased dollar valuation variable rate for building permits. The overall fee structure for building permits should remain revenue neutral at this time since full cost recovery is being achieved.**
- **Do not increase the current plans examination fees at this time since the revenues from building permit fees are covering the general fund subsidization for this service area.**
- **Perform a detailed cost of service analysis for special use permits and variances going to the Board of Zoning Appeals and increase the fees for those services, if necessary, to cover the full costs of services.**
- **Eliminate the requirement to add one tenth of a percent of the project dollar valuation for variance fees for projects with dollar valuations in excess of \$200,000.**
- **Determine the average full costs of services for plans examination services for projects of a value greater than \$380,000 and change the fee structure to charge higher fees, if justified, for the higher dollar value projects.**
- **Determine the full cost of services provided by the Fire Marshal's Office and increase the fees for electrical, plumbing, and mechanical/gas permits sufficiently to recover the full costs of all fee**

related services provided by Codes Administration and the Fire Marshal's Office.

- **Restructure the fees for electrical, plumbing and mechanical/gas permits so that they are based on project dollar valuation instead of fixtures, outlets, kilowatts, etc. within various categories of permits. (That is, a trade permit fee would not be charged for construction that does not involve that trade. For example, a garage may not involve mechanical/gas work. Also, the dollar valuation fee would vary by type permit. For example, a permit for a warehouse with little plumbing would have a different dollar valuation table for plumbing than a residential permit requiring extensive plumbing.)**
- **Charge code violation reinspection fees for building permits.**
- **Determine the full costs of performing reinspection services and increase fees, if necessary, to cover the full costs of services.**

IX. GENERAL ISSUES

In the conduct of the study, the MAXIMUS project team noted two issues which relate to multiple facets of the Department of Codes Administration. These are discussed in the following pages.

1. **THE NUMBER OF APPEALS BOARDS TO WHICH THE VARIOUS INSPECTIONS DISCIPLINES REPORT SHOULD BE REDUCED THROUGH CONSOLIDATION.**

Codes Administration staff interact with, provide staff for, and in many cases attend meetings for six different boards. The project team raises the issue of whether any of these boards could be consolidated, thus decreasing the number of administrative hours expended, and thus the numbers of interactions with multiple board members.

The project team interviewed board members of five of the six boards, and has collected data regarding the numbers of appeals heard by each. These figures are presented below, by appeals board for each of the past two years:

**Number of Appeals Heard by Appeals Boards
Metro Nashville and Davidson County Department of Codes Administration
Calendar Years 2001 and 2002**

Year	Board	Appeals Heard	No. of Meetings
CY2001	Fire & Building	170	12
CY2001	Electrical	4	11
CY2001	Plumbing	32	11
CY2001	Mechanical/Gas	2	2
CY2001	Property Stds.	10	12
CY2001	BZA	229	24
CY2001	Fire & Building	126	12
CY2002	Electrical	2	11
CY2002	Plumbing	30	11
CY2002	Mechanical/Gas	1	3
CY2002	Property Stds.	47	12
CY2002	BZA	259	24

Analysis of the above data indicates that three of the boards (Electrical, Plumbing and Mechanical/Gas) heard relatively few appeals in the past two years, and are

responsible for building code cases. (The Property Standards Board also heard relatively few cases, however these are distinguished from “trades” in that they typically involve violations of the zoning codes and are thus dissimilar in nature). Given that there were only 33 appeals heard in these three boards last calendar year, the project team believes that there are efficiencies to be gained in staff interactions and administrative effort through the consolidation of the Mechanical/Gas, Electrical and Plumbing Boards.

An additional item for consideration is that the Electrical Board is alone among the Boards in requiring contractors to appear before it prior to taking the State examination for licensing. The project team believes that this task should be delegated to the Electrical Inspections Chief, as is done currently in other “trades” functions.

Recommendation: Combine the Electrical, Plumbing and Mechanical/Gas Boards to reduce the administrative effort required of staff in their interactions with these entities. This will require the Metro Council to pass an ordinance to this effect, and will require the coordination with Metro Legal to draft the ordinance. The Ordinance should state that the new Board should contain representatives from each of the referenced trades.

Further, the Electrical Board is alone in its retention of the responsibility for approving contractor-applicants to sit for the State licensing examination. This practice should be delegated to the Electrical Chief Inspector.

The next issue analyzes the adequacy of the allocated building space for the Codes Administration Department in the proposed renovated building.

2. **THE PROJECT TEAM'S OBSERVATION OF THE DOCUMENT IMAGING PROJECT INDICATES THAT ADDITIONAL RESOURCES ARE NEEDED.**

The Department has allocated 2 Customer Service Representatives to the task of electronically scanning historical files, however, at the current pace of scanning these documents, the project team estimates that it will take another 9 to 10 years to complete this task. The Codes Administration Department has received a quotation of approximately \$280,000 to \$300,000 from an outside vendor to perform the electronic scanning of these historical documents. This task can reportedly be completed within a time frame well within the projected move date of the Department to its new building, which would eliminate the need to move the related files.

Recommendation: It is recommended that the Department procure the proposed services of a private vendor to electronically scan the historical files currently located in the file room. This is to reduce the projected time period of completion, reduce costs, and allow the reallocation of the 2 Customer Service Representatives to more productive tasks, such as to the Property Standards Unit of the Inspections Division, where they should be utilized to assemble case files for presentation at Environmental Court, file case files, answer phones and record complaints. The Department has received a quote of approximately \$280,000 to \$300,000 for the completion of the electronic scanning of its historical files.

X. CONCLUSIONS

In this chapter, we summarize the recommendations which we have made throughout the report, provide suggestions regarding the relative priorities of the recommendations, and identify any implementation issues which Metro will need to address.

Recommendation	Fiscal Impact	Priority	Implementation Issues
Begin the accumulation of arrival and departure times for the various categories of inspections, by Inspector.	Est. cost: None Est. benefit: Capture of time by Inspector, by type of activity will assist in the analyses of work volumes, productivity levels and training needs.	Medium	This ability will be a standard capability of the Department's prospective information system, however realizing the full utility of this feature will require significant training of Inspectors, and will require managers to provide forceful leadership to ensure that data capture is consistent among Inspectors and between Units of the Department.
Purchase and implement the use of laptop computers, or similar electronic devices, to allow for the direct input of inspections results in the field.	Est. cost: \$60,800 of capital cost for 32 field inspectors. Est. benefit: Avoidance of re-transcription of inspections results, as well as the enhanced productivity of Inspectors, which may result in an additional half-hour of inspections per day. Further, there is a potential cost avoidance of approximately \$60,460 over the first two years of this recommendation.	High	Significant training of Inspectors in the use of the preferred electronic means of data capture.
Purchase and implement the use of cellular telephones for facilitated communications between Inspectors and customers and/or administrative staff.	Est. cost: \$2,400 hardware, and an additional \$30,700 annual airtime costs. Est. benefit: Enhanced and "real time" communications, which will increase customer service, and will allow Customer Service Representatives in the office	Low	No significant implementation considerations, although the Department may need to stress the need for adherence to any existing Metro policies regarding cell phone usage. The full benefit of this would be realized in conjunction with implementing the laptops discussed above.

	Recommendation	Fiscal Impact	Priority	Implementation Issues
		to communicate inspections needs to Inspectors who may provide facilitated inspections while in the field.		
	Begin the consistent capture of information relating to workload activity between Divisions to allow comparisons to productivity benchmarks as well as productivity of Inspectors between Divisions. Further, the Department should ensure that the new management information system allows for the analysis of the “aging” of permits to identify those which have had no activity within specific time ranges.	Est. cost: None Est. benefit: This will allow for comparisons of productivity of Inspectors to benchmarks and productivity between Divisions, and will facilitate the identification of expired permits.	Medium	This will require that Division managers arrive at an agreement as to the appropriate workload activities to report, and to train Inspectors in the capture of this information.
	Consider the transition to a process whereby routine inspections continue to be conducted by Inspectors focused upon specific disciplines, however begin the training and utilization of multi-disciplinary Inspectors for all final inspections.	Est. cost: There will be some costs associated with the training of current Inspectors in multi-disciplinary functions. Est. benefit: The full implementation of this recommendation, based on historical inspections data, could result in reducing 7 positions, if they are not needed for increased demand, with a net cost savings of approximately \$332,500 annually.	High	There will be training required for current Inspectors.
	Discontinue the use of demolition funds for operational purposes. Further, the funds for demolition should be expended in a more even fashion throughout the year, as opposed to the recent practice of expending these funds at the end of the fiscal year.	Est. cost: Accomplishing the requisite numbers of backlogged demolitions and capitalization of the fund will require a capital expenditure of approximately \$519,000.	High	The Department will be required to make an additional capital budget request, and to present the justification for additional funding based on the justifications presented in the body of the report. The establishment of a special revenue

	Recommendation	Fiscal Impact	Priority	Implementation Issues
		Est. benefit: A more consistent accomplishment of demolitions, as well as an elimination of the current backlog of about 117 demolition orders.		fund, funded initially by capital dollars, should be used to collect liens and to centrally issue funds for the demolition of structures. The administration of this fund should be accomplished by a Metro Department whose mission is more closely identified with fund management.
	Establish turnaround time targets for plans review, and report the actual times against these targets monthly.	Est. cost: None Est. benefit: The implementation of this recommendation is expected to have a positive impact upon customer service and satisfaction, as applicants are made aware of expected times for plan review.	Low	The Department should analyze historical turnaround times to enable the establishment of reasonable turnaround times as a starting point. As more recent data are accumulated, these targeted times may be adjusted.
	Property Standards Inspectors should begin the notation of code violations in the filed which, due to time restrictions associated with investigating Special Handling cases, are not immediately investigated. These cases should be proactively investigated at such time that the volume of violations in a particular geographic area warrant the assignment of an Inspector.	Est. cost: None Est. benefit: Greater customer service level, as well as a potential reduction of complaint-driven calls for service.	High	Property Standards Inspectors will be required to formally note potential code violations, as opposed to the current practice of mental notation, which may result in these violations remaining unabated. These violations may be noted formally in handheld devices which could be purchased for each Investigator.
	Allocate two additional Customer Service Representatives to the Property Standards Unit in order to facilitate the assembly of case files for Inspectors, and to make contact with complainants to ensure they are aware of the status of investigations.	Est. cost: There is no net cost associated with this recommendation, as there are presently two Customer Service Representatives assigned to the electronic imaging of files. These employees should be transferred to the Property Standards Unit at no increased cost.	Medium	Transfer the two Customer Service Representatives currently assigned to the electronic imaging of historical files to the Property Standards Unit. This should occur following establishment of a contract for document imaging.

	Recommendation	Fiscal Impact	Priority	Implementation Issues
		Est. benefit: Increased field time for Property Standards Inspectors, allowing for the accomplishment of up to 1,200 more field inspections per year, per Inspector.		
	Purchase laptop computers, or similar electronic data capturing equipment, for each of the 17 Property Standards Inspectors to decrease the amount of time expended in re-transcription of inspections results. Additional efficiencies can be achieved by prioritizing complaints and assessing productivity against benchmarks.	Est. cost: \$32,300 in capital expenditures. Est. benefit: Decreased “downtime” of Property Standards Inspectors, allowing for the increased number of inspections per Inspector.	High	The Department should begin the identification of the preferred means of data capture. This may take the form of laptop computers or handheld devices.
	The Department of Codes Administration should, as standard policy and procedure, forward all homeowner inspection profiles requiring structural modifications to MDHA and provide to the homeowner information regarding eligibility for financial assistance for low interest loans, deferred payment loans, etc.	Est. cost: None Est. benefit: A more equitable distribution of funding for the accomplishment of identified and required repairs to structures requiring abatement of some type.	Med	Codes Administration and MDHA will be required to communicate all homeowner information via electronic means, or in the interim, through more traditional means of communication.
	Create a Property Standards Division as the fourth division of the Department.	Est. cost: There will be some increased personal costs associated with the reclassification of a managerial position which currently is at a Unit level to that of a Division Manager, although the project team believes this can be absorbed with current budget levels.	Medium	This will require the transfer of the Property Standards Unit from the Inspections Division, and the appointment of a Division Manager.

	Recommendation	Fiscal Impact	Priority	Implementation Issues
		Est. benefit: This will elevate the organizational importance of the property standards function within Metro, and will, as a corollary benefit, provide a more equitable span of control for division managers.		
	The Department should implement certain improvements in customer service. These include the placement of brochures in the waiting area which describe the development review process, the posting of signs informing applicants of the steps required in acquiring permits, and the posting of signs informing applicants that they should visit a Customer Service Representative prior to seeing a Zoning Examiner is their contractor license has expired.	Est. cost: There may be a minimal cost associated with the printing of signs and brochures, however this is not expected to be significant. Est. benefit: Enhanced customer service, and potential reduction of wasted time on the parts of applicants.	Medium	The Department will be required to design, print and place brochures throughout the waiting area.
	Restrict the attendance at Board of Zoning Appeals (BZA) meetings to the Board Secretary and either the Zoning Examinations Supervisor or the Zoning Division Director.	Est. cost: There is no cost associated with this recommendation. Any cost savings would be related to the increased productivity of current BZA attendees who will no longer attend the meetings.	Low	Immediately restrict the attendance at BZA meetings.
	Provide keyless access codes only to Codes Administration Department employees entering the file room.	Est. cost: None Est. benefit: Reduction of potential unauthorized entry.	Low	Distribute access codes only to Department employees. Change the access code at regular intervals.
	Modify the existing lien database to incorporate the ability to add and delete liens in order to maintain accurate counts of liens. This lien information should also identify the nature of the deletion (i.e., payment arrangement, sale of property, etc.).	Est. cost: None Est. benefit: Increased functionality of the lien database.	Medium	The Department should redesign the existing database.

	Recommendation	Fiscal Impact	Priority	Implementation Issues
	The Department should increase and/or re-examine many of its fees for services, such as for plans review, permits, code violation re-inspections, etc.	Est. cost: An estimated \$600,000 revenue increase may be made available.	High	Metro should review the adequacy of all fees charged, both in Codes Administration and in other related offices which perform services related to development review and permitting.
	Combine the Electrical, Plumbing and Mechanical/Gas Boards.	Est. cost: None. There may be some non-quantifiable cost savings realized through the reduced numbers of interactions current staff a required to accomplish in the administration of meetings, agendas, etc.	Low	The Department should, in concert with Metro Legal, draft an ordinance for Council consideration.
	Outsource document imaging.	Est. cost: \$280,400. Est. benefit: Historical documents will be imaged much sooner, and two customer service representatives can be transferred to an area that has a customer service needs.	High	A contractor to perform this service is in place, pending budgetary approval.

ATTACHMENT A

**RECOMMENDED CAPBILITIES OF THE DEPARTMENT'S
MANAGEMENT INFORMATION SYSTEM**

The Department of Codes Administration and Information Technology Services have recently initiated the process of procuring a new management information system. This new system will represent a quantum step forward in the ability of managers to assess operations, as well as the ability to provide additional and/or enhanced services to customers.

The Department had, prior to the initiation of MAXIMUS project activities, defined most of the required and desired capabilities of the new system, and had already received on site presentations from four potential providers of management information systems. Therefore, the MAXIMUS project team does not attempt to define the information system data requirements here, as the scope of this study did not include such an analysis. Rather, in the points below, we offer recommended new system attributes which address specific impediments to the provision of services and reporting capabilities of the current system, and which were observed during project activities:

- **Interface with the Metro Geographical Information System (GIS):** It is strongly recommended that the new system provide an interface with the GIS system in order to “link” geographical locations of inspections with textual details regarding the results of these inspections. This graphic capability will assist in the collection of data regarding types of complaints in specific geographical regions of the County, and will provide managers with valuable tools in assigning personnel to the various locations.
- **Interface with Metro’s Financial System:** The new system should provide the capability of accepting fees and fines, as well as the ability to automatically upload these data into the financial system of Metro.
- **Provision of On-Line Updates of Various Activities of the Department:** The Department should work toward the provision of on-line status of plan reviews, demolition orders, inspections, as well as potentially other activities of the Department. This functionality would potentially reduce the volume of calls to the Department, and would increase the level of customer service provided, as this was a frequently-heard desired feature of the Department’s information system, both in staff interviews as well as in focus group discussions.
- **Full Automation of the Permit Application Process:** The new system should allow for the completion of permit applications on-line, the credit card payment for these applications, and the acceptance of electronic plan submittals.
- **Identification of the “Aging” of Permits:** During the course of the study, the project team encountered instances in which permits had been issued for specific construction activities, however no inspections had been requested. Currently, these permits are identified only as Inspectors decide to clear out old files. The new system should allow for the determination of permit age (e.g., 30, 60, 90 and 120+ days) by category, with permit holders contacted prior to expiration dates to determine their intent to construct.

- **Provision of Monthly Reports Regarding Inspections by Inspector:** The Department has this capability within its current system, however it was apparent to the project team that the information is not analyzed thoroughly, as there were several months missing in the Electrical and Plumbing areas. Further, there is no record of time expended per inspection. The accumulation of these types of data is, in the view of the project team, valuable to managers in the determination of individual productivity (which should be a primary consideration in annual performance appraisal exercises), the standardization of inspection procedures, and in the identification of the need for additional training on the parts of individual inspectors. In reviewing the workload volumes provided, it was additionally apparent that there are wide variations between Inspectors in their individual numbers of inspections as well as their rejection rates. Currently, managers focus primarily on their divisions' respective abilities to respond in a timely manner to inspections requests, but miss a valuable opportunity to assess the efficiency with which these inspections are carried out.

- **Identification of Inspections Not Occurring Within Specified Time Periods:** Currently, managers review average response time ranges (e.g., the average number of days from request to inspection), however these data do not identify the frequency with which individual requests fall within these ranges. For example, the Electrical, Plumbing, Building and Mechanical/Gas divisions have a stated service level target of providing next day inspections when receiving the inspection request by 2:00 p.m. of the preceding day. Similarly, the Property Standards Division provides first inspection of Special Handling cases within 48 hours of complaint. At a summary level, the respective divisions report their compliance with these service levels on an average basis. However, this method does not "flag" instances in which performance does not comply with stated policy, and further, does not provide meaningful descriptors such as the fractile percentages with which the divisions comply with the service level targets. In this latter regard, a more effective manner of data provision would state the division's performance as, for example, "Provided first inspection of property standard complaints within 48 hours 96.5% of the time". The new information system should provide the capability of collecting and reporting information in this manner.

- **Plan Review Turnaround Times:** Currently, the Department reports the numbers of plans reviewed by Plans Examiners, but does not report these in a formal fashion on an individual basis. Further, it has not, as was noted in the body of the report, provide customers with service level targets regarding the estimated time of review. The project team conducted random samples of commercial and residential plans reviews turnaround times and concluded that these times are well within benchmark standards, and further, that workload volumes are at the upper end of typical ranges. The new information system should provide these details, and should equip managers with the ability to note

trends in these turnaround times, and to correlate any increases with the need for additional personnel.

ATTACHMENT B
INDIRECT COST ALLOCATION TABLES AND DISCUSSION

Codes Administration Director's Office

The Codes Administration Director's Office budget includes the Director, the Assistant Director, the Director's Administrative Assistant, the Assistant Director's Administrative Assistant, the Administrative Services Manager, an Administrative Specialist and an Office Support Rep. The salary for the Assistant Director was allocated to the six divisions he supervises in accordance with the number of positions in each division. The salary for his Administrative Assistant was allocated to all divisions supervised by the Assistant Director except the Property Standards Division in accordance with the number of position in those divisions. The salary of the Office Support Rep was allocated 30% for neighborhood audits (a non-fee related activity) with the remainder divided between the Electrical, Plumbing, and Mechanical/Gas divisions based on the number of staff positions in each division for support of contractor licensing and appeals for those areas. The salaries for the remaining four positions were allocated to Zoning Administration and the respective divisions of Codes Administration based on the number of positions in each organizational element. The following table provides the distribution of salaries for this office.

Codes Administration Director's Office Salary Distribution									
	Annual					Plans	Property		Non Fee
	Salary	Building	Electrical	Plumbing	Mech/Gas	Exam	Standards	Zoning	Related
Positions		13	9	8	8	6	23	21	
Codes Administration	249,115	36,801	25,478	22,647	22,647	16,985	65,110	59,448	
Assistant Director	86,237	16,733	11,584	10,297	10,297	7,723	29,604		
Administrative Spec	41,543	12,274	8,497	7,553	7,553	5,665			
Office Support Rep	25,489	-	6,424	5,709	5,709	-	-	-	7,647
Total Salaries	402,384	65,808	51,983	46,206	46,206	30,373	94,714	59,448	7,647

The fringe benefits for this office were allocated to organizational elements in accordance with the allocation of salaries.

All departmental costs other than salary and fringe benefit costs are centrally budgeted in the Codes Administration Director's Office. Costs associated with temporary services and recording were allocated only to the Property Standards Division. Costs associated with advertising and promotion were allocated only to the Property Standards and Zoning Administration based on a weighted average of the expenditures for these services by the respective organizations over the past 18 months. Costs associated with motor pool and fleet management operations were allocated to departmental organizational elements based on the number of vehicles assigned to the respective organizations. All remaining costs were allocated to departmental organizational elements based on the number of staff positions budgeted for each organizational element. The following table provides the allocation of all costs from the Code Administration Director's Office to the respective departmental organizational elements.

Total Codes Administration Director's Office Cost Distribution									
	Annual					Plans	Property		Non Fee
	Cost	Building	Electrical	Plumbing	Mech/Gas	Exam	Standards	Zoning	Related
Salaries	402,384	65,808	51,983	46,206	46,206	30,373	94,713	59,448	7,647
Fringe Benefits	87,534	14,316	11,308	10,052	10,052	6,607	20,604	12,932	1,664
Departmental Costs									
Temporary Services	28,280						28,280		
Recording	7,940						7,940		
Advertising	38,406						24,273	14,133	
Motor Pool/Fleet Mgt	122,617	25,710	19,777	15,822	15,822		39,554	5,933	
All Other Dept Costs	1,113,338	163,912	113,477	100,869	100,869	75,652	289,997	264,780	3,795
Total Distribution	1,800,499	269,746	196,545	172,949	172,949	112,632	505,361	357,226	13,106

Zoning Administration Salary Distribution

All costs associated with Zoning Administration were allocated to building, electrical, plumbing, and mechanical/gas permits in accordance with work done by Zoning Administration staff in the permit issuance, records management, zoning review and zoning appeals processes. In the initial salary allocation, the Supervisor's salary and 34% of the Customer Services Supervisor's salary were allocated to general and administrative expenses for further allocation throughout Zoning Administration. The salaries for the Switchboard Operator, 33% of the Customer Services Supervisor's salary, and the salaries for the two office support positions providing imaging services were allocated to the respective permit categories based on the number of permits issued per year for each category. The remaining 33% of the Customer Services Supervisor's salary was allocated directly to building permits. The salaries for Administrative Services were allocated 10% to building permits with the remaining 90% allocated to electrical, plumbing and mechanical/gas permits in accordance with the number of permits issued in each permit category. The salaries for the Zoning Examination and Urban Forester divisions were

allocated to building permits. The following table provides the initial allocation of Zoning Administration salaries.

Zoning Administration Salary Distribution						
Initial Distribution of Zoning Administration Salaries						
Positions	Annual Salary	Building	Electrical	Plumbing	Mech/Gas	G&A
Supervisor	84,612					84,612
Customer Service Supervisor	47,036	26,749	2,010	1,245	1,040	15,992
Customer Service Office Support	80,581	58,284	10,435	6,463	5,399	
Administrative Services	158,754	15,875	66,899	41,403	34,577	
Zoning Examination	334,573	334,573				
Urban Forrester	86,713	86,713				
Other	1,957	-	-	-	-	1,957
Total Salaries	794,226	522,194	79,344	49,111	41,016	102,561

The salary for the Zoning Administration Supervisor and 30% the salary for the Customer Services Supervisor were then reallocated from general and administrative salaries to permit categories based on the salaries already allocated to those categories by the rest of the Zoning Administration staff as shown by the following table.

Redistribution of Zoning Administration G&A					
Positions	Annual Salary	Building	Electrical	Plumbing	Mech/Gas
G&A	102,561	77,432	11,765	7,282	6,082
Customer Service Supervisor	31,044	26,749	2,010	1,245	1,040
Customer Service Office Support	80,581	58,284	10,435	6,463	5,399
Administrative Services	158,754	15,875	66,899	41,403	34,577
Zoning Examination	334,573	334,573			
Urban Forrester	86,713	86,713	-	-	-
Total Salaries Redistributed	794,226	599,626	91,109	56,393	47,098

Indirect Cost Allocation

Indirect costs from the Metropolitan Government of Nashville and Davidson County full cost indirect cost allocation plan were allocated to departmental organizational elements with the exception of the Director's Office. An allocation was not made to the Director's Office since all Director's Office costs are being allocated to other organizational elements. All indirect costs were allocated based on the number of

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budgeted staff positions for each organization with the exception of motor pool costs. The motor pool costs were allocated based on the number of vehicles assigned each organizational element. A table of the distribution of indirect costs to the operating units of the Department is provided below:

Distribution of Metropolitan Government of Nashville and Davidson County Indirect Costs								
		Building	Electrical	Plumbing	Mech/Gas	Plans Exam	Property Standards	Zoning
Positions		13	9	8	8	6	23	21
Assigned Vehicles		13	10	8	8	0	20	3
Central Service								
Departments								
Workers Comp	14,726	2,175	1,506	1,339	1,339	1,004	3,849	3,514
Employee Benefit	218,607	32,294	22,358	19,873	19,873	14,905	57,136	52,168
Post Audits	7,244	1,070	741	659	659	494	1,893	1,729
Insur/Judgements	75,769	11,193	7,749	6,888	6,888	5,166	19,803	18,081
Legislative	20,114	2,971	2,057	1,829	1,829	1,371	5,257	4,800
Mayor	20,000	2,955	2,045	1,818	1,818	1,364	5,227	4,773
Empl Benefit Bd	17,564	2,595	1,796	1,597	1,597	1,198	4,591	4,191
Empl Assistance	976	144	100	89	89	67	255	233
Civ Svc Med Exam	208	31	21	19	19	14	54	50
Personnel	24,656	3,642	2,522	2,241	2,241	1,681	6,444	5,884
Div of Buildings	125,579	18,551	12,843	11,416	11,416	8,562	32,822	29,968
Central Printing	1,251	185	128	114	114	85	327	299
Motor Pool	7,995	1,676	1,290	1,032	1,032	-	2,579	387
Postal Service	6,410	947	656	583	583	437	1,675	1,530
Radio Shop	4,017	593	411	365	365	274	1,050	959
Dir of Finance	691	102	71	63	63	47	181	165
Payroll	3,208	474	328	292	292	219	838	766
Internal Audit	8,721	1,288	892	793	793	595	2,279	2,081
Div of Accounts	15,229	2,250	1,558	1,384	1,384	1,038	3,980	3,634
Purchasing	23,589	3,485	2,413	2,144	2,144	1,608	6,165	5,629
Treasury	5,666	837	579	515	515	386	1,481	1,352
Budget	1,887	279	193	172	172	129	493	450
Public Property	103	15	11	9	9	7	27	25
FASTNET	13,672	2,020	1,398	1,243	1,243	932	3,573	3,263
Data/Computer	84,438	12,474	8,636	7,676	7,676	5,757	22,069	20,150
Office Supply	1,138	168	116	103	103	78	297	272
Dept of Law	211,615	31,261	21,642	19,238	19,238	14,428	55,308	50,499
Total	915,073	135,675	94,060	83,494	83,494	61,846	239,653	216,852

Distribution of All Zoning Administration Costs

Zoning Administration fringe benefits, the costs allocated to Zoning Administration from the Director's Office and Zoning Administration indirect costs (from the previous table) were allocated to respective permit categories based on the salary allocations from Zoning Administration to those categories as shown by the following table.

Final Distribution of Zoning Costs to Major Service Areas					
	Total	Building	Electrical	Plumbing	Mech/Gas
Redistributed Zoning Salaries	794,226	599,626	91,109	56,393	47,098
Zoning Fringe Benefits	199,330	150,490	22,866	14,153	11,820
Costs Allocated to Zoning from Codes Admin	357,227	269,700	40,979	25,364	21,184
City/County Indirect Costs Allocated to Zoning	216,849	163,717	24,876	15,397	12,859
Total Zoning Costs	1,567,632	1,183,533	179,830	111,307	92,961

Property Standards Division

The majority of work done by the Property Standards Division is related to substandard buildings, abandoned vehicles, weeded lots and other appearance related problems. The revenues derived from these areas are constrained for the most part by liens and charges that cannot be based on fees for services. The costs and revenues for these type services were considered as non-fee related costs and revenues in this study. Estimates from staff do however substantiate that approximately 15% of the work done by the Property Standards Division is for fee related activities such as inspections directly related to building rehabilitation permits, structure demolition permits, sign permits, and use of occupancy permits to include new buildings, alterations and additions and the change in use for buildings. Consequently, 15% of the salary and fringe benefit costs and 15% of most of the remaining costs attributable to the Property Standards Division was allocated to building permits. The only exceptions to this allocation were costs associated

with temporary services, recording and advertising. These costs are not related to the issuance and inspections for building permits and were therefore considered to be 100% non-user fee costs. The following table provides the distribution of Property Standards Division costs to building permits and non-fee related activities. A total of \$259,591 was allocated to building permits and \$1,531,506 was allocated to non-fee related activities.

Distribution of Property Standards Costs			
	Total	Costs	Costs
	Property Standards	Allocated to	Allocated to
	Costs	Building Permits	Non-Fee Related
		Activities	
Property Standards			
Cost Categories			
Property Standards Salaries & Wages	828,100	124,215	703,885
Property Standards Fringe Benefits	217,980	32,697	185,283
Codes Administration Salaries & Wages	94,713	14,207	80,506
Codes Administration Fringe Benefits	20,604	3,091	17,513
Departmental Costs			
Temporary Services	28,280	-	28,280
Recording	7,940	-	7,940
Advertising	24,273	-	24,273
Motor Pool/Fleet Management	39,554	5,933	33,621
Other Departmental Costs	289,997	43,500	246,497
City/County Indirect Cost Allocation	239,656	35,948	203,708
Total Property Standards Costs	1,791,097	259,591	1,531,506

ATTACHMENT C

**SERVICE ASSESSMENT OF THE
DEPARTMENT OF CODES ADMINISTRATION**

Department:		CODES ADMINISTRATION			
Division:		INSPECTIONS			
Section:		BUILDING INSPECTIONS			
FTE	Total:	11	Filled:	11	Vacant: 0
Budget	Total:		G.F.:		Other:

Summary of Principal Activities:

- Building Inspectors perform inspections within 7 geographical zones in Metro for residential inspections, and 4 Inspectors make inspections of commercial structures throughout Metro. Note that although there are 7 geographical districts for residential Inspectors, two of these districts are currently covered by a single Inspector.
- Inspectors complete a Daily Inspection Report, however arrival and departure times for each inspection are not recorded.
- Inspectors travel to Howard School complex each afternoon to retrieve messages and to schedule inspections for the following day. These Inspectors travel and report to the Howard School complex the following morning.
- Building Inspectors are not deputized.
- Inspectors review approved plans for compliance with regulatory codes and inspect structures during various stages of construction to ensure that procedures and materials meet standards. As time allows, Inspectors will proactively patrol areas of assigned responsibility to ensure that work being done in these areas is done with applicable permits. Issues stop work orders as appropriate.
- Inspectors make court appearances to prosecute violators of codes. Inspectors make a minimum of three inspections for each structure, including a footing, framing and final inspection.
- Building Inspectors must within 2 years of employment attain SBCCI certification as Building Inspectors, One and Two Family Dwelling Codes Inspectors and in Legal Aspects of Code Enforcement.
- Secretary processes Use and Occupancy Certificates. These employees also act as receptionists, schedule inspections, ensure the completeness of permit applications, and manage the hard copy files of permits for the Division.

Summary of Principal Performance

- Work hours: 7:30 a.m. – 4:00 p.m.
- Conducted 30,127 inspections in CY 2002. This equates to approximately 11.5 inspections per Inspector per day.
- Approximately 82.6% of all inspections resulted in approvals during CY 2002.
- Conducted 29,492 building inspections in FY 2001. With an average of 10 Inspectors, this equates to an average of approximately 2,949 inspections per Inspector.
- The Unit attempts to schedule inspections within 24 hours of receipt of request, although it does not measure this element of customer service.

Department:		CODES ADMINISTRATION			
Division:		INSPECTIONS			
Section:		ELECTRICAL INSPECTIONS			
FTE	Total:	9	Filled:	9	Vacant: 0
Budget	Total:		G.F.:		Other:

Summary of Principal Activities:

- Electrical Inspectors perform inspections within 8 geographical zones in Metro.
- Inspectors complete a Daily Inspection Report, however arrival and departure times for each inspection are not recorded. Inspectors complete a minimum of three inspections for each structure. These include a rough in inspection, a service release and a final inspection.
- Inspectors travel to Howard School complex each afternoon to retrieve messages and to schedule inspections for the following day. These Inspectors travel and report to the Howard School complex the following morning.
- Electrical Inspectors are not deputized.
- Inspectors review approved plans for compliance with regulatory codes and inspect structures during various stages of construction to ensure that procedures and materials meet standards. As time allows, Inspectors will proactively patrol areas of assigned responsibility to ensure that work being done in these areas is done with applicable permits. Issues stop work orders as appropriate.
- Inspectors make court appearances to prosecute violators of codes.
- Electrical Inspectors must within 2 years of employment attain SBCCI certification as Certified Residential Electrical Inspectors, Certified Commercial Electrical Inspectors, One and Two Family Dwelling Codes Inspectors and in Legal Aspects of Code Enforcement.
- Secretary processes Use and Occupancy Certificates and Service Releases. These employees also act as receptionists, schedule inspections, ensure the completeness of permit applications, and manage the hard copy files of permits for the Division.

Summary of Principal Performance

- Work hours are 7:30 a.m. till 4:00 p.m.
- Conducted 22,405 inspections in 9 months of CY 2002 (Data for three months – Feb., Jun, Oct. – were unavailable). This equates to an average of 15.1 inspections per Inspector per day. (Note that the 22,405 inspections performed in the 9 month period have been “annualized” to equate to 12 months of workload data in other sections of this report. This “annualized” figure is 29,873 inspections. The 15.1 inspections per Inspector figure noted previously is valid, as the 9 months of data were divided by the number of “Inspector-months” expended to accomplish them.)
- Approximately 84.9% of all inspections resulted in approvals during CY 2002.
- Conducted 25,913 electrical inspections in FY 2001. With an average of 8 Inspectors, this equates to an average of approximately 3,239 inspections per Inspector.
- The Unit attempts to schedule inspections within 24 hours of receipt of request, although it does not measure this element of customer service.

Department:		CODES ADMINISTRATION			
Division:		INSPECTIONS			
Section:		PLUMBING INSPECTIONS			
FTE	Total:	8	Filled:	8	Vacant: 0
Budget	Total:		G.F.:		Other:

Summary of Principal Activities:

- Plumbing Inspectors perform inspections within 8 geographical zones in Metro.
- Inspectors complete a Daily Inspection Report, however arrival and departure times for each inspection are not recorded. Inspectors complete a minimum of three inspections for each structure. These include a rough in inspection, a water and sewer top out inspection and a final inspection.
- Inspectors travel to Howard School complex each afternoon to retrieve messages and to schedule inspections for the following day. These Inspectors travel and report to the Howard School complex the following morning.
- Plumbing Inspectors are not deputized.
- Inspectors review approved plans for compliance with regulatory codes and inspect structures during various stages of construction to ensure that procedures and materials meet standards. As time allows, Inspectors will proactively patrol areas of assigned responsibility to ensure that work being done in these areas is done with applicable permits. Issues stop work orders as appropriate.
- Inspectors make court appearances to prosecute violators of codes.
- Plumbing Inspectors must within 2 years of employment attain SBCCI certification as Plumbing Inspectors, One and Two Family Dwelling Codes Inspectors and in Legal Aspects of Code Enforcement.
- Secretary processes Use and Occupancy Certificates and Service Releases. These employees also act as receptionists, schedule inspections, ensure the completeness of permit applications, and manage the hard copy files of permits for the Division.

Summary of Principal Performance

- Work hours are 7:30 a.m. till 4:00 p.m.
- Conducted 28,052 inspections in 11 months of CY 2002 (Data for January were unavailable). This equates to an average of 17.3 per Inspector per day. (Note that the 28,052 inspections performed in the 11 month period have been “annualized” to equate to 12 months of workload data in other sections of this report. This “annualized” figure is 29,295 inspections. The 17.3 inspections per Inspector figure noted previously is valid, as the 11 months of data were divided by the number of “Inspector-months” expended to accomplish them.)
- Approximately 87.8% of all inspections resulted in approvals during CY 2002.
- Conducted 27,130 plumbing inspections in FY 2001. With an average of 7 Inspectors, this equates to an average of approximately 3,876 inspections per Inspector.
- The Unit attempts to schedule inspections within 24 hours of receipt of request, although it does not measure this element of customer service.

Department:		CODES ADMINISTRATION				
Division:		INSPECTIONS				
Section:		MECHANICAL/GAS INSPECTIONS				
FTE	Total:	8	Filled:	8	Vacant:	0
Budget	Total:		G.F.:		Other:	

Summary of Principal Activities:

- Mechanical/Gas Inspectors perform inspections within 7 geographical zones in Metro.
- Inspectors complete a Daily Inspection Report, however arrival and departure times for each inspection are not recorded. Inspectors complete a minimum of three inspections for each structure. These include a rough in inspection, a progress inspection (similar to a service release) and a final inspection.
- Inspectors travel to Howard School complex each afternoon to retrieve messages and to schedule inspections for the following day. These Inspectors travel and report to the Howard School complex the following morning.
- Mechanical/Gas Inspectors are not deputized.
- Inspectors review approved plans for compliance with regulatory codes and inspect structures during various stages of construction to ensure that procedures and materials meet standards. As time allows, Inspectors will proactively patrol areas of assigned responsibility to ensure that work being done in these areas is done with applicable permits. Issues stop work orders as appropriate.
- Inspectors make court appearances to prosecute violators of codes.
- Mechanical/Gas Inspectors must within 2 years of employment attain SBCCI certification as Mechanical Inspectors, One and Two Family Dwelling Codes Inspectors and in Legal Aspects of Code Enforcement.
- Secretary processes Use and Occupancy Certificates and Service Releases. These employees also act as receptionists, schedule inspections, ensure the completeness of permit applications, and manage the hard copy files of permits for the Division.

Summary of Principal Performance

- Work hours are 7:30 a.m. till 4:00 p.m.
- Conducted 17,930 inspections in CY 2002. This equates to an average of 13.2 inspections per Inspector per day.
- Approximately 75.5% of all inspections resulted in approvals during CY 2002.
- Conducted 17,763 mechanical/gas inspections in FY 2001. With an average of 7 Inspectors, this equates to an average of approximately 2,538 inspections per Inspector. The Unit estimates that it will accomplish 18,500 inspections in FY 2003.
- The Unit attempts to schedule inspections within 24 hours of receipt of request, although it does not measure this element of customer service.

Department:		CODES ADMINISTRATION				
Division:		INSPECTIONS				
Section:		PROPERTY STANDARDS INSPECTIONS				
FTE	Total:	22	Filled:	21	Vacant:	1
Budget	Total:		G.F.:		Other:	

Summary of Principal Activities:

- Unit is comprised of a “Blue” Team (whose area is north of the Cumberland River to Smith Springs/Anderson Road), a “Red” Team (whose area is defined as being west of the Blue Team area) and a “Flex” Team, which focuses on substandard living conditions and fills in between the Red and Blue areas as needed. Inspectors assigned to the three sub-units handle complaints within specific geographic zones with their respective Teams.
- The Unit enforces Metro’s Property Standards Code Chapter 16.24 which is based on the International Property Standards Code, and relates to minimum standards for buildings, structures and premises. Specifically, Inspectors investigate complaints relating to, e.g., vacant buildings, interior and exterior appearance of structures, rubbish and garbage on properties, extermination, unfit structures, junk cars, illegal signs, and other regulated characteristics.
- Unit issues home occupation permits, sign permits.
- Inspectors prepare documentation for the demolition of dilapidated structures. Property demolitions are budgeted through this Unit. The budget for such demolitions is typically approximately \$120,000 to \$130,000 annually.
- Inspectors are not deputized and do not carry firearms on inspections.
- The Unit is a product of the merger of the former Housing Unit and Zoning Unit.
- Inspectors may issue a variety of “actions”, which include abate notices (for cosmetic violations), civil warrants or citations, regular inspections (for housing violations such as holes in walls, broken windows, leaky roofs, etc., which are sent via registered mail), code repairs (if repairs are estimated to cost less than half of the value of the structure itself), code demolitions (if repairs are estimated to cost more than half of the value of the structure), abandoned vehicle notices, and stop work notices (if structures are occupied without a Use and Occupancy permit.)
- Some complaints are designated as “Special Handling” cases which are deemed to be of higher priority due to the identity of the complainant, the severity of the violation being reported, the length of time since the original complaint, or other reason as determined by the Department. Special Handling cases are typically administratively tracked by the Department Director’s Administrative Assistant.
- Inspectors inspect billboard and sign locations, fence locations, etc. Inspectors take photographs of code violations and examine and file photographs.
- Inspectors prepare court cases and present information related to these cases in Court, which occurs once per week.
- Inspectors are required to be certified Housing Rehabilitation Inspectors, certified Housing Rehabilitation Code Enforcement Officers, Certified One and Two Family Home Dwelling Inspectors, certified in Legal Aspects of Code Enforcement, and certified in Zoning and Property Standards. Each of these is a certification issued by SBCCI.

Summary of Principal Performance

- Work hours are 7:30 a.m. till 4:00 p.m.
- From August, 2000 to January 28, 2003 (30 months), there have been a total of 2,213 Special Handling cases. Of these, 1,913 have been closed, and 200 are still open. The figure of 2,213 cases equates to 4.4 Special Handling cases per Inspector, per month, or somewhat more than one per four to five business days per Inspector.
- The Unit attempts to investigate Special Handling cases within 48 hours of the receipt of the

Department:	CODES ADMINISTRATION
Division:	INSPECTIONS
Section:	PROPERTY STANDARDS INSPECTIONS
<p>complaint. The Unit reports no defined targeted turnaround time for the investigation of non-Special Handling cases, although it reports they are handled as quickly as possible.</p> <ul style="list-style-type: none">• Conducted 19,041 code inspections in CY 2001. With an average of 14 Inspectors (this figure excludes Supervisory personnel over the three field units), this equates to an average of approximately 1,360 inspections per Inspector.• Conducted 29,281 code inspections in CY 2002. This equates to an average of 175.3 per Inspector per month, or approximately 8.5 per Inspector per day.	

Department:		CODES ADMINISTRATION					
Division:		INSPECTIONS					
Section:		PLANS EXAMINATION					
FTE	Total:	5	Filled:	5	Vacant:	0	
Budget	Total:		G.F.:		Other:		
Summary of Principal Activities:							
<ul style="list-style-type: none"> • Reviews plans submitted by applicants, making notations on plans as to necessary modifications prior to permit issuance. Plans Examiners ensure conformance with Standard Building Code, Standard Plumbing, Gas & Mechanical Codes, the Model Energy Code, the National Electrical Code and the CABO/ANSI Handicap Code. • Checks plans for proper dimensions, proper materials, construction methods, etc. • Plans Examiners discuss codes, standards and required modifications with architects, engineers, contractors, and other applicants. • Examiners report discrepancies and design variations and maintain files. • Administrative Assistant receives plans and distributes workload to Examiners, and places reviewed plans in work area for retrieval by applicants. 							
Summary of Principal Performance							
<ul style="list-style-type: none"> • Work hours are 7:30 a.m. till 4:00 p.m. • Plans Examiners reviewed 3,327 sets of plans in CY 2002. This equates to 1,109 sets of plans per Examiner last year. The total valuation of permits for which Plans Examiners performed reviews was \$673,545,289. • There are no reported targeted turnaround times for the review of submitted plans. 							

Department:		CODES ADMINISTRATION				
Division:		INSPECTIONS				
Section:		ADMINISTRATIVE SERVICES				
FTE	Total:	5	Filled:	5	Vacant:	5
Budget	Total:		G.F.:		Other:	
Summary of Principal Activities:						
<ul style="list-style-type: none"> • Customer Service Representatives (CSR) take inspection requests over phone from contractors, builders, the public. The requests are entered into the computer and issued to specific Inspectors based on geographic area. • CSR's type letters and general correspondence for trades inspections units. • CSR's interact with Gas and Electric agencies in turning on utilities at work sites. • CSR's enter results of inspections and retrieve this information at the request of contractors and others with interests in these results. • CSR's answer questions from the public regarding requirements to obtain Use & Occupancy permits. • One CSR types Use & Occupancy permits. One is assigned to handling Mechanical/Gas and Plumbing workloads, one is assigned to Electrical workloads, and one is assigned to Building Inspections workloads. The Supervisor, whose title is Administrative Assistant, oversees the activities of the Unit, distributes workloads, evaluates performance, ensures proper cross-training of CSR's, handles mistakes made on permits, and handles the clerical and administrative functions related to the Fire and Building Board appeals. • At the time of the on-site activities of the project team, the Unit had access to a Mechanical/Gas Inspector who was on light duty assignment, This employee was utilized in scanning final inspections, service release paperwork, etc. The Unit is attempting only to scan current work, and not historical files. This is being done by the Administrative Services Unit of the Zoning Administration Division. 						
Summary of Principal Performance						
<ul style="list-style-type: none"> • Work hours are 7:30 a.m. till 4:00 p.m. 						

Department:		CODES ADMINISTRATION			
Division:		ZONING ADMINISTRATION			
Section:		ADMINISTRATIVE SERVICES			
FTE	Total:	4	Filled:	4	Vacant: 0
Budget	Total:		G.F.:		Other:
Summary of Principal Activities:					
<ul style="list-style-type: none"> • One Customer Service Representative (CSR) operates the Department's switchboard, taking all calls for the Permits area and the Zoning and Plans Review sections, referring calls to the proper location. • The Unit is responsible for the filing of all map and parcel documents, correspondence, permits and all related actions relating to parcels. • Two CSR's scan documents for electronic storage. • The Unit's Supervisor, whose title is Administrative Services Officer III, relates information to applicants regarding child care facilities, group homes for the mentally and physically handicapped, ensuring plans meet parking and other requirements. • The Supervisor represents the Department on special events in the City such as the Italian Street Festival, Summer Lights, FanFare, street closings, etc. • The Supervisor handles the majority of correspondence for the BZA and maintains all related BZA files. Issues legal ads, neighborhood notices, Notices to Council, etc., for BZA. 					
Summary of Principal Performance					
<ul style="list-style-type: none"> • Work hours are 7:30 a.m. till 4:00 p.m. • Scanned and imaged 249,000 documents in 2000; 348,159 in 2001; and 461,901 in 2002. 					

Department:		CODES ADMINISTRATION					
Division:		ZONING ADMINISTRATION					
Section:		ZONING EXAMINATIONS					
FTE	Total:	7	Filled:	7	Vacant:	0	
Budget	Total:		G.F.:		Other:		
Summary of Principal Activities:							
<ul style="list-style-type: none"> • Unit is responsible for the administration of the permit process as it relates to building and zoning. • One Zoning Examiner spends a significant amount of time in the administration of BZA technical activities, notifying the public of BZA meetings, posting public signs, taking photos and including these in BZA meeting packets which assist in explaining variance requests, making PowerPoint presentations, and making presentations before the BZA. • Unit personnel write residential, commercial, blasting, sign and U&O permits. • Zoning Examiners perform zoning calculations from checklist which provides guidelines regarding categories needing to be analyzed. These categories pertain to setbacks, parking requirements, landscaping requirements, etc. • One Zoning Examiner is responsible for the liaison activities with the Beer Board, ensuring proper zoning, possession of U&O, etc. • Zoning Examiners examine each stage of plans before application for permit is issued. Further, Examiners examine building, sign and U&O permits. Verify compliance with regulations. • Zoning Examiners must obtain certification in Legal Aspects of Codes Enforcement within 2 years of employment. 							
Summary of Principal Performance							
<ul style="list-style-type: none"> • Work hours are 7:30 a.m. till 4:00 p.m. 							

Department:		CODES ADMINISTRATION			
Division:		ZONING ADMINISTRATION			
Section:		URBAN FORESTRY			
FTE	Total:	2	Filled:	2	Vacant: 0
Budget	Total:		G.F.:		Other:

Summary of Principal Activities:

- The Unit enforces Metro’s Landscaping, Buffering and Tree Replacement Code Chapter 17.24.
- Unit performs landscape plans review for the permitting process, making comments to bring plans into compliance and signing off on approved plans. Complainants have the option of appealing to the BZA for exceptions and variances. Sample items for examination by Urban Forestry include ensuring that proper protective fencing is installed at drip lines, ensuring the proper tree density on plans, ensuring that tree types are identified, ensuring that perimeter strips adjacent to public streets are within proper width tolerances, ensuring that 8% of interior paved areas are landscaped, examination of how irrigation will be installed, ensuring that the property’s zoning is indicated on plans, as well as that of surrounding properties, as well as other items.
- The Unit issues tree removal permits, issues citations and stop work orders on projects as conditions warrant, issues abate notices and orders tree replacements, orders the removal of diseased trees and monitors the surgery on diseased and hazardous trees.
- The Unit licenses arborists in Metro.
- Unit personnel make inspections of works in progress to make in-course corrections and make final inspections to assure conformance to approved plans.
- Performs public speaking engagements as requested. Conducts training classes as requested at local technical institute. Makes television appearances as requested.
- Personnel perform duties on several boards, including the Metro Tree Advisory Committee (which was created by the Landscaping Ordinance), the International Society of Agriculture and the Public Tree Committee. The Director serves as staff to the BZA.

Summary of Principal Performance

- Work hours are 7:30 a.m. till 4:00 p.m.
- The Urban Forestry Inspector reportedly conducted 556 inspections last fiscal year, including final inspections and rejections.

Department:		CODES ADMINISTRATION			
Division:		ZONING ADMINISTRATION			
Section:		CUSTOMER SERVICE			
FTE	Total:	5	Filled:	5	Vacant: 0
Budget	Total:		G.F.:		Other:

Summary of Principal Activities:

- Unit handles licensing, bonding and general liability requirements of contractors. Although the Director’s office handles the processing of new and renewal plumbing, electrical and Gas/Mechanical contractors’ licensing, the Customer Service Unit of the Zoning Division maintains and renews general liability insurance for the contractors.
- Customer Service Representatives may check the status of a contractor’s license on-line.
- Issues electrical, gas/mechanical, plumbing, low voltage permits and accepts fees for permits after applicants meet requirements.
- Customer Service Representatives set up debit accounts for contractors whereby “drawdowns” against deposits are made for permits.
- Maintains files for general contractor bond and general liability insurance. Corresponds with insurance companies for a variety of reasons, including their transmittal of general liability insurance status.
- One Customer Service Representative is located in the front of the permit area, assisting the public and applicants in answering procedural questions, routing applicants, answering phones and issuing permits.
- The Unit accepts faxed applications and processes these for routine permit applications.
- Customer Service Representatives research properties in map and parcel books as well as in the automated system.
- Customer Service Representatives print out and distribute tracking sheets which inform applicants which agencies must review plans prior to permit issuance.

Summary of Principal Performance

- Work hours are 7:30 a.m. till 4:00 p.m.
- In FY 2000, issued 12,365 building permits, 18,132 electrical permits, 7,870 plumbing permits and 8,881 mechanical permits. In FY 2001, these figures were as follows: 10,177 building permits, 17,877 electrical permits, 8,029 plumbing permits and 8,159 mechanical/gas permits.
- Approximately 52% of applicants established and used a debit account in FY 2001. The Department estimates that 55% of applicants will utilize this feature in FY 2003.

Department:		CODES ADMINISTRATION					
Division:		ADMINISTRATIVE SERVICES					
Section:							
FTE	Total:	4	Filled:	4	Vacant:	0	
Budget	Total:		G.F.:		Other:		
Summary of Principal Activities:							
<ul style="list-style-type: none"> • Receives and processes cash receipts of the Department. These receipts include permit fees, appeals board fees, license renewals, Fire and Buildings Board, Property Standards Board, file copies, liens on property, abandoned vehicle fees and other revenue sources. • Assists Director in making decisions regarding proposed payment plans and amounts for property for which liens are outstanding. The Division maintains historical files on properties on which liens are placed. • The Division develops Department and Divisional budgets in conjunction with Divisional managers. Monitors budgets and informs managers of potential issues regarding expenditures. • Maintains and purchases office supplies. • Makes capital purchases for Department. • The Division performs an advisory role to the Department Director in fiscal, operational, administrative and personnel matters. • The Division serves as liaison with Metro Human Resources, making requests and preparing paperwork for the filing of new and vacant positions. The Administrative Services Manager makes decisions regarding which applicants meet Departmental criteria after Metro HR send prioritized list. Division personnel assist new employees in setting up insurance. The Division also conducts civil service investigations and processes customer complaints. Further, the Division distributes performance evaluation forms and processes these after receipt from managers. Administers personnel policies and procedures for the Department. 							
Summary of Principal Performance							
<ul style="list-style-type: none"> • Work hours are 7:30 a.m. till 4:00 p.m. 							

ATTACHMENT D
COMPARISON TO BEST MANAGEMENT PRACTICES

Department:	CODES ADMINISTRATION	
Division:	INSPECTIONS	
Best Management Practice	Nashville-Davidson County Performance	
<ul style="list-style-type: none"> • There is a consistent basis utilized in the Division for the filing of documents. Typically this is based on address. • There is a central filing point in the Office where all documents are filed, thereby facilitating a department-wide capability of tracking the progress of document/application review. 	<ul style="list-style-type: none"> • Central filing of documents is based on address. The Division is currently in the process of electronic imaging of all original files. There are reportedly approximately 3.5 million in the central filing location. 	
<ul style="list-style-type: none"> • Does the Division's automated information system integrate all departmental functions, including receiving and tracking, development applications and inspections activity? 	<ul style="list-style-type: none"> • This is currently the case with the Department's internally-developed automated system. The Department is currently in the process of evaluating new software systems, however it is a requirement that the new system incorporate these features. 	
<ul style="list-style-type: none"> • Does the information system allow land-based records look-up for all parcels, including all relevant land use, construction and inspections history? 	<ul style="list-style-type: none"> • The current information system allows for records look-ups for all parcels, land use and inspections histories. The Department is, however, in the process of searching for a new system. 	
<ul style="list-style-type: none"> • Are documents scanned and electronically stored to minimize physical storage space? 	<ul style="list-style-type: none"> • Customer Service Representatives in the Administrative Services Unit of Inspections electronically scan copies of final inspections, correspondence, canceled permits, service releases, etc., as they are completed. This Unit of the Department does not image historical files, however. This is accomplished by the Zoning Division. 	
<ul style="list-style-type: none"> • Are there established target turnaround times for plan reviews? 	<ul style="list-style-type: none"> • Interviews indicate that there are no established turnaround times for these reviews. Plans Review Unit indicates that it makes a determination regarding the likely time period plans will be needed based on the lengths of time others in the review process are likely to take. 	
<ul style="list-style-type: none"> • Do Inspectors utilize laptop computers in the field to document the results of inspections? 	<ul style="list-style-type: none"> • Laptops are currently not available to Inspectors. The use of laptops would enable Inspectors to document the results of inspections immediately, avoiding the transcription of results at the end of the day. 	
<ul style="list-style-type: none"> • Does the office provide next day inspections? 	<ul style="list-style-type: none"> • Each of the trades inspection units (i.e., electrical, mechanical, plumbing, building) indicates that there is a goal of providing next-day inspections if the applicant makes the request by 3:00 p.m. • A review of statistics collected internally indicates that the inspections units are in fact 	

Department:	CODES ADMINISTRATION	
Division:	INSPECTIONS	
		meeting this targeted service level, as most months the “number of days to inspect” is less than 1.0, indicating that the average time to conduct the average inspection is less than one day.
<ul style="list-style-type: none"> Do inspectors average 12-15 stops per day, per inspector? 	<ul style="list-style-type: none"> The number of inspections per Inspector varies among the trades. For example, Electrical Inspectors average 15.1 inspections per day; Plumbing Inspectors average 17.3 per day; Mechanical/Gas Inspectors average 13.2 per day; and Building Inspectors average 11.5 per day (although it should be noted that Building Inspectors are rejecting about 17% of all inspections, which lengthens the amount of time expended on each inspection). It should also be noted that benchmarks for the numbers of inspections per Inspector measure “stops” per day, rather than numbers of inspections. Generally, these numbers will not vary significantly from each other, however there will be more inspections performed than stops made, as inspectors may make multiple inspections at the same “stop”. This is typical of inspections within new subdivisions, and the project team did observe several such multiple inspections during ride-alongs with inspectors. 	
<ul style="list-style-type: none"> Do plan check staff average between 800 and 1,000 plans per year? 	<ul style="list-style-type: none"> The Plans Review Unit of Inspections has 3 dedicated Plans Examiners (the Chief Plans Examiner conducts a small number of reviews, however these are small enough that the position is not included in the number of Reviewers for this calculation). With 3,327 reviews completed in CY 2002, this equates to 1,109 reviews per Plans Examiner. 	
<ul style="list-style-type: none"> Do inspections per permit average between 4 and 5? 	<ul style="list-style-type: none"> With 44,242 permits issued in 2001, and 100,298 inspections, this equates to only 2.3 inspections per permit. 	
<ul style="list-style-type: none"> Do the hours of operations for the Building Inspections Office coincide with contractor work hours? 	<ul style="list-style-type: none"> The office opens at 7:30 a.m. The project team noted no significant issues with the hours of operation either through staff interviews or through focus group input. 	
<ul style="list-style-type: none"> Does the Property Standards Unit process citizen complaints in a timely manner and provide public assistance to assist violators in achieving corrective action on code compliance violations? 	<ul style="list-style-type: none"> The Codes Administration Department has instituted a “Special Handling” case processing service whereby citizens making complaints which receive high-level visibility may have complaints investigated within 48 hours. Generally, however, 	

Department:	CODES ADMINISTRATION	
Division:	INSPECTIONS	
		routine cases are not investigated within this time period.
<ul style="list-style-type: none"> Does the department utilize multi-discipline inspectors? Plan reviewers? 	<ul style="list-style-type: none"> There are no multi-disciplinary inspectors in the Department currently, although this was reportedly done in prior years. This approach was reportedly not well-accepted by the construction community, although this has not been verified by the project team. The 3 Plans Examiners, however, are multi-disciplinary. 	
<ul style="list-style-type: none"> Are the office's fees recovering the full cost of service delivery? 		<ul style="list-style-type: none"> (This is discussed in detail within the report.)
<ul style="list-style-type: none"> Are plan reviewers available to the public during conventional office hours? 		<ul style="list-style-type: none"> The Plans Review Unit ensures that a Plans Examiner is available during all conventional business hours.
<ul style="list-style-type: none"> Are the inspectors routed on a geographic basis? 		<ul style="list-style-type: none"> All of the trades inspection units route Inspectors on a geographical basis, although the Building Inspections Unit further segments its inspections into commercial and residential inspections.
<ul style="list-style-type: none"> Do Code Enforcement Officers accomplish 2,500-2,800 inspections annually per Officer? 		<ul style="list-style-type: none"> In CY 2002, Property Standards Inspectors accomplished 29,281 inspections of properties. Although 17 different Inspectors contributed to this total, a total of only 155 "Inspector months" were accumulated, equating to an average of 175.3 inspections per Inspector per month. This equates to an average of approximately 8.8 inspections per Inspector per day, and about 2,104 per Inspector per year.

Department:	CODES ADMINISTRATION	
Division:	ZONING	
Best Management Practice	Nashville-Davidson County Performance	
<ul style="list-style-type: none"> • There is a consistent basis utilized in the Division for the filing of documents. Typically this is based on address. • There is a central filing point in the Office where all documents are filed, thereby facilitating a department-wide capability of tracking the progress of document/application review. 	<ul style="list-style-type: none"> • Central filing of documents based on address. The Division is currently in the process of electronic imaging of all original files. There are reportedly approximately 3.5 million in the central filing location. • The Department requires that all files be checked out through the Customer Service Representatives in the Administrative Services Unit of the Zoning Division, however each employee has access to the file room via keyless entry. 	
<ul style="list-style-type: none"> • The central file retains all original documents. Staff work only with copies. 	<ul style="list-style-type: none"> • Staff continue to work with original documents to the extent that they have not been electronically imaged. 	
<ul style="list-style-type: none"> • Does the Division's automated information system integrate all departmental functions, including receiving and tracking, development applications and inspections activity? 	<ul style="list-style-type: none"> • This is currently the case with the Department's internally-developed automated system. The Department is currently in the process of evaluating new software systems, however it is a requirement that the new system incorporate these features. 	
<ul style="list-style-type: none"> • Can builders, developers and applicants submit application materials electronically, with the ability to submit signatures electronically? 	<ul style="list-style-type: none"> • This is currently not available. However, developers may submit applications via facsimile. 	
<ul style="list-style-type: none"> • Does the information system allow land-based records look-up for all parcels, including all relevant land use, construction and inspections history? 	<ul style="list-style-type: none"> • The current information system allows for records look-ups for all parcels, land use and inspections histories. The Department is, however, in the process of searching for a new system. 	
<ul style="list-style-type: none"> • Are documents scanned and electronically stored to minimize physical storage space? 	<ul style="list-style-type: none"> • The Administrative Services Unit of the Zoning Division has committed two Customer Service Representatives to the electronic imaging of all documents in the historical files (i.e., 1975 and prior). These documents include as-builts, inspections, etc. Customer Service Representatives in the Inspections Division are imaging all current documents as they are completed. 	
<ul style="list-style-type: none"> • Can applicants pay permit (i.e., bldg., plumbing, electrical, mechanical, foundation, grading, TCO/CO) fees over the internet? 	<ul style="list-style-type: none"> • This is not currently available, although applicants may establish debit accounts whereby they pre-pay for expected permit activity, and accounts are debited the appropriate amounts. 	
<ul style="list-style-type: none"> • Do the hours of operations for the permit applications office coincide with contractor work hours? 	<ul style="list-style-type: none"> • The office opens at 7:30 a.m. The project team noted no significant issues with the hours of operation either through staff interviews or through focus group input. 	
	<ul style="list-style-type: none"> • This is currently the case with the 	

Department:	CODES ADMINISTRATION	
Division:	ZONING	
<ul style="list-style-type: none"> Does the Division utilize permit tracking software? 	<p>Department's internally-developed automated system. The Department is currently in the process of evaluating new software systems.</p>	
<ul style="list-style-type: none"> Does the department provide for enforcement of the tree protection and landscaping ordinances? 	<ul style="list-style-type: none"> The Urban Forestry Unit of the Zoning Division enforces the Landscaping, Buffering and Tree Replacement Ordinance. It accomplishes this primarily through plans reviews and final inspections. This constitutes somewhat of a limitation on the Unit's ability to properly enforce the Ordinance's requirements as it may only discover violations (such as the absence of a tree protection fence, encroachment upon the tree "drip line", etc.) until final inspection. 	
<ul style="list-style-type: none"> Are the office's fees recovering the full cost of service delivery? 	<ul style="list-style-type: none"> (This is discussed in detail in the report) 	
<ul style="list-style-type: none"> Does the office provide "over the counter permits"? 	<ul style="list-style-type: none"> Yes, the Department provides both fax capability for permit processing as well as many instances in which customers are able to obtain same day permits. 	

ATTACHMENT E
Tabulated Results of the Customer Surveys

Metro Nashville and Davidson County, Tennessee

Tabulated Results of the Permitting, Inspections and Plan Review Functions Survey

Please check the box stating how strongly you agree or disagree with the following statements. If you have not had experience with a particular item, please check "N/A" for the Statement. If you have had experience with a topic, but do not have a strong feeling, please check "Neutral." Thank you for your help with this survey of the Metro Codes Administration and Planning Departments.		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Total Responses
1	When submitting an application, I have found the staff at the counter to be responsive and helpful.	30	46	6	6	3	5	96
2	Staff were helpful in assisting me understand the requirements of obtaining a permit in Nashville.	30	44	4	8	1	9	96
3	Permit handouts were helpful and informative.	25	27	23	3	1	17	96
4	Plan checks are complete and accurate; problems did not surface later which should have surfaced during the plan check.	13	33	9	3	1	37	96
5	I did not have to wait an excessive amount of time to find out if my original submittal was complete or needed more information.	16	34	8	7	4	27	96
6	Within the constraints of the City's codes, staff conducting the plan checks were practical in applying regulations.	15	36	7	4	2	32	96
7	Staff conducting plan checks were fair in dealing with my permit application.	14	37	9	1	2	33	96
8	Department staff were accessible when I needed help in resolving problems.	23	37	13	5	4	14	96

Please check the box stating how strongly you agree or disagree with the following statements. If you have not had experience with a particular item, please check "N/A" for the Statement. If you have had experience with a topic, but do not have a strong feeling, please check "Neutral." Thank you for your help with this survey of the Metro Codes Administration and Planning Departments.		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Total Responses
9	The time it took to approve plans was reasonable.	11	25	14	5	3	38	96
10	Inspectors were timely in responding to my request for inspections.	36	35	14	7	2	2	96
12	Inspectors were courteous when conducting inspections.	38	45	6	5	1	1	96
13	Inspectors were knowledgeable in conducting inspections.	36	47	9	3	1		96
14	When inspectors found a problem they were clear in explaining what I had to do to correct it.	36	43	10	2	1	4	96
15	Inspection staff were fair in conducting inspections.	37	48	8	2	1		96
TOTAL RESPONSES		360	537	140	61	27	219	

Metro Nashville and Davidson County, Tennessee

Tabulated Results of the Zoning Enforcement Survey

	Please check the box stating how strongly you agree or disagree with the following statements. If you have not had experience with a particular item, please check "N/A" for the Statement. If you have had experience with a topic, but do not have a strong feeling, please check "Neutral." Thank you for your help with this survey of the Metro Codes Administration and Planning Departments.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Total Responses
1	When submitting an application, I have found the staff at the counter to be responsive and helpful.	2	5	1	2			10
2	Staff were helpful in assisting me understand the requirements of obtaining zoning or a zoning variance in Nashville.	1	6	2	1			10
3	Permit handouts were helpful and informative.		4	3	1	1	1	10
4	Zoning / variance application reviews are complete and accurate; problems did not surface later that should have surfaced during the review.	1	3	1	3	1	1	10
5	I did not have to wait an excessive amount of time to find out if my original submittal was complete or needed more information.	2	2	3	3			10
6	Within the constraints of the City's zoning ordinance, staff conducting the zoning / variance reviews were practical in applying regulations.	2	3	1	3	1		10
7	Staff conducting zoning / variance reviews were fair in dealing with my permit application.	2	2	2	2	1	1	10
8	Codes Administration staff was accessible when I needed help in resolving problems.		2	4	1	1	2	10
9	The time it took to approve plans was reasonable.		4	2	2	2		10
10	Inspectors were timely in responding to my request for zoning / variance information.		3	3	1		3	10
11	Staff were courteous when conducting zoning / variance inspections.	1	3	3	1		2	10

Please check the box stating how strongly you agree or disagree with the following statements. If you have not had experience with a particular item, please check "N/A" for the Statement. If you have had experience with a topic, but do not have a strong feeling, please check "Neutral." Thank you for your help with this survey of the Metro Codes Administration and Planning Departments.		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Total Responses
12	Staff were knowledgeable in conducting zoning / variance inspections.	1	4	1	3	1		10
13	When staff found a problem during a zoning / variance inspection, they were clear in explaining what I had to do to correct it.	1	2	3			4	10
14	Staff were fair in conducting zoning / variance inspections.		5	2	1		2	10
TOTAL RESPONSES		13	48	31	24	8	16	

ATTACHMENT F

Tabulated Results of the Peer City Surveys

F1: Responses for Plan Review, Permits, and Inspections Functions

SURVEY ITEM	Nashville, TN	Indianapolis, IN	Austin, TX	Jacksonville, FL	Norfolk, VA	Louisville, KY	AVERAGE
Staffing							
No. plan reviewers	3	N/R	10	9	5	11	8
No. building inspectors	10	N/R	5	22	5	12	11
No. electrical inspectors	8	N/R	10	13	4	14	10
No. mechanical inspectors	7	N/R	4	8	4	11	7
No. plumbing inspectors	7	N/R	5	10	3	4	6
No. code enforcement inspectors	17	N/R	N/R	14	N/R	N/R	16
No. combined inspectors	N/A	15	12	N/R	N/A	N/R	14
No. elevator inspectors	N/A	N/R	N/R	N/R	2	3	3
Subtotal – Direct	52	15	46	76	23	55	45
No. support personnel	9	3	12	33	9	15	14
Totals	61	18	58	109	32	70	58
Work Volume – Permits							
No. plan reviews	3,327	N/R	2,921	23,014	2,270	N/A	7,883
No. building permits	10,177	9,962	37,051	19,145	4,402	9,410	16,338
No. electrical permits	17,877	7,503	above number is total	26,354	3,328	12,130	13,438
No. mechanical permits	8,159	10,848	above number is total	19,567	2,780	15,492	11,369
No. plumbing permits	8,029	5,141	above number is total	17,635	2,048	4,584	7,487
No. elevator permits	N/A	N/R	above number is total	N/R	77	State issues all elevator permits	77

METRO NASHVILLE DEPARTMENT OF CODES ADMINISTRATION
Performance Audit Final Report: June 5, 2003

SURVEY ITEM	Nashville, TN	Indianapolis, IN	Austin, TX	Jacksonville, FL	Norfolk, VA	Louisville, KY	AVERAGE
No. mobile homes and signs	N/A	N/R	above number is total	3,869	N/R	N/R	3,869
No. other permits	N/A	763	above number is total	N/R	N/R	N/R	763
Total Permits	44,242	34,217	37,051	86,570	12,635	41,616	42,721
Work Volume – Inspections (FY 2002 data)							
No. mobile homes and signs	N/A	N/R	N/R	2,842	N/R	N/R	2,842
No. building inspections	30,127	11,834	63,472	102,183	12,685	23,098	40,557
No. electrical inspections	29,873	5,767	above number is total	51,100	8,132	24,605	23,895
No. mechanical inspections	17,930	4,238	above number is total	34,623	7,495	20,315	16,920
No. plumbing inspections	29,295	6,464	above number is total	42,865	7,003	7,356	18,597
No. combined inspections	0	N/R	87,474	0	N/R	N/R	29,158
No. elevator inspections	0	N/R	N/R	N/R	210	1,899	1,055
Totals	107,225	28,303	150,946	233,613	35,525	77,273	147,603
Budget vs Actual Revenue Data (FY 2003)							
Total budget for Codes Admin.	\$6,683,707	N/R	\$9,200,000	\$7,925,360	\$2,019,349	\$3,400,000	\$5,636,177
Total Fees collected by Codes Admin.	\$6,497,000	\$2,561,642	\$9,000,000	\$7,589,576	\$1,271,767	\$3,090,811	\$4,702,760
Percent of Budget Offset through Fees	97%	N/A	98%	96%	63%	91%	87%
Population	565,352	731,327	329,892	750,000	234,000	693,604	550,696
Square Miles	502	362	256	841	221	63	374

SURVEY ITEM	Nashville, TN	Indianapolis, IN	Austin, TX	Jacksonville, FL	Norfolk, VA	Louisville, KY	AVERAGE
Work Process							
Average time for residential plan review	Sample indicates 22.6 days	N/R	N/A: Only Zoning	3-5 days initial review	1.8 days	30 minutes	5.7 days
Average time for complex plan review (Industrial/Commercial)	Sample indicates 12.8 days for average commercial review	N/A: State level review prior to local receipt	21 days	10 days initial review	15 working days	1 – 4 hours if submitted ready; 10 days if incomplete	11.8 days if submitted ready; 13.8 days if incomplete
Extent of technology used	Permit applications may be made via fax. Debit accounts available for payments.	Dell lap-tops; Verizon air-card; e-mail, MS Office; on-board printer	None	Real time results from field with laptop; processes may be tracked on Internet.	None	Handheld computer device w/stylus; real time data available in field with wireless tools	N/A
Policy for turn around on inspection request	Same day if received by 2:00 p.m. Next day thereafter.	48 hours or Expedited inspection of 2 hours (\$40 fee)	90% performed within 24 hours. Remaining 10% in 48 hours.	24 hours	9:00 AM cut-off for same day inspection	Immediate service is the policy; 48 hours if running behind	N/A
Use of Design Review Board as part of permitting process?	No	Yes (Historical Districts & Landmarks)	No	No	Yes	Yes (Overlay and Landmark District Reviews)	N/A

SURVEY ITEM	Nashville, TN	Indianapolis, IN	Austin, TX	Jacksonville, FL	Norfolk, VA	Louisville, KY	AVERAGE
Are Codes Admin., Zoning and Nuisance Code Enforcement and Planning in the same or different departments? If different, please list departments.	Codes and Property Standards in same department. Planning is separate and does not include zoning.	Zoning - Separate section of same division. Unsafe & Vacant Buildings - Marion County Health & Hospital Corporation.	Codes - Watershed Protection. Zoning & Housing - Neighborhood Planning.	Zoning - Planning. Nuisance - Neighborhood s. Building - Public Works.	Codes - Dept. of Planning/Community Development. Nuisance Code Enforcement - Dept. of Neighborhood & Leisure Services.	N/R	N/A

F2: Responses for Property Standards and Nuisance Code Enforcement

SURVEY ITEM	Nashville, TN	Indianapolis, IN	Austin, TX	Jacksonville, FL	Norfolk, VA	Louisville, KY	AVERAGE
Zoning, Property Standards and Nuisance Code Enforcement							
Staffing							
No. property standards inspectors	17	N/R	N/R	N/R	24	30	27
No. zoning inspectors/examiners	N/A	16	N/R	N/R	N/R	6	11
No. other inspectors	N/A	N/R	N/R	N/R	1	N/R	1
Subtotal - Direct	17	16	0	0	25	36	24
No. support personnel	4	2	N/R	N/R	6	4	4
Totals	21	18	0	0	31	40	28
Work Volume - Inspections							
No. property standard inspections	29,281	N/R	N/R	N/R	13,067	68,000	35,863
No. zoning inspections	N/A	17,460	N/R	N/R	3	1,466	6,310
No. other inspections	N/A	N/R	N/R	N/R	1,265	154	710
Totals	29,281	17,460	0	0	14,335	69,620	31,985
Work Volume - Cases							
No. active property standard cases	2,847 (est., based on average over 30 month period)	N/R	N/R	N/R	5,951	N/R	5,951
No. active zoning enforcement cases See above		3,910	N/R	N/R	N/R	137	2,024
No. other cases	N/A	N/R	N/R	N/R	581	N/R	581
No. Zoning Board of Appeals cases 306		550	N/R	N/R	N/R	216	383
Totals	3,153	4,460	0	0	6,532	353	3,782

SURVEY ITEM	Nashville, TN	Indianapolis, IN	Austin, TX	Jacksonville, FL	Norfolk, VA	Louisville, KY	AVERAGE
Budget and Actual Revenue Data							
Total budget for Property Standards, Zoning Code, and Nuisance Code Enforcement	\$1,791,097	\$1,752,752			\$1,410,544	\$2,290,500	\$1,817,932
Total Fees and Revenues Generated by Property Standards, Zoning Code, and Nuisance Code Enforcement (other than fines and forfeitures)	\$94,800	None	N/R	N/R	N/A for Nuisance Code Activities	None	N/A
Totals	484,800	\$1,752,752	\$0	\$0	\$1,410,544	\$2,290,500	\$1,817,932
Population	565,352	731,327	329,892	750,000	234,000	693,604	550,696
Square Miles	502	362	256	841	221	63	374
Work Process							
Average time for initial complaint inspection	No service level target for "routine" cases; special handling cases are investigated within 48 hours.	48 hours	N/R	N/R	Nuisance: 1 day, Zoning: 48 hours	120 hours	2.6 days
Average time to achieve compliance (up to point of court action)	Unknown	N/A	N/R	N/R	Code: 90 days Environmental: 7 days Zoning: 5 days	90 days	90 days for code cases

SURVEY ITEM	Nashville, TN	Indianapolis, IN	Austin, TX	Jacksonville, FL	Norfolk, VA	Louisville, KY	AVERAGE
Extent of technology used	Hand-held radios	Hand-held radios; laptops	N/R	N/R	N/A	Handheld computers	N/A
Policy for notification of complainants	Written notification and/or phone call	Written Notice (Mail)	N/R	N/R	Codes - Written Legal Note (Mail) Zoning - Letters or Violation Notices	Written Notice (Mail)	N/A
Does community have Sign Ordinance?	Yes	Yes	N/R	N/R	Zoning - Yes	Yes	N/A
Are Codes Admin., Zoning, Nuisance Code Enforcement, and Planning in the same or different departments?	Planning is in separate department, Health Department administers portion of nuisance code.	Same (Dept. Of Metropolitan Development). Nuisance Code Enforcement is also handled by the Health Department.	N/R	N/R	Nuisance - Dept. of Neighborhood & Leisure Services. Codes and Zoning - Dept. of Planning & Community Development.	Zoning – Planning & Design Services. Code Enforcement & Property Maintenance – Dept. of Inspections	N/A