

This guideline provides a standard list of basic factors the Incident Commander should consider in the evaluation of tactical situations. It also provides the Incident Commander with a checklist of the basic items that are involved in size-up, decision-making, initiating action, and review/revision on the fireground. All of the factors listed are not critical fireground factors for every tactical situation; however, they do provide a framework for the Incident Commander to follow.

Incident Commanders should avoid beginning operations before adequately considering all fireground factors. Size-up is a conscious process involving the very rapid but deliberate consideration of the critical factors and the development of a rational plan of attack based on those conditions. Attack is many times an instinctive action-oriented process that involves taking the shortest and quickest route directly to the fire. Incident Commanders should adequately think the problem through before acting.

Fireground factors represent any items that are dynamic during the entire fireground process. The relative importance of these factors change throughout the time frame of the incident. The Incident Commander should deal with this change and base decisions on up-to-date information. Incident Commanders should be careful to avoid developing a plan and sticking to it, even when the fireground factors may have changed.

In critical situations, the Incident Commander may develop an initial plan and initiate attack based on an incomplete evaluation of the fireground factors. In these cases, it is important for the Incident Commander to remember that updated information should be obtained as soon as possible so additional operations can be further directed.

The Incident Commander can obtain information about fireground factors using three different methods.

**VISUAL FACTORS:**

These factors include information obtained through visual observation. This information is categorized as the type that can normally be gained by actually looking at the situation from the outside.

**RECONNAISSANCE FACTORS:**

These factors include information that may not be visible to the Incident Commander from his position on the outside of a tactical situation. The information may be obtained through feedback from other personnel (e.g. Division/Group Supervisors), who may be assigned to investigate these areas.

**PREPLANNING AND FAMILIARITY FACTORS:**

This information has been gained from formal pre-fire planning and by general information that

the Incident Commander would have prior to performing operations.

**BASIC FIREGROUND FACTORS THE INCIDENT COMMANDER SHOULD CONSIDER:**

**Building Factors:**

- Size
- Interior arrangement/access to stairs, halls, and elevators
- Construction type
- Age
- Condition (faults/weaknesses)
- Value
- Compartmentation/separation
- Vertical/horizontal shafts and channels
- Outside opening doors and windows/degree of security
- Utility characteristics hazards/controls
- Concealed space/attic characteristics
- Exterior access
- Time projection on continuing fire effect on building
- Building use

**Fire Factors:**

- Size
- Extent/percent of structure involved
- Location
- Stage
- Direction of travel
- Time of involvement
- Type of material involved
- Amount of material involved
- Type and amount of material left to burn
- Products of combustion

**Occupancy Factors:**

- Specific occupancy
- Type of business (mercantile, public assembly, etc.)

- Value characteristics associated with occupancy
- Fire load size/nature
- Status of building (vacant, occupied, under construction, etc.)
- Time as it affects occupancy use

**Life Hazards:**

- Occupancy Load
- Location of occupants
- Condition of occupants
- Commitment required for search and rescue
- Fire control required for search and rescue
- Needs for EMS
- Time estimate of fire effect on victims
- Exposure and control of spectators
- Hazards to fire personnel
- Access for rescue forces
- Characteristics of escape routes/avenues of escape

**Arrangement Factors:**

- Access, arrangement, and distance of external exposures
- Combustibility of exposures
- Access, arrangement, and nature of internal exposures
- Severity and urgency of the exposures fire effect
- Value of exposures
- Most dangerous direction/avenue of spread
- Time estimate of fire effect on exposures (internal and external)
- Obstructions to operations
- Capability/limitations on apparatus movement and use

**Resource Factors:**

- Resources on scene
- Resources responding
- Resources available in reserve
- Estimate of response time for additional resources
- Condition of resources
- Capability and willingness of personnel
- Capability of overhead
- Number and location of hydrants

- Supplemental water sources
- Adequacy of water sources
- Built-in fire protection sprinklers, standpipes, and alarm systems
- Outside agency resource and response time

**Other Factors:**

- Time of day
- Day of week
- Season
- Special hazards by virtue of holidays and special events
- Weather (wind, rain, heat, cold, visibility)
- Traffic conditions
- Social conditions (strike, riot, mob, etc.)