Information Item

Date:	January 12, 2021
To:	Mayor, Mayor Pro Tempore, and Members of the City Council
From:	Damon Dequenne, Assistant City Manager Ben Rowe, Assistant City Manager Aaron King, Director of Planning and Development Services

Subject:
Information item on current issues impacting the timeliness of construction related inspections

Strategic Focus Area: Service Excellence
Strategic Objective: Ensure Service Delivery Efficiency and Effectiveness
Strategic Plan Action Item: No
Key Work Item: No

Background Information

The Planning & Development Services Department (PDS) is composed of two divisions: Planning and Inspections. The Inspections Division contains the Construction Control personnel who are responsible for enforcement of the NC State Building Code. Personnel in this area include the Permit Office staff (8), Plan Reviewers (4), and Inspectors (22) with expertise in electrical, building, mechanical, and plumbing. The Inspections Division also includes the Zoning Enforcement staff which consists of four field inspectors and one supervisor. As PDS is a City-County Department, the Inspections Division provides Construction Control services to all of Forsyth County other than the Town of Kernersville. The Inspections Division does not provide inspection-related services for roads, utilities, minimum housing code, or erosion control.

As the Inspections Division is responsible for the enforcement of the NC State Building Code, they are also bound by additional Building Code provisions included in the General Statutes. Specifically related to the purpose of this report is NCGS 143-139.4 which requires that inspections be performed within two business days of their request date. The NCGS also provide for measures to be taken when a local inspections department fails to consistently meet the required two business day standard. NCGS 143-151.8 contains the provisions for the NC Code Officials Qualifications Board and it goes on further to empower said Board with oversight of "willful misconduct, gross negligence, or gross incompetence." A local inspections department is deemed to meet this definition when they have engaged in "the habitual failure to provide requested inspections in a timely manner" with the penalty for said action being disciplinary action toward the Chief Building Official.

This report has been prepared for discussion at the Public Works Committee because the Inspections Division has consistently failed to meet the required two business day timeline for requested inspections.

Methodology

The content of this report has been provided by personnel from various departments including PDS, Human Resources, Budget, and Office of Performance and Accountability (OPA). The subsequent information will provide data on the workload of the Inspections Division, benchmarking data from the NC Benchmarking Project, and comparative salary/compensation information from peer communities. The intent of this report is to offer a comprehensive view of relevant issues that offer context into the issues of timeliness of inspections.

Performance/Benchmarking Data

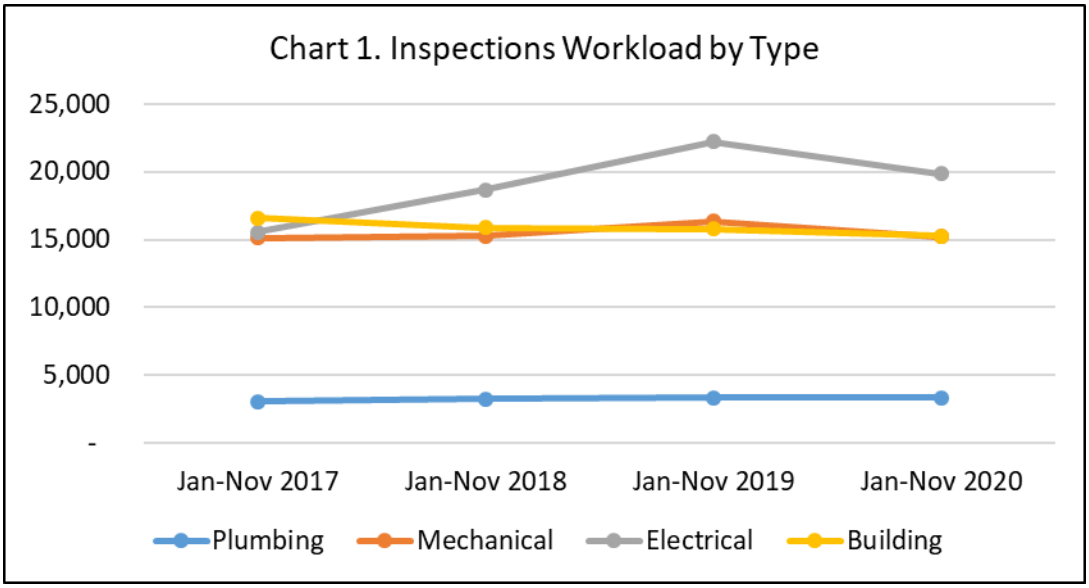
The following performance data is provided to illustrate workload, efficiency, and effectiveness information for the Inspections Division of the Planning & Development Services Department. Internal performance data is shown as well as jurisdictional comparisons as reported through the North Carolina Benchmarking Project. The Benchmarking Project includes NC municipalities with the following nine providing data used in the analysis below: Apex, Asheville, Chapel Hill, Goldsboro, Greensboro, Greenville, Raleigh, Wilson, and Winston-Salem.

Workload

Table 1 below shows inspections by type for the period January through November for each of the last four years. Chart 1 shows the same information depicted as a line graph to highlight the increase in electrical inspection workload.

Table 1. Number of Inspections Conducted

Date Range	Plumbing	Mechanical	Electrical	Building	Total
Jan-Nov 2017	3,061	15,103	15,568	16,565	50,297
Jan-Nov 2018	3,268	15,252	18,674	15,895	53,089
Jan-Nov 2019	3,370	16,339	22,229	15,805	57,743
Jan-Nov 2020	3,372	15,211	19,840	15,253	53,676

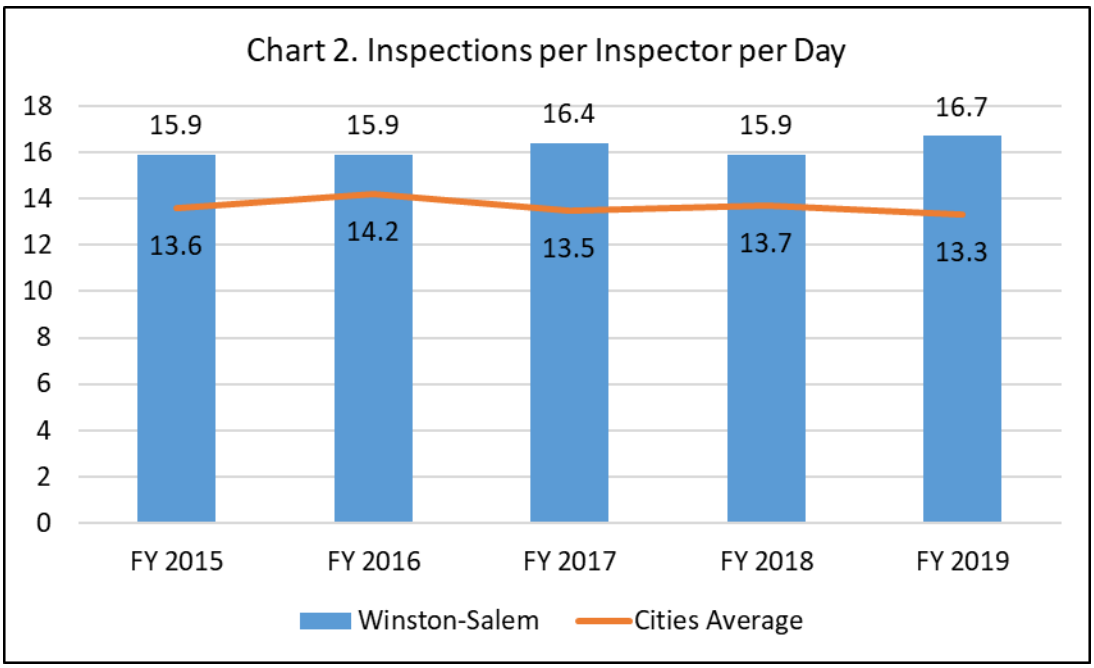


Analysis of Workload Data:

Electrical inspections have been the primary driver of the increase in workload for the last three years. Electrical inspections increased 27% in three years, and were 16% higher in calendar year 2019 compared to 2020. One factor contributing to the increase in electrical inspections relates to Duke Energy's efforts to replace the outside service panel and meter box on many homes constructed prior to the 1970s. There are thousands of homes in Forsyth County impacted by this initiative. This effort has impacted and will continue to significantly impact the efficiency of electrical inspections for the near term. Plumbing inspections have increased by 10%, mechanical inspections are roughly the same (less than 1% increase), and building inspections have decreased by 8%. Overall workload has increased nearly 7% from 2017 to 2020.

Efficiency

The most commonly used measure of efficiency for construction control services is inspections per inspector per day. The North Carolina Benchmarking Project (NCBP) data excerpted below in Chart 2 shows a five-year comparison between the City and the average of the comparison group for all inspection types performed. The most recent NCBP data available is from the report for the fiscal year 2019.

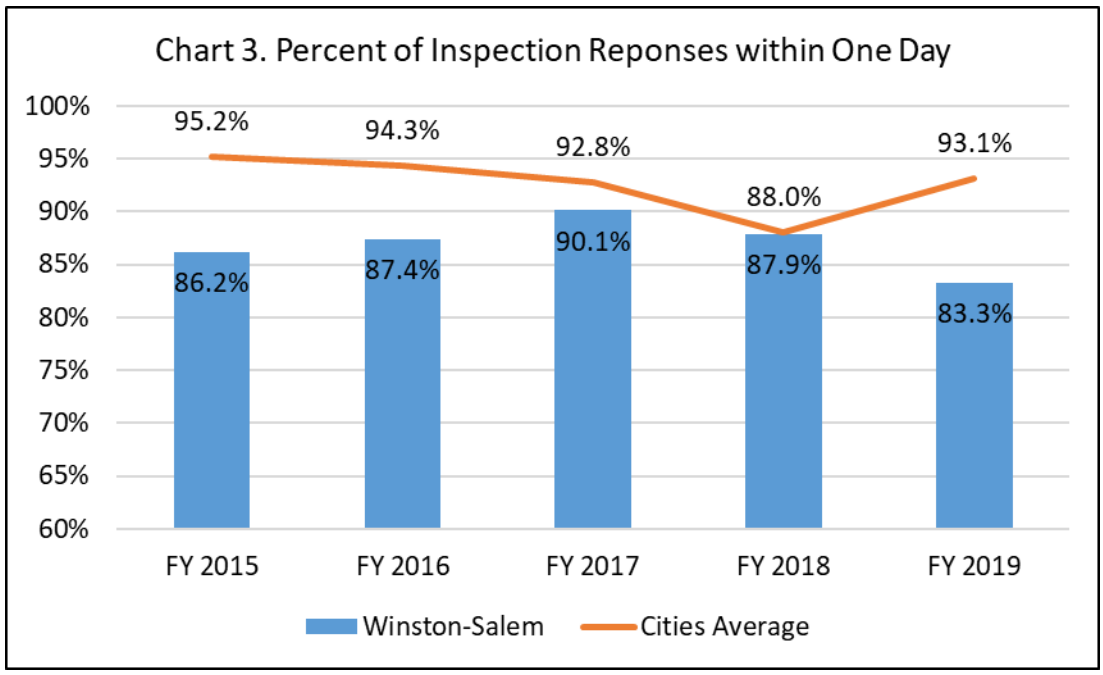


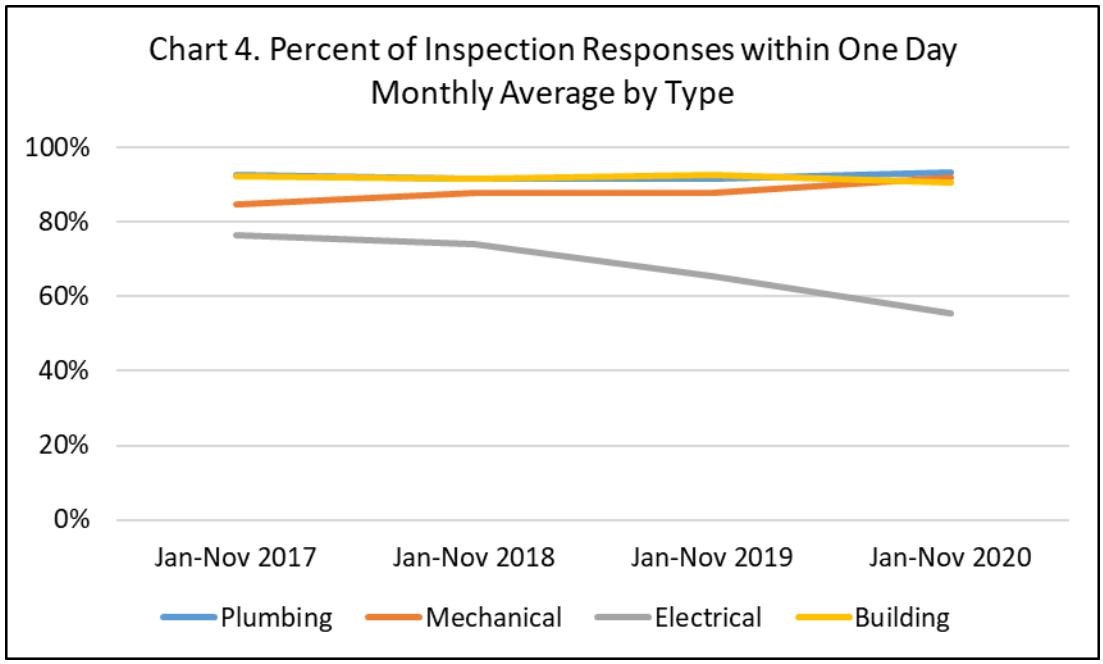
Analysis of Efficiency Data:

Efficiency data shows that the City's (including county inspections as part of a City/County department) performance exceeds the average of the other cities in the NCBP over the five-year period reported above. The City's internal performance metrics shows that efficiency has increased slightly in calendar year 2020, which is not reflected in the NCBP data above.

Effectiveness

The most commonly used metric of effectiveness has been the percentage of inspections completed within one business day (State law now requires inspections to be completed within two business days). Chart 3 on the next page depicts the percent of inspections responded to within one business day compared to other cities in the NCBP. Chart 4 shows the City's internal metrics, by inspection type, for inspections completed within one business day.





Analysis of Effectiveness Data:

Effectiveness data shows the City has been habitually lower than the average of the other cities in responding to inspection requests, with a significant divergence in fiscal year 2019. The City's downward trend overall, which continues downward in calendar year 2020 data, is caused mostly by the response to electrical inspection requests. In calendar year 2020, responses to requests for building, plumbing, and mechanical inspections were

completed within one day more than 90% of the time; however, that percentage falls to 56% for electrical inspections. For the months September through November, electrical inspection timeliness, as measured above, fell below 50%.

Overall Analysis
The predominant issue within the Inspections Division appears to be related to electrical inspection timeliness. The number of inspection requests has increased while the ability to complete those within one business day has fallen sharply. There has been no significant change in overall efficiency as measured by the number of inspections completed per day.

Comparison of Peer Communities

As part of this report, staff wanted to offer a comparative view of how inspector positions are compensated in peer communities. The chart below provides a summary of the hiring minimum/mid-point/maximums along with information on how peer communities compensate inspectors for obtaining additional certifications. All peer communities surveyed offer some level of compensation for obtaining additional certifications; the City of Winston-Salem does not. There are three inspector certification levels and the levels are earned through education, experience and prior inspections or construction employment. The levels are based on inspections for building size, building complexity of design, and the type of occupancy. The average length of time for an inspector with an extensive construction background to reach a Level III Certification is four to five years after employment as an inspector. The benefits of providing compensation for additional certifications are numerous. First, it serves as an effective tool to retain existing employees. Second, it places an employer at a more competitive place in the market when trying to recruit new employees. Third, it provides an incentive for an employee to gain additional certifications thus making the employee more versatile and more efficient in their work. An inspector with multiple certifications can conduct multiple inspections per site rather than having individual inspectors visit the site to review for compliance within their respective trades.

Jurisdiction	L-I Minimum	Midpoint	Maximum	Level I	Level II	Level II	Level III	2nd Level II	2nd Level III
Guilford	$44,774	$52,609	$73,334	52,000 + 2%	plus 2%	plus 2%	plus 2%	plus 2%	plus 2%
Surry	$49,000	$56,995	$64,989	Plus 3%	plus 3%	plus 3%	plus 3%	plus 3%	plus 3%
High Point	$51,238	$59,927	$68,616	plus 5%	plus 5%	plus 5%	plus 1.5%	plus 1.5%	plus 1.5%
Durham	$50,408	$64,000	$77,591	No Change	$56,706	$61,327	plus 1.5%	plus 1.5%	plus 1.5%
Raleigh	Hires at Level II Only				$62,400	plus 2.5%	plus 2.5%	plus 2.5%	plus 2.5%
Charlotte	Hires at Level II Only				$62,900	$66,400	plus 3%	plus 1%	plus 1%
Winston-Salem	$47,799	$59,749	$71,699						

1. A level I starting in Guilford will earn $53,040 and then get 2% for every level attained and 2% for every additional certificate and level.
2. Employees in Surry County receive an annual 3% Cost of Living increase.
3. High Point's newest inspector started at $51,238. The highest paid field inspector with all four trades earns $70,418 annually and has no supervisory duties.
4. Raleigh guarantees 1% per year, the last two hires started at $66,000 with one Level III.

The Inspections Division has had several inspector positions vacant and advertised over the past year. The number of qualified candidates received for these positions is typically low and in some cases staff has had to re-advertise due to lack of qualified candidates. Another challenge faced during the recruiting and hiring process is competition from peer communities. On occasions where a qualified candidate was offered a position, the applicant chose another employer whose compensation was more lucrative. The Inspections Division continues to face challenges in attracting and hiring qualified inspectors. There are also difficulties in retaining existing inspectors as peer communities (along with private sector construction companies) have the ability to offer more robust compensation packages. Over the past few years, the Inspections Division has lost at least seven employees who obtained employment with a peer community or within the construction industry.

Operational Challenges

Several factors have emerged in recent times that have contributed to the issue of timely inspections. First, permit volumes have remained high with electrical experiencing the greatest increase. The robust construction market along with low interest rates for home mortgages have contributed to the increase in volume. Second, the Inspections Division has had challenges in keeping the 22 budgeted inspector positions consistently filled. As of this writing, four of the 22 positions remain vacant leaving 18 inspectors currently on

staff. This consistent reduction in personnel routinely leaves the Inspections Division in a position of not having enough staff to adequately handle the volume of inspections being requested. Each day, the Inspections Division carries over dozens of inspections that have not been completed. Add these carryovers to the following day's workload and there is no opportunity for staff to get fully caught up. Staff from the Plan Review team routinely chip-in to help out with field inspections in an effort to "triage" when inspection numbers spike. While helpful, this effort has the negative effect of putting plan review further behind in meeting their respective deadlines. Last, when Inspections staff consistently run behind on meeting deadlines, it negatively impacts construction crews and homeowners as they attempt to properly sequence construction activities. This causes longer timeframes for construction and leads to frustration as construction crews become less efficient in waiting for inspections to be conducted.

Summary

The development community within Forsyth County has a reasonable expectation that inspections be conducted in a timely manner and in compliance with the two business day timeframe prescribed by the State. Inspections staff is fully committed to providing quality customer service and meeting said deadline consistently. Inspections management has worked to adjust territories to make workloads more balanced, deployed staff from Plan Review to help with workloads, and offered overtime to inspectors interested in additional hours. These efforts have been positive but they have not significantly impacted the issue of timeliness. The information provided above offers insight into many of the issues that impact the ability of inspections to be conducted in a timely manner. Staff will be present at the January 12, 2021 Public Works Committee to provide a more detailed presentation on this item and should recommendations be requested, staff will work to offer a menu of alternatives.