

# 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;

Departments Where Not All Firefighters on a Shift Are Equipped with SCBA

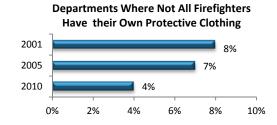
2001
60%
52%

20%

2010

0%

➤ 4% for **personal protective clothing**, compared to 8% in 2001 and 7% in 2005; and

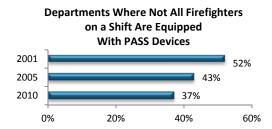


> 37% for personal alert safety system devices (PASS), compared to 52% in 2001 and 43% in 2005;

40%

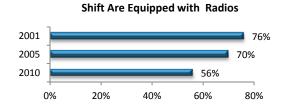
60%

80%



> 56% for **portable radios**, compared to 76% in 2001 and 70% in 2005.

Departments Where Not All Firefighters on a



## **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:

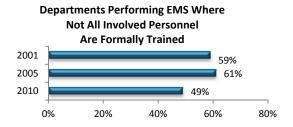
> 52% for **structural firefighting**, compared to 53% in 2001 and 68% in 2005; and

Firefighting Where Not All Involved
Personnel Are Formally Trained

2001
53%
2010
52%
0%
20%
40%
60%
80%

**Departments Performing Structural** 

➤ 49% for emergency medical service (EMS), compared to 59% in 2001 and 61% in 2005.



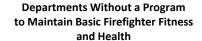
Source: Third Needs Assessment of the U.S. Fire Service, NC, NFPA, Fire Analysis and Research, Quincy, MA. October 2011

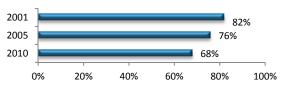
#### **Fitness and Health**

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 pumpers 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 <a href="http://www.nfpa.org/needsassessment">http://www.nfpa.org/needsassessment</a>.