

Oklahoma's OK-First Weather Education Program for Emergency Managers: 15 Years of Lessons Learned and a Look Towards the Future



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1. What is OK-First?

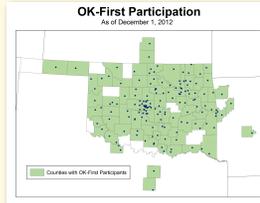
OK-First is an outreach program of the Oklahoma Climatological Survey and Oklahoma Mesonet that serves the public safety community in Oklahoma. Since 1996, OK-First has provided:

- **Certification classes** for public safety officials on weather basics, radar, weather products, software, and more
- **Access to weather data** through a customized, password-protected decision support website as well as additional software
- **Follow-up support** for troubleshooting and content-related questions
- **Connections** to a large, knowledgeable community of trained users
- **Required re-fresher training** on old concepts as well as new concepts and technology (must attend every 18 months to maintain certification)

2. Who Participates?

Participation in OK-First is limited to agencies and organizations that have jurisdictional responsibilities in maintaining public safety. OK-First participants include:

- **Emergency managers**
- **Firefighters**
- **Police Officers**
- **Sheriffs**
- **Highway Patrol**
- **Military Officials**
- **Health Officials**
- **School Safety Officials**
- **State Agency Employees**
- **Non-profit Response Groups**



Admission into the program is competitive and requires signed approval by an agency superior in order to be considered for the 4-day certification class.

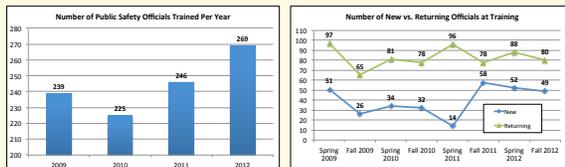
As of the fall of 2012, a total of 214 separate agencies are actively involved in OK-First, representing 67 of 77 Oklahoma counties. Approximately 500 public safety officials are actively involved in the program.

3. OK-First Training Totals and Trends

From 1997-2012:

- More than **900** public safety officials received Full or Assistant Certification
- A total of **193** classes were taught
- Classes were taught at **40** different locations across Oklahoma

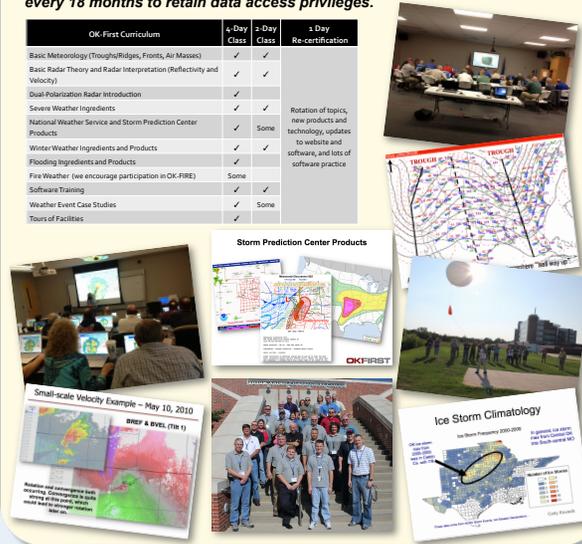
From 2009-2012 (numbers include re-trained participants):



4. OK-First Training

OK-First offers 3 types of classes: Certification (4 days), Assistant (2 days), and Re-certification (1 day). The certification class is a crash course in basic meteorology, radar, software, and more (see table below) and is required for at least 1 person per agency to complete. Assistant classes are a shorter, abbreviated version of the certification class aimed at additional support staff at an office. Finally, re-certification classes are offered to help participants brush up on various topics and to cover new ones as well. **All agencies are required to have their lead OK-First participant complete re-certification training at least once every 18 months to retain data access privileges.**

OK-First Curriculum	4-Day Class	2-Day Class	1-Day Re-certification
Basic Meteorology (Troughs/Ridges, Fronts, Air Masses)	✓	✓	
Basic Radar Theory and Radar Interpretation (Reflectivity and Velocity)	✓	✓	
Dual Polarization Radar Introduction	✓	✓	
Severe Weather Ingredients	✓	✓	
National Weather Service and Storm Prediction Center Products	✓	Some	Rotation of topics, new products and technology, updates to website and software, and lots of software practice
Winter Weather Ingredients and Products	✓	✓	
Flooding Ingredients and Products	✓	✓	
Fire Weather (we encourage participation in OK-FIRE)	Some	✓	
Software Training	✓	✓	
Weather Event Case Studies	✓	Some	
Tours of Facilities			



6. Key Lessons Learned

Meteorologists at the Oklahoma Climatological Survey/Oklahoma Mesonet have learned an incredible amount working with our partners in public safety during the past 15 years. The following are our Top 5:

1. **Providing weather data and tools without associated training does little to solve weather preparedness problems**
2. **You can never train too much – training is what leads to prudent, rational, and well-informed decisions**
3. **Continuous support is paramount – for a group to truly use tools they need a trusted source they can rely on for questions**
4. **Involve users in website and tool development as early in the process as feasible; also involve users in continued software beta testing**
5. **Foster mutually beneficial partnerships with key groups to support your educational activities – don't try to be a hero!**

7. A Look Towards the Future

Emergency management as a profession has transformed itself dramatically since the mid 1990s. Long gone are the days of weather and radar data being unavailable or too cost prohibitive. In its place public safety officials now have a flood of information available at their fingertips yet less time to view, comprehend, and process these data given a growing list of responsibilities. **More weather information is available to public safety officials now than ever before, however, does that help us become a more Weather-Ready Nation?**

The key to prudent use of information lies in education and training. In very few other scientific fields is it as critical to educate users on how to properly interpret information as it is in the atmospheric sciences given the use of the information in public safety decisions. Our experiences in Oklahoma with OK-First have taught us that the training is even more important than the data access itself – it's really a pre-requisite to viewing and using data. **As a nation are we adequately equipping our nation's public safety officials with the knowledge needed to use the myriad of information products and data now available to them?**

While efforts to educate our nation's public safety officials on weather have increased over the years through programs such as FEMA's Emergency Management Institute and COMET's METED program, these programs cannot do it alone. **To help our nation's public safety officials and decision makers we as a scientific community must continue to not only provide the best meteorological data and products to users BUT ALSO the requisite education and training on how to properly utilize and interpret these products.** The educational methods available today are more diverse than ever before and range from more formal methods of instruction (certification programs, CEUs, COMET, FEMA, etc.) to more informal methods (short videos, YouTube, webinars, etc.). We as a community must continue to capitalize on these opportunities if we truly want to become a more Weather-Ready Nation.

5. Decision-Support Website & Tools

OK-First certification provides agencies with password-protected access to a multi-hazard decision support page (below, left) as well as the RadarFirst software (below, right). Participants receive extensive training from degreed meteorologists on how to utilize the tools as well as how to properly interpret various weather and radar products.

