

2030 Land Resource Management Plan

PLANNING ISSUES—PUBLIC SAFETY

Objectives

1. To support a high level of law enforcement protection to Kane County in a cost-efficient, coordinated, cooperative, and effective manner.
2. To support a high level of fire protection and ambulance services for Kane County in a cost-efficient, coordinated, cooperative, and effective manner.
3. To support a high level of emergency dispatch for Kane County in a cost-efficient, coordinated, cooperative, and effective manner.
4. To support disaster mitigation, preparedness, response, and recovery from all types of disasters that may befall Kane County.

Chapter Focus



One of the fundamental responsibilities of a local government is to ensure the health, safety, and welfare of its citizens. This responsibility is addressed in a number of different ways: police protection, traffic and pedestrian safety, fire protection and ambulance service, emergency dispatch, emergency management, and public safety design. These services are supported by wise land uses and building designs fostering a sense of community and a secure environment.

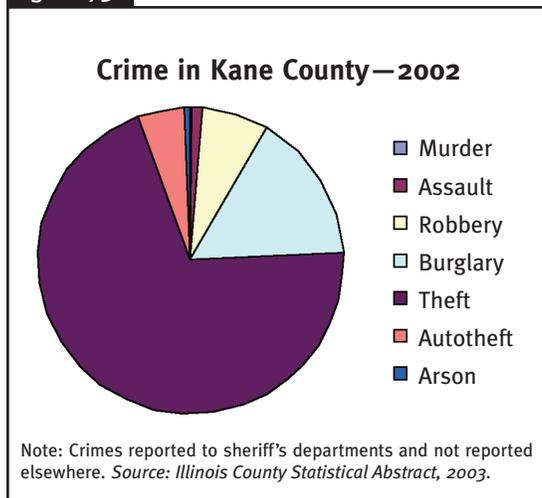
This chapter examines:

- Police Protection
- Traffic and Pedestrian Safety
- Fire Protection and Ambulance Service
- Emergency Dispatch
- Emergency Management
- Public Safety Design

Police Protection

In 2001, Kane County was served by 1,135 highly trained, full-time law enforcement officers from 23 government units, according to the Illinois Statistical Abstract. Of these officers, 92% were employed by 22 municipal police departments and 8% were employed by the Kane County Sheriff's Office. Both the police departments and the sheriff's office are responsible for the protection of life and property. The sheriff's office has the additional duty of providing security for the Circuit County and the county correctional facilities. The Illinois State Police provide an additional level of patrol on state and county highways.

Figure 73



When a village submits a request for incorporation to Kane County, Ordinance 90-226 requires that the County Board first determine the proposed incorporation is compatible with the official county land use plan and all necessary municipal services will be provided to village residents. The most fundamental of these services is police protection.

In 2000, there were 13,105 traffic accidents in all of Kane County, both incorporated and unincorporated. Of those accidents, 4,398 or 34% involved injuries. In 2001, 13,121 crimes were recorded in the county. Of these, 89% were property crimes (burglary, theft, motor vehicle theft, and arson) and 11% were violent crimes.

Kane County has several community crime and drug prevention programs: Operation Identification, Officer Friendly/McGruff Crime Prevention Dog, Operation Child Identification, sexual assault prevention education, gang awareness, education for gang evasion, and drug abuse resistance education.

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Traffic and Pedestrian Safety



Safe roads, sidewalks, paths, and public transportation facilities such as bus and train depots are essential for overall community well being. As the region becomes more suburbanized, the result is a higher number of arterial streets with high-speed traffic, fewer sidewalks or crosswalks, and stores, shops, and offices accessible only by car. According to the Surface Transportation Policy Project, these environments have been shown to be the most dangerous for walkers. The injury and fatality rates for young pedestrians is unnecessarily high—pedestrian crashes are one of the biggest killers of children ages 5 to 9. Children are often engrossed in play activities and don't know or understand the danger of moving vehicles.

Traffic-calming techniques are physical measures that reduce the negative effects of motor vehicle use and improve conditions for nonmotorized street users. Traffic-calming circles, raised crosswalks, and boulevards are some of the techniques applied in residential neighborhoods and in local commercial shopping districts. The U.S. Department of Transportation, Federal Highway Administration, summarizes the general objectives of traffic calming:

- Promote safe and pleasant conditions for motorists, bicyclists, pedestrians, and residents,
- Improve the environment and livability of neighborhood streets,
- Reduce vehicular speeds,
- Discourage use of residential streets by non-citizens cut through vehicular traffic, and
- Encourage citizen involvement in the traffic calming process by incorporating the preferences and requirements of the citizens (Refer to Figure 74).

Other safety solutions include substituting angled parking for parallel on street parking, reducing traffic speeds to help drivers detect children, and providing safe places for children to wait for school buses. Roadways, ditches, and missing connections between sidewalks are unsafe and can easily be improved to provide safe bus stop locations.



It is important to note that safety is also a perception, and cannot be solely captured by traffic statistics and data. Roadways, sidewalks, and bikeways should provide the user with a level of comfort and safety. Road design has traditionally focused on efficient movement of vehicles as the primary objective. An alternative approach equally weighs the safety, both perceived and real, of pedestrians and bicyclists with that of the motorist. This means comprehensively designing the road network to include sidewalks and crossings for pedestrians, clearly designated bike paths for bicyclists, and vehicle lanes. Inclusive road design benefits all of the user groups. One application is lighted crosswalks that are triggered when a pedestrian enters the crosswalk. This benefits both the motorist and the pedestrian, especially at dusk or dark.

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Fire Protection and Ambulance Service



Kane County is served by 38 fire protection agencies (Refer to Figure 75). The fire districts in Kane County received ratings ranging from 3 to 9 (on a scale of 1 to 10) from the Nationwide Insurance Service Office. Ratings are used to set insurance premiums. A major criterion for achieving high ratings is a reliable municipal water supply system for hydrants and fire suppression systems. Historically in Kane County, coordination and assistance between fire departments has been exceptional. In the greater Chicago region, virtually all municipal and rural fire protection districts belong to the Mutual Aid Box Alarm System. This system allows for greater fire protection through the use of resources from neighboring fire districts for an emergency exceeding the capabilities of the requesting fire department. In Kane County, there are two divisions of the Mutual Aid Box Alarm System: the northern 6 townships are in division two, while the remaining 10 townships are in division thirteen.

Along with coordination and assistance between fire departments and districts, fire prevention and education programs also play an important role in fire safety. Fire prevention and education programs include Sparky the Fire Dog, Children’s Safety Town, Learn Not to Burn, Fire Prevention Week, Fire Fighter for the Day, home fire drills, home fire safety advisory checks, and business and industrial fire brigades.

The use of the ambulance has profoundly changed delivery of medical care. At one time, the emphasis of the ambulance rested on the speed with which the patient could be transported to the nearest hospital. Today, however, fully equipped vehicles and technically trained personnel have transformed the ambulance into an emergency room on wheels. A similar emergency service is the aeromedical helicopter service, which operates in Kane County. Staffed by two pilots, a paramedic, and a nurse, the medical helicopter transports severe trauma and non-trauma patients to the nearest trauma center. These “life-flights” have roughly a 200-mile service radius, placing high quality and specialized medical care within an hour’s flight time.

Kane County has four hospitals: Provena Mercy Center for Health Care Services in Aurora, Delnor Community Hospital in Geneva, and Saint Joseph Hospital and Sherman Hospital in Elgin. All of these hospitals have a Level II trauma center, in which board-certified surgeons are on duty 24 hours/7 days a week. Future medical services in Kane County may include mobile health units that screen patients for health problems and provide immunizations, health education, and basic medical treatment, as well as MedNite, a satellite uplink for both audio and video specialized medical consultation.

Emergency Dispatch

Emergency dispatch is the routing of law enforcement, fire protection, and emergency medical services to an emergency location. The 911 emergency telephone number covers all of Kane County. Dialing 911 connects the caller to one of ten emergency dispatch centers in Kane County. Kane County is currently utilizing the Enhanced 911 System. Enhanced 911 displays the telephone number and location of the phone originating the call, an emergency route, and the correct responding public safety agencies. Each telephone service line is coded to the correct emergency dispatch center, and another nearby emergency dispatch station backs each dispatch center. Cell phones at this time are the exception to the Enhanced 911 system, because they do not provide place of origin when placing a 911 call. However, cell phones do provide fast response times where a home phone cannot be accessed in emergency situations. Technical advances being implemented by emergency dispatch include computer-aided dispatch, telecommunication devices for the deaf, multi-lingual language line, silent dispatch, and pre-arrival instruction. Many of these advances are available from emergency dispatch centers in Kane County.

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Emergency Management

The Federal Emergency Management Agency (FEMA) is responsible for establishing policies and programs for emergency management at the federal, state, county, and municipal levels. This responsibility includes the management of national procedures for the full range of disasters, whether natural or technological, or national security crises. The most likely disasters that may affect Kane County are tornados, flooding, and hazardous materials incidents.

In Kane County, the Kane County Office of Emergency Management (OEM), formerly known as the Kane County Emergency Services and Disaster Agency was established to prevent, minimize, repair, and alleviate injury or damage resulting from natural or man-made disasters. To achieve this task, the OEM has developed an emergency operation plan that charges several service and governmental agencies with performing specific duties during an emergency. These agencies include local law enforcement, building departments, fire districts, and school districts; the American Red Cross and Salvation Army; the Kane County Board and Chairman; and the Kane County Coroner, Development Department, Forest Preserve District, Health Department, and the Division of Transportation.

The Kane County OEM also has agreements with local emergency service and disaster agencies for joint assistance during emergencies; and has assisted in the preparation of specific disaster plans for local businesses, industries, and institutions. The Kane County OEM has assisted the Elgin Community College and the Juvenile Justice Center to develop a disaster plan, and has developed a model disaster plan for Kane County schools.

The Kane County OEM utilizes 30 trained uniformed, organized, and ranked volunteers for a number of functions. These functions include snow, water, and forests search and rescue; mobile command and communication that includes a broad spectrum of emergency public safety frequencies; disaster lighting; and transport of materials such as sandbags to construct flood protection. Specific weather-related Kane County OEM operations are Power Outage, Noah's Ark for flooding, Snowflake for blizzard, and Thunderhead for heavy rains. Another regional emergency management volunteer organization is the Multi-County Severe Weather Warning System coordinated by the National Weather Service. In Kane County, about 40 trained volunteer weather spotters assess severe weather conditions at specific locations near their work or home. When the National Weather Service issues a severe weather warning, spotters are alerted by radio and travel to their assigned locations near their work or home from which they radio-relay details of weather conditions. Kane County is one of 16 counties in the region which belongs to the Multi-County Severe Weather Warning System.

Due to the increased demand for terrorism preparedness, the Kane County OEM has placed 80% of their functioning in association with terrorism preparedness. The Kane County OEM sits on the Governor's Terrorist Task Force, works with all municipalities to write policies and procedures in preparation for terrorism attacks, and has written a new plan titled the *County's Response to Terrorism*.

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Public Safety Design

A major part of protecting life and property is crime prevention. Traditionally, crime prevention has sought to discourage criminal behavior by apprehending and removing lawbreakers from society. Another approach to crime prevention focuses on the built environment instead of on the criminal. A safe, well-used and maintained environment consists of public spaces including: parks, plazas, and central squares; pedestrian friendly streets with sidewalks and paths; and open, well lit buildings. In such public safety designed spaces, the opportunity for crime is minimized and the fear of crime is reduced.

A well-designed neighborhood creates a strong sense of ownership, pride, and enjoyment in the total environment. Principles of design can be applied to neighborhoods so that its surroundings are under the view of community residents and therefore significantly more secure.

This approach draws upon Jane Jacob's concept of "eyes on the street." Oscar Newman, author of *Defensible Space, Crime Prevention Through Urban Design*, has carried this concept further with the term "defensible space," which he defines as a safe, functional, and well-maintained environment. Defensible space utilizes land use planning and building design techniques that foster a sense of community. Residents share a common terrain and common responsibility for its security. Several elements of physical design can contribute to building a sense of place and a secure environment:

- provide common open space in residential areas to create a sense of community and to improve the watch over the neighborhood;
- create a sense of common terrain by using the same landscape, lighting, or paving material throughout the public spaces of a residential development;
- increase pedestrian usage while slowing vehicular traffic;
- place windows to allow for surveillance of interior and exterior space;
- design well-lit entryways; and
- place appropriate lighting in parking areas at shopping and work places.

Defensible space gives people confidence in their neighborhoods. The goal of defensible space design is to make communities the setting for neighborly connection, thus deterring crime. Common public spaces for adults and play areas for children bring people together. Improving the physical security of a community encourages a climate of civility.

Neighborhood Watch, Block Watch, or Citizen Crime Watch are popular community policing programs that reduce crime and criminal opportunity by promoting the concept of neighbors looking out for each other. These community-policing programs facilitate communication and cooperative relationships between neighbors as well as create real and psychological deterrents to criminal activity. Homeowner organizations make ideal neighborhood watch units to establish forums for neighborhood meetings to discuss crime prevention programs and self-help techniques (Refer to Figure 76).

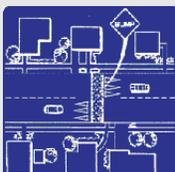
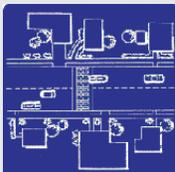
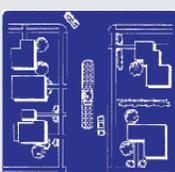
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Policies

1. Assist the appropriate Kane County governmental agencies in protecting the health, safety, and welfare of county residents.
2. Promote crime prevention through the incorporation of defensible space techniques and other crime prevention programs.
3. Include standards for neighborhood and pedestrian safety in design and subdivision review.
4. Include the strict enforcement of fire prevention standards in all county building codes.
5. Support continued cooperation between the separate emergency dispatch centers.
6. Support Kane County Emergency Management Agency disaster programs.
7. Require that any proposal for new incorporation clearly demonstrate the capacity to provide full level police protection and patrol service.
8. Support the establishment of a countywide Neighborhood Watch task force to achieve better cooperation between individual municipal and county Neighborhood Watch programs.

Figure 74

Provide Safe Pedestrian Environments With Traffic Calming Techniques

TRAFFIC CIRCLES	Barriers placed in the middle of an intersection, directing all traffic in the same direction.		
SPEED HUMPS	Rounded raised pavement devices placed across roadways to slow and/or discourage traffic. a.k.a. road humps, undulations		
RAISED CROSSWALKS	Flat-topped speed humps often constructed with a brick or other textured material to slow traffic.		
BOULEVARDS	A broad thoroughfare with landscape, sidewalk, or pedestrian improvements, often with a landscaped median or center divider, that functions as a linear open space.		

Source: *Traffic Calming Measures*, U.S. Department of Transportation, Federal Highway Administration; *A Planners Dictionary*, APA PAS Report Number 521/522, American Planning Association; www.trafficcalming.org (drawings) and City of Seattle (pictures).

Figure 75

Kane County Fire Protection Agencies

Fire Departments

Algonquin Fire Department
Aurora Fire Department
Batavia Fire Department
Carpentersville Fire Department
Caterpillar Tractor Fire Department
East Dundee Fire Department
Elgin Fire Department
Fermi National Accelerator
Laboratory Fire Department
Geneva Fire Department
Huntley Fire Department
Montgomery Fire Department
St. Charles Fire Department
Sugar Grove Fire Department
West Dundee Fire Department

Fire Protection Districts

Algonquin Fire Protection District
Bartlett/Countryside
Fire Protection District
Batavia Fire Protection District
Big Rock Fire Protection District
Burlington Fire Protection District
Carpentersville Fire Protection District
East Dundee Fire Protection District
Elburn/Countryside
Fire Protection District
Geneva Fire Protection District
Hampshire Fire Protection District
Huntley Fire Protection District
Kaneville Fire Protection District
Maple Park Fire Protection District
Marywood Fire Protection District
Moecherville Fire Protection District
Montgomery Fire Protection District
North Aurora Fire Protection District
Pingree-Plato Fire Protection District
Rutland and Dundee
Fire Protection District
South Elgin/Countryside Fire
Protection District
South Park Fire Protection District
St. Charles Countryside
Fire Protection District
Sugar Grove Fire Protection District
West Dundee Fire Protection District

Figure 76

Ten Steps to Create a Safer Neighborhood

Planners Al Zelinka and Dean Brennan in their recently published book *SafeScape: Creating Safer, More Livable Communities Through Planning and Design* show how to use design, planning and zoning to enhance community safety.

1. **Park your car and walk.** In addition to being good exercise, walking puts “eyes on the street” and provides an opportunity to interact with neighbors. Seeing and being seen in your neighborhood is an essential ingredient in preventing crimes of opportunity.
2. **Check that street signs — both directional and safety — are in place.** A lack of wayfinding information makes people uncomfortable and hesitant to visit a neighborhood. Ask neighbors to post house numbers so they are visible from the street both day and night.
3. **Make sure all streetlights function properly and provide as much illumination as possible.** Street lighting helps illuminate potential hiding places both along the street and around houses and other structures.
4. **Hold a neighborhood clean-up day.** Properties that are well maintained signal pride in a community. When pride is lacking, disrespect for, and erosion of, neighborhoods grow. A poorly maintained neighborhood sends a mental message that it is an unsafe neighborhood.
5. **Prune trees and shrubs.** Overgrown trees and shrubs provide hiding places and limit the ability of the residents to see what’s going on along the streets and sidewalks. Trees and shrubs can also provide hiding places around houses, allowing someone to break in without being seen.
6. **Plant a community garden.** Vacant lots attract unwanted activities and often become littered with debris. A garden, with plots available to residents, adds color and activity to the neighborhood in addition to providing nutritious vegetables for the dinner table. Community gardens can also serve as informal gathering places for neighborhood residents and facilitate resident interaction.
7. **Pull back your curtains, open your blinds, and sit on your front porch.** Spend time in rooms and outdoor spaces that allow you to observe what others are doing outside your home. It will help you recognize who belongs and who doesn’t. The more “eyes on the street,” the better.
8. **Slow down the cars and traffic.** Talk to local planners and governmental officials about “traffic calming” ideas. Speed humps, one-way designations, and traffic circles are just a few of the many tools in the traffic calming kit.
9. **Encourage schools and churches in your neighborhood to hold outdoor activities.** Church and school activities occur, all too often, inside a building. Ask school and church leaders to hold activities and events that bring students, parents, and congregants outside and provide more “eyes on the street.” These facilities can also be used for neighborhood meetings and informal resident gatherings.
10. **Conduct a neighborhood safety audit.** Invite police, fire and planning officials to join residents for a walk through the neighborhood. The purpose of the audit, which should be conducted after dark since lack of adequate lighting is often a major contributor to unsafe conditions, is to identify potentially unsafe areas. Residents then can work with local government officials to address identified issues.

Source: Brennan, Dean and Al Zelinka, SafeScape: Creating Safer, More Livable Communities Through Planning and Design, APA Planners Press, 2001.