North Carolina

State OSHA Annual Report (SOAR)

Fiscal Year 2019



December 13, 2019

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PART I - STRATEGIC PLAN OVERVIEW

Program Outcome Goals

On October 1, 2018, North Carolina began its fifth five-year planning cycle as documented in the Strategic Plan (SP). The five-year SP ending on September 30, 2023 includes two primary outcome goals:

- Reduce the rate of workplace fatalities by 2%
- Reduce the rate of workplace injuries and illnesses by 5%

Outcome Goals Results

·	Baseline	2018	2019	2020	2021	2022	Reduction
Fatality Rate	.00102	.00079	NA*				
Injury & Illness Rate	1.4	1.4	NA*				

Areas of Emphasis Outcome Goals

- Reduce the construction industry fatality rate by 2% by the end of FY 2023
- Reduce the fatality rate in logging and arboriculture by 2% by the end of FY 2023
- Reduce the days away, restricted, or transferred (DART) rate for grocery and related product wholesalers by 5% by the end of FY 2023
- Reduce the DART rate in long term care by 5% by the end of FY 2023
- Support the overall outcome goal of reducing workplace injury and illness rate by 5% by the end of FY 2023 by addressing specific health hazards in the workplace
- Reduce the DART rate in food manufacturing by 5% by the end of FY 2023
- Reduce the number of Amputations in support of the overall outcome goals of reducing the rate of workplace injuries and illnesses by 5% by the end of FY 2023

Areas of Emphasis Activity Goals

• Conduct inspections, consultative surveys and train employers and employees as documented for each area of emphasis

State Demographic Profile

Sector	Establishments	Employees
Total Private Industry	270,161	4,087,169
Total Public Sector	6,401	625,223

^{*} Data available through the 2nd Quarter of FY 2019

Goal Setting Process

- Evaluate injury, illness, and fatality data
- Secure input from stakeholders
- Establish five-year outcome goals
- Select areas of emphasis and strategies to impact achievement of outcome goals
- As described in Administrative Procedure Notice (APN) 19, Strategic Management Plan Committee Activity, create a committee of division employees in each area of emphasis to manage the strategic planning process
- Determine level of activity for each emphasis area
- Share progress on achieving goals with staff on a monthly basis
- Alter strategies, if outcome goals are not being reached
- Evaluate the process

Areas of Emphasis

North Carolina's strategy for reducing injury, illness, and fatality rates is based on addressing specific areas that have the greatest impact on the overall rates. The areas of emphasis in the current Strategic Plan include:

- Construction
- Logging and Arboriculture
- Grocery and Related Product Wholesalers
- Long Term Care
- Exposures for Health Hazards (asbestos, lead, isocyanates, silica, hexavalent chromium)
- Food Manufacturing
- Amputations

Strategic Activity to Support Outcome Goals

- Improve safety and health programs through compliance, consultation, and training
- Expand safety and health recognition programs
- Develop construction partnerships at high profile construction sites
- Establish alliances in the areas of emphasis
- Implement Special Emphasis Programs (SEPs) for selected industries with specific intervention guidelines and activity goals
- Track activity and outcome goals monthly and share status with staff
- Conduct quarterly meetings for each area of emphasis committee

Factors Affecting Achievement of Outcome Goals and Strategic Activity Goals

- Insufficient federal funding requiring the elimination or freezing of positions
- Number of trained division personnel released to provide division intervention

- Need to maintain vacant positions in response to budget uncertainty
- Turnover rate and the loss of experienced compliance safety and health officers (CSHOs)
- Response to Hurricane Florence required diversion of resources
- Strategies employed within each area of emphasis
- Resources committed to the areas of emphasis

Program Statistics

Fatality Totals	2018	2019	2020	2021	2022	2023
Total	49	54				
Construction	24	18				
Manufacturing	7	9				
Public Sector	4	4				
Logging/Arboriculture	5	6				
Hispanic	11	12				
Overall Rate	.00079	TBD*				

Injury and Illness Rates	2018	2019	2020	2021	2022	2023
TRC (All)	2.6					
DART(All)	1.4					
Public Sector TRC	3.9					
Public Sector DART	1.8					

Intervention Statistics	2019	2020	2021	2022	2023
Inspections	2,928				
Inspection Goals	2,994				
Consultation Visits	1,692				
Consultation Goals	1,370				
Trained	13,696				
Training Goals	9,600				

Compliance Activity	2019	2020	2021	2022	2023
Serious Violations	3,511				
Willful Violations	21				
Average Serious Penalty	\$1,783				
Follow-ups	106				

PART II - REVIEW OF SPECIFIC OUTCOME GOALS AND ACTIVITIES IN AREAS OF EMPHASIS

1.1 Reduce Construction Industry Fatality Rate Statewide by 2% by the end of FY 2023

Significant safety and health strides have been made reducing the fatality rate in the construction industry. During the last strategic planning cycle, the construction fatality rate

increased. The construction industry continues to have a high number of workplace accidents compared to other industries, and this can have a significant impact on the state's overall outcome goals of reducing injury, illness and fatality rates.

Strategies for Achieving Specific Outcome Goal

- Conduct Occupational Safety and Health Division (OSH) compliance, consultation, and training interventions and outreach
- Utilize inspection guidelines established for the construction industry
- Maintain strong working relationships with construction industry groups through partnerships, alliances and other outreach efforts
- Identify high fatality, high activity counties for special emphasis on an annual basis
- Re-inspect those employers with work place fatalities
- Use informal settlement agreements to require employers to attend construction training
- Provide Hispanic outreach personnel to conduct construction training in Spanish
- Establish partnership agreements at high visibility construction sites
- Develop Spanish language publications and training materials specific to construction
- Distribute outreach letters and training materials for companies cited for five or more serious violations.
- Promote recognition programs such as Building Sub-Contractor Star and SHARP
- Conduct consultative blitzes in high fatality and activity counties
- Inspect all cranes operating on construction sites
- Utilize mobile training unit "Labor One" for on-site training as requested
- Analyze statistical data to confirm validity of inspection targeting process
- Develop materials and training presentations specific to the construction industry

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Outcome	Baseline	2019	2020	2021	2022	2023
Fatalities	73	18				
Rate	.00101	.0026				
Hispanic	N/A	8				

Construction	2019	2020	2021	2022	2023	Total
Inspections	1,682					1,682
Goals	1,050					1,050
Consultation	501					501
Goals	200					200
Trained	2,293					2,293
Goals	2,500					2,500

1.2 Decrease Fatality Rate in Logging and Arboriculture by 2% by the End of FY 2023

The State has had success in reducing the number of fatalities in logging and arboriculture. The SEP for logging was initiated in FY 1994. This was in response to 13 logging fatalities in FY 1993. Experience has shown that a reduction in OSH activity can translate into an increase

in the number of injuries and fatalities in this industry. For this reason, and the industry's fatality history, logging Northern American Industry Classification System (NAICS 11331) and arboriculture (NAICS 56173) remain in the Strategic Plan.

Strategies for Achieving Specific Outcome Goal

- Place increased emphasis on tracking specific injuries and fatalities on a monthly basis. If there is an increase in injuries and fatalities, additional resources could be allocated including inspection and focused training events
- Increase employer and employee awareness of regulatory requirements and safety and health work practices
- Change employer and employee behavior to improve job safety and health through education, consultation, and compliance interventions
- Establish and maintain strong working relationships with industries, associations, groups, and key individuals through alliances and other outreach efforts
- Continue use of meaningful safety and health programs with site specific safety training such as the Pro Logger training
- Develop materials and training presentations specific to the industry
- Focus training events and outreach to specific problem areas such as tree felling
- Evaluate SEP strategies to maintain effectiveness
- Utilize guidance documents that address work place hazards that are common to the industry

Outcome	Baseline	2019	2020	2021	2022	2023
Fatalities	5	6				
Rate	.02486	.0056				

Logging	2019	2020	2021	2022	2023	Total
Inspections	39					39
Goals	60					60
Consultation	28					28
Goals	13					13
Trained	382					382
Goals	150					150

2.1 Reduce the DART Rate in Grocery and Related Product Wholesalers (NAICS 4244) by 5% by the end of FY 2023

The State's strategic planning process includes statistical analysis to determine which industry groups have high injury and illness rates that could affect the state's goal of reducing the overall injury and illness rate. The baseline rate for grocery and related product wholesalers is 3.5 which was more than twice the overall DART rate of 1.3. For this reason, this industry remains as an area of emphasis in the current SP. Operational Procedure Notice (OPN) 145 was updated to provide guidance in identifying hazards and completing inspections in the grocery industry.

The most recent industry DART rate is less than the baseline.

Strategies for Achieving Specific Outcome Goal

- Provide OSH compliance, consultation and training interventions
- Determine activity levels for OSH intervention
- Determine need for a grocery hazard alert and other industry specific training materials
- Evaluate inspection data to determine if there are any industry trends that should be addressed
- Advance alliances with industry trade groups
- Expand recognition programs such as Carolina Star and SHARP programs
- Evaluate employer's safety and health program during intervention and recommend improvements

Outcome	Baseline	2018	2019	2020	2021	2022	
DART	3.5	3.4					
Cwaaawy		2010	2020	2021	2022	2022	

Grocery	2019	2020	2021	2022	2023
Inspections	23				23
Goals	20				20
Consultation	4				4
Goals	3				3
Trained	7				7
Goals	25				25

2.2 Reduce the DART Rate in Long-Term Care (LTC) by 5% by the end of FY 2023

While progress has been made in this industry group during previous planning cycles, the baseline rate of 3.9 was still more than twice the overall DART rate. For this reason, the LTC (NAICS 623) emphasis area has been carried over from the previous strategic plan. The most recent DART rate is below the baseline.

Strategies for Achieving Specific Outcome Goal

- Conduct OSH compliance, consultation, and training interventions
- Develop and maintain alliances in LTC including the public sector
- Advance ergonomics guidelines during OSH interventions
- Address elements of long term care intervention contained in OPN 132 including bloodborne pathogens, tuberculosis, ergonomics, slips, trips, falls, and workplace violence
- Develop materials and training presentations specific to the industry
- Distribute outreach material through direct contact with affected employers
- Properly code inspections for accurate tracking of activity at specific work sites
- Develop procedures to reduce work place violence in LTC facilities

Outcome	Baseline	2018	2019	2020	2021	2022
DART	3.9	3.3				

Long Term Care	2019	2020	2021	2022	2023	Total
Inspections	58					58
Goals	48					48
Consultation	66					66
Goals	40					40
Trained	442					442
Goals	50					50

2.3 Conduct Emphasis Inspections, Training, and Consultation Activity in Establishments Where Employees Might be Exposed to Health Hazards Such as Lead, Silica, Asbestos, Hexavalent Chromium and Isocyanates

The State has established a special emphasis program to address health hazards in the work place. The current health hazards include lead, silica, asbestos, hexavalent chromium, and isocyanates. Tracking mechanisms have not been developed to allow for the establishment of specific outcome measures in this area of emphasis. The State will continue to monitor the progress of Federal OSHA in developing reliable outcome measures for health issues. A reduction in illnesses relating to the emphasis health hazards identified could influence the primary outcome goal of reducing the overall injury and illness rate by 10% during the five-year cycle of the strategic plan.

Strategies for Affecting Overall Outcome Goals through Elimination of Health Hazards

- Pursue OSH compliance, consultation and training interventions
- Conduct follow-up inspections where overexposure was initially detected
- Develop hazard alerts, training materials and industry guides for specific health hazards
- Provide consultative support on chemicals identified in health hazards SEPs
- Research and review site specific data sources that could be used to identify employers having or potentially having health hazard exposures
- During interventions, identify workplace activities where health hazards may be present
- Secure information from other agencies concerning possible employee overexposure
- Utilize specific inspection procedures described in OPN 135

Health Hazards	2019	2020	2021	2022	2023	Total
Inspections	144					144
Goals	100					100
Consultation	245					245
Goals	200					200
Trained	795					795
Goals	400					400

Inspections with Detectable Results

Hazard	Inspections	Samples	Overexposures (Inspections)	Overexposures (Samples)
Silica	7	66	6	22
Lead	12	26	2	4
Asbestos	5	9	0	0
Cr (VI)	6	7	0	0
Isocyanates	5	9	0	0
Totals	35	117	8	26

2.4 Reduce the DART Rate in Establishments in Food Manufacturing (NAICS 311) by 5% by the end of FY 2023

The strategic planning process is intended to allocate resources in those areas of emphasis with above average injury and illness rates in an attempt to impact the overall State injury and illness rate. The Food Manufacturing (NAICS 311) DART rate was 2.5 in FY 2017 which was more than the overall DART rate of 1.3. For this reason, food manufacturing was carried over to the current five-year Strategic Management Plan. The baseline rate for this industry is 2.6 which is the five-year average DART rate for the period 2012-2016. Operational Procedure Notice 140 was updated for food manufacturing and to provide specific inspection guidelines. The most recent DART rate is below the baseline.

Strategies for Achieving Specific Outcome Goal

- Give special attention to the OSHA recordkeeping process at each site visited
- Interview a sufficient number of employees to confirm accuracy of OSHA 300 log entries
- Develop educational materials and training presentations specific to this industry
- Provide consultation and technical assistance at sites covered by this area of emphasis
- Conduct inspections addressing industry hazards identified in OPN 140
- Utilize ergonomics inspection procedures to determine the appropriate response when ergonomic hazards may exist
- Consider inspection of additional company sites on targeting schedules when three or more serious violations are identified
- Ensure that all CSHOs are sufficiently trained to recognize hazards associated within the food manufacturing industry

Outcome	Baseline	2018	2019	2020	2021	2022
DART	2.6	2.2				

Food	2019	2020	2021	2022	2023	Total
Inspections	42					42
Goals	40					40
Consultation	26					26
Goals	12					12
Trained	14					14
Goals	25					25

2.5 Reduce the number of Amputations in support of the overall outcome goals of reducing the rate of workplace injuries and illnesses by 5% by the end of FY 2023

The first year of any new addition to the SP is designated as a planning year. FY 2019 was a planning year for Amputations. A strategic management plan committee was established to manage the planning process. This includes developing strategies to achieve established goals and determining the appropriate activity level for department intervention including compliance activity, consultation, and training. In FY 2019, Operational Procedure Notice (OPN) 149 was developed to provide guidance for conducting amputation SEP inspections

Strategies for Achieving Specific Outcome Goal

- Meet quarterly to monitor and review the reported results related to Amputations by OSH bureaus
- The SEP Committee Chair will prepare and distribute biannually to the Compliance Bureau supervisors a summary of the reported Compliance inspections any trends or hazard trends identified
- Evaluate information and procedures in the FOM, OPNs, and other department reference materials and make recommendations for revisions to these documents as it relates to Amputations
- Develop an OPN for Amputations during the planning period

Amputation	2019	2020	2021	2022	2023
Inspections	planning year				
Goals	planning year				
Consultation	planning year				
Goals	planning year				
Trained	planning year				
Goals	planning year				

PART III – SPECIAL ACCOMPLISHMENTS: FY 2019

- The State's total recordable case (TRC) rate for Calendar Year (CY) 2018 remained at historic low levels. The private sector Total Recordable Case (TRC) rate was 2.4 and the Days Away Restricted Transfer (DART) rate was 1.3. If the public sector numbers are included, the overall NC TRC was 2.6 and the DART was 1.4. These rates are respectively 16% lower and 18% lower than the national rates.
- OSH participated with Federal OSHA in the National Safety Stand Down to Prevent Falls in construction. The Educational Training and Technical Assistance (ETTA) section participated in three training events to include one webinar, one speaker bureau request and one site visit with Labor One in New Hanover County. Labor One was on site for training and personal protective equipment demonstrations. The Consultative Services Bureau participated in 16 events across the state which reached and trained upwards of 1400 attendees. ETTA also hosted two Construction Forums to supplement fall stand down activities. Construction forums were hosted in Wake and Cabarrus counties and covered various topics to include; electrical hazards, excavation and trenching, fall protection and struck-by/caught between hazards.
- OSHA Region 4 reached out to NCDOL's ETTA to assist in providing a 45-minute educational outreach to a large construction employer in Charlotte, NC which would coincide with the National Safety Stand-Down to prevent falls in construction. With coordinated efforts the arrangements were made for the West Bureau Chief to provide a class covering the following topics: OSHNC construction SEP, common types of construction fatalities (e.g. falls, struck-by), and the General Contractors role in construction jobsite safety, including the multi-employer citation policy.
- During Safe + Sound Week, in addition to various webinars being held, a podcast discussing the Safe + Sound campaign was held with the OSH Director. According to OSHA, 162 NC employers registered their participation in Safe + Sound.
- The OSHNC Home Land Security Coordinator, was requested to present at the OSHA State Emergency Preparedness and Response Conference call in March 2019. OSHNC presented a PowerPoint on the fall 2018 Hurricane Florence Response and Recovery in North Carolina.
- The Division has taken various actions to increase safety and health professional pay to be more competitive with the private sector. A policy change was made that allows salary adjustments for various professional certifications and designations. This change resulted in 246 pay increase actions from 2015-2019. The staff certifications and credentials strengthen the ratios associated with professionalism in the division and associated pay increases appear to be impacting the division's overall strategy to retain experienced safety and health professionals.

- In State Fiscal Year (SFY) 2019 the N.C. Legislature provided a 2.5% across-the-board salary increase for all state employees, which provided a modest increase to all OSH staff. The bi-annual budget also included a provision for an additional 2.5% salary increase for most state employees in 2020.
- OSHNC Advisory Council meetings were held on May 8, 2019 and November 20, 2019. The OSHNC Advisory Council provides guidance to the OSHNC Division on matters related to the OSH Act. Two meetings are held each Calendar Year. One meeting was held in Asheboro and the other meeting was held in Raleigh.
- As part of the OSHNC quality program, 17 internal inspection report audits were conducted, and 111 high profile case file reviews were completed by the OSH Director's Office. The purpose of the audits was to ensure that inspection activities were being conducted in accordance with established policies and procedures. The findings of these audits were posted internally, and feedback was provided to the compliance bureau chiefs, supervisors, and compliance officers.
- OSHNC Division Director, Kevin Beauregard, was the Chairman of the Occupational Safety and Health State Plan Association (OSHSPA) in FY 2019. He began his 2-year term as OSHSPA chair near the beginning of FY 2018. The OSHSPA Board meets with OSHA leadership 3 times a year to plan and coordinate OSHSPA meetings to better ensure consistency amongst OSHA programs nationwide.
- OSHNC participated in meetings across the State with regional safety schools including
 the NC Statewide Safety Conference, Western NC Safety and Health School, Eastern
 Carolina Safety and Health School and the Wilmington Regional Safety and Health School.
- N.C. Department of Labor's Commissioner Berry participated in the 2019 4th Annual Summit on Safety Leadership held at the North Carolina Zoo in Asheboro, NC. The school was sponsored by the Safety and Health Council of NC; NC State Industry Expansion Solutions; NCDOL; and the NC Zoo. The three and a half days of training included topics such as "The Art of Safety Leadership", "What is a Safety Culture", "Disaster Response and Mold Safety", "Looking at OSHA from Both Sides", and "The Billion Dollar Problem".
- OSHNC met with a delegation from the South Korea Electric Power Corporation in January 2019. A five-person project team was greeted by the OSH Administration staff. The team was interested in employee welfare and industrial safety and indicated that they wanted to collect strategies to provide and manage safer work spaces and better deal with work related injuries under their auspices.
- The OSHNC Complaint Desk and field office processed 2,784 complaints and 822 referrals in FY 2019. Over 2,579 additional contacts were made with the public that did not result in valid complaints, along with 120 reports of injuries that were not processed due to the incidents not being reportable to OSHNC.

- The OSHNC Compliance Bureau's conducted 2,928 inspections during FY 2019 and identified and corrected over 7,750 hazardous conditions, including 5,185 that were classified as serious, willful, or repeat violations.
- Approximately 55% of all OSHNC Compliance inspections resulted in serious, willful, or repeat violations, with a total penalty assessment of \$9.47 million. However, only 4.3% of inspections with citations were legally contested by employers.
- Inspections with citations were written and processed in a timely manner, which expedites abatement of the hazardous conditions. OSHNC Compliance had an average lapse time of 36.0 days for safety inspections and 37.7 days for health inspections, both of which are significantly lower than the respective national averages of 49.4 and 59.7 days.
- The OSHNC Compliance Bureau inspected 54 fatalities during FY 2019, identifying serious, willful, or repeat violations on 77.8% of those inspections.
- The OSHNC Compliance Bureau inspected or investigated 194 accidents resulting in an amputation, plus an additional 23 accidents where an employee was pulled into machinery. In response, the Division developed a new Amputations Special Emphasis Program (SEP) that was implemented in FY 2019.
- OSHNC compliance staff helped develop the curriculum and teach at the 62nd annual NC Industrial Ventilation Course that was held in Raleigh in May 2019.
- A total of 14 action requests were processed by the OSHNC Division's Compliance Bureaus. This quality program activity provides opportunities for program improvement identified by customers, division employees or as a result of internal audits and Federal OSHA audits. Ongoing revisions are made to the Field Operations Manual (FOM) and Operational Procedure Notices as a result of the quality program action items.
- The OSHNC Lab completed 632 in-house equipment calibrations. An additional 90 pieces of equipment were sent to the manufacturer for calibration or repair.
- Three change requests were submitted for the OSHA Express (OE) Data Management System this past year which included additions and modifications to the new Document Management System using the Scanner data module for the OE. The scanner capabilities at each office have allowed the OSH Division to move closer toward the goal of having a paperless system in FY2020. OSH is in the last phase of testing and integrating the system.
- In FY 2019 OSH transmitted data from OE to OSHA's Information System (OIS) via an interface. OSH and the OE vendor continue to work together to ensure that the OE and OIS, State Activity Mandated Measures (SAMM) and State Information Report (SIR) reports are providing accurate data.

- OSHNC continues to provide administrative support for the OSHA Legacy Data (OLD) system. The OLD system was rolled out in late FY 2016, and additional features were subsequently added to allow OSHA and State Plans to access and modify pre-OIS inspection files, as necessary. Progress continues to be made closing NC open legacy case files. At the end of FY 2019, OSHNC had 137 cases remaining in OLD.
- The team leader of the OSHNC Construction Special Emphasis Program (SEP) represented the department in a national OSHA live webinar on Trenching and Excavation, in March 2019. The OSHA Directorate of Construction requested an OSHNC representative to talk about the departments drone program and how we use drones in our inspection process.
- As part of the NCDOL Unmanned Aircraft Systems (UAS) program,16 pilots successfully completed an in-depth training curriculum to ensure flight competency, risk avoidance and mitigation strategies. Upon completion of the training program the pilots were awarded a set of wings to recognize their Federal Aviation Administration Remote Pilot Certification, NC Department of Transportation Unmanned Aircraft System State Permit and completion of a robust flight training program. Through the year, drones were successfully deployed on multiple high-profile accident investigations which included falls, excavation collapse, heavy equipment roll over and logging. In an effort to enhance photogrammetry and videography during the investigative process and to increase safety operations the department added three new DJI Matrice 210's to the UAS fleet.
- The OSHNC Division was engaged in the following three high visibility construction projects in support of the construction strategic plan goal through the partnership program:
 - o Flatiron/Blythe Development Company:
 - o Site #1 Charlotte Douglas Airport Improvements Charlotte
 - o Fluor Enterprises:
 - o Site #2 DAPI US Project, Novo Nordisk Facility Clayton
 - Turner –Rogers: (Joint venture)
 - Site #3 Charlotte-Douglas Airport Concourse A, Expansion Project Charlotte
- The OSHNC Division encourages and supports continuing education of our staff and offers occupational safety and health training courses, CSP/CIH professional certification courses and the use of CSP/CIH certification software. The Division firmly believes that providing staff members with quality training and access to certification software allows them an opportunity for self-improvement and it allows us to better serve our customers.
- Two bilingual NCDOL staff presented and participated at the "Labor Rights Educational Forum" put on by the Guatemala Consulate, in August 2019.
- The Consultation Services Bureau (CSB) has a task/measure called "intervention" that is different from onsite visits and is not counted in the program statistics. During FY 2019, 269 interventions were conducted. Activities included in this measure are telephone and

- email correspondence, off site technical training, speeches, presentations and targeted mailings.
- CSB continued to conduct interventions and surveys in the logging and arboriculture industries providing outreach to this highly hazardous industry.
- Consultative staff reached a huge audience by being speakers at an August 2019 NC
 Masonry Contractors Association meeting, that was extensively publicized, tweeted and
 written about. The Association advertised the event and the availability of free
 consultation services to assist contractors in being code compliant.
- There were 132 private sector companies participating in the Safety and Health Achievement Recognition Program (SHARP), at the end of FY 2019 and 5 working towards the SHARP. There were 6 construction companies participating in SHARP at the end of FY 2019. There were 47 public sector establishments participating in SHARP at the end of FY 2019.
- CSB mailed 800 letters to employers with an Experience Modifier Rate (EMR) of 1.5 or higher. Tracking last year's requests from the mailing, the bureau noted that 50% of customers no longer had an EMR above 1.5.
- Staff from OSHNC Compliance, CSB and ETTA continued working with East Carolina University in February 2019 by hosting an equipment demonstration and calibration class. This has been done annually for the past several years. Staff coordinated with instructors for a master's class and worked with students on calibration procedures with sampling pumps and various media. They also showed the students the different types of monitors and other equipment OSH has available for inspections, such as gas, dust and ventilation meters.
- CSB identified and addressed overexposures to noise, lead, silica, arsenic, copper, iron oxide, manganese, cadmium and chromium.
- In February 2018 CSB mailed out 180 letters to the Grocery and Related product in conjunction with our Special Emphasis efforts due to an increase in the industry injury/illness rate last year. It is our hope that employers in that industry contact CSB and ETTA for assistance with their safety and health programs. CSB is working with PSIM to develop a database to be able to email these types of correspondence.
- In April 2019 the Consultation program received the Regional Annual Consultation Evaluation Report (RACER). There were no negative findings or observations nor were there any recommendations for improvement.
- The Education, Training and Technical Assistance (ETTA) Training Section participated in 210 events to include speaker's bureau requests, 10 and 30-hour courses, individual topic workshops, webinars and public outreach fairs and conferences.

- One OSHNC Division personnel attained the 500 and/or 501 Train the Trainer Authorization. To be eligible for this program, the employee must be recommended by their supervisor and/or bureau chief. This authorization allows an employee to teach State and Federal 10 and 30-hour courses. In addition, four OSH Division personnel attended the 502/503 refresher courses and were recertified as authorized trainers.
- ETTA provides training and outreach services to the Spanish speaking population through delivery of individual topic workshops. A total of 24 Spanish speaking workers were trained.
- ETTA offered 217 hours of formal training, 271 hours of continuing education, and 43 hours of other job-related training to internal personnel. Courses offered included:
 - a. OSH 100 (Initial Compliance Course)
 - b. OSH 125 (Introduction to Safety Standards for Industrial Hygienists)
 - c. OSH 105 (Introduction to Safety Standards for Safety Officers)
 - d. CPR/AED
 - e. OSH 123/131 (Accident Investigations/Interviewing Techniques)
 - f. Amputations SEP
 - g. Confined Space in Construction OSH Construction Safety Specialist (OCSS)
 - h. Electrical Standards (OTI #3095)
 - i. Excavation and Trenching
 - i. Fall Protection
 - k. HAZWOPER 8-Hour Refresher.
 - 1. Health Hazards in Construction
 - m. Long Term Care
 - n. Lockout-Tagout
 - o. Machine Guarding
 - p. Safety and Health Management Systems
 - q. Scaffolds OCSS
 - r. Technical Writing
- OSHNC Division's annual training, conducted in October 2019, included in-depth classes on Masonry, Cranes and Derricks for OSH staff. Another course track was provided for the Agricultural Safety and Health (ASH) bureau on Home Inspections, Using the ASH Paperless System and Farm Guarding and Safety.
- The ETTA Training Section conducted five 10-hour and two 30-hour general industry awareness courses and seven 10-hour and two 30-hour construction awareness courses.
- The ETTA Training Section participated in and hosted a booth during the Mexican Consulate Labor Week. OSH staff handed out materials and were available for questions.
- In FY 2019, the OSH Division signed a new alliance with the North Carolina Association of Local Governmental Employee Safety Officials (NCALGESO).
- There are eight active alliances including Carolinas AGC, Lamar Advertising Company, Mexican Consulate, N.C. State Industry Expansion Solutions, National Utilities

Contractor's Association of the Carolinas, the Safety and Health Council of North Carolina, the North Carolina Association of Local Governmental Employee Safety Officials (NCALGESO) and a joint alliance with Forestry Mutual Insurance Company, N. C. Forestry Association and the Carolina Logger's Association.

- ETTA's Standard's Section revised 29 publications including brochures, quick cards and booklets, covering multiple safety and health topics. This includes brochures on the following: NCDOL, MESH, Library, ETTA, and Alliances and Partnerships. Quick cards included Spanish topics such as heat stress, hydrogen sulfide, nail gun safety, scaffold inspections, scaffold safety, tree trimming, lead protection, mold prevention, personal protective equipment, respirators, silicosis, top 4 in construction, work zone safety, and West Nile virus. Booklets included safety briefings and tool box talks in English and Spanish.
- ETTA also developed a new quick card covering the requirements under 29 CFR 1910.134 Appendix D Information for Employees Using Respirators When Not Required Under Standard.
- ETTA continued to update and add content to the OSH portion of the NCDOL redesigned website in 2019. ETTA developed 13 safety and health topic pages for the NCDOL website including pages on the following: hand and power tools, benzene, carbon monoxide, amputations, zoonotic diseases, overhead and gantry cranes, organic solvents, material handling and storage, excavations and trenching, acids and bases, abrasive blasting, concrete and masonry, and boat manufacturing.
- In ongoing efforts to find new and exciting ways to interact with and educate the NC public, NCDOL started to record and release podcasts in November 2018. The podcasts are designed to educate and inform North Carolina citizens on the role that the Department of Labor plays in state government. Many of the episodes that have been released relate to OSH activities and the departments that run them. To date there have been 26 episodes. ETTA participated in eight podcasts relating to ETTA services, alliance activity, and construction work place hazards. Podcasts topics included library, recognition program and standards activity and services, fall hazards, excavation and trenching hazards and information about individual alliance organizations. Carolinas AGC, N.C. State Industry Expansion Solutions, National Utilities Contractor's Association of the Carolinas, and the Safety and Health Council of North Carolina participated in the 2019 podcast series.
- ETTA contributed to the designs of three billboards located on prominent highways in N.C. The billboards promoted the following safety and health initiatives: The Grain Handling Stand Up, Fall Stand Down, Safe + Sound Week.
- ETTA's Standards Section added 50 documents to the Field Operations Manual, revised OSH Division policies, and adoption of multiple Federal OSHA Instructions.

- ETTA distributed 70,627 publications to employers and employees across the state, The Publications Desk served 4,531 customers and the Standards Section answered 3,159 standards inquiries.
- Final rules adopted in NC included Technical Amendments (29 CFR 1910.119 and 29 CFR 1910.184), the revised rule for Cranes and Derricks in Construction: Operator Qualification (29 CFR 1926 Subpart CC), revisions to Electronic Submission of Employer Identification Number and Injury and Illness Records to OSHA (29 CFR 1904.41), and two revisions to the rule on Beryllium (29 CFR 1910.1024).
- The NCDOL (Charles H. Livengood Jr. Memorial) Library loaned out 886 items (e.g., safety videos, consensus standards, certification exam preparation books) to NCDOL employees and registered public patrons. Additionally, the library responded to 1,063 information requests, answered 453 reference questions, provided streaming video access (via The Training Network NOW) to 129 patrons, served 476 visitors, provided 20 library tours and acquired 230 items for the collection.
- Three OSH Division personnel attained the Certified Industrial Hygienist (CIH) certification. CIH is a safety and/or health professional who has met education and experience requirements, has demonstrated by examination the knowledge that applies to the professional practice of industrial hygiene, continues to meet recertification requirements established by the American Board of Industrial Hygiene (ABIH), and is authorized by ABIH to use the Certified Industrial Hygienist designation.
- Five OSH Division personnel attained the Certified Safety Professional certification.
 Certified Safety Professional (CSP) is a safety and/or health professional who has met
 education and experience requirements, has demonstrated by examination the knowledge
 that applies to professional safety practice, continues to meet recertification requirements
 established by the Board of Certified Safety Professionals, and is authorized by Board of
 Certified Safety Professionals (BCSP) to use the Certified Safety Professional
 designation.
- Three OSH Division personnel received the Construction Health and Safety Technician certification. Construction Health and Safety Technician (CHST) is a certification awarded by the BCSP to individuals that demonstrate competency in construction safety and health through an examination and recertification requirements.
- Five OSH Division personnel attained the Associate Safety Professional certification. Associate Safety Professional (ASP) is an independent certification awarded by BCSP. This certification denotes that an individual has met academic requirements and has passed the Safety Fundamentals Examination (the first of two examinations leading to the CSP).
- One OSH Division personnel received the Occupational Hygiene and Safety Technician certification. Occupational Hygiene and Safety Technician (OHST) is a certification awarded by the BCSP to individuals that demonstrate competency in occupational hygiene and safety activities through an examination and recertification requirements.

- Twenty-four OSH Division personnel attained the OSH Construction Safety Specialist Program (OCSS) designation. To be eligible for this program, the employee must be recommended by their supervisor and/or bureau chief. This program focuses on advanced construction topics to include, but not limited to Excavations and Trenching, Cranes and Derricks, Fall Protection, Steel Erection, Electrical Safety, Scaffolding, Residential Construction (i.e.; frames, trusses, and roofing), Health Hazards, Concrete and Masonry and Material Handling Equipment (i.e.; loaders, bulldozers) and Work Zone Safety. Each course contains a field portion with an emphasis on OSH inspection procedures.
- Two OSHNC Division personnel attained the Manager of Environmental Safety and Health (MESH), three received the Construction MESH, two received the Industrial Hygiene MESH as a result of receiving 100 hours of safety and health training. This designation is offered in collaboration with NC State Industry Expansion Solutions and the Safety and Health Council of North Carolina.
- In FY 2019 OSHNC staff held 420 professional certifications and designations. A breakdown is as follows: 22 CSP, 11 CIH, 13 ASP 5 CHST, 3 OHST, 82 OCSS, 10 Certified Public Managers (CPM), 86 MESH, 61 Construction-MESH, 65 IH-MESH, 24 Public Sector-MESH, 1 Advanced MESH, 1 Certified Hazardous Materials Manager (CHMM), 16 Remote Pilots, 19 Virtual Observers, 1 Construction Certified Trained Supervisor and 2 Graduate Safety Professionals.
- A new Emergency Preparedness (EP) MESH was introduced in 2019 which is geared toward individuals responsible for analyzing, identifying, measuring and controlling workplace hazards or stressors that can cause sickness, impaired health, or significant discomfort in workers through chemical, physical, ergonomic or biological exposures.
- The OSH Division promotes continuing education of our staff and offers occupational safety and health training courses along with CSP and CIH professional certification courses. In addition, certification software and study materials for CSP, CIH, CHMM, OHST, CHST, and CET have been purchased to assist employees in obtaining certifications. The Division firmly believes that providing staff members with quality training and access to certification software allows them an opportunity for self-improvement and it allows us to better serve our customers.
- In 2019, OSHNC staff played key leadership roles in the Carolinas Section of the American Industrial Hygiene Association (AIHA). The OSH staff held positions as president, vice president, secretary and outreach coordinator.
- ETTA hosted the 2019 Annual Carolina Star Safety Conference which had a total of 705 in attendance.
- The ETTA Recognition Program Section trained 23 new Special Star Team Members (SSTMs) during the FY and achieved 28 re-certifications, one promotion and 7 new Star sites were added for an overall total of 153 Star Sites: 103 Carolina Star sites, 23 Building Star sites, 22 Public Sector Star sites and 5 Rising Star sites.

- The OSHNC Safety Awards Program celebrated its 73rd year and gave out 2,629 Gold Awards, 487 Silver Awards, and 84 Million Hour Awards. There were 4,193 in attendance and 33 banquets.
- The Planning Statistics and Information Management (PSIM) Bureau mailed a total of 3,117 surveys to public sector employers (collection of calendar year 2018 injury and illness data). As of the end of FFY 2019, 2,998 survey responses were received with a 96.2 percent response rate and a 100 percent clean rate.
- PSIM completed an analysis of data collected from the 2015, 2016, and 2017 Public Sector Surveys, resulting in updated, established target rates for employer specific categories.
- PSIM coordinated the strategic plan process for all bureaus in the OSH Division to submit data for the FFY 2020 Strategic Management Plan.
- PSIM worked in conjunction with ETTA Bureau, Compliance Bureaus, and/or Legal Affairs Division staff to update and revise several Field Operation Manual chapters and OPN's. PSIM staff updated OPN 128 and APN 19 for FFY 2019.
- PSIM Bureau Chief continued to perform duties associated with the responsibility of being the Medical Records Coordinator for the OSH Division.
- PSIM analyzed public sector inspection activities for FFY 2014 2018.
- PSIM analyzed construction inspection activities for FFY 2018.
- PSIM completed FFY 2018 Occupational Fatalities Comparison Report (OFIR Report Analysis).
- PSIM analyzed and verified CY 2018 fatality data for Communications Division 's annual press release.
- PSIM continued refinement of the OSH private and public-sector databases to supplement our exclusive use of the Division of Employment Security database.
- PSIM received, researched, and processed 1,200 requests for revisions/changes to the private and public-sector establishment databases, which helps to enhance the accuracy of these site databases and the OSH Division Targeting System.
- PSIM received and processed 671 requests from the public sector for revisions/changes to the Public-Sector Injury and Illness Survey database.
- PSIM worked on various targeting schedules that were updated and assignments released for:
 - i. Public Sector Schedule
 - ii. General Industry Schedules (Safety and Health)

- iii. ASH Schedule
- iv. Health Hazards Schedules (Asbestos, Lead, and Isocyanates)
- v. Fatality Reinspection Schedule
- vi. Communication Tower Schedule
- PSIM staff members continued as active Strategic Management Plan (SMP) Committee
 members and participated in all SMP meetings, discussions, and activities, which were
 essential functions directly related to the success of OSH Division Strategic Management
 Plan goals.
- PSIM staff participated as a representative from the OSH Division to the Occupational Surveillance Advisory Group.
- PSIM compiled OSH data was initiated for the NCDOL Annual Report, the OSH Annual Program Statistics Report, and various other annual reporting requirements.
- PSIM received closed inspection files for FFY 2017 (and older) from the field offices.
- PSIM prepared 1,328 inspection files for scanning and scanned 265 of those files for archiving into the department's file content management system (OnBase).
- The project of quality control review is continuing and ongoing for OSH inspection files, which have been archived through the imaging and file conversion processes.
- PSIM received 1,141 disclosure requests during FFY 2019 and processed 1,002 requests (564 from FFY 2019 and 438 from previous years) during this fiscal year, which resulted in an 87.8% response rate.
- PSIM provided notifications of workplace accidents and fatalities to the North Carolina Department of Commerce, North Carolina Industrial Commission Fraud Investigations Unit of the Insurance Compliance and Fraud Investigation Section.
- The Agricultural Safety and Health (ASH) Bureau completed 1891 preoccupancy housing inspections of migrant farmworker housing and conducted 75 compliance inspections. Housing certificates were issued to 1818 sites with total occupancy (beds) of 23,797.
- In January/February 2018, ASH held their 25th Annual Gold Star recognition awards and recognized 174 Double Gold Star growers and 94 Single Gold Star Growers.
- In June, ASH staff providing training to 302 migrant farm workers and 57 growers in two on-farm training events coordinated by GAP Connections. The training took place in Pinetops and Ruffin, NC and consisted of 8 training stations. ASH staff trained workers on migrant housing regulations, field sanitation requirements, heat stress and venomous snakes and spiders found in NC. Growers received training on the most frequently cited standards, injury reporting requirements, and emergency action plans. Workers and

- growers also received training on wage and hour regulations, equipment safety, human trafficking, basic CPR, pesticide safety, heat stress and green tobacco sickness.
- ASH, in conjunction with ETTA, provided training to 75 Christmas tree growers during the North Carolina Christmas Tree Association's summer meeting held in August 2019.
 ASH staff provided training on OSH standards applicable to agriculture and ETTA staff conducted a presentation on chainsaw safety.
- ASH staff provided training to 19 farm contractors during two workshops hosted by NC Cooperative Extension. Training topics included migrant housing regulations, field sanitation requirements, injury and illness logs, and worker training requirements.
- In August, ASH staff presented at NC Department of Commerce's annual training event. Topics covered included the Migrant Housing Act of NC, the preoccupancy inspection process, and compliance inspection procedures.
- ASH participated in a pilot project initiative implemented by the Office of State Budget and Management to test "System Analysis" in North Carolina. The project's goal was to optimize the migrant housing preoccupancy inspection process to limit or reduce the number of provisional occupancy notices issued in future years. As a result, short-term and long-term solutions were identified, and ASH will implement as feasible.
- An internal audit was conducted by OSH administration to review the ASH publications,
 ASH outreach and Field Operations Manual to assure the information is accurate and
 current and to review how the department can better serve the Agricultural community
 that they permit. The department is making steady progress towards addressing the areas
 identified in the audit.