Fact Sheet
North Carolina Fire Service Needs Assessment

There has been substantial progress in reducing many fire department needs, although more remains to be done.

Protective Equipment and Clothing

The 2010 percentage of North Carolina departments without enough equipment to equip all personnel (or all personnel on a shift, as appropriate) was:

- 45% for self-contained breathing apparatus (SCBA), compared to 60% in 2001 and 52% in 2005;
- 37% for personal alert safety system devices (PASS), compared to 52% in 2001 and 43% in 2005;
- 4% for personal protective clothing, compared to 8% in 2001 and 7% in 2005; and
- 56% for portable radios, compared to 76% in 2001 and 70% in 2005.

Training

In many fire departments, not all involved personnel have been formally trained in their emergency response duties. The 2010 percentage of North Carolina departments in which not all involved personnel have been formally trained was:

- 52% for structural firefighting, compared to 53% in 2001 and 68% in 2005; and
- 49% for emergency medical service (EMS), compared to 59% in 2001 and 61% in 2005.

Source: Third Needs Assessment of the U.S. Fire Service, NC, NFPA, Fire Analysis and Research, Quincy, MA. October 2011
Fitness and Health

In many fire departments, there is no program to maintain basic firefighter fitness and health. The 2010 percentage of North Carolina departments with no such program was:

- 68%, compared to 82% in 2001 and 76% in 2005.

Unusually Challenging Incidents

There has been little or no progress in increasing the ability of fire departments to handle various unusually challenging incidents with local trained personnel and specialized equipment alone:

- Provide technical rescue and EMS at a structural collapse involving 50 occupants; and
- Provide hazardous material response and EMS at an incident involving chemical or biological agents and with 10 injuries.
- Wildland/urban interface (WUI) fire affecting 500 acres; and
- Mitigation of a major developing flood.

However, there has been progress in the percentage of departments having written agreements for working with others. The 2010 percentage of North Carolina departments with no such written agreement was:

- 65% for structural collapse, compared to 63% in 2001 and 76% in 2005;
- 67% for chemical or biological incidents, compared to 60% in 2001 and 73% in 2005;
- 46% for wildland/urban interface fires, compared to 71% in 2001 and 68% in 2005; and
- 59% for developing major flood, compared to 67% in 2001 and 66% in 2005.

Success requires more written agreements, with each participating department knowing its role, providing resources needed to play its role, and helping test the plan in simulations and rehearsals.

Stations and Apparatus

Some stations lack specific features, which are required by current standards but were not required when stations were constructed. Some stations are old enough that a variety of persistent or recurring problems are to be expected and replacement might be better and even cheaper. Some departments are using old fire apparatus.

- 19% of North Carolina fire departments do not have backup power for their fire stations.
- 32% of North Carolina fire departments do not have exhaust emission control for their fire stations.
- 31% of the fire stations in North Carolina are over 40 years old.
- 4% of North Carolina fire department engines and pumper are at least 30 years old.

Cautions on interpretation

Trends. For some states and most needs assessment survey questions, even large changes from one survey to another will not be statistically significant. Be cautious in interpreting results as trends.

State-to-state comparisons. States where a large share of departments serve small communities will tend to have greater needs according to the measures used here than states where a small share of departments serve small communities. State-to-state comparisons must be viewed with caution, particularly if the states have very different mixes of urban and rural communities.

How rural is North Carolina? The survey for North Carolina was based on the following responses:

- 17 of the 30 departments protecting populations of 25,000 or more;
- 21 of the 57 departments protecting populations of 10,000 to 24,999; and
- 65 of the 747 departments protecting populations of less than 10,000.

Access the full state report, other state reports and the national reports at [http://www.nfpa.org/needsassessment](http://www.nfpa.org/needsassessment).