

## ATTACHMENT

### ITEM 8 – STAFF REPORT

#### EXECUTIVE DIRECTOR

##### Fiscal Year 2022-2023, 1<sup>st</sup> Quarter

The Board has a stated goal to “provide a pool of qualified code officials.” The total number of active Code Enforcement Officials (CEOs) is a Key Performance Indicator (KPI). As of October 3, there were **3,946** active CEOs. There are **1,797** CEOs with Probationary or Standard Building, Mechanical, Electrical or Plumbing certificate(s). There are **2,717** CEOs with Probationary or Standard Fire certificate(s).

“Shortages” of qualified inspectors may be indicated by failure of local government (county/city) Authorities Having Jurisdiction (AHJs) to perform requested inspection within two business days as required by [N.C. Gen. Stat. § 143-139.4 Certain building inspections by State.](#)

“(a) When a permit holder has been informed by a local inspection department that any inspection has not been, or will not be, conducted within two business days after first requested, the permit holder may request in writing that the Commissioner assign personnel to conduct the inspection.”

A voluntary inspector marketplace has been established to facilitate peer-to-peer sharing among AHJs of active inspectors with Standard certificates through the existing Board database application. A statutory inspector marketplace under the Commissioner of Insurance has also been established. In addition, businesses that provide inspection services under contract have certified some of their inspectors through comity.

The question remains, “How many inspectors are needed to perform requested inspection within two business days?” NCDOT is seeking assistance through the Office of Strategic Partnerships for a research partner to answer this question through their project portal [https://projectportal.nc.gov/project/doi\\_inspectors](https://projectportal.nc.gov/project/doi_inspectors). Such a project will require funding that is as yet undefined and unsourced. [N.C. Gen. Stat. § 143-151.20](#) states in addition to appropriations made by the General Assembly, the Board may accept for any of its purposes and functions under this Article any and all donations, both real and personal, and grants of money from any governmental unit or public agency, or from any institution, person, firm or corporation, and may receive, utilize, disburse and transfer the same, subject to the approval of the Council of State. Any arrangements pursuant to this section shall be detailed in the next regular report of the Board. Such report shall include the identity of the donor, the nature of the transaction, and the conditions, if any. Any moneys received by the Board pursuant to this section shall be deposited in the State treasury to the account of the Board.

#### Budget

[N.C. Gen. Stat. § 143-151.16](#) states the Board shall establish a schedule of fees to be paid by each applicant for certification and such fee shall not exceed \$20, annual renewal application fee not to

exceed \$10 and late renewal fee of \$4. [N.C. Gen. Stat. § 151.21](#) states that fees collected shall be credited to the Insurance Regulatory Fund. [Note: there is no agency rule schedule of fees.]

For the Fiscal Year Ending (FYE) 2023 first quarter revenues were \$63,684.  
 For the prior FYE 2022 total year-end revenues were \$101,364.

As of FY 1<sup>st</sup> QTR ending 9/30/2022, the Engineering Qualification Board fund 155202 has an appropriated **\*\*Authorized Budget\*\*** of \$10,286.00. The Special Qualification Board Fund 2201 has a balance of \$5,557.81.

**Workforce Capacity**

Reports are that some Jurisdictions (AHJs) have hired individuals with 3-year probationary certificates and required all four (4) Level 1 Standard achieved or face termination as a condition of the employment contract. Board Rule [11 NCAC 08 .0706](#) lists the number of stories and square feet of floor areas of buildings for inspectors for Levels 1, 2 and 3. Does the workforce supply of inspectors match the inspection demand?

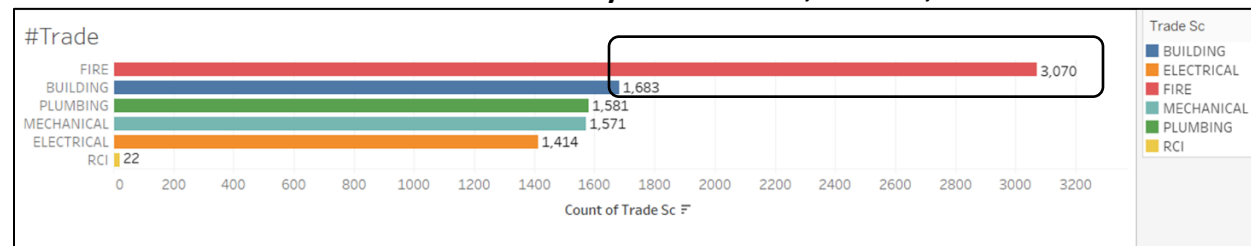
Suppose we count how many inspectors have all four Trade certificates for each level that would allow a single CEO to perform all inspections for a given building? The table below shows about 200 Level 1, 83 Level 2 and 358 Level 3 meet these criteria. Is this the correct mix?

**CEOs with all (4) BMEP Certifications for Probationary and Standard, Levels 1, 2 and 3**

CEOs	BP1	BS1	BP2	BS2	BP3	BS3	EP1	ES1	EP2	ES2	EP3	ES3	MP1	MS1	MP2	MS2	MP3	MS3	PP1	PS1	PP2	PS2	PP3	PS3	
	282	375	156	168	102	594	232	277	136	147	82	536	223	359	166	188	92	536	207	345	157	189	89	589	
(4) Level 1 - BMEP - PROB	118						118						118						118						
(4) Level 1 - BMEP - STD		93	45					93	44					93	47					93	47				
(4) Level 2 - BMEP - PROB		43	55					41	55					43	55					44	55				
(4) Level 2 - BMEP - STD				28	16					28	16					28	16					28	16		
(4) Level 3 - BMEP - PROB				15	16					15	16					15	16					15	16		
(4) Level 3 - BMEP - STD						338						338						338						338	

The chart below shows nearly 1,100 Fire Level 1 certifications more than other trades. How many of these are performing Fire inspections or do they reflect promotional requirements in the Fire service.

**CEOs with FIRE Certifications for Probationary and Standard, Levels 1, 2 and 3**



## DASHBOARD (KPIs)

COQB	Total FY 2020-2021	Total FY 2021-2022	1st QTR Jul	1st QTR Aug	1st QTR Sep	1st QTR Jul - Sep
<b>CEOs</b>	4,210	4,136	3,902	3,902	3,934	<b>3,946</b>
<b>Applications</b>	2,704	3,261	215	152	89	456
<b>Pre-Qualification</b>	576	679	34	9	1	44
<b>Probationary</b>	1,186	1,710	85	75	53	213
<b>Standard</b>	942	1,038	60	68	35	163
<b>Military/Spouses</b>				1	1	2
<b>Criminal History</b>				4	5	9
<b>Board courses</b>	206	189				0
<b>Students</b>	1,884	1,972		70	54	124
<b>Exam eligibilities</b>	1,362	1,525		120	76	196
<b>Exams taken</b>	1,256	1,371	97	120	126	343
<b>Exams passed</b>	793	888	69	83	87	239
<b>Certificates Issued</b>	1,357	2,209	184	201	114	499
<b>Probationary</b>	725	1,327	112	106	57	275
<b>Standard</b>	632	882	72	95	57	224
<b>Certificates Total</b>			9,196	9,209	9,237	
<b>Complaints</b>		16	1	3	1	5
<b>Disciplinary actions</b>			1			1

Several initiatives are ongoing or underway by various entities attempting to meet the need for timely inspection and plan review outcomes. Benchmarks are two business days for inspections and 21 days for plan review?

**Initiative**

1. NCDOI Inspector Marketplace: Temporary Solutions
2. NCDOI contract with inspection businesses.
3. NCORR Office of Recovery and Resiliency – Trainers/Trainees (NCDOI)
4. Remote Inspections
5. Board Rule Changes to Education and Experience requirements
6. Board course Guidelines and State exam changes – Level 1 Fire, Building, Electrical
7. Veterans and applicants with criminal history outreach and recruitment
8. Data analytics, visualization and dashboards
9. Residential Changeout Inspector
10. OSBM Program Evaluation grant and OSP research partnerships
11. Permit Technician certification

**Initiative Status**

2. To date the following companies have expressed interest in or are actively having employees apply for NCCOQB certification: [SAFEbuilt®](#), [Bureau Veritas](#), [RCI of SC, Inc.](#), [CC&I Services, LLC](#), [ECS Southeast, LLP](#).

**CERTIFICATION****Prequalify -****Applications -**

**Certificates** – There are three **Types** of certificates:

- 1) **Probationary** that have a duration of three years and may not be renewed.
- 2) **Standard** certificates must be renewed annually after attaining six hours of continuing education.
- 3) **Limited** certificates are no longer issued.

**Total Certificates (active) Building, Electrical, Mechanical, Plumbing, RCI**

#CERT-Type,Trade,Level							
Trade Sc	LEVEL 1		Cert Level Sc / Cert Type Sc				Grand Total
	PROB	STD	LEVEL 2		LEVEL 3		
			PROB	STD	PROB	STD	
BUILDING	278	376	153	167	102	593	1,669
ELECTRICAL	232	276	135	147	82	535	1,407
FIRE	281	1,172	289	343	156	816	3,057
MECHANICAL	223	357	167	187	89	535	1,558
PLUMBING	203	344	156	194	94	583	1,574
RCI	8	14					22
Grand Total	1,225	2,539	900	1,038	523	3,062	9,287

**Fire**

#CERT-Type,Trade,Level							
Trade Sc	LEVEL 1		Cert Level Sc / Cert Type Sc				Grand Total
	PROB	STD	LEVEL 2		LEVEL 3		
			PROB	STD	PROB	STD	
FIRE	281	1,172	289	343	156	816	3,057

## EXAMINATION

PSI Services, LLC administers State exams under a 5-year NCDOI contract 12-001164 issued May 4, 2021. There are six Trades and three Levels for a total of 16 exams. Below is a detailed count of exams taken and passed for the FYE 2023 1<sup>st</sup> QTR.

Exam Taken Counts between 07/01/2022 and 09/30/2022

### Exam Taken

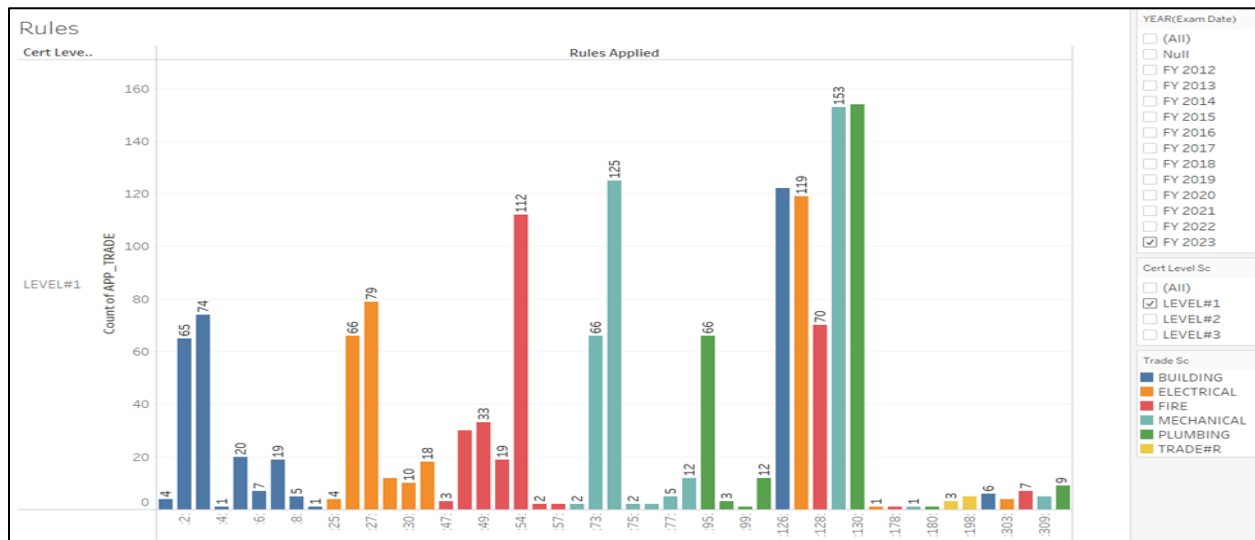
Area/Level	Number Taking	Number Passing	% Passing	High Score	Low Score	Average Score
Building Inspector I	40	14	35.00	87.00	37.00	64.53
Building Inspector II	19	14	73.68	86.00	61.00	73.95
Building Inspector III	14	11	78.57	90.00	55.00	74.07
Electrical Inspector I	43	12	27.91	81.00	37.00	63.86
Electrical Inspector II	11	8	72.73	84.00	65.00	75.09
Electrical Inspector III	8	7	87.50	88.00	57.00	77.88
Fire Inspector I	61	60	98.36	99.00	60.00	88.21
Fire Inspector II	33	23	69.70	87.00	59.00	73.21
Fire Inspector III	7	5	71.43	89.00	64.00	74.71
Mechanical Inspector I	39	28	71.79	90.00	51.00	74.13

### Exam Taken Totals

Total Taking	Total Passing	Total % Passing
360	258	71.67

### Board Rules for Education and Experience for Exams FY 2022-2023, 1<sup>st</sup> QTR.

State exam pass rates may reflect the education and experience eligible candidates “bring to the table.” For Level 1 exams the Board rules examinees qualified under are shown below.



For example, Building Level 1 shows a 35% pass rate. The largest number of applicants were eligible by Board Rule 11 NCAC 08 .0706(h) #126, 2 and 3. Respectively:

- 126 - Applicant will be receiving direct technical supervision under a standard certificate holder for probationary period.
- 2 – A four-year degree from an accredited college or university
- 3 - At least six months of building inspection experience with a probationary Level I building inspection certificate on a minimum of two Level I buildings while working under the direct supervision of a standard certified building inspector I, II, or III with a supporting letter from the applicant's supervisor which complies with Paragraph (b) of this Rule. [Note: Some candidates satisfy multiple criteria].

**Self-Study Program**

The score distribution table below continues to show a strong correlation between the high score percentages of those students completing the Self-Study (73% above 90% score) as compared to those students taking the Board Exams after the Course (40% above the 90% score).

SCORE DISTRIBUTION (Percentages)					
	<70	70-79%	80-89%	90>	Total
EOC to State Exam	1%	7%	52%	40%	100%
Self-Study to State Exam	0%	0%	27%	73%	100%

The tables below show a comparison of the score distributions for EOC to Board Exams as compared to Self-Study to Board Exams by Board Rules. The highest number of Examinees came from NCAC Rule 8 (54) which is “at least four years of experience in fire suppression activities for a city, county, volunteer, or other governmental fire department”.

SCORE DISTRIBUTION BY BOARD RULE (EOC to State Exam)						
NCAC Rule	Rule	<70	70-79%	80-89%	90>	Total
1	47	0	0	1	0	1
2	48	0	0	2	2	4
3	49	1	0	3	6	10
4	50	0	0	0	0	0
5	51	0	0	1	0	1
6	52	0	0	0	0	0
7	53	0	0	6	6	12
8	54	0	3	22	13	38
9	55	0	0	0	0	0
		1	3	35	27	66

**SCORE DISTRIBUTION BY BOARD RULE (Self-Study to State Exam)**

NCAC Rule	Rule	<70	70-79%	80-89%	90>	Total
1	47	0	0	0	0	0
2	48	0	0	0	4	4
3	49	0	0	1	0	1
4	50	0	0	0	0	0
5	51	0	0	0	0	0
6	52	0	0	0	0	0
7	53	1	0	0	1	2
8	54	0	0	5	8	13
9	55	0	0	0	0	0
		1	0	6	13	20

### COQB Subject-Matter-Expert (SME) Working Groups

#### Building End-of-Course (EOC) Items

- SME consultant doing final review of EOC items to be repurposed as Self-Study Phase Exam test items.
- Working group to meet to validate the items
- Once Phase exams completed, BLDG I, Residential Self-Study will be ready for implementation.
- Currently developing BLDG I, Commercial Self-Study

#### Electrical I, II, III State Items

- Exams activated for PSI Board exams on March 1, 2021
- SMEs reviewed and replaced non-performing, or items needed to move to higher level(s).
- Revised exam implemented October 1, 2022.
- SMEs currently evaluating test items for the Electrical Level II Exam.

#### Fire Level I

- The new Fire I exam was activated June 1, 2022.
- PowerPoint slides – Chapters 9&10 PowerPoint slides sent to SME working group for review.
- Skill sheets reviewed and ready to implement.
- SME Committee developing the Production Plan for a Fire I Course based on the IFSTA *Fire Inspection and Code Enforcement* manual and curriculum and the 7Cs program.

#### Plumbing EOC/Board Exams, and Self-Study

- Recruiting SME working group members
- NCDOI staff and SME creating a Plumbing Correlation Sheet for use in all facets of Plumbing Programs and will start entering data into Moodle activities.



The table below shows the various possible program formats for Fire Inspector I.

- Column A – The various events associated with the three different formats.
- Column B – This is the format of the current program.
- Column C – This program would be for those individuals who are going for promotion but will not be doing fire inspections at the level of a CEO Fire Inspector. This is a certificate program **NOT a certification program**.
- Column D – This program is for agency fire inspectors who need to be **certified**. This option will still be open to those going for promotion if they so choose.

One item of note in column D is that instructors and students have asked if the Self-Study can be completed prior to the Standard Board Course. From the student perspective, they would have in-depth knowledge of how to research and apply the fire code prior to going to the class. From the instructor’s perspective, they could spend more time on key points, scenarios concerning inspections, tables in the code book, and other areas that they don’t have time to cover in the current format. Instead of reading off code sections on a PowerPoint, they could actually deep dive into the code.

**FIRE INSPECTOR I PROGRAMS**

A	B	C	D
Program Components	Traditional (Current Program)	Basic Fire Code Book Program	Code Officials Qualification Board Fire Inspector I Certification
Program Purpose	Current Program to be replaced by the other two programs.	Basic/beginner level of code book knowledge for promotional purposes	Code Enforcement Officials Fire Inspector Level I
Probationary Certificate	OSFM Generated		OSFM Generated
CEO ID	OSFM Generated		OSFM Generated
Educational Course	Standard Board Course		Standard Board Course*
Course Evaluations	Instructor EOC Test		No EOC Test Chapter Quizzes and tests*
Assign a Mentor			Assigned by Home Agency
Pre-Course Modules			Supplementals Tab
Self-Study Program		Moodle	Integrated into Curriculum*
Type		Awareness Self-Study	Fire I Inspector Self-Study
Moodle		Production	Production
Access		Same as Crowd Manager Public	Supplementals Tab
Phases		All chapters in one Course	3 Phases
Final Evaluation		3 Self-Check Tests	Proctored Phase Test
Skill Sheet Sign-Offs			By Home Agency
State Exam Eligibility	OSFM Generated		OSFM Generated
State Exam	PSI		PSI
Final Credential	Standard Certificate	Certificate of Completion	Standard Certificate
Program Maintenance	Code Changes	Code Changes	Code Changes
Program Tracking	COQB Database		COQB Database**

\*If/when approved by the Board - Fire Inspector I Certification Course (IFSTA Curriculum)

\*\* Rich continues to track Self-Study participation until this can be added to the COQB Database

## EDUCATION

### Board Courses

Recent updates to the NCDOT/OSFM website have been completed. A new webpage has been designated for those CEOs looking to attend an upcoming Standard Certificate Courses. This page can be viewed at: <https://www.ncosfm.gov/licensing-cert/code-officials-qualification-board-coqb/coqb-board-course-schedules> .

### COQB - Board Course Schedules

Scheduled		Start Date												
Course Name	Sponsor Name	FY 2023										FY 2024		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Building Level I	Cape Fear Community College				01/11									
	Randolph Community College					02/09				06/19				
	Wake Technical Community College					02/06								
Building Level III	Coastal Carolina Community College			12/02										
	Randolph Community College			12/06				04/13					09/14	
Electrical Level I	Vance-Granville Community College				01/06									
Electrical Level II	Vance-Granville Community College					02/10								
Electrical Level III	Asheville Buncombe Technical Community College	10/27												
	Vance-Granville Community College			12/02			03/10							
Fire Level I	Cleveland Community College			11/09										
	Wilkes Community College		10/31											
	Durham Technical Community College			11/19										

(Screenshot of webpage)

The next Standard Certificate Online Instructor Course will start on November 10, 2022. The course will be taught entirely online. You must submit an application no later than 10/31/2022 to be considered. All applications will be reviewed and notification will be sent prior to the start of the course. Email Beth Williams at [beth.williams@ncdoi.gov](mailto:beth.williams@ncdoi.gov) for additional information.

Jennifer Hollyfield is now the Education Coordinator for both COQB and HILB. Questions regarding login, course scheduling, Sponsor and CEO applications, and course approvals/denials should be directed to Jennifer. Her email is [jennifer.hollyfield@ncdoi.gov](mailto:jennifer.hollyfield@ncdoi.gov).

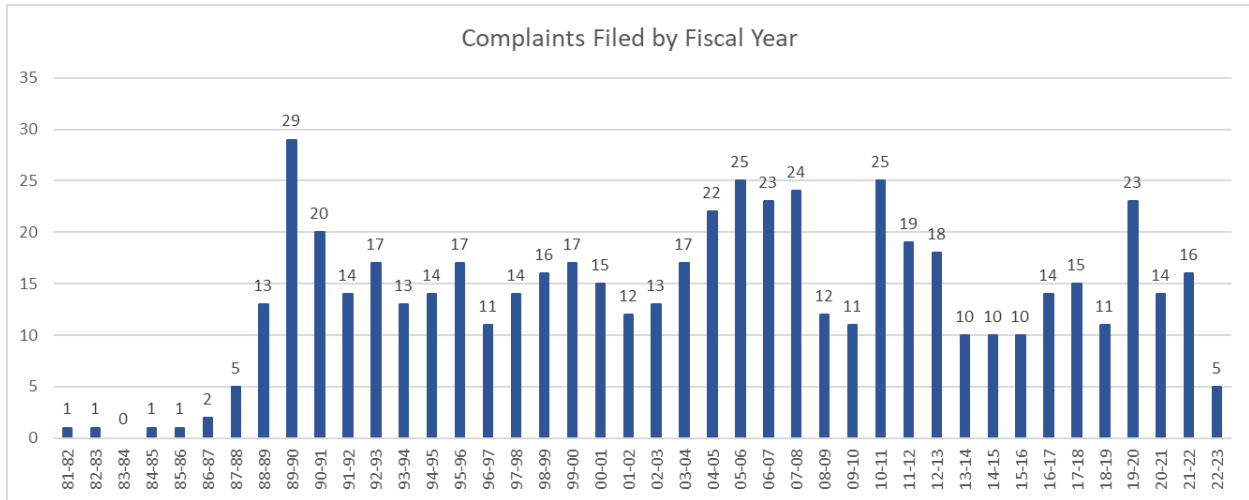
### Continuing Education

There was no Code College held this Fall. Code Officials currently seeking CE to meet Board requirements should reach out to the different trade associations. OSFM continues to offer free online courses for all Code Officials seeking additional learning options. For assistance, contact Jennifer Hollyfield at [jennifer.hollyfield@ncdoi.gov](mailto:jennifer.hollyfield@ncdoi.gov)

## INVESTIGATIONS

Active Cases: 3

Investigations – Completed Since Last Report: 3



Tommy Green is teaching an electrical class for the NCEIA/IAEI

Chris McLamb is preparing to sit for the Building Level 3 Exam

Jeff Johnson is conducting outreach to jurisdictions to further refine the Fire Marshal 101

Course. [https://rise.articulate.com/share/bAEIBcKQeDD1ZdCudvWs4ACDb0u\\_Hd2c](https://rise.articulate.com/share/bAEIBcKQeDD1ZdCudvWs4ACDb0u_Hd2c)

Staff will be attending the Permitting Personnel Association annual conference in Charlotte.