Analysis of Code Enforcement and Implementation, Permitting Requirements and Fees, and Training and Education in Florida Jurisdictions

RINKER-CR-2017-101

Draft Final Report

19 May 2017

Submitted to

Florida Building Commission and Building A Safer Florida (BASF) State of Florida Department of Business and Professional Regulation

Authors

R. Raymond Issa, Ph.D., J.D., PE, F.ASCE, API

Copyright © 2017 Center for Advanced Construction Information Modeling/University of Florida All Rights Reserved.

CACIM
Rinker School
University of Florida
Box 115703
Gainesville, FL 32611-5703

www.bcn.ufl.edu/cacim



DISCLAIMER

The Center for Advanced Construction Information Modeling/University of Florida nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the Center for Advanced Construction Information Modeling/University of Florida or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the Center for Advanced Construction Information Modeling/University of Florida or any agency thereof.

TABLE OF CONTENTS

	<u>Page</u>
Executive Summary	1
Background	4
Survey Results	
A. Demographic Questions	4
B. General Jurisdictional and Departmental Data	9
C. Training and Information Relating to Interpretations	11
D. Permitting and Associated Fee Structures	14
E. Code Enforcement and Associated Fee Structures	17
Conclusions and Recommendations	24
APPENDIX A – Survey Printout From Qualtrics	25
APPENDIX B - Exclusions	36

EXECUTIVE SUMMARY

This study of permitting and code enforcement in the State of Florida was conducted by the University of Florida's Center for Advanced Construction Information Modelling in partnership with Building a Safer Florida (BASF). The study consisted of a survey, distributed in two rounds, which focused on developing an understanding of permitting and code enforcement processes, training and pricing structures across the State of Florida. The survey was distributed via email, first to a list of code enforcement and permitting professionals licensed in the State of Florida and then by the Building Officials Association of Florida (BOAF) to its membership. The survey consists of a series of demographic questions followed by sections focused on the following data: general jurisdictional and departmental, training and information relating to interpretations, permitting and associated fee structures, and code enforcement and associated fee structures. A total of 95 complete responses were gathered, with responses from 53.7% (36) of the counties in Florida. The presented results and findings are limited to the responses received and full participation from every county would need to be achieved in order to gather a more holistic view of permitting and code enforcement practices in the State of Florida.

The results indicate that the respondents represented 36 counties in the State of Florida with the majority working in jurisdictions defined at the city level and an average jurisdictional size of 943 square miles. A total of 94.7% (90) of all the respondents were male and the vast majority 92.6% (88) possessed a 5001-Standard Inspector license. The majority of respondents carried general building, residential or commercial, certifications with other represented as well. When asked to provide an official job title a total of 102 titles were provided by the 95 respondents with 9 indicating they carried multiple titles. There were 29 distinct job title categories reported, with Building Official and Inspector being the most common responses. The demographics indicate a reasonably diverse sample and provides insight into the lack of uniformity in job titles in the departments in charge of permitting and code enforcement throughout the state.

The next grouping of questions related to general jurisdictional and departmental data. The intent of this section of the survey was to establish the way departments are labeled and organized throughout the State of Florida. A total of 25 distinct department names were reported from the 95 respondents with "Building Department" and "Building Division" being the most common. The average annual permit volume was reported in the following categories as: new construction – 4,446, renovation or existing construction – 4,351, residential construction – 16111, and commercial construction – 25,285. Based on the responses, permitting and code enforcement were the responsibility of the same person or people within 40% of the departments. Approximately 83% (79) of respondents indicated that there was a rigid chain of command within their department, with one person ultimately responsible for decision making and protocols. Furthermore, the results indicated an average rating of 8.5, on a 10-point Likert scale with 1 being not supported and 10 being fully supported, when asked how they felt their supervisor/supervisors supported the decisions made in regards to permitting and code enforcement. The next section build upon these findings by focusing on departmental training and code interpretation processes.

The primary goal of the training and interpretation section of the survey was to determine the access to and level of training received by code enforcement and permitting professionals, as well as provide basic insight into the overarching interpretive processes followed throughout the State of Florida. The results indicated that 50.5% (48) of the respondents received training for permitting, and 48.4% (46) received training for code enforcement, multiple times per year. Furthermore, 84.2% (80) indicated that they felt they had access to training materials and resources

necessary for their jobs. A total of 52% (25 out of 48) indicated that they were required to recertify bi-annually, with 81.05% indicating that they were provided the opportunity to gain certifications in additional disciplines. The comments provided for these questions indicated that this was largely dependent on the size and staffing of the department the respondent was a part of, with larger departments being more compartmentalized among disciplines. In regards to interpretive processes, 80% (76) of departments indicated having formal interpretive processes, such as written departmental policy, and the ICC code commentary was used "sometimes" or "always" by a combined 53.7% (51) of the jurisdictions. The final two sections of the survey focused on gathering greater details related to permitting and code enforcement practices throughout the state.

The average reported turnaround time to receive a permit was 12.4 days. Additionally, over 97% of respondents indicated their individual departments and 100% of their specific jurisdictions provided plan review services for residential or commercial construction. In relation to cost, 33.7% of respondents indicated that they did not have a set cost schedule for residential permits, and 37.9% indicated no set cost schedule for commercial permits. The primary explanation was that permit costs were based on either project value or area. The results indicated that 51.22% of permits were approved without comment and 38.4% required more than one re-submission to gain approval. In addition, 52.6% (50) of departments were reported as not charging a re-submission fee for a permit, while a fee ranging from \$10 to \$440 was reported by the rest. A total of 50.5% (48) of departments indicated that they charged fees above and beyond the initial permit amount. The explanation for these fees included: state surcharge, environmental impact, processing, and fire assessment. Finally, 97.9% of departments indicated that they provided permitting support during the application process.

In relation to code enforcement, 35.8% (34) of the respondents reported having monthly meetings, with an additional 30.5% (29) reporting weekly meetings related to code enforcement policies and procedures. An average rating of 3.0 on a 10-point Likert scale with 1 being no deviation and 10 being a great deal of deviation, was indicated when the respondents were asked to rate the amount of deviation in code enforcement decisions that existed within their department. Communication and effective leadership or oversight was the most frequently cited reason for low deviation. Differences of experience, opinion, and personal interpretations were cited as the primary reasons resulting in greater deviation. While a rating of 3.0 is reasonably low, the max rating provided was 8 which should be considered. Furthermore, it was indicated that 65.3% (62) of the departments relied on the same person or people to inspect multiple disciplines with 81.1% indicating that there existed one head inspector who held final responsibility for all decisions made. The results indicated an average wait time for inspections in their jurisdiction to be 1.4 days with 92.6% (88) of the departments including the cost of initial inspection in the permit cost. Furthermore, 70.5% (67) of the respondents indicated no difference in the inspection fee amount based on the discipline being inspected, with the average cost being \$71.45. A majority, 89.5% (85), of departments charged re-inspection fees with an average reported cost of \$56.05. In addition, the results showed that 71.1% of projects received approval on the first inspection with 36.5% reportedly requiring more than one re-inspection. The final questions in this section related to the existence of a board of adjustment and appeal to review code enforcement decisions made by the department. A total of 64.4% (58) of departments indicated having such a board, which render an average of 31 decisions annually.

This study provides baseline findings for the current state of permitting and code enforcement departments and processes in the State of Florida. The findings are limited by the

honesty and thoroughness of the respondents, as well as the 53.7% of counties which were represented. Moving forward, it will be crucial to gather data from each county across the state, while meeting with department heads in as many jurisdictions as possible to improve the quality of the responses. Each respondent was thanked for sharing their valuable time and insight, which was crucial to the successful collection of data for this study. Overall, permitting and code enforcement in the State of Florida appears to vary between jurisdictions in a number of ways, especially in relation to departmental organization and pricing structures. While greater response rates and more thorough answers are always the goal this study provides a solid foundation on which informed decisions regarding further areas of interest and investigation can be made.

BACKGROUND

This analysis is based on survey responses collected by the University of Florida's Center for Advanced Construction Information Modelling in partnership with Building a Safer Florida (BASF). The survey was developed to assess the current state of code enforcement and permitting across the state of Florida. The survey begins with basic demographic questions then is broken down into sections collecting the following data: general jurisdictional and departmental, training and information relating to interpretations, permitting and associated fee structures, and code enforcement and associated fee structures. Each section was designed to gather data in an effort to determine current practices in various jurisdictions across the state. Skip-logic was employed throughout the survey to ensure that questions which were no longer relevant based on a respondents previous responses were not presented to them. Researchers received Institutional Research Board (IRB) approval from the University of Florida and administered the survey through the online survey platform Qualtrics. The survey was initially distributed via email, to a list of currently licensed code enforcement and permitting professionals in the State of Florida provided by DPBR. The number of responses received from this survey were 71 and covered 32 counties. Subsequently, a second a round of survey invitations were emailed by the Building Officials Association of Florida (BOAF) to its membership. The latter survey yielded 24 responses from 20 counties for a cumulative total of 95 responses from 36 counties. A total of 16 counties received responses in both the first and second round of the survey distribution. The survey was open for 90 days over the course of the two rounds and was closed once responses ceased for a period of one week after sending a reminder email to those building officials whose county was not yet represented in the completed responses. The presented results are solely based on the average of the collected responses from both survey rounds and relies on the accuracy and thoroughness of each of the individual respondents. The presented results are limited by the fact that only 53.7% (36 out of 67) of the Florida counties participated in the survey. While every effort was made to solicit results from across the state, full participation from every county would be required for a more holistic view of the current state of code enforcement and permitting in the state of Florida.

SURVEY RESULTS

A. Demographic Questions

The demographic questions asked in this survey focused on the roles, certifications, and gender for the professional being surveyed, as well as the geographical and population information for their jurisdiction. There were a total of nine questions in the demographic section of the survey (See Appendix A). Five of the questions (Q0.1 - Q0.32) related to the definition of their jurisdictional area, three (Q0.33-Q0.5) related to the licenses and roles of the respondent, and the final question (Q0.6) asked for the gender of the respondent. Of the respondents, 94.7% (90) reported as male with 5.3% (5) reporting as female.

Of the 67 counties in the State of Florida, complete responses were received from 36 counties, with multiple respondents from 23 counties. Figure 1 shows a map of the counties represented by complete responses, as well as the number of responses received within each county. Within each county the jurisdictions of the respondents varied from the entire county to individual neighborhoods. Figure 2 provides a breakdown of the reported jurisdictional area types. The majority of the responses, 58, reported their jurisdictional area as a city, with 30 reporting the entire county as their jurisdictional area. Other was indicated 6 times, with descriptions of town, village, consolidated county and state property jurisdiction provided. The average jurisdictional area size was 942.72 square miles with a minimum size of 0.18 square miles and a maximum of 60,000 square miles. Following the questions related to jurisdiction, the respondents were asked questions about their specific job title and certifications.

A total of 88 respondents possessed a 5001-Standard Inspector license, a 5002-Standard Plans Examiner license was reported by 76 respondents and 69 respondents reported having a 5003-Building Code Administrator License. Figure 3 provides a breakdown of the licenses reported in the survey. The respondents were asked to define their official job title and a total of 29 distinct titles were reported, with trade specific titles categorized together where indicated. Figure 4 shows the provided job titles, with building official being the most common (39). A total of 102 titles were reported by the 95 respondents, as some reported having multiple titles. Finally, respondents were asked to indicate which disciplines they were certified in. Figure 5 shows the response by discipline certifications. General building inspection, both commercial and residential, received the highest response rates, 75 and 74 respectively, with 3 indications of no certification and 31 instances of certification in areas outside of those provided. The descriptions provided under "Other" included; fire inspector, coastal, master code professional, floodplain, modular, gas, 1 & 2 family, plans examiner and certified building official.

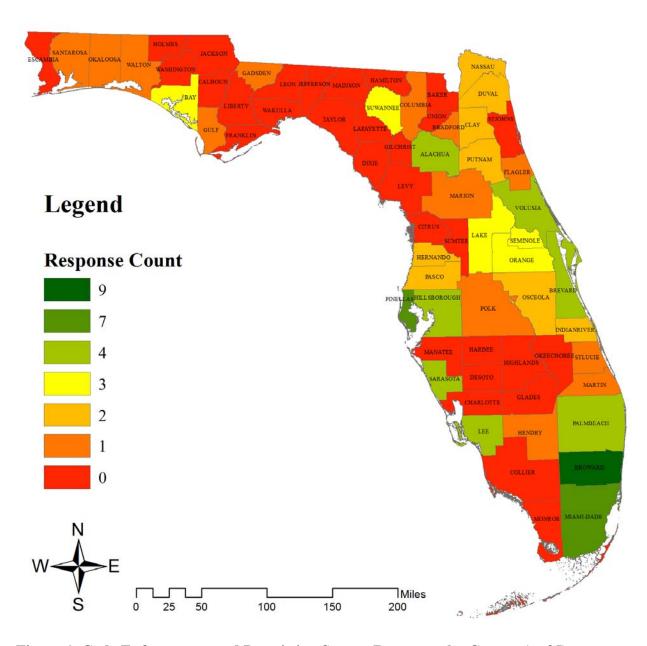


Figure 1. Code Enforcement and Permitting Survey Responses by County (n=95)

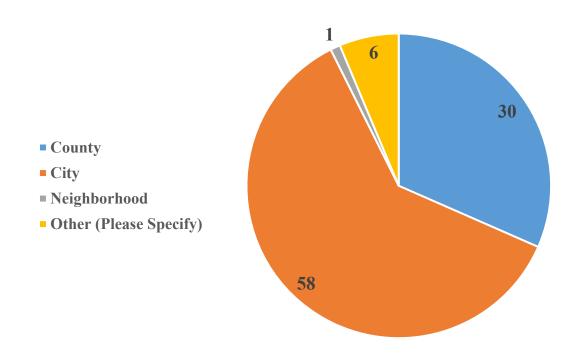


Figure 2. Jurisdictional Area by Type (n=95)

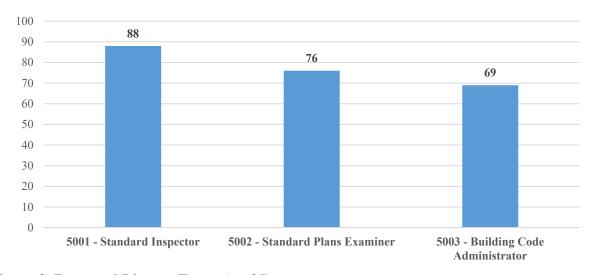


Figure 3. Reported License Types (n =95)

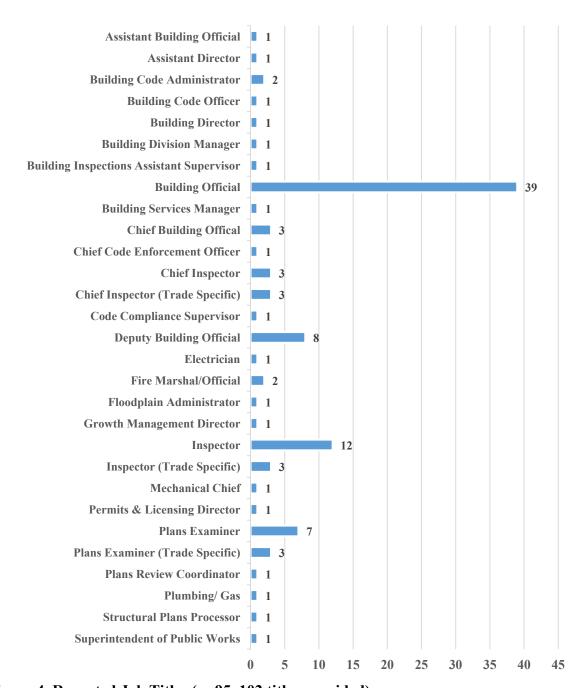


Figure 4. Reported Job Titles (n=95, 102 titles provided)

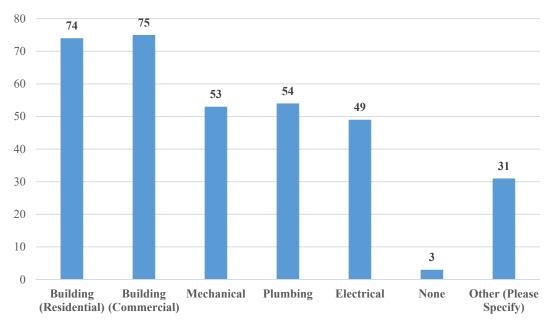


Figure 5. Certified Inspection Disciplines of Respondents (n=95, multiple responses allowed)

B. General Jurisdictional and Departmental Data

Respondents were asked to provide information about the jurisdiction and department they operate in. Questions ranged from the title of the department to the breakdown of employees within their department. The intent of this section of the survey was to establish the way departments are labeled and organized throughout the State of Florida. The first question (Q1.1 in Appendix A) asked for the official name of the department in which the respondent was a code enforcement or permitting professional. The department names were categorized into 25 distinct responses. Figure 6 provides a breakdown of the 25 distinct names and frequency with which they were reported. The names "Building Department", "Building Division", "Community Development", and "Development Services" were the four most prevalent responses in the order listed. In addition to the name of the department, responses were provided which indicated the approximate permit volumes for each jurisdiction.

As show in Table 1, the average annual permit volume for new construction was reported as 4,447 and is shown in Table 1. Existing building or renovation construction had an average reported annual permit volume of 4,351 (see Table 1). The approximate annual permit volumes for residential construction and commercial construction were also reported and are shown in Table 1. The average annual permit volume issued for residential construction was 16,111 and the average annual permit volume issued for commercial construction is 25,285.

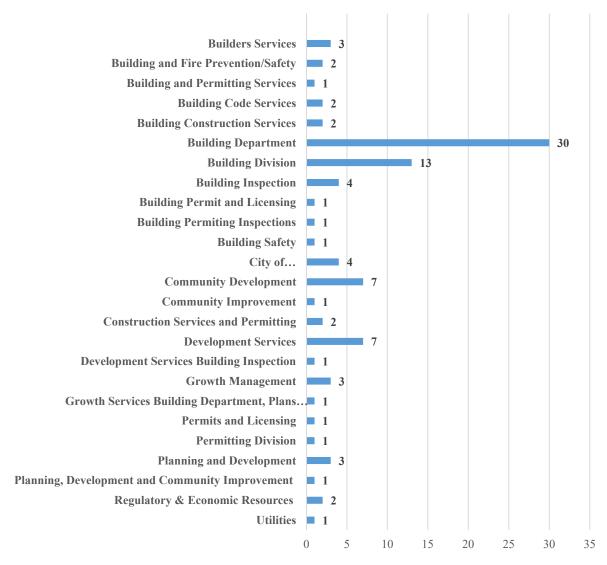


Figure 6. Official department names (n=95)

Table 1. Annual Permit Volumes

Permit Type	Minimum	Maximum	Mean	Std. Dev.
New Construction	1	112,500	4,447	14,575
Exist. Bldg./ Renovation	0	50,000	4,351	7,673
Residential Construction	0	1,000,000	16,111	105,789
Commercial Construction	1	2,000,000	25,285	211,799

The approximate number of employees by role was reported in the categories of; code administrators, plan reviewers, inspectors, and other. There was an average of 3 code administrators, 9 plan reviewers, and 14 inspectors reported per jurisdictional area. The details for each category are reported in Table 2. In addition to these categories respondents were able to

select employees in an "Other" category. The descriptions provided in the "Other" category included; support staff, permit technicians, code compliance, elevator, design professionals, civil engineer and code enforcement professionals. Figure 7 shows the breakdown of responses as to whether or not permitting and code enforcement responsibilities resided with the same person within the respondent's jurisdiction. The results are shown by county to provide an indication of how responsibilities are divided throughout Florida. A reported 40.0% (38) of the respondents to the survey indicated that permitting and code enforcement responsibilities resided with the same person or persons. The final questions in this section of the survey related to the chain of command and supervisor support provided within the respondent's department. Approximately 83.2% (79) of the respondents indicated that a rigid chain of command existed within their department, with one person ultimately responsible for decision making and protocols. Furthermore, an average rating of 8.5 on a 10-point Likert scale with 1 being not supported and 10 being always supported, was reported, when asked how they felt their supervisor/supervisors supported the decisions made in regards to permitting and code enforcement. Following this section of the survey, questions were asked related to training and code interpretations.

Table 2. Number of employees by Job Title (n=95)

	Minimum	Maximum	Mean	Standard Deviation
Code Administrators	0	51	3	6
Plan Reviewers	0	408	9	42
Inspectors	0	358	14	39

C. Training and Information Relating to Interpretations

The third portion of the survey was related to training, certification, and code interpretive processes (see Appendix A). A total of fourteen questions were asked, with eleven related to certifications (Q2.1 - Q2.11) and three (Q2.12 - Q2.14) related to interpretative processes within the respondents jurisdiction. The primary goal of this section was to determine the access to and level of training received by code enforcement and permitting professionals in the state of Florida. Secondarily it provided basic insight into the overarching interpretative processes followed throughout the state.

The results showed that 50.5% (48) of respondents received training related to permitting "multiple times per year" and 22.1% (21) indicated that they received "yearly" training. Figure 8 shows a breakdown of all responses provided for the amount of training received related to permitting. Similarly, 48.4% (46) of the respondents indicated that they received training related to code enforcement "multiple times per year" and 20% (19) received "yearly" training. Figure 9 provides a breakdown of the responses for the amount of training received related to code enforcement in their jurisdiction. The majority of responses for both permitting training and code enforcement training were "multiple times per year" and "yearly" training. Furthermore, 84.2% (80) of the respondents felt that they had access to the training materials and resources which were necessary to do their job. Beyond training, respondents were asked questions related to the certification opportunities and resources they received.

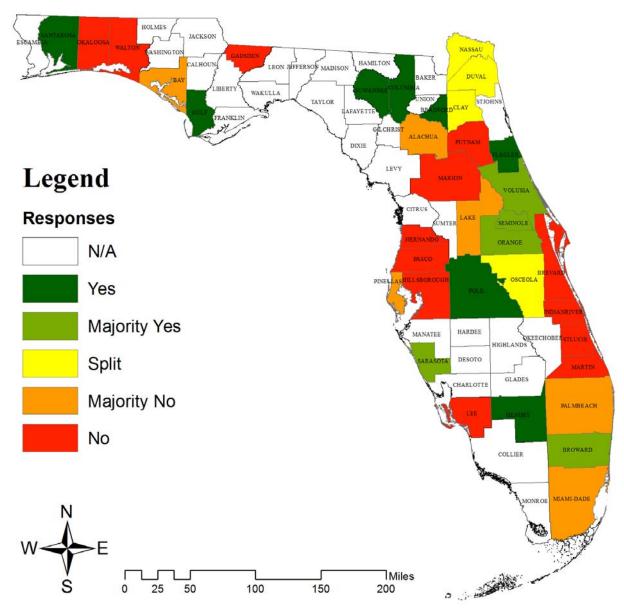


Figure 7. Division of Permitting and Code Enforcement Responsibilities (n=95)

When asked the frequency of re-certification required for the various inspection disciplines in which they were certified, the majority of respondents, 52.0% (25 out of 48) indicated a two year re-certification cycle. Other responses included three years and yearly continuing education. A total of 81.1% (77) of the respondents indicated that they were provided opportunities to earn certifications in additional inspection disciplines. Of those who had the opportunity to receive additional certifications, 93.5% (72 out of 77) indicated that they received financial support for required courses and certification exams toward earning certificates in new disciplines.

Additionally, 92.2% (71 out of 77) reported feeling that they had the support of their supervisor to obtain such additional certifications. Of the respondents who indicated that they did not receive opportunities or support for earning additional certifications, the common reasons provided were; budget, not necessary in large departments where work is subdivided, prohibited

by workload, lack of experience in other fields in jurisdictions where you are required to be a certified contractor in the discipline in which you are inspecting, not encouraged by superiors, and no cross training provided. When asked about the amount of continuing education hours required per year, the results indicated that on average a total of 17.1 hours were required. A minimum of 4 hours and a maximum of 80 hours was reported. Similar to the certification questions 88.9% (95) of respondents, indicated that they were made aware of continuing education opportunities available to them. A total of 82.1% (78) of respondents indicated that they were encouraged to participate in continuing education beyond what was required.

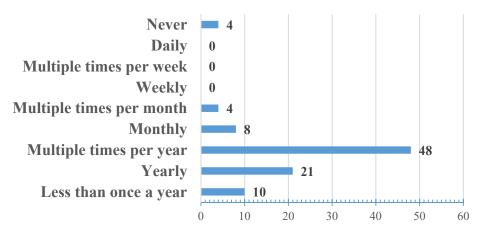


Figure 8. Frequency of training related to permitting (n=95)

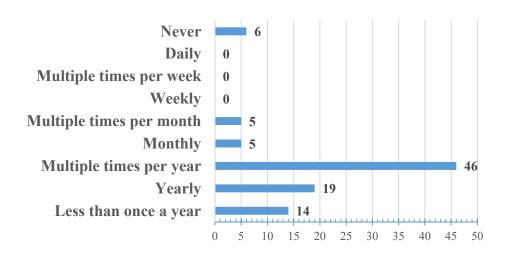


Figure 9. Frequency of training related to code enforcement (n=95)

The final three questions (Q2.12 - Q2.14) of this section related to code interpretative process within the respondent's jurisdiction. The results indicated that 80.0% (76) of the departments represented in this survey provide formal interpretive processes for practitioners

beyond the application and enforcement of the code, e.g. written building department policy, local rules, local ordinances, or local code amendments. Furthermore, Figure 10 shows the results related to the use of the ICC code commentary in day-to-day operations. The results indicated that 34.7% (33) of the jurisdictions used the ICC code commentary "sometimes", 19% (18) "always" use the code commentary, and 23.2% (22) indicated an "informal reliance" on the code commentary. A total of 5 jurisdictions reported "formal acceptance" of the ICC code commentary and the rest indicated non-use of the commentary. Finally 87.4% (83) of the jurisdictions indicated that their staff was familiar with statewide interpretive processes, e.g. requesting a non-binding interpretation by Building Officials of Florida, and declaratory statements or binding interpretations by the Florida Building Commission (FBC). Subsequent to this section respondents were asked questions specific to permitting and code enforcement fees and processes.

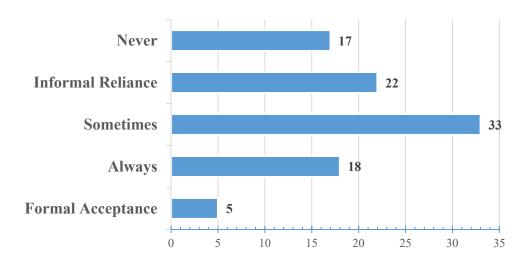


Figure 10. Use of ICC code commentary in day-to-day operations (n=95)

D. Permitting and Associated Fee Structures

A total of twelve questions were asked (Q3.1 – Q3.11 in Appendix A) related to permitting processes and fee structures within the respondent's jurisdiction. The results indicated that the average turnaround time for a permit application in the responding jurisdictions was 12.4 days with a minimum of one day and maximum of 180 days reported. The average time from permit to certificate of occupancy was reported as 171.9 days with a minimum of one and a maximum of 2196 days. In relation to plan review services for permitting, 97.9% (93) of the jurisdictions reported providing plan review services for residential permits and 100% (95) indicated offering such services for commercial permits. Furthermore, the results indicated that on average 51.2% of plans were approved without comment and 38.4% of plans required more than one resubmission. Following the questions related to permitting procedures respondents were asked about the fee structure within their jurisdiction.

The results indicated that 33.7% (32) of jurisdictions did not have a standard permit fee amount for residential construction but based it on project value or building area. Of the jurisdictions that did indicate a fee, 66.3% of the sample population, the average fee was \$3,073 with a minimum of \$35 and a maximum of \$35,000. A total of 37.9% (36) of jurisdictions reported not having a standard fee for commercial permits. Of the 62.1% of jurisdictions who did indicate a fee, the average fee for a commercial permit was \$810, with a minimum of \$54 and a maximum of \$100,000. Furthermore, as shown in Figure 11 broken down by county to show the distribution of fees charged across Florida, 47.4% (45) of the respondents indicated that they did not charge a permit resubmission fee. For the responses that indicated the charging of a re-submission fee, the fees ranged from \$10 to \$440 or indicated that they were based on the initial permit value.

In addition to base permit fees, respondents were asked whether additional fees above and beyond the initial permit amount were charged by their individual departments or jurisdictions. A total of 50.5% (48) of the departments reported charging fees above and beyond the initial permit amount. Table 3 shows a sample of the common descriptions for the fees charged by a department which were above and beyond the permit amount. Multiple respondents indicated more than one fee type charged by their department. The majority of descriptions provided did not include a dollar amount but were rather descriptive of the type of fee and, in some cases, the percentage added to the permit amount. Similar to the fees charged by departments, 51.6% (49) of jurisdictions were reported as charging fees above and beyond the initial permit amount. Table 4 provides a sample of the descriptions for jurisdictional fees reported which were above and beyond the initial permit amount. The descriptions were similar to those provided at the department level with the addition of: development permit fee, land dedication units, zoning, and pass through fees. Lastly, a total of 97.9% (93) of respondents reported that their individual department provided permitting support during the application process, while 92.6% (88) indicated that the specific jurisdiction in which they operated provided similar permitting support.

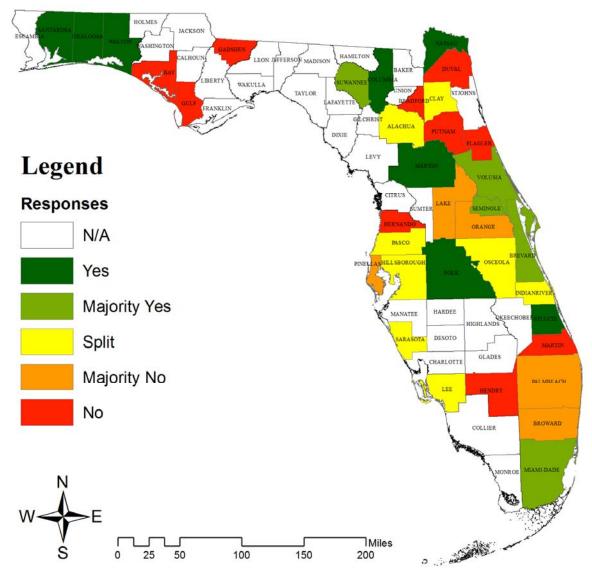


Figure 11. Jurisdictional permit resubmission fee (n=95)

Table 3. Sample of departmental fees charged above and beyond the permit amount

- State surcharge fees
 Impact Fees
- 3. Revision fee
- 4. Plan review fee
- 5. 4% surcharge
- 6. \$5,000
- 7. Plan addendum fees
- 8. Contractor registration, \$50

- 9. Environmental impact
- 10. Fire Assessment
- 11. Processing
- 12. Technology
- 13. Water sewer impact
- 14. Education and training
- 15. Inspections

Table 4. Sample of jurisdictional fees charged above and beyond permit amount

1. State surcharge fees	8. Contractor registration, \$50.0
2. Impact Fees	9. Land dedication units
3. Development permit fees	10. Zoning
4. Plan review fee	11. School
5. Fire Review	12. Sewer
6. \$5,000	13. Escrow fee
7. Pass through fees	14. Sewer connection fees
15. \$45 residential fee and \$55 commercial fee	

E. Code Enforcement and Associated Fee Structures

A total of sixteen questions (Q4.1 – Q4.16 in Appendix A) were asked related to code enforcement and associated fee structures. The questions were in three categories, code enforcement practices (Q4.1 – Q4.7), associated fees (Q4.8 – Q4.13), and decision or appeals processes (Q4.14 – Q4.16). The goal of this section of the survey was to provide baseline information from across the State of Florida for how code enforcement is conducted, regulated and priced. The initial questions in this section focused on establishing the departmental procedures and perceived deviation related to code enforcement. Figure 12 shows the frequency of meetings related to code enforcement policies and development reported throughout the state. Weekly meetings were reported by 30.5% (29) of the respondents and another 35.8% (35) indicated monthly meetings. A total of 9.5% (9) of the jurisdictions reported never having meetings related to this subject matter.

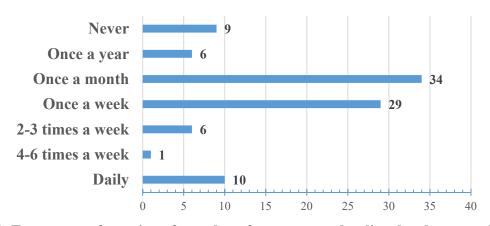


Figure 12. Frequency of meetings for code enforcement and policy development (n=95)

In regards to perceived deviation in code enforcement, the results indicated an average rating of 3.0, on a 10-point Likert scale with one being none at all and ten being a great deal of deviation, with a reported minimum of one and maximum of eight. Table 5 lists a sample of the common positive and negative reasons, in no particular order of frequency or importance, provided for the selected deviation ranking. The provided explanations varied, with communication showing up most frequently in the positive reasons. Differences of opinion or personal interpretation were the most cited reasons in the negative explanations provided. The results further showed that 65.3% (62) of the jurisdictions had the same people conduct inspections for a variety of disciplines (see Figure 13). Furthermore, 81.1% (77) of the jurisdictions reported having one head inspector who was ultimately responsible for the decisions made by the department. However, the results further indicated that the average level of supervisory involvement in code enforcement activities was a 4.5, on a 10-point Likert scale with 1 being none at all and 10 being a great deal of involvement.

Table 5. Description of reasons for perceived code enforcement deviations

Negative		
	1.	Interpretation variation
	2.	Level of experience (in field or in code enforcement)
	3.	Code ambiguity
	4.	Individual background experiences
	5.	Uninformed employees
	6.	Lack of leadership
	<i>7</i> .	Trust in the builder
	8.	Personal code ideologies
	9.	Lack of similar and consistent training
	10.	Volume of work being permitted
	11.	Use of old information
Positive		
	1.	Being the only person in a department
	2.	Daily discussions within department
	3.	Standard operating procedures and checklists
	4.	Teamwork and interoffice communication
	5.	Building official oversight
	6.	Staff training and communication

The physical permitting process was the subject of the next grouping of questions with the goal of determining whether there existed any large deviations in time and cost among the responding jurisdictions. On average, the wait time for an inspection was reported as 1.4 days, with a minimum of 0.3 days and a maximum of 24 days. The cost for initial inspection fees is reportedly included in the initial cost of a permit in 92.6% (88) of the jurisdictions, responses shown in Figure 14 by county in the State of Florida. Furthermore, as shown in Figure 15, 70.5% of the jurisdictions reported no difference in inspection fees based on the discipline being inspected. The average cost for an inspection among the respondents was \$71.45, with a minimum of \$15 and a maximum of \$350. Table 6 shows the reported inspection fees by discipline. Due to the high incidence of blanket fees, regardless of discipline, the average fee for any discipline was between \$695 and \$12,553. As shown in Figure 16, 89.5% (85) of the responding jurisdictions charged a re-inspection fee. The average re-inspection fee was \$56.05, with a minimum of \$7.50 and a maximum of \$136. The results further indicated that approximately 71.1% of work is approved after first inspection and 36.5% of the work requires more than one inspection to gain approval.

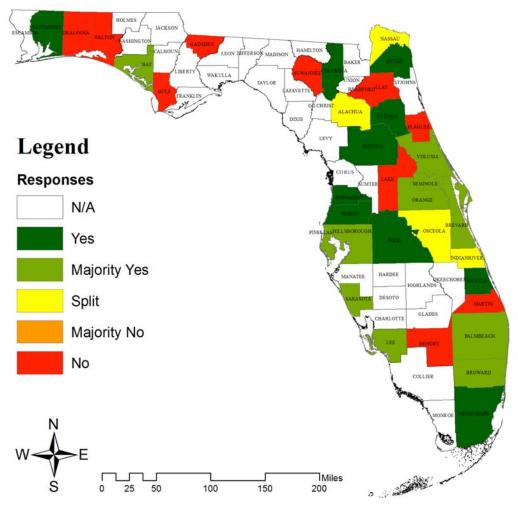


Figure 13. Inspection by discipline responsibilities (n=95)

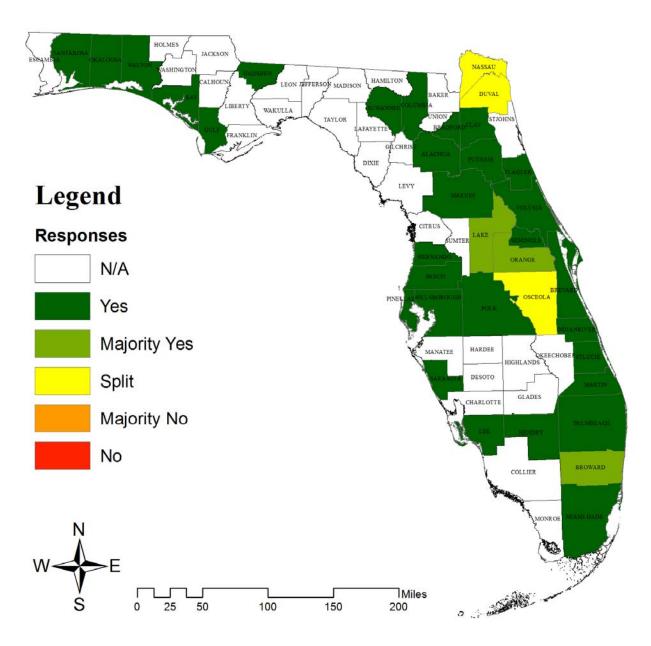


Figure 14. Inspection fees included in permit cost (n=95)

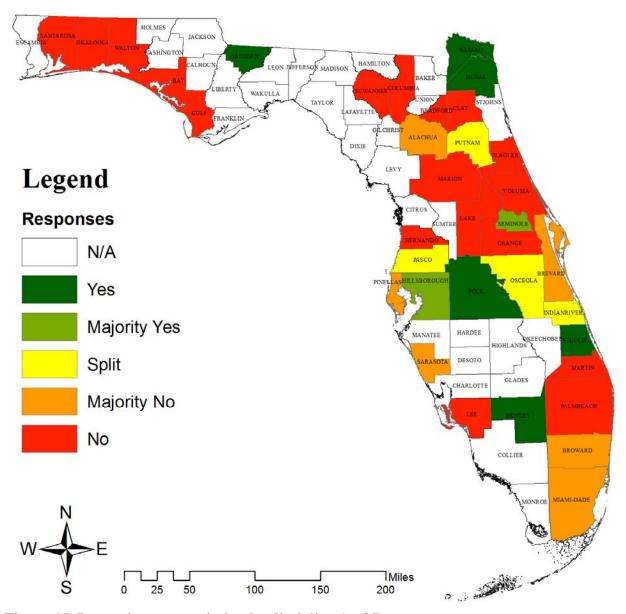


Figure 15. Inspection cost variation by discipline (n=95)

Table 6. Cost of Building Inspection Types

Inspection Type	Minimum	Maximum	Mean	Standard Deviation	n
Building	\$0.00	\$1,000,000	\$12,553	\$108,522	86
Mechanical	\$0.00	\$50,000	\$1,238	\$7,616	86
Plumbing	\$0.00	\$50,000	\$1,267	\$7,706	84
Electrical	\$0.00	\$75,000	\$1,555	\$9,771	85
Structural	\$0.00	\$50,000	\$695	\$5,550	82
Site	\$0.00	\$50,000	\$735	\$5,767	76

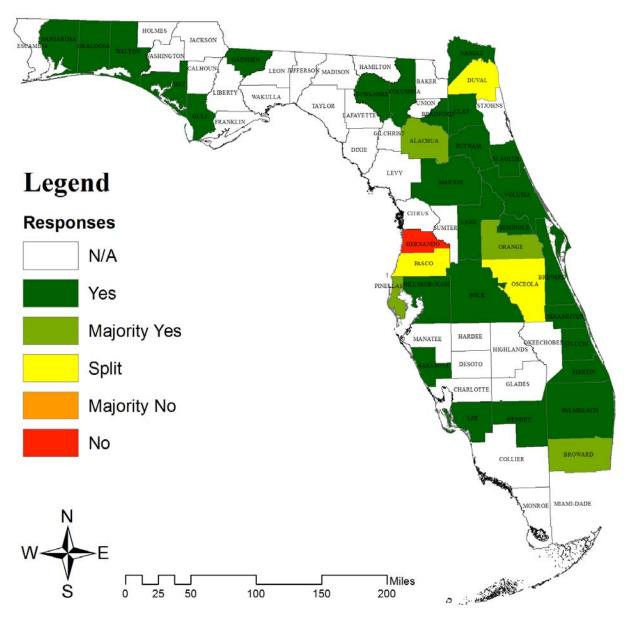


Figure 16. Re-inspection fee charges (n=95)

The final questions in this section of the survey (Q4.15 - Q4.16) are related to the existence and use of a local boards of adjustment and appeal to review permitting and code enforcement decisions. As shown in Figure 17, 64.4% (58 out of 90) of the reporting jurisdictions had a local board of adjustment and appeal. A total of 5 respondents did not provide an answer to this question. Of those who reporting having a board of appeals the results indicated that approximately 31 decisions were reviewed per year, with a minimum of zero and a maximum of 350. Skip logic was used for this final question to ensure that those who indicated that they did not have a board of adjustment and appeal were not asked or able to provide responses as to how many decisions were

reviewed. These questions concluded the survey and the respondents were subsequently thanked for their participation and valuable insight.

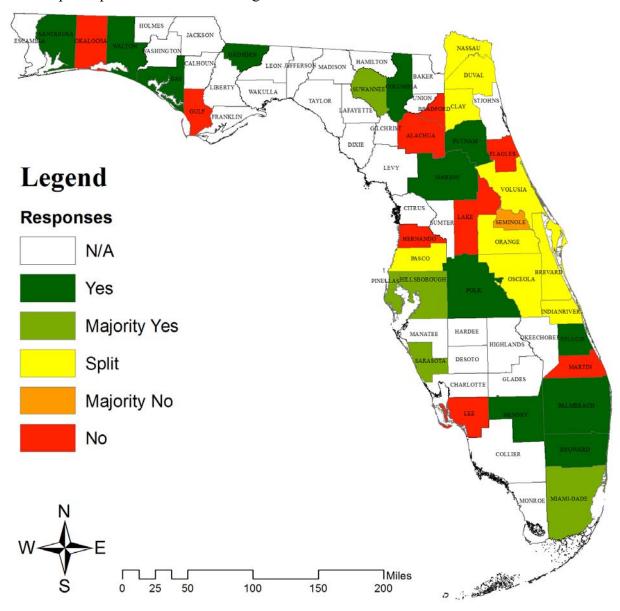


Figure 17. Existence of a local board of adjustment and appeal (n=90)

CONCLUSIONS AND RECOMMENDATIONS

The findings of this study indicated that there exists a lack of uniformity in the way permitting and code enforcement is organized and conducted in the State of Florida. There was a total of 28 different department title categories identified across the 53.7% (36) of Florida counties represented in this survey. Furthermore, a total of 29 different job titles were identified among the 95 respondents, with slight deviations suggested in the way departments are organized across the State of Florida. Furthermore, the breakdown of individual responsibilities and certification levels varied widely from jurisdiction to jurisdiction. This study found that the reported pricing structures for both permitting and code enforcement varied greatly between jurisdictions. Approximately 50% of jurisdictions and departments charged fees above and beyond the initial permit amount, with the initial fee for that permit ranging from \$35 to \$100,000. Between 30% and 40% of respondents indicated that fees were not on a set scale but were based upon building value or area. A similar disparity was reported in code enforcement as well. While 92.6% of respondents reported the cost of initial inspection being included in the permit amount, 29.5% reported that the inspection cost varied based on the system being inspected. In addition, 89.5% of respondents indicated that a re-inspection fee was charged and that an average of 36.5% of work required more than one inspection to pass.

In addition to variations in pricing structure it was reported that, on a 10-point Likert scale with 1 being no deviation and 10 being a great deal of deviation, the level of deviation in the way codes were enforced was 3.0. While this number is reasonably low, despite having a maximum rating of an 8, the descriptions gathered related to the reasons for the individuals rating consisted of approximately 65% negative reasons. The most common reason for code enforcement deviation was cited as differences of opinion and individual interpretations. Furthermore, it was reported that communication, team meetings and effective leadership were primary factors in consistent code enforcement. In relation to permitting, a positive indication was reported in that over 97% of individual departments and 100% of reporting jurisdictions indicated offering plan review services and over 92% provide some sort of permitting support during the application process. While the findings of this study provide valuable insight into the state of permitting and code enforcement in the State of Florida, there are limitations to the extent to what the data can infer.

Moving forward, responses gathered from all 67 counties in the state of Florida would help in an effort to draw comprehensive conclusions related to permitting and code enforcement variation across the state. Furthermore, it will be crucial to meet with the department heads from each county and major jurisdictions to validate the data gathered and achieve more thorough and complete participation across the board. The findings of this study provide a foundation from which further research should be conducted in order to develop a more complete understanding of potential areas of concern or interest. Overall, permitting and code enforcement in the State of Florida appears to vary between jurisdictions in many ways including: departmental organization, roles and responsibilities, and pricing structures. The information provided herein supports this conclusion and provides a basis for future research and areas of focus for action related to statewide permitting and code enforcement policy.

APPENDIX A

SURVEY PRINTOUT FROM QUALTRICS

Analysis of Code Enforcement and Implementation in the State of Florida

Intro Code Enforcement and Permitting Professionals,

Thank you for taking the time out of your busy days to complete this survey. Your input is extremely valuable and greatly appreciated by the research team and the State of Florida. This survey has been designed as part of an analysis of code enforcement and permitting implementation, requirements, fees, training and education in the State of Florida. The goal is to gain participation from individuals currently survey in the State of Florida as code enforcement and/or permitting professionals. This survey should take you approximately 10 to 15 minutes and all data is recorded anonymously. The survey will ask basic demographic questions and then a series of questions related to your experiences as a code enforcement and/or permitting professional. Please answer all questions to the best of your knowledge and be as thorough as possible with open response questions. This data is a vital first step in analyzing the state of code enforcement and permitting in all aspects in the State of Florida. Your participation in this survey is voluntary and you may choose to stop the survey at any time. We thank you for your time, shared expertise and valuable responses. Should you have any questions, comments or concerns, please feel free to contact the Principal Investigator Dr. Raymond Issa at raymond-issa@ufl.edu.

Regards,
The research team
(IRB201700552)

0.1	In which County are you a code enforcement or permitting professional in the state of Florida?
\circ	Alachua County
	Baker County
	Bay County
	Bradford County
	Brevard County
	Broward County
	Calhoun County
	Charlotte County
	Citrus County
O	Clay County
\mathbf{O}	Collier County
0	Columbia County
O	DeSoto County
\mathbf{O}	Dixie County
O	Duval County
O	Escambia County
\mathbf{O}	Flagler County
O	Franklin County
0	Gadsden County
0	Gilchrist County
	Glades County
\mathbf{O}	Gulf County
\mathbf{O}	Hamilton County
0	Hardee County
0	Hendry County
_	Hernando County
O	Highlands County
	Hillsborough County
_	Holmes County
0	Indian River County
0	Jackson County
0	Jefferson County
0	Lafayette County
0	Lake County
0	Lee County
0	Leon County
0	Levy County Liberty County
0	Liberty County Medican County
0	Madison County Manatas County
0	Marion County Marion County
0	Martin County Martin County
0	Miami-Dade County
•	Main-Dade County

O	Monroe County
\mathbf{O}	Nassau County
\mathbf{O}	Okaloosa County
\mathbf{O}	Okeechobeee County
\mathbf{O}	Orange County
\mathbf{O}	Osceloa County
\mathbf{O}	Palm Beach County
\mathbf{O}	Pasco County
\mathbf{O}	Pinellas County
\mathbf{O}	Polk County
\mathbf{O}	Putnam County
\mathbf{O}	St. Johns County
\mathbf{O}	St. Lucie County
\mathbf{O}	Santa Rosa County
\mathbf{O}	Sarasota County
\mathbf{O}	Seminole County
\mathbf{O}	Sumter County
\mathbf{O}	Suwannee County
\mathbf{O}	Taylor County
\mathbf{O}	Union County
\mathbf{O}	Volusia County
\mathbf{O}	Wakulla County
\mathbf{O}	Walton County
O	Washington County
0.2	Which of the following is your jurisdictional area defined by?
0	County
0	City
\mathbf{O}	Neighborhood
	Other (Please Specify)
0.3	
0.3	What is the name of your jurisdictional area?
	1 What is the approximate size of your jurisdiction in square miles? (Please provide answer in square les)
0.3	2 To the best of your knowledge, what is the approximate population if your jurisdictional area?

0.3	3 Please select the license(s) you have from the list below: (Check all that apply)
	5001 - Standard Inspector 5002 - Standard Plans Examiner 5003 - Building Code Administrator
0.4	What is your official job title? (Please type it as it would appear on a business card)
0.5	In which of the following inspection disciplines are you certified? (Select all that apply)
	Building (Residential) Building (Commercial) Mechanical Plumbing Electrical None Other (Please Specify)
0.6	With which gender do you identify?
O	Male Female Other
1.1 car	What is the official name of your department? (Please enter the name as it would appear on a business d)
1.1	1 What is the approximate budget for your building department? (in US Dollars)
	2 To the best of your knowledge, what is the annual permit volume within your department for each of following two categories? (please enter the quantity of permits for each category)
	New Construction Existing Buildings
	3 To the best of your knowledge, what is the annual permit volume within your department for each of following two categories? (please enter the quantity of permits for each category)
	Residential Commercial

1.2 To the best of your knowledge, approximately how many code enforcement/ permitting professionals does your DEPARTMENT employ?
1.3 To the best of your knowledge, approximately how many code enforcement/ permitting professionals work in your JURISDICTIONAL AREA?
1.4 Do permitting and code enforcement responsibilities reside with the same person or people within your department?
O Yes O No
1.41 Please allocate the number of employees in your jurisdictional area, as you specified in the previous questions, into their position as accurately as possible:
Code Administrators Plan Reviewers Inspectors Other (Please specify)
1.5 Does your department have a rigid chain of command with one person ultimately responsible for decision making and protocols?
O Yes O No
1.6 On a scale from 1 to 10 (with one being not supported and 10 being always supported), how do you feel your supervisor/supervisors support the decisions you make in regards to code enforcement and permitting?
Level of Support

2.1 How frequently do you receive training related to PERMITTING in the state of Florida?
 Less than once a year Yearly Multiple times per year Monthly Multiple times per month Weekly Multiple times per week Daily Never
2.2 How frequently do you receive training related to code enforcement in the state of Florida?
Q Less than once a yearQ Yearly
O Multiple times per year
O MonthlyO Multiple times per month
O Weekly
O Multiple times per week
O Daily O Never
2.3 Do you feel that you have access to training materials and resources which are necessary to do your job?
O Yes
O No
Carry Forward All Choices - Displayed & Hidden from "In which of the following inspection disciplines are you certified? (Select all that apply)"
2.4 How frequently are you required to re-certify for each of the following inspection disciplines you identified earlier in this survey?
O Building (Residential)
O Building (Commercial)O Mechanical
O Plumbing
O ElectricalO None
O Other (Please Specify)

2.5 Are you provided opportunities to earn certification in additional disciplines?
O Yes O No
Condition: If No Is Selected. Skip To: To the best of your knowledge, please
2.6 Do you feel that your supervisor/ supervisors adequately support you in obtaining additional certifications?
O Yes O No
2.7 Is financial support provided by your department, for required courses and certification exams, as you work to earn certification in additional disciplines?
O Yes O No
Condition: If Yes Is Displayed. Skip To: On average, how many hours of continu
2.8 To the best of your knowledge, please elaborate on why you said that you are not provided opportunities to earn additional certifications? (Remember, all responses are anonymous and your honesty is appreciated)
2.9 On average, how many hours of continuing education are you required to complete each year?
2.10 Are you made aware of continuing education opportunities available to you?
O Yes O No
2.11 Are you encouraged to participate in continuing education beyond the requirements as it relates to your areas of expertise?
O Yes O No
2.12 Does your jurisdiction provide "formal" interpretive processes for practitioners beyond application and enforcement of the Code? (e.g. Written building department policy, local rule, local ordinance, local amendment to the Code, verbal policy, etc.)
O Yes O No

2.13 Does your jurisdiction use the ICC code commentary in its day-to-day operations?
 Formal Acceptance Always Sometimes Informal Reliance Never
2.14 To the best of your knowledge, is the staff in your jurisdiction familiar with statewide interpretive processes? (i.e. ever participated by requesting a Non-Binding Interpretations by Building Officials of Florida or Declaratory Statements by the Commission or Binding Interpretations by the Commission)
O Yes O No
3.1 On average, what is the typical turnaround time (in days) for a permit application in your jurisdiction
3.11 On average, what is the typical amount of time (in days) that it takes from permit to Certificate of Occupancy in your jurisdiction?
3.2 Does your jurisdiction provide plan review services for residential permits?YesNo
3.3 Does your jurisdiction provide plan review services for commercial permits?YesNo
3.31 To the best of your knowledge, please assign percentages to the following categories related to plan approvals in your jurisdiction for the calendar year 2016:
% of plans approved without comment % of plans requiring more than one resubmittal
3.4 What is the standard fee for a residential building permit in your jurisdiction? (US Dollars)
3.5 What is the standard fee for a commercial building permit in your jurisdiction? (US Dollars)

3.6 Does your DEPARTMENT charge a re-submission fee for a permit? (If yes please specify the amount in US Dollars)		
	Yes No	
	Does your DEPARTMENT charge any additional fees above and beyond the permit amount? (If yes, ase specify and include the amount in US Dollars)	
	Yes No	
	Does your JURISDICTION charge any additional fees above and beyond the permit amount? (If yes, ase specify and include the amount in US Dollars)	
	Yes No	
C	0 Does your DEPARTMENT provide permitting support during the application process? Yes No	
O	1 Does your JURISDICTION provide permitting support during the application process? Yes No	
	How frequently does your department have meetings related to code enforcement policies and relopment?	
O O O O	Daily 4-6 times a week 2-3 times a week Once a week Once a month Once a year Never	
	On a scale from 1 to 10 (with 1 being none at all and 10 being a great deal of deviation), how much riation is there in the way codes are enforced between different members of your department? Deviation in code enforcement	

4.3 Please explain what you feel contributes to the level of deviation you specified in the previous question.
4.4 To the best of your knowledge, what is the average wait time (in days) for an inspection in your jurisdictional area? (from request to inspection)
4.5 Does your jurisdictional area have different people who conduct inspections for each building discipline? (e.g. structural, plumbing mechanical, etc.)
O Yes O No
4.6 Do all inspectors in your jurisdictional area report to one head inspector who is ultimately responsible for decisions on code enforcement policies?
O Yes O No
4.7 On a scale from 1 to 10 (with 1 being none at all and 10 being a great deal of involvement), how muc supervisory involvement is there in your jurisdictional area related to code enforcement?
Level of supervisory involvement
4.8 In your department, are initial inspection fees included in the cost of a permit?
O Yes O No
4.9 Does the cost of an inspection vary based on the system/ discipline being inspected?
O Yes O No
Condition: If No Is Selected. Skip To: What is the average cost (US Dollars)

4.11 What is the average cost (US Dollars) for a building inspection in your jurisdiction for each of the following disciplines? (Select each discipline with a separate cost and identify the cost)
□ Building □ Mechanical □ Plumbing □ Electrical □ Structural □ Site
4.10 What is the average cost (US Dollars) for a building inspection in your jurisdiction?
4.12 Does your jurisdiction charge a re-inspection fee?
O Yes O No
Condition: If No Is Selected. Skip To: To the best of your knowledge, please
4.13 What is the re-inspection fee? (US Dollars)
4.14 To the best of your knowledge, please assign percentages to the following categories related to approved work in your jurisdiction for the calendar year 2016:
% of work approved on first inspection % of work which requires more than one inspection
4.15 Does your jurisdiction have a local board of adjustment and appeal that reviews permitting and enforcement decisions?
O Yes O No
Condition: If No Is Selected. Skip To: End of Block.
4.16 To the best of your knowledge, what is the average annual number of decisions reviewed by the local

4.16 To the best of your knowledge, what is the average annual number of decisions reviewed by the local board of adjustment and appeal in your jurisdiction?

APPENDIX B

EXCLUSIONS

The following data elements were excluded from this report based on the validity of the data received from the respondents as well as the reasonableness of the responses as evaluated by the researchers.

- Jurisdictional Population: This data was left out due to the overall unreasonable nature of the responses received. The respondents were asked to provide a best guess and the responses were thought to be unreliable by the researchers.
- Department Budget: This data was left out due to the overall unreasonable nature of the responses received. The respondents were asked to provide a best guess and the responses were thought to be unreliable by the researchers.
- Respondent groups outside the intended population: Responses which indicated a department or jurisdiction as a school, university, private company, the entire state, or anything of that nature were excluded from the analysis provided in this report.