
NCWM MODEL FIELD TRAINING PROGRAM



National Conference on Weights and Measures
"That Equity May Prevail"

Acknowledgements

The National Conference on Weights and Measures expresses gratitude to the following individuals who volunteered their time and talents to the development of this Model Field Training Program.

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We especially recognize Mr., Cleary who brought the concept of this project to the Board of Directors and asked to lead a task group in its development. It will serve many organizations as a guide to achieving consistent and effective training that leads to increased competency and professionalism.

The contributions of the Task Group members listed above were vital to success. They are among those in the weights and measures community who possess a strong grasp of weights and measures disciplines. They are familiar with the skills and qualities necessary for field officials to be successful. They understand the challenges that training officers face in instilling those skills and qualities for new inspection personnel.

We also acknowledge the Professional Development Committee for its support of this project. The Committee provided careful review and assessment of the products of the Task Group and provided opportunities for communication to membership on the status and goals of the project.

The volunteer efforts of so many serve as the foundation of success in the National Conference on Weights and Measures as it strives for national uniformity through quality weights and measures standards applied in a uniform and professional manner on a national scale.

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INTRODUCTION

Concept:

This program would require the state or jurisdiction to identify Field Training Inspectors (FTI) to work with the new hire in the field and use this manual to ensure the new inspector is competent in all of the required basic skills needed to perform the function of an entry level weights and measures official. This manual is designed as a shell with examples of universal competencies identified by subject matter experts set up in a format that allows the FTI to verify and sign off as the competency is achieved and demonstrated by the trainee. The trainee would be graded on a competency based evaluation scale (CBES).

After each phase of the manual is completed an overall evaluation form would be included so that the FTI could cover strengths and weaknesses identified during the training period. Both FTI and trainee would sign off and acknowledge the overview. Ideally the training would take 6-9 months depending on the skill level of the trainee, but within the probation period so that employers could make informed decisions as to the retention of the trainee.

While a written test is a good way to evaluate memorization of facts, only through actual fieldwork can a FTI be sure their candidate can actually do the job properly with little or no supervision. NCWM could offer this model manual to the jurisdictions along with a class on the implementation of the program to those areas interested. Perhaps NCWM could also certify those jurisdictions that use this model in order to develop programs meeting the general guidelines of the NCWM model.

Potential benefits of this project:

- Ensures consistent training under the guidance of a senior inspector.
- Enhances the professionalism of your staff.
- Provides solid documentation that training has in fact been provided and the result of the training.
- Provides solid documentation of any deficiencies of the trainee in the event of a negative hire.
- Protection of your department from lawsuits based on lack of proper training and vicarious liability issues.
- Provides lateral opportunities for those selected to act as Field Training Inspectors and prepares them for supervisor positions.
- Ensures that the public we serve has the most competent, well-trained government regulators in the marketplace.
- Ensures agencies hiring laterally that the candidates who have been through such a program are competent.

In-Service Training Guide

Date issued

Inspector to whom issued

Date completed

Issued by

Purpose:

This guide is used to instruct new weights and measures inspectors in the various duties they will most likely perform during their careers. All situations and problems are not included but the subjects found herein constitute the basis, which will help the new Inspector in building a good foundation for their future activities on the job.

Very few, if any, entry-level candidates for Weights and Measures Inspector positions have well-rounded experience working with weighing and measuring devices. Even candidates from private industry involved in the manufacture or repair of weighing and measuring devices normally have experience with only one or two types of devices, and are not familiar with the principals of legal metrology, nor do they have experience working as government regulators. A significant training period is necessary to teach candidates with demonstrated aptitudes the specific skills they need to function successfully as Weights and Measures Inspectors before they are able to work on their own and assume responsibility for a territory.

This training program is designed to facilitate the recruitment of entry-level candidates capable of mastering the required skills. In order to master these skills, candidates will complete a training program, the duration of which shall not be more than nine months and shall not be less than three months. The training program includes several phases, any of which may be waived at any point in the process upon demonstrated proficiency by the employee.

The weights and measures Field Training Inspectors (FTIs) have been carefully selected and trained to do the on-the-job training. The new inspector is expected to carry this in-service training guide with them and be prepared at anytime to show it upon request. FTIs and other supervisors will make regular checks of these training guides to ensure that definite progress is being made.

In addition to the guide a routine evaluation report (listed below) of the trainees performance shall be done by the FTI at least once a week in order to document

general employee performance. The rating guidelines for the ROF are also included.

Each FTI working with the trainee shall complete an evaluation of performance. Trainers shall report any incidents of unprofessional or inappropriate behavior, especially any failure to comply with safety procedures, or behavior that results in physical harm or risk of physical harm to the trainee, the trainer or members of the public. Serious or repeated unsafe, unprofessional or inappropriate behavior will result in termination from the program.

Trainees will also complete written and field exams related to their assignment as a weights and measures trainee. Trainees will be permitted a maximum of three attempts to pass written and field exams. Failure to pass any exam after three attempts will result in a rating of NRT (Not Responding to Training) and dismissal from the training program. Failure to pass all written and field exams within 12 months will result in termination from the program.

In addition to the instruction the new inspector will receive under the direction of the FTI, it is expected that the new inspector will do home study. The broad background of knowledge needed by the effective weights and measures inspector cannot be gained entirely on the job or during the written exams administered by NCWM. Reference to various handbooks is made for this purpose in the appendix located in the back of the in-service training guide. Also the new inspector should maintain a current copy of Handbooks 44, 130 and 133 for ready reference.

Upon satisfactory completion of the training program, the Department will certify to the State Personnel Department that the trainee has successfully completed training. The trainee shall then be deemed eligible for appointment.

Required Interpersonal Skills For Field Training Inspectors

Commitment to service:

- Predisposition to seek responsibility
- Responsive to the public need
- Responsive to the goals of the Department and weights and measures

Oral Communication and Listening:

- Conveying ideas to another in a coach-pupil atmosphere
- Clear and Concise in nature
- Responsive to the trainee's needs
- Ability to adjust to the personality of the trainee
- Patience

Flexibility:

- Ability to adapt to changing conditions as needed

Planning and Organizing:

- Implementing decisions according to a timeline
- Utilizing resources at your disposal to achieve a desired result
- Knowledge of subject matter

Follow Through:

- Verifying effectiveness
- Accessing results
- Timely response to inquires

Essential FTI Duties

Observer:

- Patient oversight of the trainee
- Allowing the trainee to act, then giving feedback as to performance
- Implies listening as well as viewing

Trainer:

- Implementing the learning process

Evaluator:

- Interpreting behavior and accessing results in terms of what is expected of a trainee
- Provide documentation

NCWM Field Training Program:

Routine Observation Report (ROR)

[Documented at least weekly]

PHASE: _____

TRAINEE: _____

FTI: _____

DATE: _____

DATE: _____

Rating Instructions: Rate observed performance of trainee in the following categories:

***NI** = Needs Improvement

****C** = Competent

NO = Not Observed

A. PERFORMANCE

- | | | | |
|--------------------------------------|-----------------------------|----------------------------|-----------------------------|
| 1. Report Writing | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 2. Driving Skills: Routine | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 3. Self-initiated Activity | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 4. Knowledge of Locations | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 5. Stress Control: Verbal/Behavior | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 6. Safety: Self/Others | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 7. Violator Control: Verbal/Physical | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 8. Decision-Making/Problem-Solving | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 9. Coordination: Multiple Tasks | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |

B. INTERPERSONAL SKILLS

- | | | | |
|---|-----------------------------|----------------------------|-----------------------------|
| 1. Communication Skills | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 2. Acceptance of Criticism | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 3. Behavior toward Citizens | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 4. Behavior toward Regulatory Personnel | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 5. Self-image/Confidence | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |

C. KNOWLEDGE

- | | | | |
|-------------------------------------|-----------------------------|----------------------------|-----------------------------|
| 1. Agencies Policies/Procedures | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 2. Enforcement Codes | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 3. Resources | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 4. Inspection Procedures/Techniques | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |

D. JOB READINESS

- | | | | |
|--|-----------------------------|----------------------------|-----------------------------|
| 1. General Appearance | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 2. Forms/Equipment /Specialized Equipment | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |
| 3. Informed on Current Issues/Community Problems | <input type="checkbox"/> NI | <input type="checkbox"/> C | <input type="checkbox"/> NO |

TRAINEE SIGNATURE

FTI SIGNATURE

COMMENTS: See * and ** below

* "Needs Improvement" ratings must be explained in comments

** Above average scores can also be explained in the comment section

NCWM Field Training Program:

Inspector Routine Observation Report

Standardized Evaluation Guidelines

PERFORMANCE

1. REPORT WRITING:

NEEDS IMPROVEMENT

General inability to accurately organize a concise, understandable report in a timely fashion:

- a. Omission or misstatement of facts
- b. Elements of violation missing/incomplete inspections
- c. Confusing or misleading narrative
- d. Continual spelling errors
- e. Consistent improper grammar
- f. Illegible handwriting
- g. Excessive time used

COMPETENT

General ability to write reports accurately in organized and timely fashion:

- a. Complete statement of facts
- b. Specific violation elements delineated/completes thorough inspections
- c. Legible handwriting
- d. Minimal spelling errors
- e. Correct grammar
- f. Concise, understandable language
- g. Reasonable time used in completion of necessary reports

2. DRIVING SKILLS:

NEEDS IMPROVEMENT

Incorrect evaluation of driving situations with loss of vehicle control:

- a. Continually violates Vehicle Code
- b. General disregard for public safety
- c. Involvement in preventable accidents
- d. Inappropriate use of safety lighting equipment
- e. Excessive and inappropriate speed
- f. Inability to exit vehicle safely

COMPETENT

Correct evaluation of driving situations with proper corresponding vehicle control:

- a. Lawful, courteous, defensive driving
- b. Concern for public safety
- c. Control of vehicle at all times
- d. Appropriate use of safety lighting equipment
- e. Vehicle speed consistent with conditions
- f. Ability to properly exit vehicle

3. SELF-INITIATED ACTIVITY

NEEDS IMPROVEMENT

- a. Does not detect violations during inspections
- b. Avoids suspicious activity during inspections
- c. Insufficient follow-up for circumstances encountered
- d. Rationalizes obvious violations
- e. Fails to use computer/resources

COMPETENT

- a. Recognizes and observes violations
- b. Initiates contact
- c. Sufficient follow-up for circumstances encountered
- d. Avoids rationalization
- e. Utilizes the computer/resources

4. KNOWLEDGE OF LOCATIONS

NEEDS IMPROVEMENT

- a. Unaware of locations while in the field
- b. Unable to use map
- c. Unable to relate location to destination
- d. Unaware of assigned work area

COMPETENT

- a. Knows location most of the time
- b. Ability to use map
- c. Ability to get to destination by the quickest route
- d. Demonstrates knowledge of assigned work area

5. STRESS CONTROL: VERBAL/BEHAVIORAL

NEEDS IMPROVEMENT

Outwardly emotional and unable to maintain order

- a. Loses temper
- b. Visibly nervous and agitated
- c. Cannot control situation
- d. Unable to function on routine matter

COMPETENT

Exhibits a controlled attitude and able to maintain order.

- a. Control of temper
- b. Visibly calm
- c. Able to contain a situation
- d. Able to resolve or defuse situations
- e. Able to coordinate actions of fellow inspectors

6. SAFETY: SELF/OTHERS

NEEDS IMPROVEMENT

Does not demonstrate understanding of or consistently utilize principles of safety:

- a. Breakdown of safety training
- b. Cannot identify hazards
- c. Exposes others to danger
- d. Creates hazardous conditions
- e. Fails to conduct or properly perform safe inspections

COMPETENT

Maintains a good safety posture and consistently applies principles of safety:

- a. Proper use of safety training
- b. Recognition of potential hazards
- c. Adequately performs in a safe manner with others and self
- d. Effectively performs safe inspections

7. VIOLATOR CONTROL: VERBAL/PHYSICAL

NEEDS IMPROVEMENT

- a. Unable to maintain control and position of advantage if hostile
- b. Incites violator with verbal abuse
- c. Behavior encourages resistance through lack of timely action
- d. Excessive use of authority

COMPETENT

- a. Consistently maintains control and position of advantage
- b. Uses verbal techniques to calm situation
- d. Behavior encourage violator to willingly cooperate
- e. Proper use of authority

8. DECISION-MAKING/PROBLEM-SOLVING

NEEDS IMPROVEMENT

- a. Unable to reason out a problem
- b. Unable to make an independent decision
- c. Easily deceived
- d. Failure to consider options/alternatives
- e. Fails to solicit other opinions/views
- f. Inflexible
- g. Biased judgment

COMPETENT

- a. Ability to reason out a problem
- b. Ability to make an independent decision
- c. Perceptive - not easily deceived
- d. Considers options/alternatives
- e. Solicits other opinions/views
- f. Flexible
- g. Acceptable use of time
- h. Rational/common sense judgment

9. COORDINATION: MULTIPLE TASKS

NEEDS IMPROVEMENT

Inspector doesn't possess the necessary coordination skills for field work:

- a. Clumsy performing routine tasks
- b. Difficulty performing several associated actions
- c. Lack of manual dexterity
- d. Unable to safely drive/and navigate
- e. Unable to perform necessary physical tasks
- f. Unable to use equipment properly

COMPETENT

Inspector possesses the necessary coordination skills for field work:

- a. Able to perform several associated actions
- b. Manually dexterous
- c. Can safely drive while using navigation or maps
- d. Uses all equipment properly and safely

INTERPERSONAL SKILLS

1. COMMUNICATION SKILLS

NEEDS IMPROVEMENT

Verbal expression and physical cues inconsistent and inappropriate to the given situation:

- a. Overly aggressive posture
- b. Inappropriate and frequent violation of personal space
- c. Poor voice tone and inflection

COMPETENT

Verbal expression consistent with physical cues; appropriate to the given situation:

- a. Use of body language projects control
- b. Respectful of personal space
- c. Controlled voice tone and inflection

2. ACCEPTANCE OF CRITICISM

NEEDS IMPROVEMENT

Unable to accept criticism in a positive manner:

- a. Argumentative
- b. Rationalizes
- c. Refuses to make correction
- d. Defensive
- e. Hostile
- f. Immature

COMPETENT

Able to accept criticism in a positive manner

- a. Applies criticism in future efforts
- b. Mature
- c. Able to question without being argumentative, defensive
- d. Accepts responsibility for acts
- e. Confident

3. BEHAVIOR TOWARDS CITIZENS

NEEDS IMPROVEMENT

Unable to establish competent, courteous interpersonal contacts:

- a. Abrupt
- b. Belligerent
- c. Overbearing
- d. Racist
- e. Sexist
- f. Introverted

COMPETENT

Generally establishes competent, courteous interpersonal contacts

- a. Friendly
- b. Empathetic
- c. Impartial
- d. Non-discriminatory
- e. Objective
- f. Professional

4. BEHAVIOR TOWARDS OTHER EMPLOYEES

NEEDS IMPROVEMENT

Belittles and rejects the duties, roles, and responsibilities of other department personnel:

- a. Unsociable
- b. Insubordinate
- c. Sarcastic
- d. Gossips maliciously

COMPETENT

Respects and supports the duties, roles, and responsibilities of other personnel:

- a. Considerate
- b. Sincere
- c. "Team Player"
- d. Follows the chain of command
- e. Supportive
- f. Good listener

5. SELF-IMAGE/CONFIDENCE

NEEDS IMPROVEMENT

Behavior indicates negative self-image:

- a. Timid
- b. Lack of confidence
- c. Negative
- d. Overly Aggressive
- e. Extremely critical of others
- f. Follows or shadows FTI
- g. Avoids others

COMPETENT

Behavior indicates positive self-image:

- a. Demonstrates self-confidence
- b. Self-reliant
- c. Self-motivated
- d. Self-starter
- e. Positive interaction with others
- f. Decisive

KNOWLEDGE

1. DEPARTMENT POLICIES/PROCEDURES

NEEDS IMPROVEMENT

Unfamiliar with Department policies and procedures and how to apply them.

COMPETENT

Working knowledge and ability to apply Department policies and procedures.

2. ENFORCEMENT CODES

NEEDS IMPROVEMENT

Demonstrates minimal knowledge of basic sections and their elements; unable to relate element to observed activity.

COMPETENT

Demonstrates working knowledge of commonly used sections; is able to relate elements to observed activity.

3. RESOURCES

NEEDS IMPROVEMENT

Inspector cannot locate and/or does not use information resource available:

- a. Computer
- b. Other government enforcement agencies
- c. Community resource agencies
- d. Past inspection information
- e. Inspection reports

COMPETENT

Inspector can locate and/or does use information resource available:

- a. Computer
- b. Other government enforcement agencies
- c. Community resource agencies
- d. Past inspection information
- e. Inspection reports

JOB READINESS

1. GENERAL APPEARANCE

NEEDS IMPROVEMENT

Grooming indicates lack of professional pride:

- a. Shoes and clothing (uniform if worn) dirty or in disrepair
- b. Unkempt hair
- c. Lack of personal hygiene
- d. Poor posture/annoying mannerisms

COMPETENT

Grooming indicates sense of professional pride:

- a. Neat clean clothing/uniform
- b. Well groomed hair
- c. Good personal hygiene

2. FORMS/EQUIPMENT

NEEDS IMPROVEMENT

Does not have required equipment and not prepared to enter the field

- a. Does not maintain resource material
- b. Does not maintain supply of forms/reports
- c. Lacks necessary equipment
- d. Dirty or non working equipment

COMPETENT

Has required equipment and is prepared to enter the field:

- a. Maintains necessary equipment and forms
- b. Maintains resource material
- c. Clean functioning equipment

3. INFORMED ON CURRENT ISSUES/COMMUNITY PROBLEMS

NEEDS IMPROVEMENT

- a. Unfamiliar with scheduled inspections
- b. Unfamiliar with traffic issues in assigned area
- c. Unfamiliar with community events, meetings, or problems
- d. Fails to record/retain briefing information

COMPETENT

- a. Familiar with inspections scheduled
- b. Familiar with traffic issues
- c. Aware of community events, meetings, and problems
- d. Properly records and retains briefing information

Competency-Based Evaluation Scale

Numerical/Adjective Rating:

5 = Outstanding

Can perform this skill without supervision or assistance with proficiency in speed, quality, quantity, self-initiative, reliability and judgment; Can lead or assist others in performing this skill.

4 = Above Standard

Can perform this skill consistently within established standards of speed, quality and quantity without assistance and / supervision.

3 = Standard

Can perform this skill generally consistent with established standards of speed, quality and quantity, but requires periodic assistance and or supervision.

2 = Short of Standard

Can perform this skill only with some assistance and or supervision to ensure consistency with established standards of speed, quality and quantity; Able to perform some parts of the skill, but cannot perform the entire skill.

1 = Unacceptable

Has limited ability or knowledge to perform this skill; Continuous assistance and/or supervision required; Performance does not meet established standards of speed, quality and quantity; Demonstrates possible limitations in learning ability to acquire the skill.

Not Responsive to Training

Has been repeatedly instructed in a particular subject matter and still fails to demonstrate knowledge of the subject or is unable to perform the particular task which would exhibit this knowledge. The training instructor should rate the new inspector NRT. The training instructor should provide the narrative comments, the training attempted and the results of the new inspector's attempt to perform the task.

Trainee Inspector Checklist

PHASE I	Rating	Date
	CBES	
1. Assignment of equipment, care and maintenance	_____	_____
2. Introduction to staff, supervision and management	_____	_____
3. Tour various offices and agencies	_____	_____
4. Assignment of manuals and code books	_____	_____
5. Agency software and forms	_____	_____
6. Agency policies and guidelines general	_____	_____
7. New employee manual	_____	_____
8. Required general government training	_____	_____
9. Weights and Measures general/state policies to Include:	_____	_____
<ul style="list-style-type: none"> • State Administrative Issues • Completion of Administrative Forms • Review of Rules • History • Roles in Society • Need for W&M • System of W&M • W&M in US and your State • Metrology • State Laws • Relationship to National & International W&M • Associations • Regional, State, Federal • Federal Agencies 		

PHASE I
Field Training Inspector Comments
and any remediation:

PHASE II

Field Training, Field, Classroom and Self Study on the following topics:

- Weighing and Measuring Devices and test equipment
- NIST Handbook 44

Trainee Inspector Checklist

	CBES	Date
1. Safe Driving Course	_____	_____
2. Operation of light duty test equipment and vehicle	_____	_____
3. Theory, design and function of weighing and measuring devices	_____	_____
<ul style="list-style-type: none"> • Terminology • Scale Types • Technology • Suitability • User Requirements • Operation/Markings • Scale Classes & Tolerances • Basic Scale Test Procedures • Basic Inspection • Measuring Device Types • Technology • Suitability • User Requirements • Operation/Markings • Tolerances for LMDs • Basic LMD Test • Basic LMD Inspection • Public complaints and inspection schedules 		
General Devices NIST Handbook 44	_____	_____
<ul style="list-style-type: none"> • Terminology • NIST Handbook 44 • Fundamental Consideration • Uncertainty • Safety • Support Equipment • Seals • Supports • General Enforcement Guidelines 		

Weighing Devices:	CBES	Date
4. Weighing Devices General	_____	_____
<ul style="list-style-type: none"> • Terminology • Scale Types • Technology • Suitability • User Requirements • Operation/Markings • Scale Classes & Tolerances • Basic Scale Test Procedures • Basic Inspection 		
5. Retail computing scales	_____	_____
<ul style="list-style-type: none"> • Common Traits • Examination Specifications • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		
6. Platform Scales	_____	_____
<ul style="list-style-type: none"> • Common Traits • EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		
7. Vehicle Scales	_____	_____
<ul style="list-style-type: none"> • Common Traits • Contents of EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		

	CBES	Date
8. Railroad Track	_____	_____
<ul style="list-style-type: none"> • Common Traits • Contents of EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		
9. Hopper Scale	_____	_____
<ul style="list-style-type: none"> • Common Traits • Contents of EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		
10. Point of Sale Scales	_____	_____
<ul style="list-style-type: none"> • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		
11. Precision Scales Class I/II	_____	_____
<ul style="list-style-type: none"> • Common Traits • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		

	CBES	Date
12. Weigh master Laws and Regulations	_____	_____
<ul style="list-style-type: none"> • Certificates, requirements and records • Types of Tare • Cab Cards • Re-weighs • Undercover Sales 		

Measuring Devices:

13. Measuring Devices General	_____	_____
<ul style="list-style-type: none"> • Terminology • Measuring Device Types • Technology • Suitability • User Requirements • Operation/Markings • Tolerances for LMDs • Basic LMD Test • Basic LMD Inspection 		

14. Retail Motor Fuel Dispensers	_____	_____
<ul style="list-style-type: none"> • Common Traits • Examination Specifications • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises • Petroleum/Fuel Quality including Labeling, Field Testing and Sampling 		

15. Liquid Propane Gas Meters	_____	_____
<ul style="list-style-type: none"> • Common Traits • EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		

	CBES	Date
16. Vehicle Tank Meters <ul style="list-style-type: none"> • Common Traits • Contents of EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 	_____	_____
17. Loading Rack Meters <ul style="list-style-type: none"> • Common Traits • Contents of EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 	_____	_____
18. Water Meters <ul style="list-style-type: none"> • Common Traits • Contents of EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 	_____	_____

	CBES	Date
19. Mass Flow Meters	_____	_____
<ul style="list-style-type: none"> • Common Traits • Contents of EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		
20. Other Meters Sub Meters et al	_____	_____
<ul style="list-style-type: none"> • Common Traits • Contents of EPO • Examination Specifications • User Requirements • Suitability • Test Equipment • Examination, Installation & Maintenance • Test Specifications • Evaluation • Field/Practical Exercises 		

PHASE II

**Field Training Inspector Comments
and any remediation:**

PHASE III

Field Training, Field, Classroom and Self Study on the following topics:

- Package Checking Procedures Including Labeling:
- Market Practices Laws and Regulations
- NIST Handbook 130

Trainee Inspector Checklist

	CBES	Date
1. Commodities General	_____	_____
<ul style="list-style-type: none"> • Terminology • Wet/Dry Tare • NIST H-133 Specifications & requirements • Uncertainty • Safety • Support Equipment • General Enforcement Guidelines 		
2. Standard Pack	_____	_____
<ul style="list-style-type: none"> • Examination Specification • Contents of EPO • Test Equipment • Examination • Test Specifications • Evaluation • Field/Practical Exercises 		
3. Random Pack	_____	_____
<ul style="list-style-type: none"> • Examination Specification • Contents of EPO • Test Equipment • Examination • Test Specifications • Evaluation • Field/Practical Exercises 		
4. Sale by Volume	_____	_____
<ul style="list-style-type: none"> • Examination Specification • Contents of EPO • Test Equipment • Examination • Test Specifications • Evaluation • Field/Practical Exercises 		

	CBES	Date
5. Sale by Count	_____	_____
<ul style="list-style-type: none"> • Examination Specification • Contents of EPO • Test Equipment • Examination • Test Specifications • Evaluation • Field/Practical Exercises 		
6. Price Verification	_____	_____
<ul style="list-style-type: none"> • Terminology • NIST H-130 Specifications & requirements • Safety • Support Equipment • General Enforcement Guidelines 		
7. Test Purchases	_____	_____
<ul style="list-style-type: none"> • Examination Specification • EPO • Purchasing Process • Check for Validity of Purchase • Field/Practical Exercises 		
8. Price Verification Packaging and Labeling	_____	_____
<ul style="list-style-type: none"> • Terminology • NIST H-130 Specifications & requirements • Packaging & Labeling Regulations • Exemptions • Indirect Sale of Random Packages 		

PHASE III
Field Training Inspector Comments
and any remediation:

PHASE IV

**Field Training, Field, Classroom and Self Study on the following topics:
Laboratory Concepts Metrology and final concepts to be covered**

Trainee Inspector Checklist

	CBES	Date
1. Metrology Laboratory	_____	_____
<ul style="list-style-type: none"> • Purpose of the Laboratory • Responsibilities of the Metrologist • NIST Expectations of the Laboratory • Rationale for the Requirements for Recognition of the Laboratory • Important Considerations for Laboratory Operation • Factors Driving Changes in Laboratory Requirement • Quality System • NVLAP Accreditation • Hierarchy of Laboratory Standards • Calibration Intervals for All Standards • Annual RMAP Round Robins & Training • Laboratory Facility Requirements • Uncertainty Analysis 		
2. Final overview of Weights and Measures	_____	_____
<ul style="list-style-type: none"> • Understanding the Commercial Measurements System • Responsibilities of W&M Regulatory Official • Consumer Protection • Fair Competition • Facilitation Value Comparisons • Funding Considerations • Licensing of W&M Devices • Licensing of Service Agencies • Conflicts of Interest • Roles of Stakeholders • Manufacturers • Packagers • Retailers • Service Agencies • Power & Duties of Officials • Type Evaluation, Initial Verification & Subsequent Inspection • Economic Impact • Complete Scope of Weights & Measures Inspections • Concurrent Federal & State Jurisdiction • Federal Pre-emption • Organizational Structure • Budget • Administrative Staff 		

- Public
- Publicity
- Public Relations
- Communication
- Record Keeping and report writing
- Forms
- Legal Considerations
- Due Process
- Stop Orders
- Standards Development
- Prosecution
- Courts



National Conference on Weights and Measures
"That Equity May Prevail"