How do You Train Your Employees?

David Orr, PE, Director, Cornell Local Roads Program
Mark Payne, Assistant Professor, Heavy Equipment Operations, Alfred State Heavy Equipment Program
Skip Vezzetti, Superintendent of Highways, Rockland County Highway Department
Dave Jensen, AHA Training Center Coordinator for Cayuga Medical Center at Ithaca, American Heart Association (was not able to attend, but sent notes that are included)

The notes below are combined from the workshops held on Monday, June 1, 2015 at the Highway School. The list is a summary of ideas and the start of a clearinghouse of where to get training.

Why Provide Training?

- “If you think education is expensive, try ignorance”
- Consider the cost of an accident if we don’t train folks;
  - Cost of a new grader ~ $350K
  - Lost time
  - Lost production
- The 10 most dangerous occupations (via Skip)
  - #10 – construction workers
  - #7 – truck drivers
  - #6 – Heavy machine operators
  - #5 – Garbage collection
  - #1 – logging and tree work
- Employers can reduce the cost of Worker’s Comp
  - Worker’s compensation premiums go down with many types of training
  - Providing training can reduce costs by reducing accident rates and risk (liability)
- Training and learning are continuous and after a training session, we need to take what we learned back to train those who were not able to attend.
- Save your employees’ money
  - When employees take defensive driving classes, their personal insurance rates often go down.

Training Providers

- Alfred State Heavy Equipment Program
- American Heart Association*
- American Public Works Association (APWA)
- American Red Cross*
- American Safety and Health Institute*

70th Annual School for Highway Superintendents
- BOCES
- Community College
- Cornell Local Roads Program
  - Highway School (with the Association of Towns of the State of New York)
  - Bridge Conference (with NYSDOT and the New York State County Highway Superintendents Association, FHWA, ABCD, and ACEC)
  - Workshops ($50/session)
    - Throughout State (Spring, Fall and requested)
    - Some Associations have paid for the sessions to keep the price down
- Contractors
- Counties & County level Highway Superintendent Associations
  - Putnam County did a full-day training
  - Sponsored a soil and water training class (saved quite a bit)
  - Washington County Safety Days
- Equipment dealers/renters
  - Some do training as part of the rental
    - Some are reluctant for certification versus awareness – may need to include in the price
  - Rockland
    - In-house certification
- FEMA National Incident Management System (NIMS)
- Fire Training Centers/Emergency Management Services
- Insurance Carrier
  - NY Comp Alliance
  - NY Municipal Insurance Reciprocal (NYMIR)
  - Public Employer Risk Management Association (PERMA)
  - Local carrier
- Internal Training
  - On-The Job (OTJ)
  - Tailgate talks
  - Co-workers
  - Supervisors
- Manufacturer’s Reps
- MEDIC First Aid*
- National Fuel
  - Trenching partnership – equipment and location
- National Safety Council*
- National Institute for Metalworking Skills
- NYS Department of Environmental Conservation (NYSDEC)
- NYSDOT
- NYSEG
  - Electrical Lines
- NYS Department of Labor
  - Public Employee Safety and Health (DOSH PESH)
    - Trench safety
· **Confined Space**
  - Mine Safety and Health Administration (MSHA)
  - Retired Individuals
  - Soil and Water Conservation District (SWCD)
  - On-line Education Centers (for profit schools?)
    - Topcon University
  - OSHA
  - Statewide Associations
    - NYS Association of Town Superintendents of Highways
    - NYS County Highway Superintendents Association
    - NYCOM - New York State Conference of Mayors and Municipal Officials
    - Association of Towns of the State of New York
  - Unions
  - Civil Service Employees Association (CSEA)
  - Teamsters
  - Vendors
    - Sponsored a flagger training through the vendor
    - Safety.cat.com (Caterpillar Safety Services)

*Offers classes that meet OSHA best practices. See [http://news.hsi.com/onlineonlycpr](http://news.hsi.com/onlineonlycpr) for further information and links. A quality class always has some live, in-person skills demonstration component.

**Training Topics Mentioned**
Limited in the time of the workshops. Most topics mentioned were for crews. Also need to review all of the offerings by the groups and organizations listed above. For each topic the list includes some of the possible place suggested to learn the material.

- **Chain saws**
  - Classes (local Community College or BOCES)
  - Basic chain saws (included Town)
  - Advanced chain saw (buckets and climbing) – field work
  - Mechanics and shop personnel – working on the saws
  - (equipment supplier) – also does NYSDOT, NYSDEC …
    - Basic 35 folks
    - Advanced – smaller
    - Small motor repair and setup
    - Insurance company paid for the classes
  - Chain saw – Is there a requirement for training (first aid)? - enforceable
  - Own PPEs – Chaps, hard hats …
  - Responsible for chain saw being sharp and maintained

- **Heavy equipment**
  - Add to the spec some training on the new piece of equipment
  - Bucket truck

- **811 – Call before you dig**
- PPE – Personal Protective Equipment
  - Hard hat
  - Chaps
  - Hearing
  - Sight
  - ...
- Snow and Ice Training
  - Prepping for storms
  - Procedures
  - Equipment review
  - Setting up the snow plow and the truck
  - Dry run of snow route prior to winter
    - Look for objects and issues – Get them cleaned up before work
    - Put a map for the route
- Hazardous materials
- First Aid
  - Automatic External Defibrillator (AED)
- Defensive Driving
- Labor Relations
- Vocational Training
- Emergencies
  - Weather-related incidents
  - Confined Space

Types of Training
- Books
- Videos (hard copies)
- On-line Training
  - On-line videos
  - YouTube
  - Webinars
    - Quality is critical
  - On-line vendor sites
    - Safety.cat.com (can pay for more formal training)
    - Careful with new technology
  - Google
  - Wikipedia
  - ToolboxTopics.com
- Tapes/CDs
- Simulators
  - Make your mistakes on the computer, not on the real thing
- Classroom
  - College-level
    - Classroom training
    - Extension workshops
Equipment operation

- Hands-on
- Tractor trailer school
- On the job (OTJ)
- In-house
  - Work zone safety and flagging
  - Winter operations school (snow school)
- Peer Training
  - Example: Iron Workers
- Tailgate Talks
- Teachable Moment
- Forum – chat room
- Games
  - Roadeo
    - Ambulance service
    - Snow plowing
- Practice, practice, practice
- Practical training

Miscellaneous

- Employee handbook – includes policy
  - Borrow from others (County, Town . . .)
  - Program
  - Benefits
  - EEO- Equal Employment Opportunity
    - Defensive driving training ($25) gives employee a discount on insurance or point reduction on license

- Certification can be used as part of promotions
  - Equipment Certification
  - CDL
  - Cornell Roadmaster Program
- $600 for employees offered for training—welding, auto mechanics

Questions to be Answered

- Is there a list (or can it be made) that is the minimum required training (mandated)?