Durham Comprehensive Plan

Chapter 12
Public Safety Element
The Durham Comprehensive Plan

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Public Safety Element

Public safety includes fire protection, emergency medical services, and law enforcement. Fire protection in Durham is provided by a combination of City and County fire fighters. The City of Durham carries an Insurance Services Office (ISO) rating of 3.

County fire protection is provided by five departments with stations throughout the County. These departments are primarily staffed by volunteers, but full time firefighters, employed by the County, work at the Lebanon and Bethesda Volunteer Fire Departments. The County Fire Marshal’s Office provides training and administrative assistance to the volunteer departments.

The Durham County Emergency Medical Service (EMS) is the primary EMS provider for the City and County. Paramedic services are provided from five EMS stations within the City limits and one County ambulance located at Durham City Fire Station 5. Additional EMS services are provided by the Bahama, Redwood, Bethesda, Lebanon, and Parkwood Volunteer Fire Departments. Additional first responder assistance is provided within the City limits by the Durham Fire Department. Duke EMS is a student run first responder service providing response on the Duke Campus.

Law enforcement is provided by the City of Durham Police Department and the Durham Sheriff’s Office. The Department has five substations several leased satellite facilities, in addition to the central Headquarters building in downtown Durham. The Sheriff’s Office provides law enforcement outside the City’s corporate limits in addition to serving civil process throughout the County. The Office also provides court security and operates the County Detention Facility. The Sheriff’s Office has three substations in addition to its headquarters in the Judicial Building in downtown Durham.
Summary of Issues

1. **Coordinating Emergency Services with Growth.** Rapid response is a key component of insuring the safety of Durham’s citizens. Continued growth will increase the demand for services beyond current levels. Reducing or maintaining response times will become more difficult. New technology can improve the effectiveness of staff resources, but public safety requires that increased staffing, sufficient vehicles and equipment and expanded facilities are provided with new development. Planning for the future should be based on the premise that sufficient facilities should be built to maintain the current ratios of staffing and facilities to population.

2. **Coordination with Other Services.** Whenever it is more efficient or cheaper, public safety facilities should be coordinated or co-located with other municipal service and support facilities. Public safety activities and responses in Durham should be coordinated with other jurisdictions and with State and Federal agencies to reduce risk and enhance resources.

3. **Community Involvement.** Public safety, particularly crime prevention, is not solely the responsibility of the public safety agencies. Public safety is a shared responsibility that is affected by the actions of many agencies and community organizations.

4. **The Built Environment and Crime.** Some areas of existing development include isolated uses that inadvertently discourage community interaction. This social and spatial isolation can unintentionally harbor crime. There are aspects of public planning that can affect crime and the perception of safety. For example, creating vibrant urban centers, well-used parks and walkable neighborhoods puts more “eyes on the street,” making these areas safer. Fostering neighborhood pride in residential areas and encouraging pedestrian activity on the streets and in public areas create a more active and cohesive community with safety benefits as well. These kinds of activities could increase the perception of safety and act as a crime deterrent.

**Goal 12.1, Fire Protection**

Provide an effective program of fire protection to maintain a safe environment for Durham’s residents, visitors, and businesses.

**Objective 12.1.1. Fire Protection Level of Service Standards, City**

Establish and maintain an appropriate level of fire protection in the City as growth-related demand for services occurs.
Policy 12.1.1a. City Fire Protection Response Time. Maintain the following response times:

i. A six (6) minute and 30 seconds emergency response time for the first arriving unit for 90% of fire or medical emergency incidents in the metropolitan/urban response area; seven (7) minute and 30 seconds in suburban and/or rural response areas;

ii. A two (2) minute and 30 seconds reflex time for 90% of emergency incidents (911 Center call processing time plus turnout time for dispatched responders);

iii. Four (4) minutes for actual travel time for 90% of emergency incidents in the metropolitan/urban response area; five (5) minutes in the suburban and/or rural response areas.

Policy 12.1.1b. City Fire Protection Equipment and Staffing. Determine strategic placement of department responders and essential equipment and apparatus by utilizing fire service jurisdiction assessment and fire data analysis software. Primary considerations include call volume, call frequency, call type (Fire, EMS), in addition to building occupancy, design and hazard. The City-County Planning Department shall indicate when rezoning proposals are located in areas identified as deficient in fire coverage.

Policy 12.1.1c. City Fire Station Locations. Determine the need for new City fire station sites based on the use of fire service jurisdiction assessment and fire data analysis software. Variables used in decisions include:

i. Increases in development activity that would eventually rule out a 4 minute travel time;

ii. Trends in adjoining service areas toward a rise in the number of calls, call type, and increasing travel times.

iii. Building occupancy, design, and hazard;

iv. Risk assessments and standards of coverage applications; and

v. Increasing population or population density, and building values in the proposed fire service area.

Policy 12.1.1d. Fire Hydrant System. Reduce the level of risk by maintaining the hydrant system with adequate fire flows.

Objective 12.1.2. Fire Protection Level of Service Standards, County

Establish and maintain an appropriate level of fire protection in Durham County outside the City as growth-related demand for services occurs.

Policy 12.1.2a. County Fire Protection Response Time. Maintain:
i. An eight (8) minute emergency response time for the first arriving unit to 80 percent of the calls, and a turn out time (chute time) of less than one minute for at least 90 percent of calls;

ii. A two (2) minute and 30 seconds reflex time for 90 percent of emergency incidents (911 Center call processing time plus turnout time for dispatched responders).

**Policy 12.1.2b. Volunteer Fire Department Stations in Durham County.** Develop a long-term plan for volunteer fire department operations, to include:

i. Common Operational Response Plan;

ii. Maximizing efficiencies in staff, equipment, and stations;

iii. Funding;

iv. Station locations and relocation recommendations based on population growth, development density, call volume, occupancy design, and hazard; and

v. Trends in adjoining service areas toward a rise in the number of calls and increasing travel times.

**Objective 12.1.3. Interagency Cooperation**

Maintain high levels of cooperation among all departments and agencies involved in fire protection and emergency services to assure a high level of service in a cost effective manner.

**Policy 12.1.3a. Mutual Aid.** Continue to implement mutual aid agreements with other jurisdictions and the State.

**Policy 12.1.3b. Fire Protection Plan.** The City Fire Department and the Durham County Fire Marshall shall develop a long range fire protection plan for comprehensive fire services throughout Durham County.

**Policy 12.1.3c. Siting Public Safety Facilities.** Establish a cooperative process among jurisdictions for the appropriate development and location of public safety facilities - especially for collaborative training sites.

**Policy 12.1.3d. Multiple Use Sites.** In programming new sites for emergency service facilities, the City and County shall evaluate the feasibility of the proposed sites to accommodate a combination of uses whenever possible in order to provide services more cost effectively and to create centers for community activities.
Goal 12.2, Emergency Medical Services

Provide an effective program of emergency medical services to maintain a safe environment for Durham’s citizens.

Objective 12.2.1. Emergency Medical Service Level of Service Standards

Establish and maintain an appropriate level of emergency medical service protection in Durham as growth-related demand for services occurs.

Policy 12.2.1a. EMS Response Time. The Durham Emergency Medical Services Department shall maintain a County-wide total response time of 12:59 minutes or less.

Policy 12.2.1b. EMS Equipment Needs. The Durham Emergency Medical Services Department shall maintain a ratio of ambulances to population of 1 to 21,500.

Policy 12.2.1c. EMS Alternative Funding Methods. The Durham Emergency Medical Services shall explore supplemental funding methods to improve EMS services in the County.

Objective 12.2.2. Interagency Cooperation

Maintain high levels of cooperation among all agencies involved in emergency medical services to assure prompt emergency response in a cost effective manner.

Policy 12.2.2a. EMS Mutual Aid. Maintain the agreement for first responder assistance with the City Fire Department.

Policy 12.2.2b. Multiple Use Facilities. In planning new stations, the EMS shall evaluate the feasibility of using the sites to accommodate educational programs for citizens and training programs for staff and, in collaboration with other agencies, to provide co-housing of public safety/EMS agencies within Durham City and County.

Goal 12.3, Law Enforcement

Continue efforts to prevent, control, and reduce crime.

Objective 12.3.1. Law Enforcement Level of Service Standards

Establish and maintain an appropriate level of service for law enforcement as growth-related demand for services occurs.
Policy 12.3.1a. City Law Enforcement Staffing. Maintain adequate patrols to provide an average response time of 5:48 minutes or less for Priority 1 calls.

Policy 12.3.1b. County Law Enforcement Staffing. Maintain a ratio of sworn officers to the County population (outside the City limits) of 1:229.

Policy 12.3.1c. Mutual Aid. Continue to implement mutual aid agreements with other jurisdictions, the State and Federal law enforcement agencies.

Objective 12.3.2. Shared Roles in Crime Prevention with Other Agencies

Involve other agencies in preventing crime.

Policy 12.3.2a. Crime Prevention Coordination. Coordinate a shared approach with community agencies toward reducing criminal activity through educational efforts that focus on crime prevention by conducting community education programs. Include coordination with major institutional, commercial and corporate stakeholders.


Policy 12.3.2c. Neighborhood Watch and Other Volunteer Programs. Involve neighborhoods in crime prevention, disaster preparedness, citizen volunteer police services and shelter management through the establishment of neighborhood programs.

Goal 12.4, Emergency Management

Provide an effective program of emergency management to maintain a safe environment for Durham’s citizens.

Objective 12.4.1. Emergency Management Services

Establish and maintain an appropriate level of emergency management in Durham.

Policy 12.4.1a. Emergency Operations Plan. Maintain and implement an effective Emergency Operations Plan to protect people and property in Durham in times of emergency. The Plan shall delineate roles and establish policies, procedures and responsibilities for public and non-profit agencies at times of
emergency. The National Incident Management System model will be incorporated into the response plan.

Policy 12.4.1b. Community and Volunteer Coordination. Division shall coordinate with City and County Departments and Community Organizations active in disasters to implement the Emergency Operations Plan and coordinate response activities during a disaster.
Amendment History

Amended – October 11, 2010

Policy 12.1.1a. City Fire Protection Response Time. Maintain the following response times: a 4 minute emergency response time for 80 percent of the calls and a turn out time of less that 1 minute for at least 90 percent of the calls.

  i. 6 minute total reflex time for the first arriving unit for 85% of all incident occurrences

  ii. 2 minute turn out time for 100% of incident occurrences (911 Center one minute call processing time plus one minute enroute time)

  iii. 4 minutes for actual travel time for 85% of occurrences.

Policy 12.1.1b. City Fire Protection Equipment and Staffing. Maintain an engine company travel distance of 1.5 miles and a ladder company travel distance of 2.5 miles, while maintaining an Operations Division staff to population ratio of at least 1:760. Determine strategic placement of engine company ladder companies, and other emergency response apparatus by utilizing fire service jurisdiction assessment and fire data analysis software. Primary considerations include call volume, call frequency, call type (Fire, EMS), in addition to building occupancy, design and hazard.

Policy 12.1.1c. City Fire Station Locations. Determine the need for new City fire station sites based on assessments that include, at a minimum, the following factors:

  i. Increasing population and building values in the proposed fire service area;

  ii. Travel distances exceeding more than 1.5 miles for an engine company and 2.5 miles for a ladder company;

  iii. Trends in adjoining service areas toward a rise in the number of calls, call type, and increasing travel times;

  iv. Risk assessments and standard of coverage applications; and

Amended – May 14, 2012


Policy 12.1.1a. City Fire Protection Response Time. Maintain the following response times:

i. A six (6) minute total reflex emergency response time for the first arriving unit for 85% of all incident occurrences;

ii. A two (2) minute turn out time for 100% of incident occurrences (911 Center one minute call processing time plus one minute enroute time);

iii. 4 minutes for actual travel time for 85% of occurrences.

Policy 12.1.2c. City Fire Station Locations. Determine the need for new City fire station sites based on, the use of fire service jurisdiction assessment and fire data analysis software. Variables used in decisions that include, at a minimum, the following factors:
i. Increasing population or population density, and building values in the proposed fire service area.
ii. Building occupancy, design, and hazard;
iii. Increases in development activity that would eventually rule out a 4 minute travel time;
iv. Trends in adjoining service areas toward a rise in the number of calls, call type, and increasing travel times; and
v. Risk assessments and standard of coverage applications.

Policy 12.1.3d. Siting Public Safety Facilities. Establish a cooperative process among jurisdictions for the appropriate siting of public safety facilities, particularly at the boundaries of jurisdictions development and location of public safety facilities - especially for collaborative training sites.

Policy 12.2.1a. EMS Response Time. The Durham Emergency Medical Services Department shall maintain a County-wide response time of 8:59 minutes or less.

Policy 12.2.2c. Multiple Use Facilities. In planning new stations, the EMS shall evaluate the feasibility of using the sites to accommodate educational programs for citizens and training programs for staff and, in collaboration with other agencies, to provide co-housing of public safety/EMS agencies within Durham City and County.

Policy 12.3.1b. County Law Enforcement Staffing. Maintain a ratio of sworn officers to the County population (outside the City limits) of 1:316229.

Policy 12.3.2a. Crime Prevention Coordination. Coordinate a shared approach with community agencies toward reducing criminal activity through educational efforts that focus on crime prevention by conducting community education programs. Include coordination with the North Carolina Central University Police Department and Duke University Police Department major institutional, commercial and corporate stakeholders.


Policy 12.4.1b. Community and Volunteer Coordination. The Emergency Management Department shall work with the Sheriff’s Office, City and County Managers, City’s Police and Fire Department, Volunteer Fire Departments, Emergency Medical Services, other agencies and citizen groups, such as the American Red Cross, the Salvation Army, Amateur Radio (ARES), Community Emergency Response Teams (CERT), Police Reserves, Sheriff’s Reserves, and Citizen Observer Patrol (COPS), to implement the Emergency Operations Plan and coordinate activities and responsibilities during periods of disaster.

Amended – June 10, 2013

Policy 12.1.1a. City Fire Protection Response Time. Maintain the following response times:

i. A six (6) seven (7) minute emergency response time for the first arriving unit for 90% of all emergency incident occurrences in the metropolitan/urban response area; eight (8) minutes in suburban and/or rural response areas;
ii. A two (2) three (3) minute turn out time for 100% 90% of emergency incident occurrences (911 Center one minute 90 seconds call processing time plus one minute 90 seconds enroute time);
iii. Four (4) minutes for actual travel time for 90% of occurrences in the metropolitan/urban response area; five (5) minutes in the suburban and/or rural response areas.

**Policy 12.1.1c. City Fire Station Locations.** Determine the need for new City fire station sites based on the use of fire service jurisdiction assessment and fire data analysis software. Variables used in decisions include:

- Increases in development activity that would eventually rule out a 4 minute travel time;
- Trends in adjoining service areas toward a rise in the number of calls, call type, and increasing travel times;
- Building occupancy, design, and hazard;
- Risk assessments and standard of coverage applications; and
- Increasing population or population density, and building values in the proposed fire service area.

**Policy 12.1.2c. City Fire Station Locations.** Determine the need for new City fire station sites based on the use of fire service jurisdiction assessment and fire data analysis software. Variables used in decisions include:

- Increasing population or population density, and building values in the proposed fire service area;
- Building occupancy, design, and hazard;
- Increases in development activity that would eventually rule out a four (4) minute travel time;
- Trends in adjoining service areas toward a rise in the number of calls, call type, and increasing travel times; and
- Risk assessments and standard of coverage applications.

**Policy 12.1.2d. Fire Hydrant System.** Reduce the level of risk by maintaining the hydrant system with adequate fire flows.

**Policy 12.2.1a. EMS Response Time.** The Durham Emergency Medical Services Department shall maintain a County-wide total response time of 8:59 12:59 minutes or less.

Amended – June 2, 2014

**Policy 12.3.1a. City Law Enforcement Staffing.** Maintain adequate patrols to provide an average response time of 6:5 5:48 minutes or less for Priority 1 calls.

Amended – August 17, 2015

**Policy 12.1.1a. City Fire Protection Response Time.** Maintain the following response times:

- A seven (7)-minute emergency response time for the first arriving unit for 90 percent of emergency incident occurrences in the metropolitan/urban response area; eight (8) minutes in suburban and/or rural response areas;
- A three (3)-minute turnout time for 90 percent of emergency incident occurrences (911 Center 90 seconds call processing time plus 90 seconds enroute turnout time); and
- Four (4) minutes for actual travel time for 90 percent of occurrences in the metropolitan/urban response area; five (5) minutes in the suburban and/or rural response areas.
Policy 12.1.1b. City Fire Protection Equipment and Staffing. Determine strategic placement of engine company ladder companies, and other emergency response apparatus by utilizing fire service jurisdiction assessment and fire data analysis software. Primary considerations include call volume; call frequency; call type (Fire, EMS); and building occupancy, design, and hazard. The City-County Planning Department shall indicate when rezoning proposals are located in areas identified as deficient in fire coverage.

Amended – October 3, 2016

Goal 12.1, Fire Protection. Provide an effective program of fire protection to maintain a safe environment for Durham’s citizens, residents, visitors, and businesses.

Policy 12.4.1c. Policy 12.1.1a. City Fire Protection Response Time. Maintain the following response times:

i. A seven (7) minute emergency response time for the first arriving unit for 90% of emergency incidents occurrences in the metropolitan/urban response area; eight (8) minutes in suburban and/or rural response areas;

ii. A three (3) minute turn out time for 90% of emergency incidents occurrences (911 Center 90 seconds call processing time plus 90 seconds turnout time for dispatched responders);

iii. Four (4) minutes for actual travel time for 90% of occurrences emergency incidents in the metropolitan/urban response area; five (5) minutes in the suburban and/or rural response areas.

Amended – November 6, 2017

Policy 12.1.1a. City Fire Protection Response Time. Maintain the following response times:

i. A seven (7) minute six (6) minute and 30 seconds emergency response time for the first arriving unit for 90% of fire or medical emergency incidents in the metropolitan/urban response area; eight (8) minutes seven (7) minute and 30 seconds in suburban and/or rural response areas;

ii. A three (3) minute turn out time two (2) minute and 30 seconds reflex time for 90% of emergency incidents (911 Center call processing time plus 90 seconds-turnout time for dispatched responders);

Four (4) minutes for actual travel time for 90% of emergency incidents in the metropolitan/urban response area; five (5) minutes in the suburban and/or rural response areas.

Policy 12.1.1c. City Fire Station Locations. Determine the need for new City fire station sites based on the use of fire service jurisdiction assessment and fire data analysis software. Variables used in decisions include:

i. Increases in development activity that would eventually rule out a 4 minute travel time;

ii. Trends in adjoining service areas toward a rise in the number of calls, call type, and increasing travel times;

iii. Building occupancy, design, and hazard;

iv. Risk assessments and standards of coverage applications; and

Increasing population or population density, and building values in the proposed fire service area.
Policy 12.2.2a. Paramedics at VFD Stations. Maintain agreements to locate paramedics at Volunteer Fire Stations.